

Ecological Soil Screening Levels for Silver

Interim Final

OSWER Directive 9285.7-77



**U.S. Environmental Protection Agency
Office of Solid Waste and Emergency Response
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460**

September 2006

This page intentionally left blank

TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	SUMMARY OF ECO-SSLs FOR SILVER	1
3.0	ECO-SSL FOR TERRESTRIAL PLANTS	3
4.0	ECO-SSL FOR SOIL INVERTEBRATES	5
5.0	ECO-SSL FOR AVIAN WILDLIFE	5
5.1	Avian TRV	5
5.2	Estimation of Dose and Calculation of the Eco-SSL	8
6.0	ECO-SSL FOR MAMMALIAN WILDLIFE	8
6.1	Mammalian TRV	8
6.2	Estimation of Dose and Calculation of the Eco-SSL	9
7.0	REFERENCES	12
7.1	General Silver References	12
7.2	References Used for Derivation of Plant and Soil Invertebrate Eco-SSLs	13
7.3	References Rejected for Use in the Derivation of Plant and Soil Invertebrate Eco-SSLs	13
7.4	References Used in Derivation of Wildlife TRVs	17
7.5	References Rejected for Use in Derivation of Wildlife TRVs	19

LIST OF TABLES

Table 2.1	Silver Eco-SSLs (mg/kg dry weight in soil)	2
Table 3.1	Plant Toxicity Data - Silver	4
Table 5.1	Avian Toxicity Data Extracted for Wildlife Toxicity Reference Value (TRV) - Silver	6
Table 5.2	Calculation of the Avian Eco-SSLs for Silver	8
Table 6.1	Mammalian Toxicity Data Extracted for Wildlife Toxicity Reference Value (TRV) - Silver	10
Table 6.2	Calculation of the Mammalian Eco-SSL for Silver	12

LIST OF FIGURES

Figure 2.1	Typical Concentrations of Silver in U.S. Soils	2
Figure 5.1	Avian TRV Derivation for Silver	6
Figure 6.1	Mammalian TRV Derivation for Silver	10

LIST OF APPENDICES

Appendix 5-1	Avian Toxicity Data Extracted and Reviewed for Wildlife Toxicity Reference Value (TRV) - Silver
Appendix 6-1	Mammalian Toxicity Data Extracted and Reviewed for Wildlife Toxicity Reference Value (TRV) - Silver

1.0 INTRODUCTION

Ecological Soil Screening Levels (Eco-SSLs) are concentrations of contaminants in soil that are protective of ecological receptors that commonly come into contact with soil or ingest biota that live in or on soil. Eco-SSLs are derived separately for four groups of ecological receptors: plants, soil invertebrates, birds, and mammals. As such, these values are presumed to provide adequate protection of terrestrial ecosystems. Eco-SSLs for wildlife are derived to be protective of the representative of the conservative end of the distribution in order to make estimates for local populations. The Eco-SSLs are conservative and are intended to be applied at the screening stage of an ecological risk assessment. These screening levels should be used to identify the contaminants of potential concern (COPCs) that require further evaluation in the site-specific baseline ecological risk assessment that is completed according to specific guidance (U.S. EPA, 1997, 1998, and 1999). The Eco-SSLs are not designed to be used as cleanup levels and the United States (U.S.) Environmental Protection Agency (EPA) emphasizes that it would be inappropriate to adopt or modify these Eco-SSLs as cleanup standards.

The detailed procedures used to derive Eco-SSL values are described in separate documentation (U.S. EPA, 2003, 2005). The derivation procedures represent the group effort of a multi-stakeholder group consisting of federal, state, consulting, industry, and academic participants led by the U.S. EPA Office of Solid Waste and Emergency Response.

This document provides the Eco-SSL values for silver and the documentation for their derivation. This document provides guidance and is designed to communicate national policy on identifying silver concentrations in soil that may present an unacceptable ecological risk to terrestrial receptors. The document does not, however, substitute for EPA's statutes or regulations, nor is it a regulation itself. Thus, it does not impose legally-binding requirements on EPA, states, or the regulated community, and may not apply to a particular situation based upon the circumstances of the site. EPA may change this guidance in the future, as appropriate. EPA and state personnel may use and accept other technically sound approaches, either on their own initiative, or at the suggestion of potentially responsible parties, or other interested parties. Therefore, interested parties are free to raise questions and objections about the substance of this document and the appropriateness of the application of this document to a particular situation. EPA welcomes public comments on this document at any time and may consider such comments in future revisions of this document.

2.0 SUMMARY OF ECO-SSLs FOR SILVER

Silver is a rare, naturally occurring metal, often found deposited as a mineral ore in association with other elements (ATSDR, 1990). In nature, silver compounds occur as halides, cyanide, thiocyanate, oxides, hydroxides, carbonates, nitrate, sulfate, sulfides, ferrocyanide complexes, and thiosulfate complexes (Bodek et al., 1988 HSDB). The oxides, sulfates, carbonates, and phosphates of silver are moderately soluble. Other silver compounds are insoluble, with the exception of nitrate which is miscible (Bodek et al., 1988 HSDB). Silver is found in minerals

such as cerargyrite (AgCl), pyrargyrite (2Ag₂S-Sb₂S₃), proustite (3Ag₂S-Ag₂S₃), and stephanite (5Ag₂S-Sb₂S₂) (Bodek et al. 1988 HSDB). From these natural sources, silver is released to air and water through the weathering of rocks and the erosion of soils.

Silver may also enter the environment from the production and use of silver compounds in batteries, catalysts, medical preparations, electroplating and photography (Cappel, 1997 HSDB). The primary use of silver (about 40% of the total U.S. supply) is in photographic film and chemicals. Another 20% is used in electrical contacts and conductors. Other uses of the metal, its alloys and compounds include sterling ware, solder, jewelry, coins, medallions, dental and medical applications (Bodek et al., 1988). Other anthropogenic sources include smelting operations, cloud seeding operations, coal combustion, steel and iron production, cement manufacturing, urban refuse incineration, and cigarette tobacco (HSDB).

When released to soils, silver exists as Ag⁺ ions or as insoluble silver complexes. the behavior of silver is strongly influenced by pH, redox conditions, and interactions with soil organic matter. Silver is highly immobile in soils relative to other metals. This immobility is due to precipitation of silver to form insoluble salts and adsorb to organic matter, clays, and manganese and iron oxides (Smith and Carson, 1977). The mobility of silver is increased by humus decomposition or by lowering pH (Alloway, 1990). The speciation of Ag⁺ ions are affected by the concentration of chloride and under reducing environments the concentration of sulfide ions. Silver compounds have a range of mobilities with partitioning controlled by silver speciation both in solution and on soil surfaces. Manganese oxide has a strong affinity to adsorb silver ions followed by Fe(OH)₃, clays, Fe₂O₃ and organic colloids. Relatively large amounts of organic colloids will substantially lower the partitioning of silver and remobilize adsorbed silver. Silver compounds are not expected to volatilize from moist or dry soil surfaces based upon their ionic character and low vapor pressures (HSDB).

Accumulation of silver from soil to plants is low and studies have shown the roots to be the main site of silver accumulation (Ratte, 1999). Silver accumulation in leaves results from deposition from airborne sources such as a smelter (Ward et al., 1979). Data on the accumulation of silver from soils by soil invertebrates is limited (Ratte, 1999). Silver is toxic in laboratory studies to avian and mammalian species with effects including reduced growth and reproduction and increased mortality.

Table 2.1 Silver Eco-SSLs (mg/kg dry weight in soil)			
Plants	Soil Invertebrates	Wildlife	
		Avian	Mammalian
560	NA	4.2	14
NA = Not Available. Data were insufficient to derive an Eco-SSL.			

Eco-SSL values were derived for silver for plants, and avian and mammalian wildlife. Eco-SSL values for silver could not be derived for soil invertebrates. For this receptor group, data were insufficient to derive soil screening values. Eco-SSL values calculated for Silver range from 4.2 mg/kg dry weight (dw) for avian wildlife to 560 mg/kg dw for plants. These concentrations are higher than the reported background soil concentrations of silver in eastern and western U.S. soils (Figure 2.1). Background concentrations reported for many metals in U.S. soils are described in Attachment 1-4 of the Eco-SSL guidance (U.S. EPA, 2003).

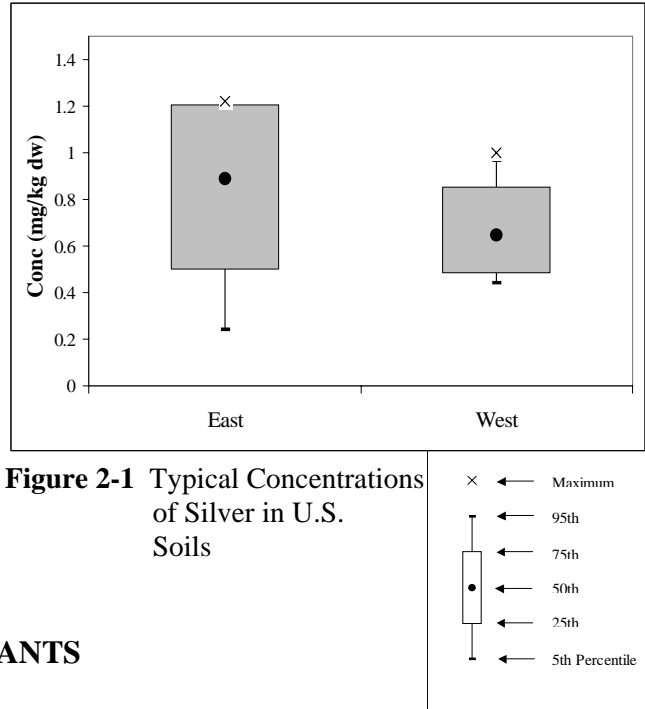


Figure 2-1 Typical Concentrations of Silver in U.S. Soils

3.0 ECO-SSL FOR TERRESTRIAL PLANTS

Of the papers identified from the literature search process, 61 were selected for acquisition for further review. Of those papers acquired, two met all 11 Study Acceptance Criteria (U.S. EPA, 2003; Attachment 3-1). Each of these papers were reviewed and the studies were scored according to the Eco-SSL guidance (U.S. EPA, 2003; Attachment 3-2). Three studies received an Evaluation Score greater than ten. These studies are listed in Table 3.1.

There are four studies eligible for Eco-SSL derivation that were used to derive the plant Eco-SSL for Silver (U.S. EPA, 2003; Attachment 3-2). The Eco-SSL is the geometric mean of the MATC values for 4 test species under different test conditions (pH and OM%) and is equal 560 mg/kg dw.

Table 3.1 Plant Toxicity Data - Silver

Reference	IP Number	Study ID	Test Organism		Soil pH	OM%	Bio-availability Score	ERE	Tox Parameter	Tox Value (Soil Conc at mg/kg dw)	Total Evaluation Score	Eligible for Eco-SSL Derivation?	Used for Eco-SSL?
Weaver and Klarich, 1973	20195	c	soybeans	<i>Glycine max</i>	7.4	0.17 - 2.8	0	GRO	MATC	3162	11	Y	Y
Weaver and Klarich, 1973	20195	e	wheat	<i>Triticum aestivum</i>	7.4	0.17 - 2.8	0	GRO	MATC	316	11	Y	Y
Weaver and Klarich, 1973	20195	f	corn	<i>Zea mays</i>	7.4	0.17 - 2.8	0	GRO	MATC	316	11	Y	Y
Weaver and Klarich, 1973	20195	g	sunflower	<i>Helianthus annus</i>	7.4	0.17 - 2.8	0	GRO	MATC	316	11	Y	Y
Geometric Mean										560			

EC₁₀ = Effect concentration for 10% of test population

EC₂₀ = Effect concentration for 10% of test population

EC₅₀ = Effect concentration for 50% of test population

ERE = Ecologically relevant endpoint

GRO = Growth

LOAEC = Lowest observed adverse effect concentration

MATC = Maximum acceptable toxicant concentration. Geometric mean of NOAEC and LOAEC.

N = No

NOAEC = No observed adverse effect concentration

ns = Not specified

OM = Organic matter content

REP = Reproduction

Y = Yes

Bioavailability Score described in *Guidance for Developing Eco-SSLs* (U.S. EPA, 2003)

Total Evaluation Score described in *Guidance for Developing Eco-SSLs* (U.S. EPA, 2003)

4.0 ECO-SSL FOR SOIL INVERTEBRATES

Of the papers identified from the literature search process, 61 papers were acquired for further review. Of those papers acquired, two met all 11 Study Acceptance Criteria (U.S. EPA, 2003; Attachment 3-1). Each of these papers were reviewed and there were no studies scored according to the Eco-SSL guidance (U.S. EPA, 2003; Attachment 3-2) that received an Evaluation Score greater than ten. An Eco-SSL could not be derived for soil invertebrates for Silver.

5.0 ECO-SSL FOR AVIAN WILDLIFE

The derivation of the Eco-SSL for avian wildlife was completed as two parts. First, the toxicity reference value (TRV) was derived according to the Eco-SSL guidance (U.S. EPA, 2003; Attachment 4-5). Second, the Eco-SSL (soil concentration) was back-calculated for each of three surrogate species based on the wildlife exposure model and the TRV (U.S. EPA, 2003).

5.1 Avian TRV

The literature search completed according to the Eco-SSL guidance (U.S. EPA, 2003; Attachment 4-2) identified 4,009 papers with possible toxicity data for either avian or mammalian species. Of these papers, 2,526 were unrelated to toxicity testing and contained information on the use of silver nitrate staining of cells. These papers are not listed in Section 7.5. Of the remaining 1,483 papers, 1,463 were rejected for use as described in Section 7.5. Of the 20 remaining papers, seven contained data for avian test species. These papers were reviewed and the data were extracted and scored according to the Eco-SSL guidance (U.S. EPA, 2003; Attachment 4-3 and 4-4). The results of the data extraction and review are summarized in Table 5.1. The complete results are included as Appendix 5-1.

Within the three papers there are 22 results for biochemical (BIO), behavior (BEH), pathology (PTH), reproduction (REP), growth (GRO), and survival (MOR) endpoints that meet the Data Evaluation Score of > 65 for use to derive the TRV. These data are plotted in Figure 5.1 and correspond directly with the data presented in Table 5.1. The no-observed adverse effect level (NOAEL) results for growth and reproduction are used to calculate a geometric mean NOAEL. This mean NOAEL is examined in relationship to the lowest bounded lowest-observed adverse effect level (LOAEL) for reproduction, growth, and survival to derive the TRV according to procedures in the Eco-SSL guidance (U.S. EPA, 2003; Attachment 4-5).

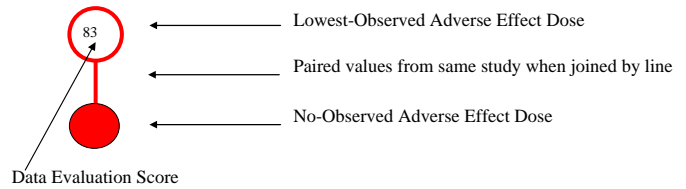
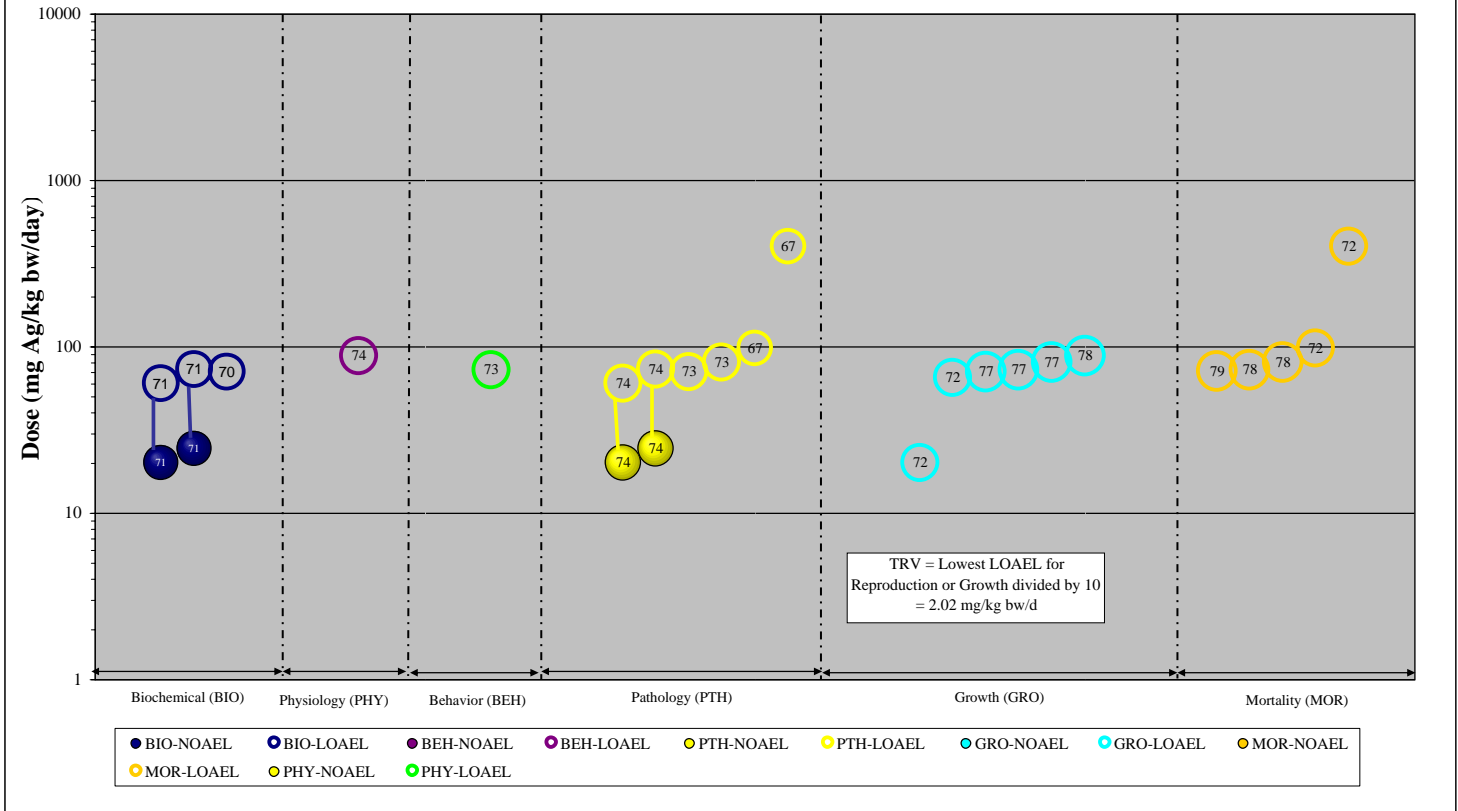
There are not three NOAEL values within the growth and reproduction effect groups. A geometric mean could not be calculated. There is not at least one NOAEL for reproduction or growth. There are at least three LOAEL values within the growth and reproduction effect groups. The avian TRV for Silver is equal to the lowest LOAEL for reproduction or growth divided by 10 and is equal to 2.02 mg/kg bw/d.

Table 5.1
Avian Toxicity Data Extracted for Wildlife Toxicity Reference Value (TRV)
Silver
Page 1 of 1

Result #	Reference	Ref No.	Test Organism	# of Conc/ Doses	Method of Analyses	Route of Exposure	Exposure Duration	Duration Units	Age	Age Units	Lifestage	Sex	Effect Type	Effect Measure	Response Site	NOAEL Dose (mg/kg bw/day)	LOAEL Dose (mg/kg bw/day)	Data Evaluation Score
Biochemical (BIO)																		
1	Jensen et al, 1974	9892	Turkey (<i>Meleagris gallopavo</i>)	3	U	FD	5	w	1	d	JV	B	CHM	PCLV	BL	20.2	60.5	71
2	Jensen et al, 1974	9892	Turkey (<i>Meleagris gallopavo</i>)	4	U	FD	4	w	1	d	JV	B	CHM	PCLV	BL	24.5	73.4	71
3	Peterson et al, 1973	9232	Turkey (<i>Meleagris gallopavo</i>)	2	U	FD	4	w	1	d	JV	B	CHM	HMGL	BL		70.8	70
Behavior (BEH)																		
4	Jensen, 1975	1403	Chicken (<i>Gallus domesticus</i>)	2	U	FD	14	d	1	d	JV	NR	FDB	FCNS	WO		88.4	74
Physiology (PHY)																		
5	Petersen and Jensen, 1975	6899	Chicken (<i>Gallus domesticus</i>)	2	U	FD	28	d	1	d	JV	NR	PHY	GPHY	WO		72.8	73
Pathology (PTH)																		
6	Jensen et al, 1974	9892	Turkey (<i>Meleagris gallopavo</i>)	3	U	FD	5	w	1	d	JV	B	HIS	GHIS	HE	20.2	60.5	74
7	Jensen et al, 1974	9892	Turkey (<i>Meleagris gallopavo</i>)	4	U	FD	4	w	1	d	JV	B	HIS	GHIS	HE	24.5	73.4	74
8	Peterson et al, 1973	9232	Turkey (<i>Meleagris gallopavo</i>)	2	U	FD	4	w	1	d	JV	B	ORW	SMIX	IHE		70.8	73
9	Peterson and Jensen, 1975	6901	Chicken (<i>Gallus domesticus</i>)	2	U	FD	28	d	1	d	JV	B	ORW	ORWT	HE		81.1	73
10	Van Vleet, 1977	6778	Duck (<i>Anas platyrhynchos</i>)	2	U	FD	3	w	1	d	JV	M	HIS	GHIS	MU		98.6	67
11	Van Vleet et al, 1981	80	Duck (<i>Anas platyrhynchos</i>)	2	U	FD	15	d	1	d	JV	M	HIS	NCRO	GZ		401	67
Growth (GRO)																		
12	Jensen et al, 1974	9892	Turkey (<i>Meleagris gallopavo</i>)	3	U	FD	5	w	1	d	JV	B	GRO	BDWT	WO		20.2	72
13	Jensen et al, 1974	9892	Turkey (<i>Meleagris gallopavo</i>)	2	U	FD	5	w	1	d	JV	B	GRO	BDWT	WO		65.5	72
14	Peterson et al, 1973	9232	Turkey (<i>Meleagris gallopavo</i>)	2	U	FD	4	w	1	d	JV	B	GRO	BDWT	WO		70.8	77
15	Petersen and Jensen, 1975	6899	Chicken (<i>Gallus domesticus</i>)	2	U	FD	28	d	1	d	JV	NR	GRO	BDWT	WO		72.8	77
16	Peterson and Jensen, 1975	6901	Chicken (<i>Gallus domesticus</i>)	2	U	FD	28	d	1	d	JV	B	GRO	BDWT	WO		81.1	77
17	Jensen, 1975	1403	Chicken (<i>Gallus domesticus</i>)	2	U	FD	14	d	1	d	JV	NR	GRO	BDWT	WO		88.4	78
Survival (MOR)																		
18	Jensen, 1975	1403	Chicken (<i>Gallus domesticus</i>)	2	U	FD	14	d	1	d	JV	NR	MOR	MORT	WO		71.4	79
19	Petersen and Jensen, 1975	6899	Chicken (<i>Gallus domesticus</i>)	2	U	FD	28	d	1	d	JV	NR	MOR	MORT	WO		72.8	78
20	Peterson and Jensen, 1975	6901	Chicken (<i>Gallus domesticus</i>)	2	U	FD	28	d	1	d	JV	B	MOR	MORT	WO		81.1	78
21	Van Vleet, 1977	6778	Duck (<i>Anas platyrhynchos</i>)	2	U	FD	3	w	1	d	JV	F	MOR	MORT	WO		98.6	72
22	Van Vleet et al, 1981	80	Duck (<i>Anas platyrhynchos</i>)	2	U	FD	15	d	1	d	JV	M	MOR	MORT	WO		401	72

JV = juvenile; w = week; FD = food; U = unmeasured; M = Male; B = both; GRO = growth; F = female; d = day; MORT = mortality; NR = not reported; MU = multiple; HE = heart; NCRO = necrosis; WO = whole organism; GZ = gizzard; SMIX = relative to body weight; GHIS = general histological changes; ORWT = organ weight; FCNS = food consumption; FDB = feeding behavior; PHY = physiology; GPHY = general physiological changes; HMGL = hemoglobin; BL = blood; PCLV = packed cell volume; CHM = chemical changes.

Figure 5.1 Avian TRV Derivation for Silver



Wildlife TRV Derivation Process

- 1) There are at least three results available for two test species within the growth, reproduction, and mortality effect groups. There are enough data to derive a TRV.
- 2) There are not three NOAEL results available within the growth and reproduction effect groups for calculation of a geometric mean.
- 3) There is not a NOAEL for reproduction or growth.
- 4) There are at least three LOAEL values for reproduction or growth.
- 5) The avian TRV for Silver is equal to the lowest LOAEL for reproduction or growth divided by 10 and is equal to 2.02 mg/kg bw/d.

5.2 Estimation of Dose and Calculation of the Eco-SSL

Three separate Eco-SSL values were calculated for avian wildlife, one for each of three surrogate species representing different trophic groups. The avian Eco-SSLs were calculated according to the Eco-SSL guidance (U.S. EPA, 2003) and are summarized in Table 5.2.

Table 5.2 Calculation of the Avian Eco-SSLs for Silver						
Surrogate Receptor Group	TRV for Silver (mg dw/kg bw/d) ¹	Food Ingestion Rate (FIR) ² (kg dw/kg bw/d)	Soil Ingestion as Proportion of Diet (P _s) ²	Concentration of Silver in Biota Type (i) ^{2,3} (B _i) (mg/kg dw)	Silver in Diet of Prey (C _{diet})	Eco-SSL (mg/kg dw) ⁴
Avian herbivore (dove)	2.02	0.190	0.139	B _i = 0.014 * Soil _j where i = plants	NA	69
Avian ground insectivore (woodcock)	2.02	0.214	0.164	B _i = 2.045 * Soil _j where i = earthworms	NA	4.2
Avian carnivore (hawk)	2.02	0.0353	0.057	B _i = 0.004 * Soil _j where i = mammals	NA	930

¹ The process for derivation of wildlife TRVs is described in Attachment 4-5 of U.S. EPA (2003).
² Parameters (FIR, P_s, B_i values, regressions) are provided in U.S. EPA (2003) Attachment 4-1 (revised February 2005).
³ B_i = Concentration in biota type (i) which represents 100% of the diet for the respective receptor.
⁴ HQ = FIR * (Soil_j * P_s + B_i) / TRV solved for HQ=1 where Soil_j = Eco-SSL (Equation 4-2; U.S. EPA, 2003).
 NA = Not Applicable

6.0 ECO-SSL FOR MAMMALIAN WILDLIFE

The derivation of the Eco-SSL for mammalian wildlife was completed as two parts. First, the TRV was derived according to the Eco-SSL guidance (U.S. EPA, 2003; Attachment 4-5). Second, the Eco-SSL (soil concentration) was back-calculated for each of three surrogate species based on the wildlife exposure model and the TRV (U.S. EPA, 2003).

6.1 Mammalian TRV

The literature search completed according to the Eco-SSL guidance (U.S. EPA, 2003; Attachment 4-2) identified 4,009 papers with possible toxicity data for either avian or mammalian species. Of these papers, 2,526 were unrelated to toxicity testing and contained information on the use of silver nitrate staining of cells. These papers are not listed in Section 7.5. Of the remaining 1,483 papers, 1,463 were rejected for use as described in Section 7.5. Of the 20 remaining papers, 13 contained data for mammalian test species. These papers were reviewed and the data were extracted and scored according to the Eco-SSL guidance (U.S. EPA, 2003; Attachment 4-3 and 4-4). The results of the data extraction and review are summarized in Table 6.1. The complete results are provided in Appendix 6-1.

Within the 13 papers there are 15 results for biochemical (BIO), behavior (BEH), pathology (PTH), reproduction (REP), growth (GRO), and survival (MOR) endpoints with a total Data Evaluation Score >65 that were used to derive the TRV (U.S. EPA, 2003; Attachment 4-4). These data are plotted in Figure 6.1 and correspond directly with the data presented in Table 6.1. The NOAEL results for growth and reproduction are used to calculate a geometric mean NOAEL. This mean NOAEL is examined in relationship to the lowest bounded LOAEL for reproduction, growth, and survival to derive the TRV according to procedures in the Eco-SSL guidance (U.S. EPA, 2003; Attachment 4-5).

There are not three NOAEL values within the growth and reproduction effect groups. A geometric mean could not be calculated. There is not at least one NOAEL for reproduction or growth. There are at least three LOAEL values within the growth and reproduction effect groups. The mammalian TRV for Silver is equal to the lowest LOAEL for reproduction or growth divided by 10 and is equal to 6.02 mg/kg bw/d.

6.2 Estimation of Dose and Calculation of the Eco-SSL

Three separate Eco-SSL values were calculated for mammalian wildlife, one for each of three surrogate species representing different trophic groups. The mammalian Eco-SSLs derived for Silver were calculated according to the Eco-SSL guidance (U.S. EPA, 2003) and are summarized in Table 6.2.

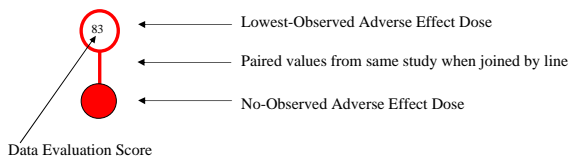
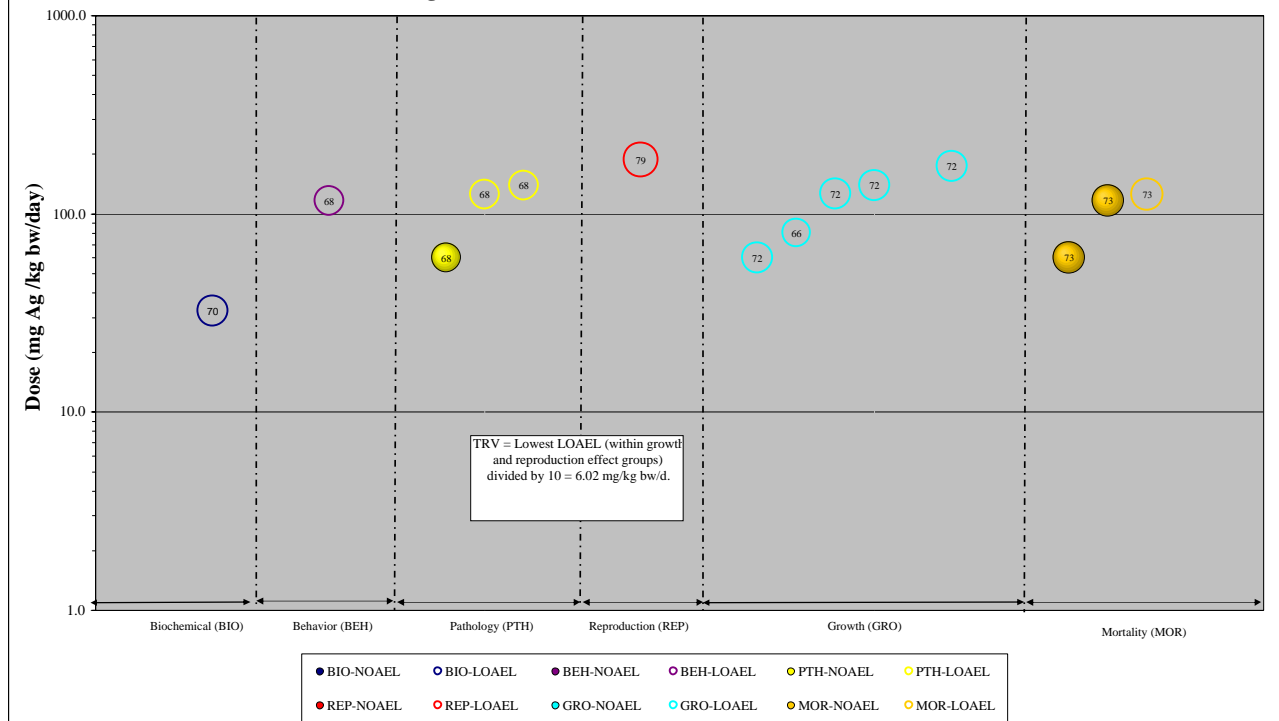
Table 6.1 Mammalian Toxicity Data Extracted for Wildlife Toxicity Reference Value (TRV)

Silver

Page 1 of 1

Result #	Reference	Ref No.	Test Organism	# of Conc/ Doses	Method of Analyses	Route of Exposure	Exposure Duration	Duration Units	Age	Age Units	Lifestage	Sex	Effect Type	Effect Measure	Response Site	NOAEL Dose (mg/kg bw/day)	LOAEL Dose (mg/kg bw/day)	Total
Biochemical (BIO)																		
1	Pribyl et al, 1980	23825	Rat (<i>Rattus norvegicus</i>)	2	U	FD	4	d	NR	NR	JV	M	ENZ	GENZ	SR		32.3	70
Behavior (BEH)																		
2	Cabe, et al., 1979	1244	Rat (<i>Rattus norvegicus</i>)	2	U	DR	13	w	50	d	JV	M	FDB	WCON	WO		116	68
Pathology (PTH)																		
3	Van Vleet, 1976	22589	Pig (<i>Sus scrofa</i>)	2	U	FD	40	d	NR	NR	JV	NR	HIS	NCRO	LI	60.2		68
4	Van Vleet et al, 1981	149	Pig (<i>Sus scrofa</i>)	2	U	FD	25	d	NR	NR	JV	M	HIS	GLSN	HE		125	68
5	Van Vleet, 1976	22589	Pig (<i>Sus scrofa</i>)	2	U	FD	28	d	NR	NR	JV	NR	HIS	NCRO	LI		140	68
Reproduction (REP)																		
6	Shavlovski et al, 1995	21093	Rat (<i>Rattus norvegicus</i>)	2	U	FD	20	d	NR	NR	GE	F	REP	PROG	WO		188	79
Growth (GRO)																		
7	Van Vleet, 1976	22589	Pig (<i>Sus scrofa</i>)	2	U	FD	40	d	NR	NR	JV	NR	GRO	BDWT	WO		60.2	72
8	Wagner et al, 1975	14503	Rat (<i>Rattus norvegicus</i>)	2	U	DR	15	w	21	d	JV	B	GRO	BDWT	WO		80.2	66
9	Van Vleet et al, 1981	149	Pig (<i>Sus scrofa</i>)	2	U	FD	4	w	NR	NR	JV	M	GRO	BDWT	WO		126	72
10	Van Vleet, 1976	22589	Pig (<i>Sus scrofa</i>)	2	U	FD	28	d	NR	NR	JV	NR	GRO	BDWT	WO		140	72
11	Matuk et al, 1981	22823	Rat (<i>Rattus norvegicus</i>)	2	U	DR	16	w	NR	NR	JV	M	GRO	BDWT	WO		174	72
Survival (MOR)																		
12	Van Vleet, 1976	22589	Pig (<i>Sus scrofa</i>)	2	U	FD	40	d	NR	NR	JV	NR	MOR	MORT	WO	60.2		73
13	Cabe, et al., 1979	1244	Rat (<i>Rattus norvegicus</i>)	2	U	DR	13	w	50	d	JV	M	MOR	MORT	WO	116		73
14	Van Vleet et al, 1981	149	Pig (<i>Sus scrofa</i>)	2	U	FD	25	d	NR	NR	JV	M	MOR	MORT	WO		125	73
15	Van Vleet, 1976	22589	Pig (<i>Sus scrofa</i>)	2	U	FD	28	d	NR	NR	JV	NR	MOR	MORT	WO		140	73

Figure 6.1 Mammalian TRV Derivation for Silver



Wildlife TRV Derivation Process

Step 1: There are at least three results available for two test species within the growth, reproduction, and mortality effect groups. There are enough data to derive a TRV.

Step 2: There are not three NOAEL results available within the growth and reproduction effect groups for calculation of a geometric mean.

Step 3: There is not at least one NOAEL results within the growth and reproduction effect groups.

Step 5: There are at least 3 LOAEL results within growth and reproduction effect groups.

TRV = Lowest LOAEL (within growth and reproduction effect groups) divided by 10 = 6.02 mg/kg bw/d.

Table 6.2 Calculation of the Mammalian Eco-SSL for Silver						
Surrogate Receptor Group	TRV for Silver (mg dw/kg bw/d) ¹	Food Ingestion Rate (FIR) ² (kg dw/kg bw/d)	Soil Ingestion as Proportion of Diet (P _s) ²	Concentration of Silver in Biota Type (i) ^{2,3} (B _i) (mg/kg dw)	Silver in Diet of Prey ⁴ (C _{diet})	Eco-SSL (mg/kg dw) ⁵
Mammalian herbivore (vole)	6.02	0.0875	0.032	B _i = 0.014 * Soil _j where i = plants	NA	1500
Mammalian ground insectivore (shrew)	6.02	0.209	0.030	B _i = 2.045 * Soil _j where i = earthworms	NA	14
Mammalian carnivore (weasel)	6.02	0.130	0.043	B _i = 0.004 * Soil _j where i = mammals	NA	990

¹ The process for derivation of wildlife TRVs is described in Attachment 4-5 of U.S. EPA (2003).
² Parameters (FIR, P_s, B_i values, regressions) are provided in U.S. EPA (2003) Attachment 4-1 (revised February 2005).
³ B_i = Concentration in biota type (i) which represents 100% of the diet for the respective receptor.
⁴ C_{diet} = Concentration in the diet of small mammals consumed by predatory species (weasel).
⁵ HQ = FIR * (Soil_j * P_s + B_i) / TRV solved for HQ=1 where Soil_j = Eco-SSL (Equation 4-2; U.S. EPA, 2003).
 NA = Not Applicable

7.0 REFERENCES

7.1 General Silver References

- Alloway, B. J. (ed.). 1990. *Heavy Metals in Soils*. New York, NY: John Wiley & Sons, 14.4: 298-304.
- ATSDR. 1990. *Toxicological Profile for Silver*. Atlanta, GA, U.S. Department of Health and Human Services, Public Health Service, Agency for Toxic Substances and Disease Registry (TP-90-24).
- Bodek, I. et al. (eds.) 1988. *Environmental Inorganic Chemistry. Properties, Processes, and Estimation Methods*. New York, NY: Pergamon Press.
- Cappel, C. R. 1997. *Kirk-Othmer Encyclopedia of Chemical Technologies*. 4th Edition. New York, NY: John Wiley & Sons, 22: 163-195.
- Hazardous Substances Database (HSBD). <http://toxnet.nlm.nih.gov>. National Library of Medicine.
- Ratte, H. T. 1999. Bioaccumulation and toxicity of silver compounds. *Environmental Toxicology and Chemistry*. 18(1): 89-108.
- Smith, I. and Carson, B. 1977. *Trace metals in the environment*. Volume 2. Silver. Ann Arbor, MI, Ann Arbor Science Publishers, 469 pp.
- United States Environmental Protection Agency (U.S. EPA). 2003. *Guidance for Developing Ecological Soil Screening Levels*. OSWER Directive 92857-55. Office of Solid Waste and Emergency and Remedial Response. Revised February 2006.
- United States Environmental Protection Agency (U.S. EPA). 1999. *Ecological Risk Assessment and Risk Management Principles for Superfund Sites*. Office of Emergency and Remedial Response, Washington, DC. OSWER Directive 9285.7-28.P.

United States Environmental Protection Agency (U.S. EPA). 1998. *Guidelines for Ecological Risk Assessment*. Risk Assessment Forum. U.S. Environmental Protection Agency, Washington DC. EPA/630/R-95/002F. April. May 14, 1998 Federal Register 63(93): 26846-26924.

United States Environmental Protection Agency (U.S. EPA). 1997. *Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments*. Interim Final. U.S. Environmental Protection Agency, Environmental Response Team (Edison, NJ). June 5, 1997.

Ward, N. I., Roberts, E., and Brooks, R. R. 1979. Silver uptake by seedlings of *Lolium perenne* L. and *Trifolium repens* L. New Zealand Journal of Science, 22: 129-132.

7.2 References Used for Derivation of Plant and Soil Invertebrate Eco-SSLs

Weaver, T. W. III. and Klarich, D. 1973. Ecological Effects of Silver Iodide in Terrestrial Ecosystems: A Preliminary Study, Section 3. In: Final Res Rep No.42, Impacts of Induced Rainfall on the Great Plains of Montana, Mont.Agric.Exp Stn., Montana State Univ., MT: 18

7.3 References Rejected for Use in the Derivation of Plant and Soil Invertebrate Eco-SSLs

- Mix** Hirsch, M. P. 1998. Availability of Sludge-Borne Silver to Agricultural Crops. *Environ.Toxicol.Chem.* 17[4], 610-616
- Media** Allus, M. A., Brereton, R. G., and Nickless, G. 1988. Chemometric studies of the effect of toxic metals on plants: the use of response surface methodology to investigate the influence of tl, cd and ag on the growth of cabbage seedlings. *Environ.Pollut.Ser.A* 52[3], 169-181
- No Tox Data** Andren, A. W. and Bober, T. W. 1995. Transport, Fate, and Effects of Silver in the Environment. In: *Abstr.of 3rd Int.Conf.*, 6-9 Aug., 1995, Washington, D.C., Univ.of Wisconsin Sea Grant Inst., Madison , 35
- OM, pH** Atsmon, D. and Tabbak, C. 1979. Comparative Effects of Gibberellin, Silver Nitrate and Aminoethoxyvinyl Glycine on Sexual Tendency and Ethylene Evolution in the Cucumber Plant (*Cucumis sativus* L.). *Plant Cell Physiol.* 20[8], 1547-1556
- Abstract** Beglinger, J. M. and Ruffing, C. J. 1998. Effects of Silver Sulfide on the Terrestrial Earthworm. *Proc.5th Argentum Intl.conf.on the Transport, Fate, and Effects of Silver in the Environment*, Sept.28-Oct.1, 1997, Hamilton, Ont., Canada
- OM, pH** Belles, J. M., Carbonell, J., and Conejero, V. 1991. Polyamines in plants infected by citrus exocortis viroid or treated with silver ions and ethephon. *Plant Physiol.(Bethesda)* 96[4], 1053-1059
- OM, pH** Beyer, E. Jr. 1976. Silver Ion: A Potent Antiethylene Agent in Cucumber and Tomato 50038. *Hortscience* 11[3], 195-196
- Media** Brown, W. V., Mollenhauer, H., and Johnson, C. 1962. An Electron Microscope Study of Silver Nitrate Reduction in Leaf Cells. *Am.J.Bot.* 49[1], 57-63
- No Dose** Cataldo, D. A. and Wildung, R. E. 1978. Soil and Plant Factors Influencing the Accumulation of Heavy Metals by Plants. *Environ.Health Perspect.* 27, 149-159

- Media** Cheung, Y. H., Wong, M. H., and Tam, N. F. Y. 1989. Root and Shoot Elongation as an Assessment of Heavy Metal Toxicity and 'Zn Equivalent Value' of Edible Crops. *Hydrobiologia* 188/189, 377-383
- Rev** Cooper, C. F. and Jolly, W. C. 1970. Ecological Effects of Silver Iodide and Other Weather Modification Agents: A Review. *Water Resour.Res.* 6[1], 88-98
- Mix** Cufar, K., Robic, D., Torelli, N., and Kermavnar, A. 1995. Phenology, Occurrence of Epicormic Branches and Reproductive Growth in Air-Polluted Silver Firs 38287. *Acta Pharm.* 45[2, Suppl 1], 379-381
- OM, pH** Cushman, K. E. and Tibbitts, T. W. 1998. The role of ethylene in the development of constant-light injury in potato and tomato. *Journal Of The American Society For Horticultural Science.* 123[2], 239-245
- OM, pH** Cushman, L. C., Pemberton, H. B., and Kelly, J. W. 1994. Cultivar, Flower Stage, Silver Thiosulfate and BA Interactions Affect Performance of Potted Miniature Roses. *Hortscience* 29[7], 805-808
- Mix** Davis, R. D., Beckett, P. H. T., and Wollan, E. 1978. Critical Levels of Twenty Potentially Toxic Elements in Young Spring Barley. *Plant Soil* 49, 395-408
- OM, pH** Earhart, D. R., Paterson, D. R., Walker, D., and Fuqua, M. C. 1978. Further Studies on Silver Ion (Ag⁺) Translocation, Ethylene (C₂H₄) Production, and Growth of *Iponoea batatas* Treated with Silver Nitrate 51356. *Hortscience* 13[3], 268
- Rev** Eisler, R. 1996. Silver Hazards to Fish, Wildlife, and Invertebrates: A Synoptic Review. *Biol.Rep.* 32, Contaminant Hazard Reviews, U.S.Dep.Interior, Natl.Biol.Serv., Patuxent Wildl.Res.Cent., Laurel, MD , 44 p.
- Abstract** Ewell, W. S., Gorsuch, J. W., Ritter, M., and Ruffing, C. J. 1993. Ecotoxicological Effects of Silver Compounds. In: A.W.Andren and T.W.Bober (Eds.), 1st International Conference Proceedings on Transport, Fate and Effects of Silver in the Environment, Aug.8-10, University of Wisconsin-Madison, Madison, WI , 113 (ABS)
- No Dur** Falandysz, J. and Danisiewicz, D. 1995. Bioconcentration Factors (BCF) of Silver in Wild *Agaricus campestris*. *Bull.Enviroin.Contam.Toxicol* 55, 122-129
- OM, pH** Falandysz, J., Bona, H., and Danisiewicz, D. 1994. Silver Uptake by *Agaricus bisporus* from an Artificially Enriched Substrate. *Z Lebensm-Unters-Forsch* 199, 225-228
- OM, pH** Feng, J. and Barker, A. V. 1992. Ethylene evolution and ammonium accumulation by nutrient-stressed tomatoes grown with inhibitors of ethylene synthesis or action. *Journal Of Plant Nutrition.* 15[2], 155-167
- Media** Feng, J. and Barker, A. V. 1993. Polyamine Concentration and Ethylene Evolution in Tomato Plants under Nutritional Stress. *Hortscience : A Publication Of The American Society For Horticultural Science.* 28[2], 109-110
- OM, pH** Fjeld, T. 1991. Effects of Silver Thiosulfate Ethephon Temperature and Irradiance Level on Keeping Quality of Christmas Begonia *begonia-cheimantha* Everett. *Gartenbauwissenschaft.* 56[2], 66-70
- OM, pH** Girling, C. A., Peterson, P. J., and Minski, M. J. 1978. Gold and Arsenic Concentrations in Plants as an Indication of Gold Mineralization. *Sci Total Environ* 10[1], 79-86

- Media** Goransson, A. and Eldhuset, T. D. 1991. Effects of Al(3+) on Seedling Growth of Silver Birch, Scots Pine and Norway Spruce at Steady State Nutrition 52132. *Developments In Agricultural And Managed-Forest Ecology* 24, 58-65
- Rev** Gorsuch, J. W. and Klaine, S. J. 1998. Toxicity and Fate of Silver in the Environment 52145. *Environ.Toxicol.Chem.* 17, 537-538
- Media** Guven, K., Duce, J. A., and De Pomerai, D. I. 1994. Evaluation of a Stress-Inducible Transgenic Nematode Strain for Rapid Aquatic Toxicity Testing. *Aquat.Toxicol.* 29, 119-137
- No Dur** Hiltbrunner, E. and Fluckiger, W. 1996. Manganese Deficiency of Silver Fir Trees (*Abies alba*) at a Reforested Site in the Jura Mountains, Switzerland: Aspects of Cause and Effect 38494. *Tree Physiol.* 16[11/12], 963-975
- Mix** Hirsch, M., Ritter, M., Roser, K., Garrisi, P., and Forsythe, S. 1997. The Effect of Silver on Plants Grown in Sludge-Amended Soils. In: A.W.Andren and T.W.Bober (Eds.), 1st International Conference Proceedings on Transport, Fate and Effect of Silver in the Environment, Aug.8-10, 1993, University of Wisconsin-Madison, Madison, WI , 69-73
- OM, pH** Hoyer, L. 1998. Silver Thiosulphate can Considerably Reduce Leaf and Fruit Abscission Caused by Ethylene in *Capsicum annuum* 'janne'. *J.Hortic.Sci.Biotechnol.* 73[1], 29-34
- Media** Ireland, M. P. 1988. A Comparative Study of the Uptake and Distribution of Silver in a Slug *Arion ater* and a Snail *Achatina fulica*. *Comp.Biochem.Physiol.C* 90, 189-194
- Media** Ke, Hueli Yang David, Anderson, Wendy L., Moncrief, Robyn M., Rayson, Gary D., and Jackson, Paul J. 1994. Luminescence studies of metal ion-binding sites on *Datura innoxia* biomaterial. *Environ.Sci.Technol.* 28[4], 586-591
- No Dose** Kong, L. S., Gao, P., Ren, T. X., and Hong, H. J. 1991. Characteristics of Plant Communities and Element Contents in Plants at Mengentaoligai Silver Lead Zinc Mine Area in Inner Mongolia. *Acta Bot.Sin.* 33[7], 529-541
- No Dose** Kormutak, A., Salaj, J., and Vookova, B. 1994. Pollen Viability and Seed Set of Silver Fir (*Abies alba* Mill.) in Polluted Areas of Slovakia 53603. *Silvae Genet.* 43[2/3], 68-73
- OM, pH** Kramer, James R., Adams, Nicholas W. H., Manolopoulos, Helen, and Collins, Pamela V. 1999. Silver at an old mining camp, Cobalt, Ontario, Canada. 53652. *Environ.Toxicol.Chem.* 18[1], 23-29
- In Vit** Lamoreaux, R. J. and Chaney, W. R. 1978. Photosynthesis and Transpiration of Excised Silver Maple Leaves Exposed to Cadmium and sulphur Dioxide. *Environ.Pollut.* 17[4], 259-268
- Media** Lamoreaux, R. J. and Chaney, R. J. 1978. The Effect of Cadmium on Net Photosynthesis, Transpiration and Dark Respiration of Excised Silver Maple Leaves. 38601. *Physiol.Plant* 43, 231-236
- Media** Lane, I. and Puckett, K. J. 1979. Responses of the Phosphatase Activity of the Lichen *Cladonia rangiferina* to Various Environmental Factors Including Metals. *Can.J.Bot.* 57, 1534-1540
- Media** Marre, M. T. and Albergoni, F. 1998. Fusicocin Counteracts the n-Ethylmaleimide and Silver-Induced Stimulation of Oxygen Uptake in *Egeria densa* Leaves. *Plant Physiology.* 116[2], 681-686
- OM, pH** Mason, M. R. and Miller, W. B. 1991. Flower Bud Blast in Easter Lily is Induced by Ethephon

and Inhibited by Silver Thiosulfate. Hortscience 26[9], 1165-1167 (ABS)

- OM, pH** Mnzava, N. A. and Mpina, G. A. 1987. Effects of Silver Nitrate on Flower Growth, Senescence, and Pyrethrin Content of Pyrethrum (*Chrysanthemum cinerariaefolium* Vis.). *Pyrethrum Post* 16[4], 128-131
- Species** Molise, E. M. and Klein, D. A. 1974. Effects of Silver on Radiorespiration of Glucose by Soil Microorganisms. *Ann.Meeting Am.Soc.Microbiol.* 2
- Media** Mollers, C., Zhang, S., and Wenzel, G. 1992. The influence of silver thiosulfate on potato protoplast cultures. *Plant Breeding = Zeitschrift Fur Pflanzenzuchtung.* 108[1], 12-18
- Media** Nielsen, L. W. and Massay, L. M. 1940. Silver as a Fungicide. In: L.Addicts (Ed.), *Silver in Industry*, Reinhold, London , 597
- Media** Pestana, M. C., Lacorte, C., de Freitas, V. G., de Oliveira, D. E., and Mansur, E. 1999. In Vitro Regeneration of Peanut (*Arachis hypogaea* L.) Through Organogenesis: Effect of Culture Temperature and Silver Nitrate. 58465. *In Vitro Cell.Dev.Biol.- Plant* 35[3], 214-216
- FL** Petering, H. G. 1984. Silver. Merian, E.(Ed.).*Metalle in der Umwelt: Verteilung, Analytik und Biologische Relevanz (Metals in the Environment: Distribution, Analysis and Biological Relevance).*Xvii+722P.Vch Verlagsgesellschaft/Physik-Verlag: Weinheim, West Germany; Deerfield Beach, 0[0], 555-560
- OM, pH** Pitcher, R. S. and McNamara, D. G. 1972. The Toxicity of Low Concentrations of Silver and Cupric Ions to the Three Species of Plant-Parasitic Nematodes. *Nematologica* 18, 385-390
- Media** Popham, J. D. and Webster, J. M. 1976. Comparative toxicity of heavy metals with special reference to cadmium on *caenorhabditis-elegans*. *Proc Int Colloq Invertebr Pathol* , 372-373
- Media** Puckett, K. J. 1976. The Effect of Heavy Metals on Some Aspects of Lichen Physiology. *Can J Bot* 54, 2695-2703
- OM, pH** Rajput, J. C., Parulekar, Y. R., Sawant, S. S., and Jamadagni, B. M. 1994. Sex Modification in Kartoli (*Momordica dioica* Roxb.) by Foliar Sprays of Silver Nitrate (AgNO₃). *Curr.Sci.* 66[10], 779
- Rev** Ratte, H. T. 1999. Bioaccumulation and Toxicity of Silver Compounds: A Review. *Environ.Toxicol.Chem.* 18[1], 89-108
- No COC** Richardson, R. G. 1979. Absorption, Translocation and Toxicity of Picloram in Silver Leaf Nightshade (*Solanum elaeagnifolium* Cav.). *J Aust Int Agric Sci* 45[4], 263-266
- Media** Serek, Margrethe and Andersen, Arne Skytt. 1994. Polyamine Uptake Does not Affect Floral Longevity in Miniature Potted Roses. *Hortscience* 29[3], 196-198
- In Vit** Siegel, S. M. 1977. The Cytotoxic Response of Nicotiana Protoplast to Metal Ions: A Survey of the Chemical Elements. *Water Air Soil Pollut.* 8[1-4], 293-304
- OM, pH** Singleton, P. and White, R. 1975. Silver Iodide: Its Movement in an Alpine Ecosystem and Its Effect on Two Plant Species. In: D.H.Knight (Ed.), *The Medicine Bow Ecology Proj.*, Univ.Wyoming, Laramie, WY , 329-351
- Media** Slade, S. J. 1993. The Effect of Silver and Other Metal Ions on the In Vivo Growth of Root-Rotting *Phytophthora* and Other Fungal Species. *Ann.Appl.Biol.* 122[2], 233-251

- Media** Smith, G. C. and Brennan, E. 1984. Responses of Silver Maple Seedlings to an Acute Dose of Root Applied Cadmium. *For.Sci.* 30, 582-586
- Media** Tso, T. C., Sorokin, T. P., and Engelhaupt, M. E. 1973. Effects of Some Rare Elements on Nicotine Content of the Tobacco Plant. *Plant Physiol.* 51, 805-806
- Rev** Vanselow, A. P. 1966. Silver 57542. In: H.D.Chapman (Ed.), *Diagnostic Criteria for Plants and Soils*, University of California, Berkeley, CA , 405, 407-405, 408
- Media** Wallace, A., Alexander, G. V., and Chaudry, F. M. 1977. Phytotoxicity of Cobalt, Vanadium, Titanium, Silver, and Chromium. *Commun.Soil Sci.Plant Anal.* 8[9], 751-756
- Media** Wallace, A. 1980. Recovery from Acute Silver Toxicity by Bush Beans Grown in Solution Culture. *J.Plant Nutr.* 2[1/2], 93-95
- Media** Wang, W. 1993. Comparative Rice Seed Toxicity Tests using Filter Paper, Growth Pouch, and Seed Tray Methods. *Environ.Monit.Assess.* 24[3], 257-265
- Media** Wang, W. 1994. Rice Seed Toxicity Tests for Organic and Inorganic Substances. *Environ.Monit.Assess.* 29, 101-107
- Media** Ward, N. I., Roberts, E., and Brooks, R. R. 1979. Silver Uptake by Seedlings of *Lolium perenne* L. and *Trifolium repens* L. *N.Z.J.Sci.* 22, 129-132
- Media** Weaver, T. and Brock, D. 1972. Ecological Effects of Weather Modification: Effect of Silver Nitrate on Plant Growth. *Proc Mont Acad Sci* 32, 27-30
- Media** Weier, E. 1938. Factors Affecting the Reduction of Silver Nitrate by Chloroplasts. *Am.J.Bot.* 25, 501-507
- Media** Werner, C. and Hohl, H. R. 1990. The Effects of Calcium and Magnesium on Accumulation and Secretion of Isoflavonoids by Soybean Roots. *Plant Sci* 72[2], 181-192
- Media** Wettlaufer, S. H., Osmeloski, J., and Weinstein, L. H. 1991. Response of polyamines to heavy metal stress in oat seedlings. *Environ.Toxicol.Chem.* 10[8], 1083-1088

7.4 References Used in Derivation of Wildlife TRVs

- Bencko, V. 1972. oxygen consumption by ***mouse*** liver homogenate during ***drinking*** ***water*** arsenic exposure. ii. *J. Hyg. Epidemiol., Microbiol., Immunol.* 16(1): 42-6. Ref ID: 15471
- Cabe, P. A., Carmichael, N. G., and Tilson, H. A. 1979. Effects of Selenium, Alone and in Combination with Silver or Arsenic, in Rats. *Neurobehav Toxicol.* 1(4): 275-8. Ref Id: 1244.
- Healy, Sm, Casarez, Ea, Ayala-Fierro, F, and Aposhian, HV. 1998. enzymatic methylation of arsenic compounds. *Toxicol. Appl. Pharmacol.* 148: 65-70. Ref ID: 14543
- Jensen, L. S. 1975. Modification of a Selenium Toxicity in Chicks by Dietary Silver and Copper. *J Nutr.* 105(6): 769-775. Ref Id: 1403
- Jensen, L. S., Peterson, R. P., and Falen, L. Inducement of Enlarged Hearts and Muscular Dystrophy in Turkey Poults with Dietary Silver. *Poultry Science.* 53(1): 57-64. Ref Id: 9892

- Kanisawa, M. and H. A. Schroeder. 1967. life term studies on the effects of arsenic, germanium, tin, and vanadium on spontaneous tumors in mice. *Cancer Research*. 27: 1192-1195. Ref ID: 20979
- Kiyono, S., Hasui, K., Takasu, K., and Seo, M. toxic effect of arsenic trioxide in infant rats. *J. Physiol. Soc. Jpn.* 36(7): 253-254; 1974.(5 References) Ref ID: 15427
- Matuk, Y., Ghosh, M., and McCulloch, C. 1981. Distribution of Silver in the Eyes and Plasma Proteins of the Albino Rat. *Can. J. Ophthalmol.* 16(3): 145-50. Ref Id: 22823
- Peterson, R. P. and Jensen, L. S. 1975. Induced Exudative Diathesis in Chicks by Dietary Silver. *Poult. Sci.* 54(3): 795-8. Ref Id: 6899
- Peterson, R. P. and Jensen, L. S. 1975. Interrelation of Dietary Silver with Copper in the Chick. *Poult. Sci.* 54(3): 771-5. Ref Id: 6901
- Peterson, R. P., Jensen, L. S., and Harrison, P. C. 1973. Effect of Silver-induced Enlarged Hearts During the First Four Weeks of Life on Subsequent Performance of Turkeys. *Avian Diseases*. 17(4): 802-806. Ref Id: 9232
- Pribyl, T., Schreiber, V., and Jahodova, J. 1980. inhibition of rat serum polyphenoloxidase activity by silver ions abolished by administration of copper ions. *Folia Biologica* 26(1): 47-52. Ref ID: 23825
- Shavlovski, Mikhail M., Chebotar, Nicolai A., Konopistseva, Liudmila A., Zakharova, Elena T., Kachourin, Anatoliy M., Vassiliev, Vadim B., and Gaitskhoki, Vladimir S. 1995. Embryotoxicity of Silver Ions Is Diminished by Ceruloplasmin-further Evidence for its Role in the Transport of Copper. *Biometals*. 8(2): 122-8. Ref Id: 21093
- Tripathi, N, Kannan, GM, Pant, BP, Jaiswal, DK, Malhotra, PR, and Flora, SJS. 1997. arsenic-induced changes in certain neurotransmitter levels and their recoveries following chelation in rat whole brain. *Toxicol. Letters*. 92: 201-208. Ref ID: 14590
- Van Vleet, J. F. Induction of Lesions of Selenium Vitamin E Deficiency in Pigs Fed Silver. *American Journal of Veterinary Research*. 37(12): 1415-1420. Ref Id: 22589
- Van Vleet, J. F., Boon, G. D., and Ferrans, V. J. 1981. Induction of Lesions of Selenium-vitamin E Deficiency in Ducklings Fed Silver, Copper, Cobalt, Tellurium, Cadmium, or Zinc: Protection by Selenium or Vitamin E Supplements. *Am J Vet Res*. 42(7): 1206-1217. Ref Id: 80
- Van Vleet, J. F., Boon, G. D., and Ferrans, V. J. 1981. Induction of Lesions of Selenium-vitamin E Deficiency in Weanling Swine Fed Silver, Cobalt, Tellurium, Zinc, Cadmium, and Vanadium. *Am J Vet Res*. 42(5): 789-799. Ref Id: 149
- Van Vleet, John F. 1977. Protection by Various Nutritional Supplements Against Lesions of Selenium-vitamin E Deficiency Induced in Ducklings Fed Tellurium or Silver. *Am. J. Vet. Res.* 38(9): 1393-8. Ref Id: 6778
- Wagner, Pa, Hoekstra, Wg, and Ganther, He. 1975. Alleviation of Silver Toxicity by Slenite in the Rat in Relation to Tissue Glutathione Peroxidase. *Proc. Soc. Exp. Biol. Med.* 148: 1106. Ref Id: 14503
- Whanger, P. D. and Weswig, P. H. 1970. Effect of Some Copper Antagonists on Induction of Ceruloplasmin in the Rat. *Journal of Nutrition*. 100(3): 341-8. Ref Id: 22300

7.5 References Rejected for Use in Derivation of Wildlife TRVs

- Unrel** 1988 annual report on alaska's mineral resources. *USGS Circular 1023. (65)*
- Diss** an aberrant recurrent excitatory circuit in the fascia dentata of rats following kainic acid lesions. *841660 ORDER NO: AAD84-08583*
- Abstract** 1966.*Abstracts of Research Reports*
- Diss** acetylcholine receptor clustering and formation of neuromuscular junctions in regenerating rat skeletal muscle. *833761 ORDER NO: AAD84-02406*
- An Prod** 1974? activity report, 1973. *Belgium, Government Agricultural Research Centre, Ghent : 205 pp.*
- Diss** analysis of avirulent strains of histoplasma capsulatum. *01111238 ORDER NO: AAD90-17376*
- Diss** analysis of the anatomical structure subserving enkephalin function in the hippocampal formation (neuropeptides). *01628714 ORDER NO: AAD98-21026*
- HHE** anatomical and morphological aspects of the human corpus callosum. *777819 ORDER NO: AAD82-11094*
- Diss** angiotensin converting enzyme in the brain, testis, epididymis, pituitary gland and adrenal gland (captopril, eukephalin convertase, peptidase, corpus striatum, guanidinoethyl mercaptosuccinic acid). *922033 ORDER NO: AAD86-16003*
- Abstract** 1973. annual report of the secretary for agricultural technical services forthe period 1 july 1971 to 30 june 1972. *Department of Agricultural Technical Services, South Africa : 270pp.*
- Diss** appearances suggesting reconstruction in the rat brain after well-defined lesions. *1052950 ORDER NO: NOT AVAILABLE FROM UNIVERSITY MICROFILMS INT'L.*
- Diss** artisans in the carolina backcountry: rowan county, 1753-1770 (north carolina). *01203621 ORDER NO: AAD92-07757*
- Diss** assimilation of metals by sediment-ingesting invertebrates: effects of natural sediment qualities and intrinsic metal characteristics (metal uptake, leptocheirus plumulosus, exopolymers, assimilation efficiency). *01658736 ORDER NO: AAD98-41765*
- HHE** autoradiographic and immunofluorescent detection of low concentrations of actinomycin d bound to human metaphase chromosomes. *791581 ORDER NO: AAD82-23004*
- Diss** behavioural ecology of the silver leaf monkey, trachypithecus auratus sondaicus, in the pangandaran nature reserve, west java, indonesia (monkey). *01146037 ORDER NO: NOT AVAILABLE FROM UNIVERSITY MICROFILMS INT'L.*
- Diss** biochemical and genetic characterization of the n-acetyltransferase polymorphism in c57bl/6j and a/j mice. *954931 ORDER NO: AAD87-12169*
- Diss** biological activity and biochemistry of a chemotaxin produced by blastomyces dermatitidis (fungus, neutrophils). *887291 ORDER NO: AAD85-13980*

- FL** 1984. breeding results in denmark in 1978-83. *Va Ra Palsdjur* 55(1): 18.
- Diss** the byzantine lead seals with family names from the collection of the numismatic museum of athens (numismatic museum) original title: die byzantinischen bleisiegel mit sammlung des numismatischen museums athen. 01285432 ORDER NO: NOT AVAILABLE FROM UNIVERSITY MICROFILMS INT'L.
- Diss** canine chemonucleolysis. 0978932 ORDER NO: AAD87-29924
- Diss** the cardiac heparan sulfate storage site for basic fibroblast growth factor. 01138012 ORDER NO: AAD91-00229
- Diss** characterisation of nuclear proteins interacting with the trout protamine genes (*salmo gardnerii*). 01208366 ORDER NO: AADNN-61681
- Diss** characterization of lymphocyte-produced macrophage growth factor and its action on the proliferation of macrophages (colony stimulating factor, csf type 1). 933649 ORDER NO: AAD86-24554
- Diss** characterization of membrane-associated molecules of the retinal pigmented epithelium in rat retina. 01183980 ORDER NO: AAD91-33217
- Diss** the characterization of the biological and mechanical properties of porous calcium phosphate ceramics used as bone implants|. 01213302 ORDER NO: AAD92-11183
- Imm** chemical sensors employing catalytic antibodies and methods using them. *PCT Int. Appl.* 102 pp.
- Diss** chicken chromosome analysis: location of cloned genes. 01204610 ORDER NO: AAD92-05467
- Diss** the chromatin patterns of seven vertebrate species (banding, birds, cat). 0996732 ORDER NO: NOT AVAILABLE FROM UNIVERSITY MICROFILMS INT'L.
- No Oral** comparative toxicity of trimethyltin in four "normal" inbred strains of mice (neurodegeneration). 01440993 ORDER NO: AADAA-19536479
- Diss** corelease of acetylcholine and gaba by an amacrine cell: evidence for independent mechanisms. 1083525 ORDER NO: AAD89-26150
- Diss** cytogenetic analysis of chromosomal heterozygosity in the *peromyscus maniculatus* species group . 1040764 ORDER NO: AAD89-03346
- Diss** dental primary afferent connectivity in the brain stem trigeminal nuclear complex (degeneration, transganglionic). 894164 ORDER NO: AAD85-21606
- Diss** development and distribution of neuroepithelial bodies in the fetal hamster lung. 833519 ORDER NO: AAD84-01837
- Diss** development and evaluation of monoclonal antibodies to *acanthamoeba* spp. (dot-immunobinding assay. 880026 ORDER NO: AAD85-08639
- Diss** development of a cryosection em autoradiography technique and its application for the subcellular localization of receptors (methyl cellulose). 01618626 ORDER NO: NOT AVAILABLE FROM UNIVERSITY MICROFILMS INT'L.

- Diss** the development of order in the rat trigeminal system. 1052958 ORDER NO: AAD82-07023
- An Prod** drinking water containing rare earth metals and silver-plated metals for acceleration of egg production in hens. *Jpn. Kokai Tokkyo Koho* : 4 pp.
- Diss** early events in the mechanism of action of nerve growth factor (neural development, map2 kinase, phosphorylation, tyrosine kinase). 01174076 ORDER NO: AAD91-25949
- Diss** ecological and population genetic studies of forest-dwelling bats (louisiana, phylogenetic, corynorhinus rafinesquii, lasionycteris noctivagans, nycticeius humeralis, lasiurus seminolus, nyssa sylvatica). 01698859 ORDER NO: AAD99-25307
- Diss** an ecology of the bahamian hutia (geocapromys ingrahami) (hutia).
- Diss** the effect of dietary fiber on canine colonic motility. 693085 ORDER NO: AAD80-18529
- Diss** effect of irradiation on proliferation of endothelial cells during neovascularization of the cornea: an autoradiographic study. 826684 ORDER NO: AAD83-25722
- Diss** the effect of surface charge on arterial thrombosis. 696335 ORDER NO: AAD80-21695
- Diss** effects of dietary fat on production performance, body fat composition and skin storage in farm-raised mink and foxes. 01215369 ORDER NO: NOT AVAILABLE FROM UNIVERSITY MICROFILMS INT'L.
- Diss** Effects of dietary glycine and copper on metabolic symptoms INDUCED BY A METHIONINE TOXICITY IN THE CHICK :
- Diss** the effects of lesions of sensory and motor cortex on ingestive behavior in rats. 762801 ORDER NO: AAD81-20898
- Diss** an enzyme histochemical and histopathological study of the degenerative and regenerative changes in the transected or hemisected spinal cord of the rat. 793806 ORDER NO: AAD82-12771
- Diss** the evaluation of marine by-products for use as feedstuffs in mink diets. 01573034 ORDER NO: AADMM-15783
- Diss** the evoked response and the modulation of cortical arousal in the visual neglect phenomenon. 794018 ORDER NO: AAD82-23730
- Diss** an examination of the development and maintenance of the deafferented olfactory cortex. 1053096 ORDER NO: AAD82-12323
- Diss** experimental infection of the white-footed mouse (peromyscus leucopus) with the lyme disease spirochete (borrelia burgdorferi). 0975757 ORDER NO: AAD87-28911
- Diss** foraging ecology and behavior of atlantic bottlenose dolphins (tursiops truncatus) in the indian river lagoon, florida (activity budgets, habitat utilization, passive listening)]. 1593265 ORDER NO: AAD97-30127
- Diss** gaze movements and the thalamic internal medullary lamina in the cat. 794459 ORDER NO: AAD82-25597

- Diss** genetic and cytogenetic studies of the aprt locus of mouse friend cells. 01154302 ORDER NO: NOT AVAILABLE FROM UNIVERSITY MICROFILMS INT'L.
- Diss** geologic models of sediment-buffered hydrothermal vents: a case study of the red dog zn-pb-ag orebody, western brooks range, alaska (red dog orebody, zinc-lead-silver). 01629666 ORDER NO: AAD98-22586
- Diss** geschlechtsdifferenzierung des vogelhirns: auswirkung original title: sexual dimorphism in the avian brain: effects of prenatal hormone treatment on sexual dimorphic organization and japanese quail (coturnix coturnix japonica) original title: sexual dimorphism in the avian brain: effects of prenatal hormone treatment on sexual dimorphic organization and behaviour in the japanese quail (coturnix coturnix japonica). 01464445 ORDER NO: AADAA-IC467461
- Diss** glutathione transport in epithelial cells: biochemical, toxicological, and nutritional aspects . 01108242 ORDER NO: AAD90-15647
- Diss** habitat use and mortality of mule deer fawns in western south dakota. 760816 ORDER NO: AAD81-24765
- Diss** hereditary striatonigral and cerebello-olivary degeneration of the kerry blue terrier. 765972 ORDER NO: AAD81-28912
- Diss** immunochemical studies of lipopolysaccharides isolated from strains of campylobacter jejuni and campylobacter coli (bacteria, antigen). 1019408 ORDER NO: NOT AVAILABLE FROM UNIVERSITY MICROFILMS INT'L.
- Diss** immunological studies of stage specificity of erythrocytic and exoerythrocytic merozoites of plasmodium fallax|. 879287 ORDER NO: AAD85-07138
- Diss** the influence of dietary trace metals upon the enzymatic, neurochemical, and neuropathological expression of aluminum neurotoxicity. 750288 ORDER NO: AAD81-15393
- Diss** insulin receptor function and regulation in erythroblastic leukemic cells. 757984 ORDER NO: AAD81-22218
- Diss** intermediate filament proteins in the developing rat optic nerve. 830836 ORDER NO: AAD83-24841
- Diss** intrahemispheric and commissural connections between and within commissurally and noncommissurally interconnected regions in the primary and secondary somatic sensory cerebral cortex: their possible role in interhemispheric transfer of learning in the raccoon. 694114 ORDER NO: AAD80-20707
- Diss** an investigation into the efferent projections from areas 17, 18 and 18a in the albino rat cortex. 757450 ORDER NO: AAD81-20593
- Diss** iron hands: the internal sources of international cooperation (cartels). 01133901 ORDER NO: AAD90-35561
- Diss** local communication in an introduced colony of feral rhesus monkeys (macaca mulatta) (florida) . 825360 ORDER NO: AAD83-24996
- Diss** mechanisms of axonal guidance: the problem of intersecting fiber systems (corpus callosum, glial sling, perforating fibers).

- Diss** morphological and neurochemical identification of enteric neuron populations in the small intestine of vertebrates|. 01431395 ORDER NO: AADAA-19529088
- Diss** morphometric study of the neuromuscular synapses in the adult rat original title: remodelacion de conexiones nerviosas en el adulto. analisis morfometrico. 1042928 ORDER NO: NOT AVAILABLE FROM UNIVERSITY MICROFILMS INT'L.
- Diss** myosin light chain kinase and selected metabolic profiles within human and rabbit skeletal muscle fibres. 01227741 ORDER NO: AADMM-61129
- Diss** nerve axon outgrowth as a model for studying cell movement . 776064 ORDER NO: AAD82-07748
- Diss** neural mechanisms for behavioral response specificity in the siphon-withdrawal response of aplysia. 01419071 ORDER NO: AADAA-19519105
- Diss** neuroanatomical and chemical changes within the nucleus accumbens paralleling patterns of behavioral activation in the developing rat. 1070842 ORDER NO: AAD89-14752
- Diss** neurotransmitters and pathways mediating the central dipsogenic and pressor actions of angiotensin ii given intraventricularly. 749964 ORDER NO: AAD81-14238
- Diss** nuclear magnetic resonance studies of avian ovomucoids and their isolated structural domains (nmr)|. UMI - Dissertation
- FL** 1975. number of kits produced at the experimental fur farm in finland. *Vara Palsdjur* 46(11): 259.
- Diss** or phase catalytic oxidation of propylene (oxide). 839043 ORDER NO: AAD84-06237
- Diss** organophosphorus-induced delayed neuropathology in the rat . 930156 ORDER NO: AAD86-21271
- Bact** 1990. performance recording of fur bearers in 1989. *Norsk Pelsdyrblad* 64(5): 10-12.
- Bact** 1990. performance recording of fur bearers in 1990. *Norsk Pelsdyrblad* 64(10-11): 25-26.
- Diss** pharmacological and biochemical properties of the benzodiazepine-gaba receptor in codfish brain in comparison with mammalian brain. 01090748 ORDER NO: AAD90-06087
- Diss** plasticity of the developing neuromuscular system of infant rats exposed to non-steroidogenic fragments of acth. 0979616 ORDER NO: AAD88-01534
- Diss** primary sex determination and gonadal morphogenesis in the mouse. 788840 ORDER NO: AAD82-20827
- CP** 1987. proceedings. papers presented at the summer meeting of the society for veterinary ethology, wageningen, the netherlands, 16-19 july 1986. *Applied Animal Behaviour Science* 17(3/4): 365-383.
- FL** 1986. production recording in finland. *Va Ra Palsdjur* 57(7): 235-236.
- Diss** pulmonary neuroendocrine cell dynamics and regulation of circulation. 742184 ORDER NO: AAD81-02207

- Diss** purification and characterization of rat fibroblast derived interferon. 921914 ORDER NO: AAD86-15733
- Diss** purification, characterization, and comparison of the mammalian uterine estrogen receptors. 841650 ORDER NO: AAD84-08566
- Diss** recovery and recoverability in the central nervous system following long-term ethanol consumption. 898850 ORDER NO: AAD85-23848
- Not Avail** 1974. report 1973. UK, Long Ashton Research Station : 213 pp.
- Bact** 1990. results of the recording of fur bearers in 1990. *Norsk Pelsdyrblad* 64(9): 11.
- Diss** the role of gap-43 and growth factors on axon elongation of rat retinal ganglion cells through peripheral nervous system tissue grafts (igf-1, bfgf). 01541659 ORDER NO: AAD97-14430
- Prim** silver stains for protein in gels. U.S. 21 pp. Cont.-in-part of U.S. Ser. No. 240,577, abandoned.
- Diss** spatial overlap and dietary preference of the native silver rice rat (*oryzomys argentatus*) and the exotic black rat (*rattus rattus*) in the florida keys (rat). 01123690 ORDER NO: AAD90-23238
- Diss** steroid hormone regulation of substance p in the anterior pituitary and hypothalamus. 01169952 ORDER NO: AAD91-22379
- Diss** studies of neurons and regeneration. 746388 ORDER NO: NOT AVAILABLE FROM UNIVERSITY MICROFILMS INT'L.
- Diss** studies within the t-complex of the mouse utilizing a new embryonic lethal (tcl(0)), and the genetical markers rb7 and tcp-1. 849092 ORDER NO: AAD84-12239
- Diss** a study of liver and brain 6-phosphofructo-2-kinase (pfk2) from product to enzyme (phosphofructokinase, fructose bisphosphate, aging). 01431289 ORDER NO: AADAA-19528895
- Diss** a study of the uptake and turnover of 1,5,6, tritium labeled fucose in the dental tissue of aging mice. 746751 ORDER NO: AAD81-10728
- Plant** 1975. sub-tropical crops. <document title>israel, institute of horticulture: scientificactivities 1971-1974. *Israel, Institute of Horticulture* : 135 pp.
- Diss** supernumeraries at bushtit (*psaltriparus minimus*) nests: incidence, origins, and proximate causes|. 01279662 ORDER NO: AAD93-03822
- Diss** the surface of pseudomonas aeruginosa in cystic fibrosis lung infection. 1030206 ORDER NO: AADDX-83315
- Diss** sympathetic cardiac connections of the left sympathetic ganglia of the dog. 826569 ORDER NO: AAD83-25365
- Diss** synthesis of potential prostacyclin receptor antagonist. 01679353 ORDER NO: AAD99-13188
- Diss** three essays on the philippine external sector. 829966 ORDER NO: AAD83-29240

- Fungus** tracking-resistant electrically insulating polymer compositions for outdoors with good resistance to moss and fungi and high-voltage outdoor electric machineries therefrom. *Jpn. Kokai Tokkyo Koho* : 6 pp.
- Diss** treasure of the land of darkness: a study of the fur trade and its significance for medieval russia (x-xvi centuries). 733257 *ORDER NO:*
- Drug** treatment of septic shock with transition metal complexes. *PCT Int. Appl.* 13 pp.
- Diss** turnover of stratum corneum of mouse oral mucosa and skin (cell proliferation, renewal rate, mitotic index, epithelium, surface clearance). 918000 *ORDER NO: AAD86-11105*
- Diss** vitamin-a metabolism by the vertebrate retina: an autoradiographic and radiobiochemical study . 749783 *ORDER NO: AAD81-13838*
- Gene** Abad, F. X., Pinto, R. M., Diez, J. M., and Bosch A(A). 1994. disinfection of human enteric viruses in water by copper and silver in combination with low levels of chlorine. *Applied and Environmental Microbiology* 60(7): 2377-2383.
- Chem Meth** Abadia-Fenoll, F. 1968. staining pericellular boutons of glutaraldehyde-fixed nervous tissue; a chromation-silvering sequence for frozen sections. *Stain Technology* 43(4): 191-5.
- Method** Abadia-Fenoll, F., Ostos Garrido, M. V., Lopez-Lendinez, J. L., and Carmona Martos, R. 1985. a modification of the chronic tartrate silver impregnation technique for block impregnation of the central nervous system and paraffin wax embedding. *Journal of Microscopy* 137(Pt 3): 225-32.
- Not Avail** Abdel Rahim, A. G. 1985. the effects of dietary l-ascorbic acid on the absorption and utilization of na75seo3 of silver-treated rats. *Comparative Biochemistry and Physiology. C, Comparative Pharmacology.*
- In Vit** Aberer, E. and Duray, P. H. 1991. morphology of borrelia burgdorferi: structural patterns of cultured borreliae in relation to staining methods. *Journal of Clinical Microbiology* 29(4): 764-72.
- FL** Abok, K., Brunk, U., Jung, B., and Ericsson, J. 1984. morphologic and histochemical studies on the differing radiosensitivity of ductular and acinar cells of the rat submandibular gland. *Virchows Archiv* 45(4): 443-60.
- FL** Abok, K., Hirth, T., Ericsson, J. L., and Brunk, U. 1983. effect of iron on the stability of macrophage lysosomes. *Virchows Archiv* 43(2): 85-101.
- FL** Abraham, A. 1966. [silver procedures for the impregnation of elements of the nervous system]. <original> silververfahren zur impragnation der elemente des nervensystems. *Zeitschrift Fur Wissenschaftliche Mikroskopie Und Mikroskopische*
- Phys** Abramczyk P(A), Ziecina, R., Lisiecka, A., Papierski, K., and Przybylski, J. 2000. the adrenal renal vascular connection plays an essential role in the pathogenesis of renovascular hypertension in the rat. *Journal of Physiology and Pharmacology* 51(1): 35-40.
- Prim** Adachi, E., Hayashi, T., and Hashimoto, P. H. 1991. a comparison of the immunofluorescent localization of collagen types i, iii, and v with the distribution of reticular fibers on the same liver sections of the snow monkey (macaca fuscata). *Cell and Tissue Research* 264(1): 1-8.
- Prim** Adachi, E., Hayashi, T., and Hashimoto, P. H. 1987. type v collagen in splenic reticular fibers of the macaque monkey. *Acta Anatomica* 129(3): 169-75.

- FL** ADACHI, S., KAWAI, H., HOSOGAI, Y., TAKAHASHI, T., YOSHIMURA, H., KATAYAMA, H., and TAKEMOTO, K. toxicity of hijiki (*hizikia fusiforme*) extract containing unidentified arsenic compound. *J FOOD HYG SOC JPN*; 21 (6). 1980 (RECD. 1981). 425-434.
- Chem Meth** Adams, J. C. 1979. a fast, reliable silver-chromate golgi method for perfusion-fixed tissue. *Stain Technology* 54(4): 225-6.
- Method** Adamski Jerzy, Husen Bettina, Marks Frank, and Jungblut Peter W. 1992. purification and properties of oestradiol-17-beta dehydrogenase extracted from cytoplasmic vesicles of porcine endometrial cells. *Biochemical Journal* 288(2): 375-381.
- Plant** Abbott, D. L., Hislop, E. C., and Clifford, D. R. 1977. temperate tree fruits. <Document Title>UK, Long Ashton Research Station: Report 1976. 208 pp.
- CP** Al-Wahab, R. M. H., Bailie, J. H., Bastiman, B., Bateman, N., Croston, D., El-Tarabolsy, M. N., English, P. R., Galbraith, H., Hanrahan, J. P., Hocking, P. M., Jones, R., Kay, R. M., Kempster, A. J., Macfarlane, J. S., McGloughlin, P., Maund, B. A., Mulvany, P. M., O'Ferrall, G. J. M., Bryant, M. J., Dury, N. S., Norman, J. A., Scott, B. M., Morgan, J. B., Jones, D. W., Chamberlain, A. G., Hammond, D., Davidson, F. M., Smith, W. J., Silver, C. L., Dias, M. F. M., MacPherson, R. M., Miller, T. B., Quirke, J. F., Bowman, J. C., Duncan, J. G. S., Boaz, T. G., Mallinson, C. B., Little, W., Cuthbertson, A., Owen, M. G., Somerville, S. H., Lowman, B. G., Deas, D. W., and Duffell, S. J. 1977. titles and abstracts of papers for presentation at the 66th meeting of the british society of animal production, harrogate, 21-24 march 1977. *Animal Production* 24(1): 125-162.
- Not Avail** Alston, F. H., Watkins, R., Sewell, G. W. F., Wilson, J. F., Howard, B. H., Burchill, R. T., Butt, D. J., North, C. J., and Cockburn, J. T. 1975. idem (continued). *UK, East Malling Research Station* : 196 pp.
- CP** Amoroso, E. C., Baranov, O. K., Bogdan, A. T., Boitor, I., Capaul, E. G., Deletang, F., Dell'Orto, V., Orto, V. dell', Fabre-Nys, C., First, N. L., Freund, M., Galloway, D. B., Glatzel, P., Hafez, E. S. E., Marie, M., Otel, V., Schwartmann, B., Sciaraffia, F., Sturman, H., Ting, H., Trut, L. N., King, G. J., Atkinson, B. A., Coltau, G., Angi, E., Salantiu, D., Bohm, B., Kadar, L., Mates, N., Muntean, M., Luca, L. J. de, De Luca, L. J., Petit, M., Carenzi, C., Pagnacco, G., Gerrity, M., Falvo, R., Stelmasiak, T., Lahlou-Kassi, A., Enbergs, H., Perotti, L., Kao, T. C., Chiang, K. T., and Tseng, K. C. 1980. symposium 2. ovarian activity and sexual cycle control. 61-130.
- Abstract** Andrews, L. D., Ansah, G. A., Buckland, R. B., Kennedy, B. W., Bartov, I., Jensen, L. S., Becker, W. A., Spencer, J. V., Mirosh, L. W., Verstrate, J. A., Bell, D. D., Swanson, M. H., Kuney, D. R., Adams, C. J., Bennett, G. I., Benoff, F. H., Berg, R. W., El Halawani, M. E., Bitgood, J. J., Shoffner, R. N., Bradley, F. A., Ogasawara, F. X., Fuqua, C. L., Buss, E. G., Campos, E. J., Baiao, N. C., Cantor, A. H., Bacon, W. L., Coleman, M. A., Carter, T. A., Martin, G. A., Ward, J. B., West, J. R., Cecil, H. C., Sexton, T. J., Cheng, S. E., Edgar, S. A., Cramerland, J., Harper, J. A., Croze, F., Etches, R. J., DeMeritt, R. J., Waibel, P. E., Ferrier, W. T., Borrelli, J., Fitzsimmons, R. C., Emsile, D. R., Garlich, J. D., Garwood, V. A., Lowe, P. C., Gebriel, G. M., Pevzner, I. Y., Nordskog, A. W., Giesen, A. F. III., Pierson, E. E. M., McDaniel, G. R., Brake, J., Gildersleeve, R. P., Satterlee, D. G., Johnson, W. A., Harris, C. E., Kinner, J. A., Hill, L., Renden, J. A., Ingram, D. R., Wilson, H. R., Johnston, N. P., and Warner, D. H. 1979. abstracts of papers to be presented at the 68th annual meeting of the poultry science association, inc. *Poultry Science* 58(4): 1029-1124.
- Not Avail** Butt, D. J., Burchill, R. T., Atkinson, D., White, G. C., Perring, M. A., Parry, M. S., and Quinlan, J. D. 1976. report for 1975. <document title>uk, east malling research station: report for 1975. *UK, East Malling Research Station* : 202 pp.

- Abstract** Chacon, R. S., Talbot, P., Chakraborty, J., Choong, S., Shuster, T., Rosenberg, M. D., Cole, A., Chen, R., Todd, M., Langley, R., Eastman, E. M., Wray, V. P., Wray, W., Heffner, L. J., Storey, B. T., Kaiserman, M. Z., Burkholder, G. D., Kooda-Cisco, M. J., Langmore, J. P., Schutt, C., Luckett, D. C., Mukherjee, A. B., Mrsny, R. J., Meizel, S., Myles, D. G., Primakoff, P., Yu, L., Szabo, P., Hardy, W. D. Jr., and Prenskey, W. 1980. abstracts of papers presented at the twentieth annual meeting, Cincinnati, Ohio, 14-18 November 1980. *Journal of Cell Biology* 87(2, 2): 1a-345a.
- Abstract** Cooper, J. E., Ray, M., Fairfull, R. W., Haley, L. E., Castell, J. D., Glebe, B. D., Saunders, R. L., Sreedharan, A., Golding, G. B., Strobeck, C., MacKay, T. F. C., Mallet, A., Mrakovcic, M., Nagai, J., Newkirk, G. F., Roberts, F. L., Pasquine, P. C., Schom, C., Halfon, E., Scott, T., Kennedy, B. W., Buckland, R. B., Singh, R. S., Singh, S. M., Zouros, E., Stiles, S. S., and Strobeck, C. 1978. abstracts of papers presented at the twenty-third annual meeting of the genetics society of Canada, Dalhousie University, Halifax, Nova Scotia June 13-16, 1978. *Canadian Journal of Genetics and Cytology* 20(3): 439-456.
- CP** Cooper, J. E., Ray, M., Fairfull, R. W., Haley, L. E., Castell, J. D., Glebe, B. D., Saunders, R. L., Sreedharan, A., Golding, G. B., Strobeck, C., MacKay, T. F. C., Mallet, A., Mrakovcic, M., Nagai, J., Newkirk, G. F., Roberts, F. L., Pasquine, P. C., Schom, C., Halfon, E., Scott, T., Kennedy, B. W., Buckland, R. B., Singh, R. S., Singh, S. M., Zouros, E., Stiles, S. S., and Strobeck, C. 1978. abstracts of papers presented at the twenty-third annual meeting of genetics society of Canada, Dalhousie University, Halifax, Nova Scotia June 13-16, 1978. *Canadian Journal of Genetics and Cytology* 20(3): 439-456.
- CP** Haas, W. P., Koteles, R. M., Stephens, J. F., Jaap, R. G., Halawani, M. E. El., Burke, W. H., Harrison, P. C., Cogburn, L. A., Brown, D. E., Hughes, B. L., Holleman, K. A., Hutt, R. B., Jones, D. G., McClung, M. R., Wang, A., Jones, W. T., McDaniel G. R., Coleman, M. A., McGibbon, W. H., Malone, G. W., Smyth, J. R. Jr., Marks, H. L., Marquez, B. J., Miller, D. H., Ferguson, T. M., Bradley, J. W., Mitchell, R. L., Buckland, R. B., Forgrave, L., Baker, R. D., Monsi, A., Enos, H. L., Nordskog, A. W., Silva, M. A., Ogasawara, F. X., Woodard A. E., Fuqua, L., Stinnett, V., Parker, J. E., Potter, L. M., Shelton, J. R., Meyer, G. B., Raffel, L. J., Buss, E. G., Rahn, A. P., Sexton, T. J., Shoffner, R. N., Shrestha, J. N. B., Otis, J., Telloni, R. V., Fechheimer, N. S., Washburn, K. W., Wilson, W. O., and Siopes, T. D. 1975. 64th annual meeting of the poultry science association (continuation). *Poultry Science* 54: 1724-1831.
- Unrel** Silver, R., <Editors> Wada, M., Ishii, S., and Scanes, C. G. 1990. endocrinology of birds. molecular to behavioral. (*Book*): x + 320 pp.
- Drug** Ager, A. 1982. *Screening and Evaluation of Experimental Antiparasitic Drugs*. <NOTE> Annual Rept. No. 14, 1 Oct 81-5 May 82
- HHE** Agerholm, C., Bastholm, L., Johansen, P. B., Nielsen, M. H., and Elling, F. 1994. epithelial transport and bioavailability of intranasally administered human growth hormone formulated with the absorption enhancers didecanoyl-1-alpha-phosphatidylcholine and alpha-cyclodextrin in rabbits. *Journal of Pharmaceutical Sciences* 83(12): 1706-11.
- Unrel** Ahmad, K N, Ahmad, M D, Chaudhry, M R, and Sial, M B. comparative study of hatchability, fertility and embryonic mortality in the first and second laying years of white leghorn and layllpur silver black breeds. [chicken]. *J Agric Res*. Mar 1972 10 (1): 54-58. Ref.
- Alt** Ahmad, M. and Reams, W. M. Jr. the behavior of the donor melano blasts in the nonpigmented host embryos. *Z MIKROSK-ANAT FORSCH (LEIPZ)*. *Zeitschrift Fuer Mikroskopisch-Anatomische Forschung (Leipzig)*. 90 (3). 1976 (Recd 1977) 484-488.

- FL** Ahmad, M. and Reams, W. M. Jr. 1977. the behaviour of pigment cells in the leg muscle compartments of silver campine fowl. *Zeitschrift Fur Mikroskopisch-Anatomische Forschung* 91(3): 573-80.
- No Tox** Ahmad, Z., Khan, M. Z., and Majid, M. A. 1981. effect of breed and age on parenterally induced newcastle disease. *Pakistan Veterinary Journal* 1(2): 67-69.
- Phys** Aibara, R. 1991. [motor innervation of the canine arytenoid muscle]. *Nippon Jibiinkoka Gakkai Kaiho* 94(6): 805-16.
- No Oral** Akeret, O., Haas, J. N., Leuzinger, U., and Jacomet, S. 1999. plant macrofossils and pollen in goat/sheep faeces from the neolithic lake-shore settlement arbon bleiche 3, switzerland. *Holocene* 9(2): 175-182.
- Alt** Al-Radawy, M. A. the differentiation of the golgi apparatus in the developing oocytes in chicken. *BULL NAT HIST RES CENT UNIV BAGHDAD. Bulletin of the Natural History Research Centre University of Baghdad.* 7 (1). 1976 (Recd 1977) 1-15.
- FL** Aleksandrov, P. N. and Speranskaia, T. V. 1987. [indices of acute inflammation against a background of lithium oxybutyrate action]. <original> pokazateli ostrogo vospaleniia na fone deistviia oksibutirata litiia. *Biulleten' Eksperimental'noi Biologii i Meditsiny* 103(2): 188-90.
- FL** Aleksandrov, P. N., Speranskaia, T. V., Bobkov, I. u. G., Zagorevskii, V. A., and Zykov, D. A. 1986. [effect of rutin and esculamine on models of aseptic inflammation]. <original> vliianie rutina i eskulamina na nekotorye modeli aspeticheskogo vospaleniia. *Farmakologiya i Toksikologiya* 49(1): 84-6.
- CP** ALHEID, G. F. 1985. neurons in dorsal and ventral pallidum of rat concentrate heavy metals and project to frontal and entorhinal cortex and to mediodorsal thalamus. *AMERICAN ASSOCIATION OF ANATOMISTS 98TH ANNUAL MEETING AND THE ASSOCIATION CANADIENNE DES ANATOMISTES (CANADIAN ASSOCIATION OF ANATOMISTS) 29TH ANNUAL MEETING*
- Abstract** ALHEID, G. F. and HASELTON, C. L. 1988. enhanced uptake of a heavy metal silver after surgical disruption of the blood-brain barrier in rats and monkeys. *18TH ANNUAL MEETING OF THE SOCIETY FOR NEUROSCIENCE*
- Aquatic** Ali, M. A., Hossain, M. A., and Islam, M. A. 1992. polyculture of carps in integrated duck-cum-fish farming ponds [in bangladesh]. *Bangladesh Journal of Training and Development.* V. 5(2) P. 25-32
- HHE** Altar, C. A. and Bakhit, C. receptor-mediated transport of human recombinant nerve growth factor from olfactory bulb to forebrain cholinergic nuclei. *BRAIN RES. Brain Research.* 541 (1). 1991. 82-88.
- Prim** Amaral, D. G., Insausti, R., and Cowan, W. M. 1987. the entorhinal cortex of the monkey: i. cytoarchitectonic organization. *Journal of Comparative Neurology* 264(3): 326-55.
- Prim** Amaral, D. G. and Price, J. L. 1984. amygdalo-cortical projections in the monkey (macaca fascicularis). *Journal of Comparative Neurology* 230(4): 465-96.
- Phys** Amenta, F., Bongrani, S., Cadel, S., Ricci, A., Valsecchi, B., and Zeng, Y. C. 1994. neuroanatomy of aging brain. influence of treatment with l-deprenyl. *Annals of the New York Academy of Sciences* 717: 33-44 .

- Phys** Amenta, F., Del Valle, M., Vega, J. A., and Zaccheo, D. 1991. age-related structural changes in the rat cerebellar cortex: effect of choline alfoscerate treatment. *Mechanisms of Ageing and Development* 61(2): 173-86.
- Phys** Amenta, F., Liu, A., and Sabbatini, M. 1995. pharmacological characterization and autoradiographic localization of dihydropyridine-type calcium channels in the kidney of spontaneously hypertensive rats. *Clinical and Experimental Pharmacology & Physiology* 22 Suppl 1: S232-3.
- No COC** Amenta, F. and Ricci, A. autoradiographic localization of dopamine da-1 receptors in the rat renal vasculature using tritiated sch-23390 as a ligand. *J AUTON PHARMACOL. Journal of Autonomic Pharmacology*. 10 (6). 1990. 373-383.
- No Oral** Andreasen, A., Danscher, G., Juhl, S., Stoltenberg, M., Revsbech, N. P., Jensen, H., and Jensen, K. B. 1997. distinct differences in partial oxygen pressure at micrometer ranges in the rat hippocampal region. *Journal of Neuroscience Methods* 72(1): 15-21.
- Alt** Anjo, A. and Couturier, E. 1976. long-term alloxan diabetes in the rat. study of mesangial cell morphology by serial biopsies. *Pathologia Europaea*. 11(4): 239-50.
- Plant** Antipov, V. G. 1970. *Effect of SO Sub 2 on Generative Organs of Woody Plants*. *CEGB-TRANS-5924*
- FL** Antonenko, L. A. 1987. structure of the lymph vessels of skeletal muscle. *Vestnik Zoologii* (No.5): 54-58.
- No Oral** Appel, N. M., Rapoport, S. I., and O'Callaghan, J. P. 1997. sequelae of parenteral domoic acid administration in rats: comparison of effects on different anatomical markers in brain. *Vol. 25, No. 4, Pp. 350-358 Synapse*
- Bact** Arlet, G. and Perol, Y. 1990. cat-scratch disease bacteria. *Nouvelle Revue Francaise D'Hematologie* 32(6): 461-3.
- In Vit** Arnolds, W. J. A. silver staining methods for the demarcation of superficial cell boundaries in whole mounts of embryos. *Mikroskopie*. 35 (7-8). 1979. 202-206.
- Phys** Arrighi S(A) and Domeneghini, C. 1997. peculiar granules of principal cells of equine epididymis are immunoreactive to (met)-enkephalin. *Biomedical Research (Aligarh)* 8(1): 29-36.
- No Oral** Arvidson, B. 1990. accumulation of mercury in brainstem nuclei of mice after retrograde axonal transport. *Acta Neurologica Scandinavica* 82(4): 234-7.
- In Vit** Ashwell, K. W., Hollander, H., Streit, W., and Stone, J. 1989. the appearance and distribution of microglia in the developing retina of the rat. *Visual Neuroscience* 2(5): 437-48.
- No Dose** Atsumi, S. the histogenesis of motor neurons with special reference to the correlation of their end plate formation part 3 the development of motor neurons innervating the inter costal muscle in the chick embryo. *ACTA ANAT. Acta Anatomica*. 80 (4). 1971 (Recd 1972) 504-515.
- BioX** Attridge, S. R., Daniels, D., Morona, J. K., and Morona, R. 1990. surface co-expression of vibrio cholerae and salmonella typhi o-antigens on ty21a clone ex210. *Microbial Pathogenesis* 8(3): 177-88.

- Drug** Aulick, L. H., McManus, A. T., Mason, A. D. Jr, and Pruitt, B. A. Jr. 1986. effects of infection on oxygen consumption and core temperature in experimental thermal injury. *Annals of Surgery* 204(1): 48-52.
- FL** Avrushchenko, M. S. h., Bul'chuk, O. V., Grigor'eva, A. V., and Iarygin, V. N. 1990. [changes in the structural and functional states of chromatin of the neurons of the cerebral hemisphere cortex in the early post-resuscitation period in rats]. <original> izmenenie strukturno-funktsional'nogo sostoianiiia khromatina neironov kory bol'shikh polusharii krysa v rannem post- reanimatsionnom periode. *Biulleten' Eksperimental'noi Biologii i Meditsiny* 109(4): 402-5.
- Phys** Avrushchenko, M. Sh, Bul'chuk, O. V., Grigor'eva, A. V., and Yarygin, V. N. change in the structural and functional state of chromatin of the cerebral cortex neurons in the early postresuscitation period in rats. *BYULL EKSP BIOL MED. Biulleten' Eksperimental'noi Biologii i Meditsiny*. 109 (4). 1990. 402-405.
- FL** Babenko, G. A., Mazepa, I. V., Mosulishvili, L. M., Belokoby'skii, A. I., and Shavliashili, N. S. h. 1980. [metal content of nucleic acids in experimental leukosis]. <original> sodержanie metallov v nukleinovoykh kislotakh pri eksperimental'nom leikoze. *Ukrainskii Biokhimicheskii Zhurnal* 52(5): 551-5.
- FL** Babenko, G. A., Mazepa, I. V., Mosulishvili, L. M., Belokoby'skii, A. I., and Shavliashvili, N. Sh. metal content in nucleic-acids during experimental leukemia. *UKR BIOKHM ZH. Ukrainskii Biokhimicheskii Zhurnal*. 52 (5). 1980 (Recd. 1981). 551-555.
- Anat** Backenkohler, U., Strasmann, T. J., and Halata, Z. 1997. topography of mechanoreceptors in the shoulder joint region--a computer-aided 3d reconstruction in the laboratory mouse. *Anatomical Record* 248(3): 433-41.
- FL** Bajmocy, E., Bacsadi, A., Glavits, R., and Kiss, I. 1999. occurrence of porcine proliferative enteropathy in a hungarian pigherd. *Magyar Allatorvosok Lapja* 121(6): 330-336.
- FL** Bakken, M. 1988. effect of social status on mothering characters in silver foxes. *Va Ra Palsdjur* 59(5): 178-179.
- FL** Bakken, M. 1989. is it possible to predict the future maternal behaviour in silver foxcubs? *Va Ra Palsdjur* 60(9): 286-288.
- CP** Bakken, M. Norges Landbrukshoegskole Aas Norway Inst. for Husdyrfag and Skrede, A. ed. 1992. the relationship between open field activity, competition capacity and first year reproductive success among farmed silver fox cubs (*vulpes vulpes*). progress in fur animal science. proceedings from the vth international scientific congress in fur animal production. P. 520-528. No. 9(Suppl.)
- CP** Bakken Morten. 1995. does fear of humans by silver fox affect reproductive performance and cub behaviour? *Applied Animal Behaviour Science* 44(2-4): 257.
- BioX** Balaban, C. D. and Severs, W. B. toxic effects of somatostatin in the cerebellum and vestibular nuclei multiple sites of action. *NEUROSCI RES. Neuroscience Research*. 12 (1). 1991. 140-150.
- Drug** Balakirev, N. A., Drozdova, E. I., Loenko, N. N., Bevz, N. I., Efimova, O. G., Kuzikov, A. N., Abramov, N. A., and Bondarenko, V. M. 1994. application of bifidumbakterin in fur animal husbandry. *Zootekhniiya* (7): 17-19.
- In Vit** Baldi, C., Minoia, C., Di Nucci A, Capodaglio, E., and Manzo, L. effects of silver in isolated rat hepatocytes. *TOXICOL LETT (AMST). Toxicology Letters (Amsterdam)*. 41 (3). 1988. 261-268.

- Phys** Banks, R. W. 1991. the distribution of static gamma-axons in the tenuissimus muscle of the cat. *Journal of Physiology* 442: 489-512.
- Anat** Banks, R. W. 1994. intrafusal motor innervation: a quantitative histological analysis of tenuissimus muscle spindles in the cat. *Journal of Anatomy* 185(Pt 1): 151-72.
- FL** Barkov, G. D., Dvoskin, Ya. G., and El'piner, L. I. effect of small concentrations of silver on some live organisms of the evolutionary series. *Vodopodgot. Ochistka Prom. Stokov (1973)* : 10, 83-91
- FL** Barkov, G. D. and El Piner L I. necessity of limiting silver content in drinking water mouse rat rabbit. *GIG SANIT. Gigiena i Sanitariya.* 33 (6). 16-21. 1968.
- FL** Barkov, G. D. and El'piner, L. I. the necessity of limiting silver levels in drinking water. *Gig. Sanit. (1968)* 33(6): 16-21
- FL** Barkov, G. D. and El'piner, L. I. 1968. [on the necessity of limiting the amount of silver in drinking water]. <original> o neobkhodimosti ogranicheniia kolichestva serebra v pit'evoi vode. *Gigiena i Sanitariia* 33(6): 16-21.
- No Dose** Barroso, C. P., Afonso, F., Caldas, M. Castro, Pinho, M., Mata, L., and Gulbenkian, S. A. 1999. suppression of 125i-vasoactive intestinal polypeptide binding sites in arteries of the hamster seminal vesicle following castration. *Histochemical Journal* 31(5): 271-276.
- CP** Barta, M. and Mertin, D. Slovenska Polnohospodarska Univerzita Nitra Slovak Republic. 1997. creation of the red fox type suitable for farm conditions. <original> tvorba vhodneho typu lisky cervenej pre farmove chovy. topical and prospective tasks in rearing and breeding of farm animals. part 2. [proceedings from the international conference held on the occasion of the 50th anniversary of the research institute of animal production]. <original> aktualne a perspektivne ulohy v chove a slachteni hospodarskych zvierat. 2 cast. zbornik referatov z konferencie s medzinarodnou ucastou poriadanej pri prilezitosti 50. vyrocia zalozenia ustavu. (Pt.2) P. 269-271
- CP** Bartel H(A) and Orkisz, S. 1994. ultrastructural evaluation of transcriptional activity with gold-rnase and silver staining methods. *Cell Biology International* 18(5): 409.
- Drug** Barua, A. B. and Olson, J. A. 1992. chemical synthesis, growth-promoting activity, and metabolism of all-trans retinyl beta-glucose in the rat. *International Journal For Vitamin And Nutrition Research.* 62(4): 298-302.
- BioX** Baskerville, A., Dowsett, A. B., Cook, R. W., Dennis, M. J., Cranage, M. P., and Greenaway, P. J. 1991. pneumocystis carinii pneumonia in simian immunodeficiency virus infection: immunohistological and scanning and transmission electron microscopical studies. *Journal of Pathology* 164(2): 175-84.
- Prim** Baskin, G. B., Chandler, F. W., and Watson, E. A. 1984. cutaneous zygomycosis in rhesus monkeys (macaca mulatta). *Veterinary Pathology* 21(1): 125-128.
- Phys** Basso, N., Kurnjek, M. L., Ruiz, P., and Taquini, A. C. 1993. effect of central norepinephrine depletion on renovascular hypertension and on the renin system. *Clinical and Experimental Hypertension* 15(4): 641-62.
- FL** Bat'kaev, A. I. 1972. some helminthiases with a natural focal occurrence in the pavlodarregion. *Voprosy Prirodnoi Ochagovosti Boleznei Alma-Ata, USSR: Akademiya Nauk Kazakhskoi SSR* (5): 158-161.

- Phys** Batra, S. and Konig, M. F. 1996. a novel method to demonstrate capillary geometry and perfusion patterns in rat brain from the same histological section. *Advances in Experimental Medicine and Biology* 388: 77-83.
- Fate** Bayer, V. E. and Pickel, V. M. 1991. gaba-labeled terminals form proportionally more synapses with dopaminergic neurons containing low densities of tyrosine hydroxylase-immunoreactivity in rat ventral tegmental area. *Brain Research* 559(1): 44-55.
- No Dose** Bazhan, N. M., Krass, P. M., and Trut, L. N. genetic and pheno genetic hormonal characteristics of animals 2. changes in functional interaction between gonads and the pituitary adrenal system during the process of silver fox domestication. *SOV GENET (ENGL TRANSL GENETIKA). Soviet Genetics (English Translation of Genetika).* 14 (7). 1978 (1979). 891-895.
- HHE** Bein, G., Bitsch, A., Hoyer, J., and Kirchner, H. 1991. the detection of human cytomegalovirus immediate early antigen in peripheral blood leucocytes. *Journal of Immunological Methods* 137(2): 175-80.
- FL** Beletskaja, L. V., Katasonova, L. P., and Aliev, T. S. 1981. [collector system of the thymus]. <original> kollektornaia sistema timusa. *Biulleten' Eksperimental'noi Biologii i Meditsiny* 92(9): 371-3.
- Phys** Belisle, C. and Sainte-Marie, G. a modified silver impregnation technique for the observation of thick sections of lymph nodes perfused with colloidal carbon. *BIOTECH HISTOCHEM.* 66 (3). 1991. 145-152.
- Phys** Bell, D. R., Sabbah, H. N., and Stein, P. D. 1990. fatty streak development in the vicinity of aortic coarctations in hypercholesterolemic rabbits. *Biorheology* 27(5): 645-57.
- Unrel** Bell, J. A. and Manning, D. D. 1991. evaluation of campylobacter jejuni colonization of the domestic ferret intestine as a model of proliferative colitis. *American Journal Of Veterinary Research.* 52(6): 826-832.
- FL** Belyaev, D. K., Isakova, G. K., and Trut, L. N. early embryonal development of domesticated silver foxes. *Zhurnal Obshchei Biologii.* 47 (4). 1986. 450-452.
- FL** Belyaev, D. K., Isakova, G. K., and Trut, L. N. effect of selection for behavior on the early embryonic development of silver foxes. *DOKL AKAD NAUK SSSR. Doklady Akademii Nauk Ssr.* 290 (6). 1986 (Recd. 1987). 1496-1498.
- FL** Belyaev D K, Isakova G K, and Trut L N . 1986. the effect of selection for behaviour on the early embryonic development of silver foxes. *DOKLADY AKADEMII NAUK SSSR* 290. 124(6): 1496-1498, illustr.
- FL** Belyaev D K, Plyusnina I Z, and Trut L N. 1986. physiological boundaries of the sensitive period of primary socialization in silver foxes, their changes during domestication. *ZHURNAL EVOLYUTIONNOI BIOKHMII I FIZIOLOGII* 22. 123(6): 555-562, illustr.
- FL** Belyaev, D. K., Plyusnina, I. Z., and Trut, L. N. physiological boundaries of the sensitive period of primary socialization in silver foxes and changes in the boundaries during domestication. *ZH EVOL BIOKHM FIZIOL. Zhurnal Evolyutsionnoi Biokhimii i Fiziologii.* 22 (6). 1986 (Recd. 1987). 555-562.
- FL** Belyaev, D. K. and Trut, L. N. reorganization of the seasonal rhythm of reproduction in silver black foxes *vulpes-fulva* during their selection for domestication. *ZH OBSHCH BIOL. Zhurnal Obshchei Biologii.* 44 (6). 1983 (Recd. 1984). 739-752.

- FL** Belyaev D K and Trut L N. 1983. reorganization of the seasonal rhythm of reproduction in the silver-black foxes during their selection for the capacity to domestication. *ZHURNAL OBSHCHEI BIOLOGII* 44. 120(6): 739-752, illustr.
- No Dose** Belyaev, D. K., Volobuev, V. T., Radzhabli, S. I., and Trut, L. N. investigation of the nature and role of supplementary chromosomes of silver foxes part 2 supplementary chromosomes in the selection of animals according to behavior. *SOV GENET (ENGL TRANSL GENETIKA). Soviet Genetics (English Translation of Genetika).* 10 (8). 1974 (1976) 997-1003
- In Vit** Benelli Umberto, Bocci Guido, Danesi Romano, Lepri Antonio, Bernardni Nunzia, Bianchi Francesco, Lupetti Mario, Dolfi Amelio, Campagni Antonio, Agen Cristiana, Nardi Marco, and Del Tacca Mario(A). 1998. the heparan sulfate suleparoid inhibits rat corneal angiogenesis and in vitro neovascularization. *Experimental Eye Research* 67(2): 133-142.
- In Vit** Benelli Umberto, Lepri Antonio, Nardi Marco, Danesi Romano, and Del Tacca= Mario(A). 1995. trapidil inhibits endothelial cell proliferation and angiogenesis in the chick chorioallantoic membrane and in the rat cornea. *Journal of Ocular Pharmacology and Therapeutics* 11(2): 157-166.
- Method** Benga Gheorghe, Banner Malcolm, and Wrigglesworth John M. 1996. quantitation of the water channel protein aquaporin (chip28) from red blood cell membranes by densitometry of silver stained polyacrylamide gels. *Electrophoresis* 17(4): 715-719.
- No Dose** Bennion, R. S., Williams, R. A., and Wilson, S. E. 1984. comparison of infectibility of vascular prosthetic materials by quantitation of median infective dose. *Surgery* 95(1): 22-6.
- Method** Benveniste, H., Cofer, G. P., Piantadosi, C. A., Davis, J. N., and Johnson, G. A. quantitative pmr imaging in focal cerebral ischemia in rat brain. *STROKE. Stroke.* 22 (2). 1991. 259-268.
- Method** Benveniste, H., Cofer, G. P., Piantadosi, C. A., Davis, J. N., and Johnson, G. A. 1991. quantitative proton magnetic resonance imaging in focal cerebral ischemia in rat brain. *Stroke* 22(2): 259-68.
- Abstract** Benvenisty, A., White, J. V., Fox, P., Modak, S., Fox, C., Voorhees, A. B., Reemtsma, K., Todd, G. J., and Nowygrod, R. development of an infection resistant vascular prosthesis using silver impregnated dacron. *16TH WORLD CONGRESS OF THE INTERNATIONAL SOCIETY FOR CARDIOVASCULAR SURGERY, RIO DE JANEIRO, BRAZIL, SEPT. 18-23, 1983. J CARDIOVASC SURG.* 24 (4). 1983. 441-442.
- HHE** Benyon, R. Christopher, Enciso, J. Antonio, and Befus, A. Dean(A). 1993. analysis of human skin mast cell proteins by two-dimensional gel electrophoresis: identification of tryptase as a sialylated glycoprotein. *Journal of Immunology* 151(5): 2699-2706.
- No Oral** Berdjis, C. C., Byers, N. T., and Bice, J. 1971. *Comparative Studies of the Effects of I125 and I131 in Rat Thyroid* : 13p.
- Fate** Beresford, N. A., Mayes, R. W., Crout, N. M. J., Howard, B. J., and Kanyar, B. 1994. dynamic behaviour of 110mag in sheep tissues. *Health Physics.* 66(4): 420-426.
- No Dose** Berestova, V. I. 1981. cobalt content in the bodies of mink, arctic foxes (alopex lagopus) and silver foxes at various stages of growth. <original> soderzhanije kopal'ta v organizme norok, nestsov i lisits raznogo vozrasta. *Scientifur.* V. 5(1) P. 34-37
- FL** Berestova, V. I. 1981. cobalt content in the bodies on mink, arctic foxes (alopex lagopus) and silver foxes at various stages of growth: <original> soderzhanije kopal'ta v organizme norok, nestsov i lisits ranogo vozrasta. *Scientifur.* 5(1): 34-37.

- No COC** Bergamaschi, M., Pierucci, L., and Branzoli, U. 1984. inhibitory activity of indobufen (*) on platelet aggregation in vivo. *Pharmacological Research Communications* 16(10): 979-85.
- HHE** Bergeron, J. J. M., Posner, B. I., Josefsberg, Z., and Sikstrom, R. intra cellular poly peptide hormone receptors the demonstration of specific binding sites for insulin and human growth hormone in golgi fractions isolated from the liver of female rats. *J BIOL CHEM. Journal of Biological Chemistry*. 253 (11). 1978 4058-4066.
- CP** Berglund, O., Hallmans, G., Nygren, C., and Taljedal I-B. effects of a diet poor in fiber on the frequency of intestinal cells stained with silver or lead-hematoxylin in mice. *XII CONGRESS OF THE INTERNATIONAL DIABETES FEDERATION, MADRID, SPAIN, SEPT. 23-28, 1985. DIABETES RES CLIN PRACT. 0 (Suppl. 1). 1985. S44.*
- No Dose** Berk, M. L. and Butler, A. B. efferent projections of the medial preoptic nucleus and medial hypothalamus in the pigeon columba-livia. *J COMP NEUROL. Journal of Comparative Neurology*. 203 (3). 1981. 379-400.
- FL** Bernatskii, V. G. 1983. the duration of pregnancy in mink in relation to the date of mating, age and colour. *Nauchnye Trudy. Nauchno-Issledovatel'Skii Institut Pushnogo Zverovodstva i Krolikovodstva* (29): 93-100.
- FL** Bernatskii, V. G. and Mashtak, Z. A. 1983. the relationship of reproductive performance of mink with the time and organisation of mating. *Nauchnye Trudy. Nauchno-Issledovatel'Skii Institut Pushnogo Zverovodstva i Krolikovodstva* (29): 101-109.
- No Dose** Berry, J. P., Zhang, L., and Galle, P. 1995. interaction of selenium with copper, silver, and gold salts. electron microprobe study. *Journal of Submicroscopic Cytology and Pathology* 27(1): 21-8.
- Gene** Bidwell Christopher A(A) and Carlson Don M. 1995. characterization of vitellogenin from white sturgeon, acipenser transmontanus. *Journal of Molecular Evolution* 41(1): 104-112.
- Abstract** Bihlmeyer, J., Goldman, M., and Scott, L. silver nitrate ingestion 1. the effect of chronic ingestion of silver nitrate on growth thyroid function and reproduction. *66TH ANNUAL MEETING OF THE SOUTH DAKOTA ACADEMY OF SCIENCE, VERMILLION, S.D., USA, APRIL, 1981. PROC S D ACAD SCI. 60 (0). 1981 (Recd. 1982). 177-178.*
- Abstract** Bihlmeyer, J., Goldman, M., and Scott, L. silver nitrate ingestion 2. effects of chronic intake of silver nitrate on behavior. *66TH ANNUAL MEETING OF THE SOUTH DAKOTA ACADEMY OF SCIENCE, VERMILLION, S.D., USA, APRIL, 1981. PROC S D ACAD SCI. 60 (0). 1981 (Recd. 1982). 178.*
- Imm** Bilinska Barbara(A), Koziel Edyta, and Kmicikiewicz Iwona. 1998. interactions between voles/mice leydig cells and macrophages. cyto- and immunocytochemical approach. *Central-European Journal of Immunology* 23(2): 106-115.
- Method** Bilinski Szczepan M(A) and Bilinska Barbara. 1996. a new version of the ag-nor technique: a combination with dapi staining. *Histochemical Journal* 28(9): 651-656.
- FL** Bilsing, V. A. and Schuetz, M. influence of black-white-colored floor plates on heart rate and behavior of guinea-pigs cavia-porcellus. *Z VERSUCHSTIERKD. Zeitschrift Fuer Versuchstierkunde*. 31 (2). 1988. 77-83.
- In Vit** Birch, N. P., Christie, D. L., and Renwick, A. G. 1984. immunoreactive insulin from mouse brain cells in culture and whole rat brain. *Biochemical Journal* 218(1): 19-27.

- Diss** Bishara, R. H. a radiotracer distribution study of p,p'-ddt in rats and the effect of some physical and chemical factors on its excretion. *Diss. Abstr. Int.*; 33(2): 675B-676B; 1972
- No Dose** Bitman, J. and Wood, D. L. 1980. cholesterol and cholesteryl esters of eggs from various avian species. *Poultry Science*. 59(9): 2014-2023.
- HHE** Blake, J., Westphal, M., and Li, C. H. 1984. synthesis of human pancreatic growth hormone-releasing factor and two omission analogs by segment-coupling method in aqueous solution. *International Journal of Peptide and Protein Research* 24(5): 498-504.
- Gene** Bloom, S. E. and Bacon, L. D. 1985. linkage of the major histocompatibility (b) complex and the nucleolar organizer in the chicken. assignment to a microchromosome. *Journal of Heredity* 76(3): 146-54.
- FL** Blumen, G. and Merzel, J. 1972. the decrease in the concentration of organic material in the course of formation of the enamel matrix. *Experientia* 28(5): 545-8.
- FL** Boccignone, M., Damasio, L., and Sarra, C. high content of some metals in the diet and fatty acid composition of different tissues of growing chicks. *Riv. Zootec. Vet. (1982)* 10(3): 164-70
- Method** Boermans, H. J. 1990. diagnosis of nitrate toxicosis in cattle, using biological fluids and a rapid ion chromatographic method. *American Journal of Veterinary Research* 51(3): 491-495.
- Phys** Bofill, Roger, Palacios, Oscar, Capdevila, Merce, Cols, Neus, Gonzalez-Duarte, Roser, Atrian, Silvia, and Gonzalez-Duarte, Pilar. a new insight into the ag+ and cu+ binding sites in the metallothionein .beta. domain. *J. Inorg. Biochem. (1999)* 73(1,2): 57-64 .
- FL** Bogdan, S. D. 1971. the effect of inbreeding on growth and development of rabbits. *Trudy Chuvashskogo Sel'Skokhozyaistvennogo Instituta* 8(2): 87-91.
- FL** Bogolepov, N. N. and Verbitskaya, L. B. electron microscopic study of the rat cerebral cortex impregnated by the golgi method. *ARKH ANAT GISTOL EMBRIOL. Arkhiv Anatomii Gistologii i Embriologii*. 73 (8). 1977 81-84.
- In Vit** Bonke, B. A., Bonke, D., and Scheich, H. 1979. connectivity of the auditory forebrain nuclei in the guinea fowl (numida meleagris). *Cell and Tissue Research* 200(1): 101-21.
- Herp** Bonnet, X., Bradshaw, D., Shine, R., and Pearson, D. 1999. why do snakes have eyes? the (non-)effect of blindness in island tiger snakes (notechis scutatus). *Vol. 46, No. 4, Pp. 267-272* Behavioral Ecology And Sociobiology
- In Vit** Booyse, F. M., Sedlak, B. J., and Rafelson, M. E. Jr. culture of arterial endothelial cells characterization and growth of bovine aortic cells. *THROMB DIATH HAEMORRH. Thrombosis Et Diathesis Haemorrhagica*. 34 (3). 1975 (Recd 1976) 825-839.
- FL** Bornstein, M. B., Iwanami, H., Lehrer, G. M., and Breitbart, L. 1968. observations on the appearance of neuromuscular relationships in cultured mouse tissues. *Zeitschrift Fur Zellforschung Und Mikroskopische Anatomie* 92(2)
- FL** Borodin, P. M. a stable polymorphism in fur color among the red fox populations of kamchatka russian-sfsr ussr. *ZH OBSHCH BIOL. Zhurnal Obshchei Biologii*. 43 (4). 1982. 541-546.
- Method** Borodin, P. M., Oda, S., Takagishi, Y., Inoue, M., and Yamamura, H. 1993 .*Sunkusu Osu Ni Okeru Senshokutai Taigo No Denshi Kenbikyo Ni Yoru Kaiseki (Electron Microscopic Analysis of Meiotic Chromosome Pairing in Male House Musk Shrew, Suncus Murinus)*

- In Vit** Bosma, P. T., Kolk, S. M., Rebers, F. E. M., Lescroart, O., Roelants, I., Willems, P. H. G M, and Schulz, R. W(A). 1997. gonadotrophs but not somatotrophs carry gonadotrophin-releasing hormone receptors: receptor localisation, intracellular calcium, and gonadotrophin and gh release. *Journal of Endocrinology* 152(3): 437-446.
- Phys** Bottino, N. R., Anderson, R. E., and Friser, R. 1970. animal endogenous triglycerides. ii. rat and chicken adipose tissue. *Lipids* 5(2): 165-70.
- BioX** Boulos Laila M(A), El-Mansoury Salwa T(A), Hegazy Iman H(A), El-Gohari Samira H, and Ebrahim Eman R(A). 1996. detection of trichinella pseudospiralis antigen in the parenteral phase in experimentally infected mice. *Journal of the Egyptian Society of Parasitology* 26(1): 9-17.
- FL** Bozhilova-Pastirova, A. 1990. [a structural and ultrastructural study of the inferior olivary complex in ground squirrels (citellus citellus l.)]. <original> strukturno i ultrasturno izsledvane na dolniia olivaren kompleks u laluger (citellus citellus l.). *Eksperimentalna Meditsina i Morfologija* 29(4): 1-7.
- FL** Braastad, B. 1988. relationship between behaviour and reproductive performance in foxes. *Va Ra Palsdjur* 59(5): 180-184.
- FL** Braastad, B. O. 1999. ethological research related to animal welfare at the department of animal science, the agricultural university of norway. *Nordisk Jordbrugsforskning* 81(3): 286-292.
- CP** Brannan, L. R., Turner, C. M. R(A), and Phillips, R. S. 1994. malaria parasites undergo antigenic variation at high rates in vivo. *Proceedings of the Royal Society of London Series B Biological Sciences* 256(1345): 71-75.
- Abstract** Brauer, M. M., Casanova, G., Kanovich, S., and Sotelo, J. R. development of the innervation of the uro genital system in the fetal mouse. *23RD ANNUAL MEETING OF THE AMERICAN SOCIETY FOR CELL BIOLOGY, SAN ANTONIO, TEX., USA, NOV. 29-DEC. 3, 1983. J CELL BIOL.* 97 (5 Part 2). 1983. 479a.
- FL** Brauer, M. M., Kanovich, S., Casanova, G., and Sotelo, J. R. 1985. development of the innervation of the urogenital complex in the fetal mouse. *Experientia* 41(12): 1605-7.
- Bact** Braun U(A), Anliker, H., Corboz, L., and Ossent, P. 1997. spiral-shaped bacteria in the abomasum of cows. *Schweizer Archiv Fuer Tierheilkunde* 139(11): 507-516.
- FL** Braun, U. Zurich Univ. Switzerland Klinik fuer Wiederkaeuer und Pferdemedizin, Anliker, H., Corboz, L., and Ossent, P. 1997. [investigations into the prevalence of spiral-shaped bacteria in the abomasum of cattle]. <original> untersuchungen ueber das vorkommen von spiralförmigen bakterien im labmagen des rindes. *Schweizer Archiv Fuer Tierheilkunde.* <Subtitle>Archives Suisses De Medecine Veterinaire. Archivio Svizzero Di Medicina Veterinaria. Swiss Archive for Veterinary Medicine. V. 139(11) P. 507-516
- Phys** Brautigam, R. T., Porter, R. S., Frasch, F., and Kutalek, S. P. 1991. chronic stability of bipolar epicardial plunge electrodes in dogs. *Journal of Investigative Surgery* 4(2): 153-9.
- Drug** Brenneman, D. E., Nicol, T., Warren, D., and Bowers, L. M. 1990. vasoactive intestinal peptide: a neurotrophic releasing agent and an astroglial mitogen. *Journal of Neuroscience Research* 25(3): 386-94.
- Aquatic** Breteler, R. J., Williams, J. W., and Buhl, R. L. measurement of chronic toxicity using the opossum shrimp mysidopsis bahia. *Hydrobiologia (1982)* 93(1-2): 189-94.

- Abstract** Brigham, D., Hu, M. L., Lamberts, D., and Spallholz, J. E. 1983. effect of dietary selenium and silver on tissue glutathione-peroxidase activity and incidence of cataracts in mice. *Federation Proceedings* 42: 927.
- Method** Brigstock, D. R., Heap, R. B., Barker, P. J., and Brown, K. D. purification and characterization of heparin-binding growth factors from porcine uterus. *Biochemical Journal*. 266 (1). 1990. 273-282.
- Anat** Brinkman, R. and Martin, A. H. 1973. a cytoarchitectonic study of the spinal cord of the domestic fowl gallus gallus domesticus. i. brachial region. *Brain Research* 56: 43-62.
- In Vit** Brooker, B. E. and Fuller, R. 1975. adhesion of lactobacilli to the chicken crop epithelium. *Journal of Ultrastructure Research* 52(No.1): 21-31.
- CP** Brown, E. R., Roth, K. A., and Krause, J. E. 1991. sexually dimorphic distribution of substance p in specific anterior pituitary cell populations. *Proceedings of the National Academy of Sciences of the United States of*
- Phys** Brum-Zorrilla, N., De Catalfo G H, Degiovanangelo, C., Wainberg, R. L., and De Fronza T G. calomys-laucha chromosome rodentia cricetidae from uruguay and argentina. *Caryologia*. 43 (1). 1990. 65-78.
- FL** Brzozowski, M. 1995. study on fox reproduction in poland. <original> studia nad rozplodem lisow w polsce. 60 P. No. 204
- FL** Brzozowski, M. Szkola Glowna Gospodarstwa Wiejskiego Akademia Rolnicza Warszawa Poland Inst. Hodowli i Technologii Produkcji Zwierzecej. 1984. collection, evaluation and conservation of semen of silver fox (vulpes vulpes l.) and an attempt to test males as sperm donors. <original> pobieranie, ocena i przechowywanie nasienia lisow srebrzystych (vulpes vulpes l.) oraz proba oceny samcow jako dawcow nasienia. *Roczniki Naukowe Zootechniki*. <Subtitle>Polish Journal of Animal Science and Technology. V. 11(2) P. 31-39
- Phys** Buijs, R. M., Van der Beek, E. M., Renaud, L. P., Day, T. A., and Jhamandas, J. H. 1990. oxytocin localization and function in the a1 noradrenergic cell group: ultrastructural and electrophysiological studies. *Neuroscience* 39(3): 717-25.
- FL** Bulau, P. 1980. [orientation of nerve fiber systems in the tangential plane of layer i of the rat neocortex]. <original> vorzugsrichtungen von fasersystemen in der tangentialebene von lamina i des neocortex der ratte. *Zeitschrift Fur Mikroskopisch-Anatomische Forschung* 94(5): 913-29.
- No Oral** Buntin, J. D. and Walsh, R. J. 1988. in vivo autoradiographic analysis of prolactin binding in brain and choroid plexus of the domestic ring dove. *Cell and Tissue Research* 251(1): 105-9.
- Nut def** Bunyan, J., Diplock, A. T., Cawthorne, M. A., and Green, J. 1968. vitamin e and stress. 8. nutritional effects of dietary stress with silver in vitamin e-deficient chicks and rats. *British Journal of Nutrition* 22(2): 165-82.
- CP** Burgess Andrew W O, Paradise Lois J(A), Hilbelink Don, and Friedman Herman. 1994. adherence of treponema pallidum subsp. pallidum in the rabbit placenta. *Proceedings of the Society for Experimental Biology and Medicine* 207(2): 180-185.
- Phys** Burton, K. A., Kabigting, E. B., Steiner, R. A., and Clifton, D. K. 1995. identification of target cells for growth hormone's action in the arcuate nucleus. *American Journal of Physiology* 269(4 Pt 1): E716-22.

- Phys** Buscher, H. P., Schramm, U., MacNelly, S., Kurz, G., and Gerok, W. 1991. the acinar location of the sodium-independent and the sodium-dependent component of taurocholate uptake. a histoautoradiographic study of rat liver. *Journal of Hepatology* 13(2): 169-78.
- No Org** Butler, J. and Cosmos, E. differentiation of the avian latissimus dorsi primordium analysis of fiber type expression using the myosin atpase histochemical reaction. *Journal of Experimental Zoology*. 218 (2). 1981. 219-232.
- Prim** Buttner-Ennever, J. A., Cohen, B., Pause, M., and Fries, W. 1988. raphe nucleus of the pons containing omnipause neurons of the oculomotor system in the monkey, and its homologue in man. *Journal of Comparative Neurology* 267(3): 307-21.
- BioX** Calera, J. A., Lopez-Medrano, R., Ovejero, M. C., Puente, P., and Leal, F. 1994. variability of aspergillus nidulans antigens with media and time and temperature of growth. *Infection and Immunity* 62(6): 2322-33.
- Prim** Cano, J., Pasik, P., and Pasik, T. 1989. early postnatal development of the monkey globus pallidus: a golgi and electron microscopic study. *Journal of Comparative Neurology* 279(3): 353-67.
- CP** Cao J(A) and Cheng M-F(A). 1999. temporal changes in apoptosis after brain lesions in young and adult ring doves. *Society for Neuroscience Abstracts* 25(1-2): 1777.
- FL** Capella, C., Vassallo, G., and Solcia, E. 1971. light and electron microscopic identification of the histamine-storing argyrophil (ecl) cell in murine stomach and of its equivalent in other mammals. *Zeitschrift Fur Zellforschung Und Mikroskopische Anatomie* 118(1)
- Prim** Carpenter, M. B. and Batton, R. R. 3d. 1980. abducens internuclear neurons and their role in conjugate horizontal gaze. *Journal of Comparative Neurology* 189(1): 191-209.
- Prim** Carpenter, M. B. and Pierson, R. J. 1973. pretectal region and the pupillary light reflex. an anatomical analysis in the monkey. *Journal of Comparative Neurology* 149(3): 271-300.
- Phys** Carstens, E., Leah, J., Lechner, J., and Zimmermann, M. 1990. demonstration of extensive brainstem projections to medial and lateral thalamus and hypothalamus in the rat. *Neuroscience* 35(3): 609-26.
- Chem Meth** Caruolo, E. V. and Minchew, P. 1985. a method for silver impregnation of mammary myoepithelia. *Stain Technology* 60(5): 255-60.
- Phys** Caselli, C., Carlier, H., and Bezard, J. 1990. erucic acid metabolism in rat heart. a combined biochemical and radioautographical study. *Archives Internationales De Physiologie Et De Biochimie* 98(6): 377-95.
- Prim** Cass, S. P., Davidson, P., and Goshgarian, H. 1989. survival of the vestibular nerve after labyrinthectomy in the cat. *Otolaryngology--Head and Neck Surgery* 101(4): 459-65.
- Method** Cathieni, M. M. and Taban, C. H. 1992. microwave-aided binding of gold-protein-ligand (gpl) complexes. light microscopic observations in the rat brain. *Journal of Histochemistry and Cytochemistry* 40(3): 387-401.
- In Vit** Centrella, M. and Canalis, E. 1987. isolation of egf-dependent transforming growth factor (tgf beta-like) activity from culture medium conditioned by fetal rat calvariae. *Journal of Bone and Mineral Research* 2(1): 29-36.

- No Tox** Chae G-T and Choe, J. transformation of subcutaneous reticular cells by injection of allogenic thymocytes in chickens. *Journal of Catholic Medical College*. 38 (2). 1985. 417-430.
- FL** Chan, A. W. K., Schanley, D. L., and Leong, F. W. 1980. the adequacy of thiamine in liquid diets used in animal models of alcoholism. *Experientia* 36(7): 859-860.
- Imm** Chan, H. M., Pringle, G. A., and Cherian, M. G. 1992. heterogeneity of antibodies to metallothionein isomers and development of a simple enzyme-linked immunosorbent assay. *Journal of Biochemical Toxicology* 7(4): 219-27.
- Phys** Chan, J., Aoki, C., and Pickel, V. M. 1990. optimization of differential immunogold-silver and peroxidase labeling with maintenance of ultrastructure in brain sections before plastic embedding. *Journal of Neuroscience Methods* 33(2-3): 113-27.
- Method** Chancellor, M. B., Blaivas, J. G., Levin, R. M., Kaplan, S. A., Otter, M. W., and Schussler, G. new method of measuring uroflow in the rat bladder. *Neurourology and Urodynamics*. 11 (2). 1992. 123-129.
- No Oral** CHANG, C. C., TATUM, H. J., and KINCL, F. A. effect of intrauterine copper and other metals on implantation in rats and hamsters. *FERTIL STERIL* 21:274-278, 1970
- HHE** Charlton, H. M., Parry, D., Halpin, D. M., and Webb, R. 1982. distribution of 125i-labelled follicle-stimulating hormone and human chorionic gonadotrophin in the gonads of hypogonadal (hpg) mice. *Journal of Endocrinology* 93(2): 247-52.
- HHE** Charlton, H. M., Parry, D., Halpin, D. M. G., and Webb, R. distribution of iodine-125 labeled fsh and human chorionic gonadotropin in the gonads of hypo gonadal hpg mice. *Journal of Endocrinology*. 93 (2). 1982. 247-252.
- Phys** Chaudhry, M. R. and Sial, M. B. 1973. studies on the effect of lowered temperature during summer nights on the physiological behaviour of white leghorn and lyallpur silver blacklayers. *Pakistan Journal of Science* 25(4/6): 179-182.
- FL** Chelidze, P. V., Mdivani, T. V., Dzidziguri, D. V., Cherkeziiia, E. O., Tumanishvili, T. G., and Tumanishvili, G. D. 1992. [the 3-dimensional organization of the nucleolus and the nucleolus organizer regions in differentiated cells. iii. changes in the nature of the distribution of argentophilic proteins in the nucleoli of mouse hepatocytes with stimulation of the hepatocytes to proliferation]. <original> trekhmernaia organizatsiia iadryshka i iadryshko-obrazuiushchikh raionov differentsirovannykh kletok. iii. izmenenie kharaktera raspredeleniia argentofil'nykh belkov iadryshek gepatotsitov myshi pri stimulatsii gepatotsitov k proliferatsii. *Tsitologïa* 34(9): 26-31.
- No Org** Chen, M, Ma, LQ, and Harris, WG. 1999. baseline concentrations of 15 trace elements in florida surface soils. *J. Environ. Quality*. 28: 1173-1181.
- Abstract** Chen, R. W., Whanger, P. D., and Weswig, P. H. rat liver metallo thionein relationship to metal metabolism. *FED PROC. Federation Proceedings*. 34 (3). 1975 927
- Bio Acc** Chen, S. Y. 1977. cytochemical and autoradiographic study of nuclei in zinc-deficient buccal epithelium. *Journal of Dental Research* 56(12): 1546-1551.
- FL** Chernov, A. I. 1976. experiences with feeding replacement females. *Krolikovodstvo i Zverovodstvo* (4): 14-15.

- No Dose** Chignier, E. and Eloy, R. 1986. adventitial resection of small artery provokes endothelial loss and intimal hyperplasia. *Surgery, Gynecology & Obstetrics* 163(4): 327-34.
- Phys** Chilingaryan, L. I., Bogdanov, N. N., and Mats, V. N. 1996. similarity and difference between the dogs by the indices of electrical activity of the frontal cortex, hippocampus, amygdala, and hypothalamus. *Zhurnal Vysshei Nervnoi Deyatel'Nosti Imeni I. P. Pavlova* 46(6): 1018-1031.
- Prim** Christensen, J., Stiles, M. J., Rick, G. A., and Sutherland, J. 1984. comparative anatomy of the myenteric plexus of the distal colon in eight mammals. *Gastroenterology* 86(4): 706-13.
- FL** Christiansen, I. J. and Lohi, O. 1985. reproduction in foxes, 5: optimal time for artificial insemination [silver fox, blue fox, reinsemination, electrical resistance]. <original> reproduktion hos raev, 5: det optimale tidspunkt for inseminering, foreloebig meddelelse. *Aarsberetning. Kongelige Veterinaer- Og Landbohøjskole. Institut for Sterilitetsforskning. (No.28) P. 73-77*
- Chem Meth** Christie, K. N. 1977. the demonstration of canaliculi in sections of decalcified bone by a silver impregnation method. *Stain Technology* 52(5): 301-2.
- Phys** Chu, C. S., McManus, A. T., Okerberg, C. V., Mason, A. D. Jr, and Pruitt, B. A. Jr. 1991. weak direct current accelerates split-thickness graft healing on tangentially excised second-degree burns. *Journal of Burn Care & Rehabilitation* 12(4): 285-93 .
- Drug** Chu, C. S., McManus, A. T., Pruitt, B. A. Jr, and Mason, A. D. Jr. 1988. therapeutic effects of silver nylon dressings with weak direct current on pseudomonas aeruginosa-infected burn wounds. *Journal of Trauma* 28(10): 1488-92.
- FL** Chung, Keun H., Kang, Myun H., Han, In K., and Kim, Chun S. 1984. the toxicity of chromium and its interaction with silver, copper and zinc in the chicks. *Hanguk Ch'Uksan Hakhoe Chi* 26(2): 172-6 .
- Gene** Civitelli, M. V., Consentino, P., and Capanna, E. inter and intra-individual chromosome variability in thammomys-gazellae rodentia muridae b-chromosomes and structural heteromorphisms. *GENETICA (The Hague)*. 79 (2). 1989. 93-106.
- Gene** Civitelli, M. V., Consentino, P., and Capanna, E. 1989. inter- and intra-individual chromosome variability in thammomys (grammomys) gazellae (rodentia, muridae) b-chromosomes and structural heteromorphisms. *Genetica* 79(2): 93-105.
- Phys** Clarke, S. and Miklossy, J. 1990. occipital cortex in man: organization of callosal connections, related myelo- and cytoarchitecture, and putative boundaries of functional visual areas. *Journal of Comparative Neurology* 298(2): 188-214.
- In Vit** Claude, P., Hawrot, E., Dunis, D. A., and Campenot, R. B. 1982. binding, internalization, and retrograde transport of 125i-nerve growth factor in cultured rat sympathetic neurons. *Journal of Neuroscience* 2(4): 431-42.
- Drug** Cockerell, C. J., Tierno, P. M., Friedman-Kien, A. E., and Kim, K. S. 1991. clinical, histologic, microbiologic, and biochemical characterization of the causative agent of bacillary (epithelioid) angiomatosis: a rickettsial illness with features of bartonellosis. *Journal of Investigative Dermatology* 97(5): 812-7.
- No COC** Coetzee, C. B., Casey, N. H., and Meyer, J. A. 1997. fluoride tolerance of laying hens. *British Poultry Science* 38(5): 597-602.

- No COC** Coetzee Christel B(A), Casey, N. H., and Meyer, J. A. 2000. the effect of water-borne fluoride on the egg production of laying hens. *Water S A (Pretoria)* 26(1): 115-118.
- Mineral** Coldwell, J. R. and Gensler, E. C. 1994. *Minerals Yearbook, 1992: Alaska*. <NOTE> *Annual Rept*
- Phys** Coli, A. and Marroni, P. 1996. dog retinal ganglion cells: a morphological and morphometrical study in aging. *Anatomia, Histologia, Embryologia* 25(2): 127-30.
- CP** Connor, M. L. influence of regulating photoperiod on furring and onset of reproductive season in silver fox. *Meeting of Eastern Branch of the Canadian Society of Animal Science, Truro, Nova Scotia, Canada, June 14-15, 1988. Can J Anim Sci.* 68 (4). 1988. 1321-1322.
- Phys** Cooke, P. S., Young, P., Hess, R. A., and Cunha, G. R. 1991. estrogen receptor expression in developing epididymis, efferent ductules, and other male reproductive organs. *Endocrinology* 128(6): 2874-9.
- Method** Coronel, C. E., Maldonado, C., Aoki, A., and Lardy, H. A(A). 1995. electron microscopic immunolocalization of caltrin proteins in guinea pig seminal vesicles. *Archives of Andrology* 35(3): 233-246.
- No COC** Corso, T. D., Sesma, M. A., Tenkova, T. I., Der, T. C., Wozniak, D. F., Farber, N. B., and Olney, J. W. 1997. multifocal brain damage induced by phencyclidine is augmented by pilocarpine. *Brain Research* 752(1-2): 1-14.
- No Oral** Cottell, D. C. and Bannigan, J. immunohistochemical detection of bromodeoxyuridine (budr) incorporated into mouse embryo cells. *Teratology* 1990 Aug;42(2):22A
- Phys** Courty, J., Dauchel, M. C., Caruelle, D., Perderiset, M., and Barritault, D. mitogenic properties of a new endothelial cell growth factor related to pleiotrophin. *Biochemical and Biophysical Research Communications.* 180 (1). 1991. 145-151.
- HHE** Cover, T. L., Dooley, C. P., and Blaser, M. J. 1990. characterization of and human serologic response to proteins in helicobacter pylori broth culture supernatants with vacuolizing cytotoxin activity. *Infection and Immunity* 58(3): 603-10.
- FL** Creasey, M. and Moffat, D. B. deposition of ingested silver in the rat kidney at different ages. *Experientia* (1973) 29(3): 326-7.
- Unrel** Crosby, E. C. and Lauer, E. W. 1968. neuroanatomy. *Progress in Neurology and Psychiatry* 23: 1-20.
- Prim** Crossland, W. J., Hu, X. J., and Rafols, J. A. 1994. morphological study of the rostral interstitial nucleus of the medial longitudinal fasciculus in the monkey, macaca mulatta, by nissl, golgi, and computer reconstruction and rotation methods. *Journal of Comparative Neurology* 347(1): 47-63 .
- Phys** Cunnane, S. C. 1990. differential utilization of long chain fatty acids during fasting-induced triacylglycerol depletion. iii. comparison of n-3 and n-6 fatty acids in rat plasma and liver. *Biochimica Et Biophysica Acta : International Journal Of Biochemistry And Biophysics.* 1036(1): 64-70.
- Surv** Custer, Thomas W. and Hohman, William L. trace elements in canvasbacks (aythya valisineria) wintering in louisiana, usa, 1987-1988. *Environ. Pollut. (1994)* 84(3): 253-9 .

- FL** Czaker, R. 1984. observations on the dynamics of argyrophilic nucleolar material in the nuclei of mice spermatids. *Experientia* 40(9): 960-3.
- FL** Czaker, R. and Mayr, B. 1982. comparative studies on the polymorphism of nucleolus organizer regions in 4 breeds of domestic pigs (*sus scrofa domestica*) with special emphasis on the development of breeds. *Zeitschrift Fur Die Zoologische Systematik Und Evolutionsforschung* 20(3): 233-241.
- FL** Dammrich, J. and Pfeifer, U. 1983. cardiac hypertrophy in rats after supra-aortic constriction. i. size and number of cardiomyocytes, endothelial and interstitial cells. *Virchows Archiv* 43(3): 265-86.
- Aquatic** Danesh, A. 1997. fish culture experiments with *abramis brama orientalis* in earthen pond to diversify aquaculture fish composition in iran. *Vol. 5, No. 4, Pp. 5-6 Iran. Fish. Sci. J.*
- FL** Danilov, E. P., Metelkin, O. A., Geller, V. I., and Dorofeev, V. M. 1976. use on fur farms of distemper vaccine prepared from the "epm" strain virus (in mink, silver foxes and arctic foxes). *Krolikovodstvo i Zverovodstvo* (5): 36-37.
- Method** Danscher, G. 1996. the autometallographic zinc-sulphide method: a new approach involving in vivo creation of nanometer-sized zinc sulphide crystal lattices in zinc-enriched synaptic and secretory vesicles. *Histochemical Journal* 28(5): 361-373.
- Chem Meth** Danscher, G. 1983. a silver method for counterstaining plastic embedded tissue. *Stain Technology* 58(6): 365-72.
- HHE** Danscher, G., Juhl, S., Stoltenberg, M., Krunderup, B., Schroder, H. D., and Andreasen, A. 1997. autometallographic silver enhancement of zinc sulfide crystals created in cryostat sections from human brain biopsies: a new technique that makes it feasible to demonstrate zinc ions in tissue sections from biopsies and early autopsy material. *Journal of Histochemistry and Cytochemistry* 45(11): 1503-10.
- No Oral** Danscher, G. and Rungby, J. differentiation of histochemically visualized mercury and silver. *Histochem. J. (1986)* 18(2-3): 109-14.
- Phys** Danscher, Gorm, Mosekilde, Lis, and Rungby, Jorgen. histochemical detection of zinc in mineralizing rat bone: autometallographic tracing of zinc ions in the mineralization front, osteocytes, and osteoblasts. *J. Histotechnol. (1999)* 22(2): 85-90.
- Phys** Dart, C., Leyland, M. L., Barrett-Jolley, R., Shelton, P. A., Spencer, P. J., Conley, E. C., Sutcliffe, M. J., and Stanfield, P. R. 1998. the dependence of ag+ block of a potassium channel, murine kir2.1, on a cysteine residue in the selectivity filter. *Journal of Physiology* 511(Pt 1): 15-24.
- No Tox** Das, P., Kumar, D., and Guha Roy M K. national demonstration on composite fish culture in west bengal india. *Journal of the Inland Fisheries Society of India.* 7 1975 (1976) 112-115.
- Phys** Dawirs, R. R., Teuchert-Noodt, G., and Kacza, J. 1992. naturally occurring degrading events in axon terminals of the dentate gyrus and stratum lucidum in the spiny mouse (*acomys cahirinus*) during maturation, adulthood and aging. *Developmental Neuroscience* 14(3): 210-20.
- FL** de Bruijn, W. C. and van Mourik, W. 1975. scanning electron microscopic observations of endothelial changes in experimentally induced atheromatosis of rabbit aortas. *Virchows Archiv, A, Pathological Anatomy and Histology* 365(1): 23-40.

- HHE** De Grandi, P. 1970. the routine demonstration of c cells in human and animal thyroid glands. value of a simple silver stain. *Virchows Archiv. B: Cell Pathology* 6(2): 137-50.
- Phys** De Nicola, L., Blantz, R. C., and Gabbai, F. B. 1991. renal functional reserve in treated and untreated hypertensive rats. *Kidney International* 40(3): 406-12.
- FL** De S. Costa, C. A., Benatti Neto, C., Vicentini, L. E. M., De S. Gonzaga, H. F., and Hebling, J. 1996. biological compatibility of fluoride varnish duraphat when used as cavity liner on dentin in molars rat's teeth. <original title> compatibilidade biologica do verniz fluoretado duraphat, quando aplicado sobre dentina em molares de ratos. *Vol. 25, No. 1, Pp. 61-68* Rev. Odontol. Unesp
- Imm** De Sa Carlos, Souriau Armel, Bernard Francoise, Salinas Jesus, and Rodolakis Annie(A). 1995. an oligomer of the major outer membrane protein of chlamydia psittaci is recognized by monoclonal antibodies which protect mice from abortion. *Infection and Immunity* 63(12): 4912-4916.
- BioX** Deerberg, F., Pohlmeier, G., Wullenweber, M., and Hedrich, H. J. 1993. history and pathology of an enzootic pneumocystis carinii pneumonia in athymic han:rnu and han:nznu rats. *Journal of Experimental Animal Science* 36(1): 1-11.
- Dead** Degange, A. R. and Newby, T. C. mortality of sea birds and fish in a lost salmon drift net. *Marine Pollution Bulletin*. 11 (11). 1980. 322-323.
- Phys** DEGRANDCHAMP, R. L. and LOWNDES, H. E. early degeneration and sprouting at the rat neuromuscular junction following acrylamide administration. *NEUROPATHOL APPL NEUROBIOL*; 16 (3). 1990. 239-254.
- Phys** Delverdier, M., Cabanie, P., Roome, N., Enjalbert, F., and Van Haverbeke, G. 1991. critical analysis of the histomorphometry of rat thyroid after treatment with thyroxin and propylthiouracil. *Annales De Recherches Veterinaires* 22(4): 373-8.
- Phys** Delverdier, M., Cabanie, P., Roome, N., Enjalbert, F., and van Haverbeke, G. 1991. quantitative histology of the rat thyroid. influence of histologic techniques on the morphometric data. *Analytical and Quantitative Cytology and Histology* 13(2): 110-4.
- FL** Demenko, V. I(A), Kkorzinnikov Yu S, Petrova, E. L., and Konon, S. A. 1992. regulation of the fall of ripe sea buckthorn and dog rose fruits. *Agrokhimiya* 0(8): 99-104.
- In Vit** Denizeau, F. and Marion, M. 1989. genotoxic effects of heavy metals in rat hepatocytes. *Cell Biology and Toxicology* 5(1): 15-25.
- FL** Deryagina, M. A. manipulation activity of primates. *ZAKHAROV, A. A. (ED.). Materialy Tret'ei Vsesoyuznoi Konferentsii Po Povedeniyu Zhivotnykh, Tom 2. Povedenie Zhivotnykh V Soobshchestvakh; (Proceedings of the 3rd All-union Conference on Animal Behavior, Vol. 2. Behavior of Animals in Communities); 1983. 304p. Izdatel'stvo Nauka: Moscow, Ussr. Paper. 0 (0). 1983 (Recd. 1984). 200-202.*
- Chem Meth** Desclin, J. C. 1973. a simplified silver impregnation of neural end-feet in paraffin sections. *Stain Technology* 48(6): 327-31.
- No Dose** Dichiaro, J. F., Rowley, P. P., and Ogilvie, R. W. 1980. backscatter electron imaging (bei) of paraffin sections stained with heavy metal histopathologic stains, with observations on some variables encountered in bei. *Scanning Electron Microscopy* (3): 181-8.

- Abstract** DINH, T. T. and RITTER, S. 1986. monosodium glutamate toxicity in neonatal rats analysis with silver stain degeneration techniques. *16TH ANNUAL MEETING OF THE SOCIETY FOR NEUROSCIENCE*
- Nut def** Diplock, AT, Green, J, Bunyan, J, McHale, D, and Muthy, IR. 1967. vitamin e and stress. 3. the metabolism of d-alpha-tocopherol in the rat under dietary stress with silver. *Br. J. Nutr.* 21: 115.
- FL** Doedens, K., Nagel, I., and Schierhorn, H. 1974. [further studies of the nude (spine-free) initial zone of the apical dendrite of cortical pyramidal cells in the albino rat]. <original> weitere untersuchungen uber die nackte (spine-freie) initialzone der apikaldendriten corticaler pyramidenzellen der albinoratte. *Zeitschrift Fur Mikroskopisch-Anatomische Forschung* 88(6): 1093-109.
- FL** Dokukin, Yu. M. and Shorokhov, V. M. 1974. relationship between the reproductive capacity of vixens and their physical condition. *Krolikovodstvo i Zverovodstvo* (5): 4-5.
- Phys** Dong L-J and Chung, A. E. the expression of the genes for entactin laminin a laminin b1 and laminin b2 in murine lens morphogenesis and eye development. *Differentiation.* 48 (3). 1991. 157-172.
- No Dose** Dopfer, D., Koopmans, A., Meijer, F. A., Szakall, I., Schukken, Y. H., Klee, W., Bosma, R. B., Cornelisse, J. L., Asten, A. J. A. M. van, and Huurne, A. A. H. M. ter. 1997. histological and bacteriological evaluation of digital dermatitis in cattle, with special reference to spirochaetes and campylobacter faecalis. *Veterinary Record* 140(24): 620-623.
- Phys** Doucet, G., Brundin, P., Descaries, L., and Bjorklund, A. effect of prior dopamine denervation on survival and fiber outgrowth from intrastriatal fetal mesencephalic grafts. *EUR J NEUROSCI.* 2 (4). 1990. 279-290.
- CP** Douglas, D. A., Harri, M., Gonzalez Reyna A, Onderka, D. K., Murphy, B. D(A), <Book> Concannon P W, England, G. C. W., Versteegen, J. P., and Russell, H. A: Eds. 1994. induction of follicular development in silver foxes (*vulpes vulpes*) with equine chorionic gonadotrophin (ecg) and antibodies against ecg. <book> journal of reproduction and fertility; fertility and infertility in dogs, cats and other carnivores. *Journal of Reproduction and Fertility* (SUPPL. 47): 379-385.
- Alt** Dressler, D. P. and Skornik, W. A. 1970. silver sulfadiazine and sulfamylon cream in the burned rat model: a comparative evaluation. *Surgery* 67(4): 644-9.
- No Dose** Drozd, U. V., Bondarenko, S. V., Yasnetsov, V. V., Batrakov, S. G., Sakandelidze, O. G., and Shashkov, V. S. composition from laminaria saccharina increases the survival time of mice at low temperatures. *Byull. Eksp. Biol. Med.* (1991) (4): 383-4.
- Method** Duan, H. J., Gao, F., Oguchi, K., and Nagata, T. 1994. light and electron microscopic radioautographic study on the incorporation of 3h-thymidine into the lung by means of a new nebulizer. *Arzneimittel-Forschung* 44(7): 880-3.
- Unrel** Dube, Benoit, Dunning, Greg, and Lauziere, Kathleen. geology of the hope brook mine, newfoundland, canada: a preserved late proterozoic high-sulfidation epithermal gold deposit and its implications for exploration. *Econ. Geol.* (1998) 93(4): 405-436 .
- Abstract** Dubiel, A., Stanczyk, J. F., Krolinski, J., and Michalewska, M. concentration of ions of selected trace elements in ejaculates of boars after interruption of the flow of secretion from the testicles epididymides and accessory sex glands. *Polskie Archiwum Weterynaryjne.* 21 (4). 1980. 485.

- Prim** DUBIN, N. H., PARMLEY, T. H., COX, R. T., and KING, T. M. effect of silver nitrate on pregnancy termination in cynomolgus monkeys. *FERTIL STERIL* 36:106-109,1981
- In Vit** Dudnik, O. A. and Zatsepina, O. V. 1995. behaviour of some nucleolar proteins under the action of hypotonic medium causing 3d separation of individual nucleolar compartments. *Tsitologiya* 37(1-2): 126-132.
- Phys** Dupont, E., Rheaume, E., Simard, J., Luu-The, V., Labrie, F., and Pelletier, G. 1991. ontogenesis of 3 beta-hydroxysteroid dehydrogenase/delta 5-delta 4 isomerase in the rat adrenal as revealed by immunocytochemistry and in situ hybridization. *Endocrinology* 129(5): 2687-92.
- Chem Meth** Dutrizac, J. E. and Jambor, J. L. 1987. behavior of silver during jarosite precipitation. *Trans. - Inst. Min. Metall. Sect. C* : 96(Dec.), C206-C218.
- Drug** Dutton Robert C, Rampil Ira J(A), and Eger Edmond I Ii. 2000. inhaled nonimmobilizers do not alter the middle latency auditory-evoked response of rats. *Anesthesia & Analgesia* 90(1): 213-217.
- No Oral** Dux, M. and Jancso G(A). 1994. a new technique for the direct demonstration of overlapping cutaneous innervation territories of peptidergic c-fibre afferents of rat hindlimb nerves. *Journal of Neuroscience Methods* 55(1): 47-52.
- Abstract** DYCK, R. F., HALLORAN, P. F., and URMSON, J. 1989. the effect of a chemically induced acute phase stimulus on mhc expression in mice. *Annual Meeting of the Societe Canadienne De Recherches Cliniques (Canadian Society for Clinical Investigation)*
- FL** Dygalo N N, Bykova T S, and Naumenko E V. 1988. tyrosine hydroxylase activity in the brain of silver foxes selected for the type of behaviour. *Zhurnal Evolyutsionnoi Biokhimii i FIZIOLOGII* 24. 125(4): 503-508, illustr.
- FL** Dygalo, N. N., Bykova, T. S., and Naumenko, E. V. tyrosine hydroxylase activity in the brain of silver foxes selected for the type of behavior. *Zhurnal Evolyutsionnoi Biokhimii i Fiziologii.* 24 (4). 1988. 503-508.
- Anat** Ebendal, T. and Jacobson C-O. tissue explants affecting extension and orientation of axons in cultured chick embryo ganglia. *Experimental Cell Research.* 105 (2). 1977 379-387.
- In Vit** Ebstein, R. P., Bennett, E. R., Sokoloff, M., and Shoham, S. 1993. the effect of nerve growth factor on cholinergic cells in primary fetal striatal cultures: characterization by in situ hybridization. *Brain Research. Developmental Brain Research* 73(2): 165-72.
- CP** <Editors> Concannon, P. W., England, G. C. W., Verstegen, J. P., and Russell, H. A. 1993. fertility and infertility in dogs, cats and other carnivores:proceedings of the second international symposium on canine and felinereproduction, university of liege, liege, belgium, august 1992. (Book): xv + 569 pp.
- Method** Effmann, E. L., Whitman, S., and Pexieder, T. 1986. stereomicroangiography in embryologic and teratologic investigation. *Teratology* 34(1): 103-12.
- FL** Egri, B., Szeness, A., and Gordos, A. 1993. observations on the composition of microflora in the respiratory and reproductive organs of furbearing animals using a new sampling device. *Magyar Allatorvosok Lapja* 48(5): 289-292.
- Anat** Ehrlich, D. and Mark, R. 1984. the course of axons of retinal ganglion cells within the optic nerve and tract of the chick (gallus gallus). *Journal of Comparative Neurology* 223(4): 583-91.

- FL** Eiberle, K. and Bucher, H. 1989. interdependence between the browsing of different tree species in a selection forest region. *Zeitschrift Fur Jagdwissenschaft* 35(4): 235-244.
- Unrel** Eiberle, K. and Nigg, H. 1987. basis for assessing game browsing in montane forest. *Schweizerische Zeitschrift Fur Forstwesen* 138(9): 747-785.
- No Dose** Eiberle, K. and Nigg, H. 1983. consequences of browsing damage to norway spruce and silver fir at montane sites. *Schweizerische Zeitschrift Fur Forstwesen* 134(5): 361-372.
- FL** Eikhgorn, A. V., Ermolova, Z. S., and Kutsenko, I. N. the cardiac lymphatic bed during the postresuscitation period. *Arkhiv Anatomii Gistologii i Embriologii*. 89 (10). 1985 (Recd. 1986). 64-67.
- Rev** Eisler, R. 1996. *Silver Hazards to Fish, Wildlife, and Invertebrates: A Synoptic Review*. BIOLOGICAL-32; CONTAMINANT HAZARD REVIEWS-32
- Rev** Eisler, R., Andren A.W., and Bober, T. W. (eds.). 1996. a review of silver hazards to plants and animals. pp. 143-144.
- Anat** Ekataksin, W. and Wake, K. liver units in three dimensions i. organization of argyrophilic connective tissue skeleton in porcine liver with particular reference to the compound hepatic lobule. *AM J ANAT. American Journal of Anatomy*. 191 (2). 1991. 113-153.
- Nutrition** El-Dakroury, A. A., Mahmoud, T. H. Ministry of Agriculture Cairo Egypt Animal Production Research Inst., and Kosba, M. A. 1983. effect of dietary protein level on productive performance and egg quality for silver montazah and gimmizah pullets egypt. *Agricultural Research Review*. V. 61(6) P. 53-69
- Aquatic** El-Sayed, A. F. M. Qatar Univ. Doha Qatar Dept. of Marine Sciences. 1994. evaluation of soybean meal, spirulina meal and chicken offal meal as protein sources for silver seabream (*rhabdosargus sarba*) fingerlings. *Aquaculture*. V. 127(2-3) P. 169-176
- FL** Elbertzhagen, H. detection of bovine casein in sheep and goat milk cheese by means of immunoelectrophoresis. *Zeitschrift Fuer Lebensmittel-Untersuchung Und -Forschung*. 185 (5). 1987. 357-361.
- FL** Elbertzhagen, H. 1987. [determination of cow milk-casein in sheep and goat cheese by immunoelectrophoresis]. <original> bestimmung von kuhmilch-casein in schaf- und ziegenkase mittels immunoelektrophorese. *Zeitschrift Fur Lebensmittel-Untersuchung Und -Forschung* 185(5)
- Anat** Ellenberger, H. H. and Feldman, J. L. 1994. origins of excitatory drive within the respiratory network: anatomical localization. *Neuroreport* 5(15): 1933-6.
- Unrel** Elliot, H. behavior of silver gulls *larus-novae-hollandiae* on seeing a fairy penguin *eudyptula-minor* walk out of the sea at manly new-south-wales australia. *EMU. Emu*. 67 (Part 3/4). 298-300. 1968.
- No Dose** Elvingsson, P. 1988. reproduction and oestrous diagnosis in farmed foxes. *Scientifur* 12(3): 206.
- FL** Elvingsson, P. and Lagerkvist, G. 1987. reproduction of farmed foxes and methods of detection of oestrus. *Va Ra Palsdjur* 58(2): 44-51.

- Chem Meth** Enestrom, S. 1983. immunohistology on formol-sublimate fixed and paraplast embedded kidney tissue with comparison to formalin fixation and to pre-embedding immunofluorescent staining. *Stain Technology* 58(5): 259-71.
- Imm** Enestrom, S. and Hultman, P. 1995. does amalgam affect the immune system? a controversial issue. *International Archives of Allergy and Immunology* 106(3): 180-203.
- FL** Engbaek, K. and Frederiksen, W. 1994. [cat-scratch disease and bacillary angiomatosis. an old and a new infectious disease with common etiology?]. <original> kattekradssygdrom og bacillaer angiomatosis. en gammel kending og en ny infektionssygdrom med faelles aetiologi? *Ugeskrift for Laeger* 156(42): 6175-80.
- No COC** Ernst, E., Moller-Madsen, B., and Danscher, G. 1991. ultrastructural demonstration of mercury in sertoli and leydig cells of the rat following methyl mercuric chloride or mercuric chloride treatment. *Reproductive Toxicology*. 5(3): 205-9.
- In Vit** Ethell Douglas W and Steeves John D(A). 1993. changes in protein expression associated with developmental transition from permissive to restrictive states of spinal cord repair in embryonic chick. *Developmental Brain Research* 76(2): 163-169.
- Phys** Ettaiche Mohamed, Fillacier Kathleen, Widmann Catherine, Heurteaux Catherine, and Lazdunski Michel(A). 1999. riluzole improves functional recovery after ischemia in the rat retina. *IOVS* 40(3): 729-736.
- FL** Eustachiewicz, R. and Luszczewska, I. 1999. the morphology and topography of formatio hippocampi in the polar fox(alopex lagopus). *Annales Universitatis Mariae Curie-Sklodowska. Sectio DD, Medicina Veterinaria* 54: 33-45.
- FL** Evsikov, V. I., Vagin Yu V, Osetrova, T. D., and Matysko, E. K. fecundity of colored female american minks that are heterozygous for some fur color genes. *Tsitologiya i Genetika*. 19 (5). 1985. 377-383.
- Anat** FABER, H., BRAUN, K., ZUSCHRATTER, W., and SCHEICH, H. system-specific distribution of zinc in the chick brain: a light and electron-microscopic study using the timm method. *CELL TISSUE RES*; 258 (2). 1989. 247-258.
- FL** Fahrenkrug, P. 1987. small animal dentistry: introduction to equipment, methodology and endodontic principles. *Tijdschrift Voor Diergeneeskunde* 112 Suppl 1: 25S-33S.
- Surv** Falkenberg, I. D., Dennis, T. E., and Williams, B. D. 1994. organochloride pesticide contamination in three species of raptor and their prey in south australia. *WILDLIFE RESEARCH*. 21(2): 163-173.
- Nutrition** Faulkner, W. L. and Anderson, D. M. 1991. the effects of fiber supplementation on diet digestibility by silverfoxes. *Canadian Journal of Animal Science* 71(3): 943-947.
- Phys** Fayein, N. A., Courtois, Y., and Jeanny, J. C. 1990. ontogeny of basic fibroblast growth factor binding sites in mouse ocular tissues. *Experimental Cell Research* 188(1): 75-88.
- FL** Fehn, P. A. and McCuskey, R. S. 1971. development of the innervation of fetal mesenteric microvasculature. *Zeitschrift Fur Zellforschung Und Mikroskopische Anatomie* 118(1)
- Prim** Felleman, D. J., Burkhalter, A., and Van Essen, D. C. 1997. cortical connections of areas v3 and vp of macaque monkey extrastriate visual cortex. *Journal of Comparative Neurology* 379(1): 21-47.

- Bio Acc** Fendick, E. A., Stevens, G. L., Brown, R. J., and Jordan, W. P. 1989. element content in tissues of four rodent species sampled in the geysers geothermal steamfield california usa. *ENVIRON POLLUT.* 58(2-3): 155-178.
- In Vit** Ferrara, N. and Henzel, W. J. pituitary follicular cells secrete a novel heparin-binding growth factor specific for vascular endothelial cells. *Biochemical and Biophysical Research Communications.* 161 (2). 1989. 851-858.
- Prim** Fiandaca, M. S., Kordower, J. H., Hansen, J. T., Jiao, S. S., and Gash, D. M. 1988. adrenal medullary autografts into the basal ganglia of cebus monkeys: injury-induced regeneration. *Experimental Neurology* 102(1): 76-91.
- Unrel** Filistowicz Andrzej(A), Wierzbicki Heliodor(A), and Zajaczkowska Anna(A). 1999. welfare of carnivorous furbearing animals and the future of their farm breeding and production - a review. *Prace i Materialy Zootechniczne* 0(55): 7-15.
- FL** Find'o, S. 1992. tolerance of tree species to browsing damage. *Lesnictvi* 38(5): 379-390.
- FL** Findo, S. reasons for the failure of artificial regeneration of silver fir abies-alba mill. *LESNICTVI (Prague).* 34 (11). 1988. 973-990.
- FL** Finger, F. L., Campanha, M. M., Barbosa, J. G., and Fontes, P. C. R. 1999. influence of ethephon, silver thiosulfate and sucrose pulsing onbird-of-paradise vase life. *Revista Brasileira De Fisiologia Vegetal* 11(2): 119-122.
- Anat** Finkelstein, D. I., Lang, J. G., and Luff, A. R. 1991. functional and structural changes of rat plantaris motoneurons following compensatory hypertrophy of the muscle. *Anatomical Record* 229(1): 129-37.
- Chem Meth** FitzGerald, M. J. and Pohlmann, M. 1966. use of the silver-hydroquinone sequence for the display of reticular fibers. *Stain Technology* 41(5): 267-72.
- Prim** Fitzgerald, M. J. and Sachithanandan, S. R. 1979. the structure and source of lingual proprioceptors in the monkey. *Journal of Anatomy* 128(3): 523-52.
- FL** Fjeldsa, J. some behavior patterns of 4 closely related grebes podiceps-nigricollis podiceps-gallardoi podiceps-occipitalis and podiceps-taczanowskii with reflections on phylogeny and adaptive aspects of the evolution of displays. *Dansk Ornithologisk Forenings Tidsskrift.* 76 (1-2). 1982 (Recd. 1983). 37-68.
- FL** Florez-Cossio, T. J. 1971. [modification of the gomori silver impregnation method for the visualisation of reticular fibre in paraffin embedded material]. <original> eine modifikation der silberimpragnationsmethode nach gomori zur darstellung der gitterfasern an paraffineingebettetem material. *Zeitschrift Fur Wissenschaftliche Mikroskopie Und Mikroskopische*
- Prim** Fonoff, R. de N, Watanabe, I. S., and Kao, T. H. 1989. [sensory nerve endings of the medium and posterior parts of cebus apella monkey's tongue mucosa]. <original> terminacoes nervosas sensitivas das partes media e posterior da mucosa lingual dorsal do macaco cebus apella. *Revista De Odontologia Da Universidade De Sao Paulo* 3(3): 377-82.
- HHE** Ford, L. hereditary aspects of human and canine cyclic neutropenia. *Journal of Heredity.* 60 (5). 1969 293-299.
- FL** Forsberg, M. 1985. insemination of foxes in 1985. *Va Ra Palsdjur* 56(11): 332.

- Diss** Forsberg, M. 1990. the male silver fox. effects on reproduction of sperm numbers, photoperiod and melatonin. *56 P. No. 8*
- FL** Forsberg, M. 1987. results of insemination of foxes in 1987. *Va Ra Palsdjur* 58(11): 394.
- CP** Fors Elizabeth A. 1996. why is the silver rice rat (*oryzomys argentatus*) so rare? *Bulletin of the Ecological Society of America* 77(3 SUPPL. PART 2): 145.
- No Oral** Foschi D(A), Castoldi, L., Corsi, F., Radaelli, E., and Trabucchi, E. 1994. inhibition of inflammatory angiogenesis in rats by loco-regional administration of hydrocortisone and protamine. *Agents and Actions* 42(1-2): 40-43.
- No Oral** Foschi D(A), Corsi, F., Cellerino, P., Fiume, M., and Trabucchi, E. 1997. paradoxical effects of intra-arterial administration of basic fibroblast growth factor on inflammatory angiogenesis in rats. *Drugs Under Experimental and Clinical Research* 23(3-4): 123-129.
- Nutrition** Fowden, A. L., Rossdale, P. D., and Silver, A. eds. Physiological Laboratory University of Cambridge Downing Street Cambridge CB2 3EG United Kingdom. 1997. comparative fetal and neonatal physiology: reviews in memory of marian silver. *Equine Veterinary Journal*. (Supplement,24) P. 0-117
- Drug** Fox, C. L., Stanford, J. W., and Modak, S. M. topical zinc sulfadiazine therapy of pseudomonas-aeruginosa infection in burned mice and rats. *FED PROC. Federation Proceedings*. 34 (3). 1975 907
- Drug** Fox, C. L. Jr. 1983. topical therapy and the development of silver sulfadiazine. *Surgery, Gynecology & Obstetrics* 157(1): 82-8.
- Drug** Fox, C. L. Jr, Sampath, A. C., and Stanford, J. W. 1970. virulence of pseudomonas infection in burned rats and mice. comparative efficacy of silver sulfadiazine and mafenide. *Archives of Surgery* 101(4): 508-12.
- No Dose** Fox, J. G., Zeman, D. H., and Mortimer, J. D. 1994. copper toxicosis in sibling ferrets. *Journal of the American Veterinary Medical Association*. 205(8): 1154-6.
- Gene** Fox, T. W. and Smyth, J. R. Jr. 1984. the columbian restriction gene, co, and early growth rate in the domestic fowl. *Poultry Science* 63(3): 586-8.
- Anat** Franzoni, M. F., Viglietti-Panzica, C., Ramieri, G., and Panzica, G. C. 1984. a golgi study on the neuronal morphology in the hypothalamus of the japanese quail (*coturnix coturnix japonica*). i. tuberal and mammillary regions. *Cell and Tissue Research* 236(2): 357-64.
- Phys** Freund, T. F., Buzsaki, G., Leon, A., and Somogyi, P. 1990. hippocampal cell death following ischemia: effects of brain temperature and anesthesia. *Experimental Neurology* 108(3): 251-60.
- No Dose** Frindt, A. 1980. evaluation of the reproductive performance of male silver foxes (*vulpesvulpes* l.). *Scientifur* 4(1): 16-17.
- FL** Frohlich, J. and Rummelfanger, H. 1982. [a simple light and dark field set-up for documentation purposes in brain research]. <original> eine einfache auflicht-dunkelfeldeinrichtung zu dokumentationszwecken in der hirnforschung. *Zeitschrift Fur Mikroskopisch-Anatomische Forschung* 96(4): 633-42.
- Method** Fry Michael J, Panayotou George, Dhand Ritu, Gout Fernanda Vv= Ruiz-Larreaan, Nguyen Oanh, Courtneidge Sara A, and Waterfield Michael D(A). 1992. purification and characterization of a

phosphatidylinositol 3-kinase complex from bovine brain by using phosphopeptide affinity columns. *Biochemical Journal* 288(2): 383-393.

- HHE** Fu, A. Z., Morris, J. C., Ford, G. C., and Nair, K. S. 1997. sequential purification of human apolipoprotein b-100, albumin, and fibrinogen by immunoaffinity chromatography for measurement of protein synthesis. *Analytical Biochemistry* 247(2): 228-36 .
- Gene** Fuji Jun-Ichiro(A) and Wakasugi Noboru. 1993. transdifferentiation from retinal pigment epithelium (rpe) into neural retina due to silver plumage mutant gene in japanese quail. *Development Growth & Differentiation* 35(5): 487-493.
- BioX** Fujikura Y(A), Kuniki, H., Sawada, T., Hamano, K., Akino, T., Shigetomi, M., Hiroazane, A., and Fukumoto, T. 1994. membrane antigen expression of syngeneically but heterotopically transplanted hepatocytes in rats. *Cell Transplantation* 3(1): 23-31.
- Method** Fujimori, O., Ueda, H., and Yamada, K. 1991. a histochemical method for the demonstration of unsaturated lipids. *Histochemical Journal* 23(2): 91-9.
- Prim** Fujioka, M. projection to the striatum and the claustrum from the somatic sensory cortex in monkey macaca-irus. *BRAIN NERVE (TOKYO)*. *Brain and NERVE (Tokyo)*. 32 (3). 1980. 269-279.
- In Vit** Furber, S., Oppenheim, R. W., and Prevette, D. 1987. naturally-occurring neuron death in the ciliary ganglion of the chick embryo following removal of preganglionic input: evidence for the role of afferents in ganglion cell survival. *Journal of Neuroscience* 7(6): 1816-32.
- Imm** Furrrie, E., Turner, M. W., and Strobel S(A). 1995. partial characterization of a circulating tolerogenic moiety which, after a feed of ovalbumin, suppresses delayed-type hypersensitivity in recipient mice. *Immunology* 86(3): 480-486.
- Method** Furukawa Kenichi(A), Yamoto Mareo, Kokawa Nobuyoshi, and Nakano Ryosuke. 1994. purification of high-molecular-weight follicle-stimulating hormone binding inhibitor in porcine follicular fluids. *European Journal of Endocrinology* 130(6): 625-633.
- Method** Gallyas, F., Guldner, F. H., Zoltay, G., and Wolff, J. R. 1990. golgi-like demonstration of "dark" neurons with an argyrophil iii method for experimental neuropathology. *Acta Neuropathologica* 79(6): 620-8.
- Method** Gallyas, F., Lohner, H., and Wolff, J. R. 1990. an argyrophil-iii method for the selective demonstration of mitochondria in aldehyde-fixed rat brain. *Journal of Neuroscience Methods* 35(3): 223-8.
- Chem Meth** Gallyas, F., Wolff, J. R., Bottcher, H., and Zaborszky, L. 1980. a reliable and sensitive method to localize terminal degeneration and lysosomes in the central nervous system. *Stain Technology* 55(5): 299-306.
- Chem Meth** Gallyas, F., Wolff, J. R., Bottcher, H., and Zaborszky, L. 1980. a reliable method for demonstrating axonal degeneration shortly after axotomy. *Stain Technology* 55(5): 291-7.
- Chem Meth** Gallyas, F., Zaborszky, L., and Wolff, J. R. 1980. experimental studies of mechanisms involved in methods demonstrating axonal and terminal degeneration. *Stain Technology* 55(5): 281-90.
- No Tox** Ganchrow Donald(A), Ganchrow Judith R, Gross-Isseroff Ruth, and Kinnamon John C. 1995. taste bud cell generation in the perihatching chick. *Chemical Senses* 20(1): 19-28.

- Nutrition** Ganegoda, G. A. P., Siriwardene, J. A. De S., Ekanayake, E. M. C., Jayawardena, K. M., and Poulter, R. G. 1979. dried fish silage as a protein source for poultry. 2. effect of fishquality on broiler performance. *Ceylon Veterinary Journal* 28(1/4): 12-18.
- Nutrition** Ganegoda, G. A. P., Siriwardene, J. A. De S., Gunaratne, S. P., Jayawardena, K. M., and Poulter, R. G. 1982. dried fish silage as a protein source for poultry. 3. comparison with fish meal using parboiled or raw rice bran as filler. *Sri Lanka Veterinary Journal* 30(1): 18-22.
- Rev** Ganther, H. E. 1980. interactions of vitamin e and selenium with mercury and silver. *Annals of the New York Academy of Sciences*. 355: 212-26.
- Phys** Gao, F., Chen, S., Sun, L., Kang, W., Wang, Z., and Nagata, T. 1995. radioautographic study of the macromolecular synthesis of leydig cells in aging mice testis. *Cellular and Molecular Biology* 41(1): 145-50.
- Method** Gao, K. X. and Godkin, J. D. 1991. a new method for transfer of polyethylene glycol-embedded tissue sections to silanated slides for immunocytochemistry. *Journal of Histochemistry and Cytochemistry* 39(4): 537-40.
- Phys** Gao, K. X., Liu, K. H., and Godkin, J. D. 1991. immunohistochemical localization of bovine placental retinol-binding protein. *International Journal of Developmental Biology* 35(4): 485-9.
- Abstract** Garrido, A. development of the innervation of the lungs in the fetal Mouse. *24th Annual Meeting of the American Society for Cell Biology, Kansas City, MO., USA, NOV. 12-16, 1984. J CELL BIOL. 99 (4 Part 2). 1984. 422a.*
- FL** Gauly M(A) and Dzapo, V. 1992. research on the oxygen utilization of pheasant embryos during incubation applying a new method. *Archiv Fuer Gefluegelkunde* 56(5): 210-212.
- In Vit** Gavrish, A. S. 1984. [spatial organization of the microcirculatory bed and organ-tissue functional elements of the myocardium]. <original> prostranstvennaia organizatsiia mikrotsirkuliatornogo rusla i organno-tkanevykh funktsional'nykh elementov miokarda. *Arkhiv Anatomii, Gistologii i Embriologii* 87(7): 36-42.
- Phys** Gearing, M., Tigges, J., Mori, H., and Mirra, S. S. 1997. beta-amyloid (a beta) deposition in the brains of aged orangutans. *Neurobiology of Aging* 18(2): 139-46.
- Phys** Gee, B., Warhol, M. J., and Roth, J. use of an anti-horseradish peroxidase antibody gold complex in the abc technique. *Journal of Histochemistry and Cytochemistry*. 39 (6). 1991. 863-870.
- Method** Gee, J. M., Amselgruber, W. M., Jasani, B., and Nicholson, R. I. 1991. use of the dinitrophenyl hapten sandwich staining procedure (dhss) to localize estrogen receptors in paraffin-embedded tissues. *Journal of Histochemistry and Cytochemistry* 39(12): 1659-70.
- Chem Meth** Geisert, E. E. Jr and Updyke, B. V. 1977. chemical stabilization of golgi silver chromate impregnations. *Stain Technology* 52(3): 137-41.
- FL** Geneser-Jensen, F. A., Haug, F. M., and Danscher, G. 1974. distribution of heavy metals in the hippocampal region of the guinea pig. a light microscope study with timm's sulfide silver method. *Zeitschrift Fur Zellforschung Und Mikroskopische Anatomie* 147(4)
- In Vit** George, S. T. and Malbon, C. C. large-scale purification of beta-adrenergic receptors from mammalian cells in culture. *Preparative Biochemistry*. 15 (5). 1985 (Recd. 1986). 349-366.

- Prim** Gerard, A., Egloff, M., Gerard, H., El Harate A, Domingo, M., Gueant, J. L., Dang, C. D., and Degrelle, H. internalization of human sex steroid-binding protein in the monkey epididymis *Journal of Molecular Endocrinology*. 5 (3). 1990. 239-252.
- Gene** 1989. Non-isotopic RNA probes. Comparison between different labels and detection systems. 93 (2) : 191-6
- Gene** Gibson-Brown Jeremy J, Agulnik Sergei I, Silver Lee M, and Papaioannou Virginia E(A). 1998. expression of t-box genes tbx2-tbx5 during chick organogenesis. *Mechanisms of Development* 74(1-2): 165-169.
- BioX** Gilbert Jerome A(A), Cooper Robert C, Puryear Harry A, Glantz Jerald, Jack Sherman W, Cox Nancy M, Crawford Douglas A, Butler, R. Allen, and Buddington Karyl K. 1998. a swine model for the evaluation of efficacy of anti-microbial catheter coatings. *Journal of Biomaterials Science Polymer Edition* 9(9): 931-942.
- In Vit** Gilmore, R. S. C. and Bridges, J. B. histological and ultrastructural studies on the myoid cells of the thymus of the domestic fowl gallus-domesticus. *J ANAT. Journal of Anatomy*. 118 (3). 1974 (Recd 1975) 409-416.
- Chem Meth** Giusti, G. V. and Fiori, A. 1969; (REF:6). the histochemical detection of thallium in paraffin-embedded tissues by the sulfide-selenium-silver method. *Stain Technology*; 44(6): 263-7
- Chem Meth** Gladden, M. H. 1970. a modified pyridine-silver stain for teased preparations of motor and sensory nerve endings in skeletal muscle. *Stain Technology* 45(4): 161-4.
- Surv** Glooschenko, V., Blancher, P., Herskowitz, J., Fulthorpe, R., and Rang, S. 1986. association of wetland acidity with reproductive parameters and insect prey of the eastern kingbird tyrannus-tyrannus near sudbury, ontario. *Water Air Soil Pollut.* 30(3-4): 553-568.
- FL** Godovich, P. L., Nikitina, M. M., Vinogradov, V. K., and Rozen, V. B. comparative characteristics of sex steroid content in the blood plasma of a bigmouth buffalo silver carp and canal sheatfish during reproduction. *Problemy Endokrinologii*. 31 (2). 1985. 70-75.
- FL** Goertzen, M., Gruber, J., Dellmann, A., Clahsen, H., and Schulitz, K. P. 1993. [neurohistological studies in allogeneic cruciate ligament transplants as intra-articular ligament replacement]. <original> neurohistologische untersuchungen bei allogenen kreuzbandtransplantaten als intraartikularer bandersatz. *Zeitschrift Fur Orthopadie Und Ihre Grenzgebiete* 131(5): 420-4.
- Nut def** Goldberg, M., LeColle, S., Bissila-Mapahou, P., Septier, D., and Carreau, J. P. 1996. radioautographic study of the incorporation of (3h)-choline into the phospholipids of secretory ameloblasts and enamel of normal and essential-fatty-acid-deficient rats. *Advances in Dental Research* 10(2): 126-34.
- Chem Meth** Goldberg, S. 1972. silver staining, featuring rapid reduction, for whole mounts of retina and optic pathways in chick embryos. *Stain Technology* 47(2): 65-9.
- Alt** Goldberg, S. and Coulombre, A. J. 1972. topographical development of the ganglion cell fiber layer in the chick retina. a whole mount study. *Journal of Comparative Neurology* 146(4): 507-18.
- Anat** Goldberg, S. and Frank, B. do young axons regenerate better than old axons. *Experimental Neurology*. 74 (1). 1981. 245-259.

- No Dose** Goldberg, S. and Frank, B. the guidance of optic axons in the developing and adult mouse retina. *ANAT REC. Anatomical Record.* 193 (4). 1979. 763-774.
- Method** Gomathi, K. G. and Sharma Shail K(A). 1993. purification and reconstitution of the delta opioid receptor. *FEBS (Federation of European Biochemical Societies) Letters* 330(2): 146-150.
- Phys** Gonzalez-Parra, S., Argente, J., Garcia-Segura, L. M., and Chowen, J. A(A). 2000. effect of neonatal and adult testosterone treatment on the cellular composition of the adult female rat anterior pituitary. *Journal of Endocrinology.* 164(3): 265-276.
- HHE** Gonzalez Tania, Berlanga Jorge, and Perez Luis C. 1995. progress in preclinical studies of recombinant human epidermal growth factor in cuba. *Biotecnologia Aplicada* 12(3): 179-180.
- Unrel** Goodman, B. L. and Shealey, S. 1974. the response of egg quality traits to divergent growth selection. *Poultry Science.* 53 (5). 1929
- Phys** Goodman, J. H. and Sloviter, R. S. 1993. cocaine neurotoxicity and altered neuropeptide y immunoreactivity in the rat hippocampus; a silver degeneration and immunocytochemical study. *Brain Research* 616(1-2): 263-72.
- Abstract** Gorcs, T. J., Liposits, Z., Lengvari, I., Vigh, S., Schally, A. V., and Chan-Palay, V. the use of the di amino benzidine silver chromogen reaction for immuno histological detection of brain peptides and transmitters. *7th European Neuroscience Congress, Hamburg, West Germany, Sept. 12-16, 1983. Neurosci Lett. 0 (Suppl. 14). 1983. S143.*
- Anat** Goshgarian, H. G. 1977. a rapid silver impregnation for central and peripheral nerve fibers in paraffin and frozen sections. *Experimental Neurology* 57(1): 296-301.
- CP** Gottlob, R. endothelial regeneration the role of smooth muscle cells blood cells and histiocytes. *Sinzinger, H. et Al. (Ed.). Progress in Biochemical Pharmacology, Vol. 13. Atherogenesis. Morphology, Metabolism and Function of the Arterial Wall. International Atherosclerosis Conference, Vienna, Austria, April 12-16, 1977. Viii+352p. Illus. S. Karger: Basel, Switzerland; New York, N.Y., USA. ISBN 3-8055-2761-6. 1977 (Recd 1978) 276-282*
- Chem Meth** Goyal, R. K. and Sengupta, A. 1986. a rapid silver-free method for staining the myenteric plexus. *Stain Technology* 61(3): 127-34.
- FL** Gracheva, N. D. 1982. [autoradiographic study of the dna synthesis rate in subependymal cells of the rat brain]. <original> avtoradiograficheskoe izuchenie skorosti sinteza dnk v subependimnykh kletkakh golovnogo mozga krys. *Tsitologiya* 24(10): 1185-98.
- Rev** Graham-Bryce, I. J. insecticides and fungicides department. *Rothamsted Report for 1978 1: 125-155 1978 (38 References)*
- Nut def** Grasso, P., Abraham, R., Hendy, R., Diplock, A. T., Golberg, L., and Green, J. 1970. hepatocellular necrosis from dietary silver in vitamin e-deficient rats. *Journal of Pathology* 100(2): Pix.
- Nut def** Grasso, P., Abraham, R., Hendy, R., Diplock, A. T., Golberg, L., and Green, J. 1969. the role of dietary silver in the production of liver necrosis in vitamin e-deficient rats. *Experimental and Molecular Pathology* 11(2): 186-99.
- No COC** GRAUWILER, J. and SCHOEN, H. teratological experiments with ergotamine in mice,rats and rabbits. *TERATOLOGY* 7:227-236,1973

- Rev** Green, J. and Bunyan, J. 1969. vitamin e and the biological antioxidant theory. *Nutrition Abstracts and Reviews.* 39(2): 321-45.
- Bact** Greenfeld Jonathan I, Sampath Lester, Popilskis Sulli J, Brunnert Steven R, Slylianos Steven, and Modak Shanta(A). 1995. decreased bacterial adherence and biofilm formation on chlorhexidine and silver sulfadiazine-impregnated central venous catheters implanted in swine. *Critical Care Medicine* 23(5): 894-900.
- BioX** Griem, P., Panthel, K., Kalbacher, H., and Gleichmann, E. 1996. alteration of a model antigen by au(iii) leads to t cell sensitization to cryptic peptides. *Vol. 26, No. 2, Pp. 279-287 Eur. J. Immunol.*
- FL** Grigor'eva, A. V., Bul'chuk, O. V., Iushchenko, O. M., and Iarygin, V. N. 1990. [the structure and transcription activity of the neuronal chromatin in the sensorimotor cortex during postnatal differentiation]. <original> issledovanie struktury i transkriptsionnoi aktivnosti khromatina neuronov sensomotornoj kory v period postnatal'noi differentsirovki. *Ontogenez* 21(5): 517-23.
- Chem Meth** Grinyo, A. 1968. staining of oligodendroglia with silver ammino tungstate in unembedded and embedded material. *Stain Technology* 43(1): 19-25.
- Phys** Grossmann, A., Erley, W., Hannon, J. B., and Ibach, H. giant surface stress in heteroepitaxial films: invalidation of a classical rule in epitaxy. *Phys. Rev. Lett. (1996)* 77(1): 127-130
- FL** Groth, H. P. 1972. [light and fluorescence microscopy studies on the innervation of the air sac system in birds]. <original> licht- und fluoreszenzmikroskopische untersuchungen zur innervation des luftsacksystems der vogel. *Zeitschrift Fur Zellforschung Und Mikroskopische Anatomie* 127(1)
- Method** Grzybek, H., Sliwa-Tomczok, W., and Tomczok, J. 1990. application on timm sulphide silver method for electron microscope localization of lead ions in blood cells. *Folia Haematologica; Internationales Magazin Fur Klinische Und*
- CP** Gu, J. and D'andrea, M. a novel combined light and electron microscopic immunocytochemical procedure to study antigen distribution in the same cells at both histologic and ultrastructural levels. *Third Joint Meeting of the Japanese Society of Histochemistry and Cytochemistry and the Histochemical Society, Seattle, Washington, Usa, August 8-11, 1990. Acta Histochem Cytochem.* 23 (5). 1990. 699.
- In Vit** Gu, Xin Xing, Tsai, Chao Ming, Apicella, M. A., and Lim, D. J. 1995. quantitation and biological properties of released and cell-bound lipooligosaccharides from nontypeable haemophilus influenzae. *Vol. 63, No. 10, Pp. 4115-4120 Infect. Immun.*
- No Oral** Guedes, R. M. C., Zica, K. G. B., and Nogueira, R. H. G. 1998. phycomycosis and cutaneous habronemiasis: retrospective study of diagnosed cases from 1979 to 1996. *Arquivo Brasileiro De Medicina Veterinaria e Zootecnia* 50(4): 465-468.
- Alt** Gugliucci, A. and Allard, M. F. 1996. glycation of hepatocyte cytosolic proteins in streptozotocin-induced diabetic rats. *Biochemical And Biophysical Research Communications.* 229(3): 952-958.
- Prim** Guridi, J., Herrero, M. T., Luquin, M. R., Guillen, J., Ruberg, M., Laguna, J., Vila, M., Javoy-Agid, F., Agid, Y., Hirsch, E., and Obeso, J. A. 1996. subthalamotomy in parkinsonian monkeys. behavioural and biochemical analysis. *Brain a journal of neurology;* 119(Pt 5): 1717-27.

- FL** Gurina, O. I. u., Mamontov, S. G., and Banin, V. V. 1987. [proliferative activity of endotheliocytes of growing corneal capillaries in the rabbit]. <original> proliferativnaia aktivnost' endotelitsitov rastushchikh kapilliarov rogovitsy glaza krolika. *Biulleten' Eksperimental'noi Biologii i Meditsiny* 103(5): 613-7.
- FL** Guschlbauer, B. 1980. nor (nucleolus organisator region) behaviour in peripheral blood cells of pig as shown by silver dye technique of thesis. *Wiener Tierarztliche Monatsschrift* 67(11): 342.
- Method** Gutterer Jan Mirko, Dringen Ralf(A), Hirrlinger Johannes, and Hamprecht Bernd. 1999. purification of glutathione reductase from bovine brain, generation of an antiserum, and immunocytochemical localization of the enzyme in neural cells. *Journal of Neurochemistry* 73(4): 1422-1430.
- Prim** Haber, S. N., Wolfe, D. P., and Groenewegen, H. J. 1990. the relationship between ventral striatal efferent fibers and the distribution of peptide-positive woolly fibers in the forebrain of the rhesus monkey. *Neuroscience* 39(2): 323-38.
- FL** Hacker, G. W., Springall, D. R., Van Noorden, S., Bishop, A. E., Grimelius, L., and Polak, J. M. 1985. the immunogold-silver staining method. a powerful tool in histopathology. *Virchows Archiv* 406(4): 449-61.
- FL** Hackman, C. R. and Vapaatalo, H. 1972. reproducible chemography in autoradiographs of rat brain. *Experientia* 28(4): 492-3.
- Prim** Hahn, L. J., Kloiber, R., Leininger, R. W., Vimy, M. J., and Lorscheider, F. L. 1990. whole-body imaging of the distribution of mercury released from dental fillings into monkey tissues [see comments]. *FASEB Journal* 4(14): 3256-60.
- FL** Hahn von Dorsche, H., Scheibner, R., Fehrmann, P., and Sulzmann, R. 1973. [histotopochemistry of the islet organ (langerhans) of the pancreas in wister rats. iv. studies on heavy metal content]. <original> beitrage zur histotopochemie des inselorgans (langerhans) des pankreas von wistar-ratten. iv. untersuchungen uber den schwermetallgehalt. *Acta Histochemica* 46(1): 60-7.
- Imm** Hainfeld, J. F. and Furuya, F. R. 1992. a 1.4-nm gold cluster covalently attached to antibodies improves immunolabeling. *Journal of Histochemistry and Cytochemistry* 40(2): 177-84.
- In Vit** Hajos, F., Balazs, R., Baker, R. E., Geric, B., and Nuijtinck, R. 1994. structural maturation, cell proliferation and bioelectric activity in long-term slice-cultures of immature rat hippocampus. *Vol. 12, No. 2, Pp. 87-97 Int. J. Dev. Neurosci.*
- FL** Hakanson, R. and Owman, C. 1969. argyrophilic reaction of histamine-containing epithelial cells in murine gastric mucosa. *Experientia* 25(6): 625-6.
- Prim** Halata, Z. and Munger, B. L. 1980. sensory nerve endings in rhesus monkey sinus hairs. *Journal of Comparative Neurology* 192(4): 645-63.
- Method** 1991. Cerium as amplifying agent--an improved cerium-perhydroxide-DAB-nickel (Ce/Ce-H2O2-DAB-Ni) method for the visualization of cerium phosphate in resin sections. *37 (3) : 295-307*
- Phys** Hale, D. W., Hedin, M. C., Smith, S. A., Sudman, P. D., and Greenbaum, I. F. 1991. the effect of heterochromatin on synapsis of the sex chromosomes of peromyscus (rodentia, cricetidae). *Cytogenetics and Cell Genetics* 56(1): 48-56.
- In Vit** Halfter, W. and Deiss, S. 1984. axon growth in embryonic chick and quail retinal whole mounts in vitro. *Developmental Biology* 102(2): 344-55.

- Anat** Halfter, W., Deiss, S., and Schwarz, U. 1985. the formation of the axonal pattern in the embryonic avian retina. *Journal of Comparative Neurology* 232(4): 466-80.
- In Vit** Halfter, W., Newgreen, D. F., Sauter, J., and Schwarz, U. 1983. oriented axon outgrowth from avian embryonic retinae in culture. *Developmental Biology* 95(1): 56-64.
- HHE** Halleen, J., Hentunen, T. A., Hellman, J., and Vaeaenaenen, H. K. 1996. tartrate-resistant acid phosphatase from human bone: purification and development of an immunoassay. *Vol. 11, No. 10, Pp. 1444-1452 J. Bone Miner. Res.*
- No Oral** Halonen, T., Miettinen, R., Toppinen, A., Tuunanen, J., Kotti, T., and Riekkinen, P. J. Sr. 1995. vigabatrin protects against kainic acid-induced neuronal damage in the rat hippocampus. *Neuroscience Letters* 195(1): 13-6.
- Fate** Ham, Kathryn N. and Tange, J. D. 1972. silver deposition in rat glomerular basement membrane. *Aust. J. Exp. Biol. Med. Sci.* 50(4): 423-34 .
- Phys** Hamburger, D. A., Yinnon, A. T., and Gerber, R. B. fractal dimension of disordered submonolayers: determination from he scattering data. *Chem. Phys. Lett. (1996)* 253(3,4): 223-229.
- Not Avail** Hamdy, S. M., Kosba, M. A., Mahmoud, T. H., and El-Turky, A. I. 1982. comparative study on the performance of four local breeds of chickens.2. feed utilization and livability in the laying house. 573-581.
- Phys** Hanawa, M., Takano, Y., and Wakita, M. 1990. an autoradiographic study of calcium movement in the enamel organ of rat molar tooth germs. *Archives of Oral Biology* 35(11): 899-906.
- Herp** Hancock, S. N., Agulnik, S. I., Silver, L. M., and Papaioannou, V. E. 1999. mapping and expression analysis of the mouse ortholog of xenopus eomesodermin. *Mechanisms of Development* 81(1-2): 205-8.
- No Oral** Handl, J., Kallweit, E., Henning, M., and Szwec, L. 2000. on the long-term behaviour of 110 mag in the soil-plant system and its transfer from feed to pig. *Journal of Environmental Radioactivity* 48(2): 159-170.
- Abstract** HANNA, L., PETERS, J. M., WILEY, L. M., CLEGG, M. S., and KEEN, C. L. 1996. comparative effects of essential and nonessential metals on preimplantation mouse embryo development. *EXPERIMENTAL BIOLOGY* 96
- FL** Hanusova-Oravcova, E., Hanus, A., and Lohi, O. 1994. reproduction ability in different colour types of nutria. *Scientifur* 18(4): 267-270.
- Plant** Haq Raza-Ul. 1992. effect of seed production, distribution, viability, losses and germination on the natural regeneration of silver fir (abies pindrow) in moist temperate forests of pakistan. *Pakistan Journal of Forestry* 42(2): 102-111.
- CP** Harri, M., Mononen, J., Kasanen, S., Ahola, L., <Editors> Rutter, S. M., Rushen, J., Randle, H. D., and Eddison, J. C. 1995. choice between floor type and floor level in farmed silver foxes. <document title>proceedings of the 29th international congress of the international society for applied ethology: exeter, uk, 3-5 august, 1995. 171-172.
- CP** Harri, M., Mononen, M., Rekila, T., and Korhonen, H. use of resting platforms and whole year nest boxes by farmbred foxes. *Meeting of the American Society of Animal Science and International*

Society of Applied Ethology, Pittsburgh, Pennsylvania, Usa, August 8-11, 1992. J Anim Sci. 70 (Suppl. 1). 1992. 175.

- Unrel** Harri Mikko(A), Mononen Jaakko(A), Rekila Teppo(A), and Rouvinen Kirsti. 1999. comparison of two breeding systems for timing of whelpings in farmed silver foxes. *Agricultural and Food Science in Finland* 8(1): 3-8.
- HHE** Harrison, H. N. pharmacology of sulfadiazine silver its attachment to burned human and rat skin and studies of gastro intestinal absorption and extension. *Archives of Surgery. 114 (3). 1979 281-285*
- Phys** Hatier, R., Malaprade, D., Roux, M., Nguyen B-L, Grignon, G., and Pasqualini, J. R. autoradiographic localization of tritiated estradiol in epididymis seminal vesicles and prostate of the fetal guinea-pig. *International Journal of Andrology. 13 (2). 1990. 147-154.*
- Phys** Hatzidimitriou, A. G., Kessissoglou, D. P., Manoussakis, G. E., Kourounakis, P. N., and Economidis, G. 1990. solid and solution behavior of sulphonylurea complexes with ions of iia group metals. molecular modeling of $k[zn(clch_4so_2nconhc_3h_7)_3]$ and action of zinc-sulphonylurea complexes as hypoglycemic agents. *Journal of Inorganic Biochemistry* 39(3): 263-76.
- FL** Haug, F. M. 1974. light microscopical mapping of the hippocampal region, the pyriform cortex and the corticomedial amygdaloid nuclei of the rat with timm's sulphide silver method. i. area dentata, hippocampus and subiculum. *Zeitschrift Fur Anatomie Und Entwicklungsgeschichte* 145(1): 1-27.
- In Vit** Hauw, J. J., Boutry, J. M., Crosnier-Suttin, N., and Robineaux, R. 1974. morphology of cultured guinea-pig cerebellum. i. pattern of development. comparison of phase contrast cinematography and silver impregnations of various cell types. *Cell and Tissue Research* 152(2): 141-64.
- Chem Meth** Hayashi, I., Tome, Y., and Shimosato, Y. 1989. thiosemicarbazide used after periodic acid makes methenamine silver staining of renal glomerular basement membranes faster and cleaner. *Stain Technology* 64(4): 185-90.
- In Vit** He, C., Muller, U., Oberthur, W., and Werdan, K. 1992. application of high resolution two-dimensional polyacrylamide gel electrophoresis of polypeptides from cultured neonatal rat cardiomyocytes: regulation of protein synthesis by catecholamines. *Electrophoresis* 13(9-10): 748-54.
- FL** Heckmann, F. W., Mehner, A., and Niehaus, H. 1971. fattening ability and dressing percentage of several rabbit breeds in various weight classes. *Archiv Fur Geflugelkunde* 35(5): 197-204.
- Drug** Heggens, J. P., McHugh, T., Zoellner, S., Boertman, J. A., Niu, X. T., Robson, M. C., and Velanovich, V. 1989. therapeutic efficacy of timentin and augmentin versus silvadene in burn wound infections. *Journal of Burn Care & Rehabilitation* 10(5): 421-4.
- Prim** Heilbroner, P. L. and Kemper, T. L. 1990. the cytoarchitectonic distribution of senile plaques in three aged monkeys. *Acta Neuropathologica* 81(1): 60-5.
- FL** Heimer, L. and Ekholm, R. 1967. neuronal argyrophilia in early degenerative states: a light and electron-microscopic study of the gles and nauta techniques. *Experientia* 23(3): 237-9.
- Nutrition** Heinen, J. M. and Mensi, M. J. Jr. 1991. feeds and feeding schedules for indoor nursery culture of postlarval freshwater prawns *macrobrachium rosenbergii*. *Journal of the World Aquaculture Society* 22(2): 118-127.

- Method** Heinke, M. Y., Wheeler, C. H., Yan, J. X., Amin, V., Chang, D., Einstein, R., Dunn, M. J., and dos Remedios, C. G. 1999. changes in myocardial protein expression in pacing-induced canine heart failure. *Electrophoresis* 20(10): 2086-93.
- FL** Helgebostad, A. and Nordstoga, K. 1978. hypervitaminosis d in fur-bearing animals. *Nordisk Veterinaermedicin* 30(10): 451-455.
- Chem Meth** Herdman, P. R. and Taylor, J. J. 1975. suppression of connective tissue impregnation in a silver technique for demonstrating nerve fibers. *Stain Technology* 50(1): 37-42.
- Mix** Hermann, J. C. Goad A. Arquitt B. Stoecker R. Porter and P. L. Claypool. effects of dietary chromium, copper and zinc on plasma lipid concentrations in male japanese quail. *Nutr. Res. (N. Y.) (1998)* 18(6): 1017-1027 .
- Phys** Herrero, M. T., Hirsch, E. C., Kastner, A., Luquin, M. R., Javoy-Agid, F., Gonzalo, L. M., Obeso, J. A., and Agid, Y. 1993. neuromelanin accumulation with age in catecholaminergic neurons from macaca fascicularis brainstem. *Developmental Neuroscience* 15(1): 37-48.
- FL** Herrmann, V. 1986. [formation and repression of neuromuscular endplates in neurogenic and muscular lesions]. <original> formation und repression neuromuskularer endplatten bei neurogenen und muskularen lasionen. *Zentralblatt Fur Allgemeine Pathologie Und Pathologische Anatomie; 131*
- FL** Herrmann, V. the influence of lesions of nerve and muscle on the formation and repression of the neuromuscular end plates. *Zentralblatt Fuer Allgemeine Pathologie Und Pathologische Anatomie. 131 (4). 1986. 323-336.*
- Prim** Herzog, A. G. and Van Hoesen, G. W. 1976. temporal neocortical afferent connections to the amygdala in the rhesus monkey. *Brain Research* 115(1): 57-69.
- FL** Hilbig, H., Stubbe, A., and Winkelmann, E. 1989. [volumetric and golgi studies of the corpus geniculatum laterale pars dorsalis of alticola stoliczkanus barakshin and alticola argentatus semicanus]. <original> volumetrische und golgi-studien am corpus geniculatum laterale pars doralis alticola stoliczkanus barakshin und alticola argentatus semicanus. *Zeitschrift Fur Mikroskopisch-Anatomische Forschung* 103(1): 14-20.
- Not Prim** Hill, C. H. 1979. chromium - interactions with other elements. *Dev. Nutr. Metab.* 2(Chromium Nutr. Metab.): 229-240.
- Rev** Hill, C. H. and Matrone, G. 1970. chemical parameters in the study of in vivo and in vitro interactions of transition elements. *Federation Proceedings.* 29(4): 1474-81.
- Mix** Hill, Ch, Starcher, B, and Matrone, G. 1964. mercury and silver interrelationships with copper. *J. Nutr.* 83: 107.
- Method** Hirabayashi, Yoshifumi. light-microscopic detection of acidic glycoconjugates with sensitized diamine procedures. *Histochem. J. (1992)* 24(7): 409-18.
- In Vit** Hirose, S., Yamamoto, M., Kim, S. J., Tsuchiya, M., and Murakami, K. 1983. localization of renin mrna in the mouse submandibular gland by in situ hybridization histochemistry. *Vol. 4, No. 6, Pp. 591-596* Biomed. Res.

- Phys** Hisano, S., Tsuruo, Y., Kagotani, Y., Daikoku, S., and Chihara, K. 1990. immunohistochemical evidence for synaptic connections between neuropeptide y-containing axons and periventricular somatostatin neurons in the anterior hypothalamus in rats. *Brain Research* 520(1-2): 170-7.
- HHE** Hitchcock, P. F. and Hickey, T. L. pre natal development of the human lateral geniculate nucleus. *J COMP NEUROL. Journal of Comparative Neurology.* 194 (2). 1980. 395-412.
- FL** Hlindkii, A. N. and Bogomolova, A. P. 1969. [formation and outflow of cerebrospinal fluid]. <original> ob obrazovanii i ottoke spinnomozgovoi zhidkosti. *Zhurnal Nevropatologii i Psikiatrii Imeni S.S. Korsakova* 69(7)
- Nut def** Hoeger, H., Labudova, O., Mosgoeller, W., Herrera-Marschitz, M., Fuerst, G., Kitzmuller, E., and Lubec, B. 1998. deficient transcription of subunit rpa 40 of rna polymerase i and iii in heart of rats with neonatal asphyxia. *Life Sciences* 62(4): 275-82.
- Phys** Hoehn, G. T. and Clark, V. L. 1990. distribution of a protein antigenically related to the major anaerobically induced gonococcal outer membrane protein among other neisseria species. *Infection and Immunity* 58(12): 3929-33.
- No Oral** Hoey, M. J. 1966. the effects of metallic salts on the histology and functioning of the rat testis. *J Reprod Fertil.* 12(3): 461-472.
- No Oral** Hoffman, D. J., Melancon, M. J., Klein, P. N., Eisemann, J. D., and Spann, J. W. 1998. comparative developmental toxicity of planar polychlorinated biphenyl congeners in chickens, american kestrels, and common terns. *Vol. 17, No. 4, Pp. 747-757 Environ. Toxicol. Chem.*
- Diss** Hofmo, P. O. 1988. studies on cryopreservation of fox spermatozoa and evaluation of the fertilizing capacity of frozen/thawed silver fox spermatozoa. *Vp.*
- FL** Hogl, O. 1975. molybdenum as a toxic factor in a swiss alpine valley. *Mitteilungen Aus Dem Gebiete Der Lebensmitteluntersuchung Und Hygiene* 66(4): 485-495.
- Phys** Holm, I. E. and Geneser, F. A. 1991. histochemical demonstration of zinc in the hippocampal region of the domestic pig: ii. subiculum and hippocampus. *Journal of Comparative Neurology* 305(1): 71-82.
- In Vit** Holm, I. E. and Geneser, F. A. 1991. histochemical demonstration of zinc in the hippocampal region of the domestic pig: iii. the dentate area. *Journal of Comparative Neurology* 308(3): 409-17.
- No Dose** Homma, K., Oki, H., and Watanabe, G. 1985. a plumage color mutation in japanese quails associated with female specific sterility due to oviducal dysfunction. *Japanese Journal of Animal Reproduction* 31(2): 84-89.
- Phys** Honea, E. C., Ogura, A., Peale, D. R., Felix, C., Murray, C. A., Raghavachari, K., Sprenger, W. O., Jarrold, M. F., and Brown, W. L. structures and coalescence behavior of size-selected silicon nanoclusters studied by surface-plasmon-polariton enhanced raman spectroscopy. *J. Chem. Phys.* (1999) 110(24): 12161-12172.
- Prim** Honrubia, F. M. and Elliott, J. H. 1970. efferent innervation of the retina. ii. morphologic study of the monkey retina. *Investigative Ophthalmology* 9(12): 971-6.

- Alt** Hoog, A., Hu, W., Abdel-Halim, S. M., Falkmer, S., Qing, L., and Grimelius, L. 1997. ultrastructural localization of insulin-like growth factor-2 (igf-2) to the secretory granules of insulin cells: a study in normal and diabetic (gk) rats. *Ultrastructural Pathology* 21(5): 457-66.
- CP** Horder, T. J. and Mashkas, A. silver stained whole mounts and horseradish peroxidase preparations demonstrating some of the rules of development of optic fibers in normal and experimentally manipulated embryonic chick Retinae. *Proceedings of the Physiological Society, March 27-28, 1981. J Physiol.* 317 (0). 1981. 15p.
- Org met** Horner, H. C., Roebuck, B. D., Smith, R. P., and English, J. P. 1983. acute toxicity of some silver salts of sulfonamides in mice and the efficacy of penicillamine in silver. *Drug and Chemical Toxicology.* 6(3): 267-77.
- Chem Meth** Howard, M. J. and Barnes, P. R. 1979. a silver carbonate method for cell counts of neurons and glial elements on paraffin embedded brain tissue. *Stain Technology* 54(6): 299-303.
- Phys** Hoyt, R. F. Jr, McNelly, N. A., McDowell, E. M., and Sorokin, S. P. 1991. neuroepithelial bodies stimulate proliferation of airway epithelium in fetal hamster lung. *American Journal of Physiology* 260(4 Pt 1): L234-40.
- Anat** Hoyt, R. F. Jr, McNelly, N. A., and Sorokin, S. P. 1990. dynamics of neuroepithelial body (neb) formation in developing hamster lung: light microscopic autoradiography after 3h-thymidine labeling in vivo. *Anatomical Record* 227(3): 340-50.
- In Vit** Hsu, H. H., Munoz, P. A., Barr, J., Oppliger, I., Morris, D. C., Vaananen, H. K., Tarkenton, N., and Anderson, H. C. 1985. purification and partial characterization of alkaline phosphatase of matrix vesicles from fetal bovine epiphyseal cartilage. purification by monoclonal antibody affinity chromatography. *Journal of Biological Chemistry* 260(3): 1826-31.
- FL** Huang, Y., Gan, M. H., and Liu, S. G. 1995. studies on a silver-enhanced colloidal gold assay for the detection of porcine parvovirus antigen. *Acta Veterinaria Et Zootechnica Sinica* 26(3): 239-244.
- FL** Hulliger, L., Pohler, O., and Straumann, F. 1967. [influence of some pure metals and alloys on the growth of rabbit fibrocytes in tissue culture]. <original> einfluss einiger reiner metalle und legierungen auf das wachstum von kaninchenfibrocyten in gewebeulturen. *Zeitschrift Fur Die Gesamte Experimentelle Medizin Einschliesslich*
- Phys** Hume, W. J. 1990. a reproducible technique combining tritiated thymidine autoradiography with immunodetection of bromodeoxyuridine for double labelling studies of cell proliferation in paraffin sections of tissues. *Cell and Tissue Kinetics* 23(3): 161-8.
- FL** Ibata, Y. and Otsuka, N. 1968. fine structure of synapses in the hippocampus of the rabbit with special reference to dark presynaptic endings. *Zeitschrift Fur Zellforschung Und Mikroskopische Anatomie* 91(4)
- Nutrition** Ibrahim, K. A. 1997. effect of feeding some local animal protein sources on the performance of r.i.r and silver montazah. *Egyptian Poultry Science Journal* 17(2): 127-152.
- Abstract** Ichinohe, K., Unakami, S., Hirata, M., and Tanimoto, y. 1985. electrophoretic studies on urinary proteins using silver stain in rats. *21st Annual Meeting of the Japanese Society of Toxicological Sciences*

- Method** Ikezu, T., Ueda, H., Trapp, B. D., Nishiyama, K., Sha, J. F., Volonte, D., Galbiati, F., Byrd, A. L., Bassell, G., Serizawa, H., Lane, W. S., Lisanti, M. P., and Okamoto, T. 1998. affinity-purification and characterization of caveolins from the brain: differential expression of caveolin-1, -2, and -3 in brain endothelial and astroglial cell types. *Brain Research* 804(2): 177-92.
- FL** Insausti, R. and Gonzalo, L. M. 1980. new data on the precise location of the lacrimo-muconasal nucleus of the rat. *Experientia* 36(8): 977-8.
- No Oral** Intengan, H. D. and Smyth, D. D. 1997. renal alpha 2a/d-adrenoceptor subtype function: wistar as compared to spontaneously hypertensive rats. *British Journal of Pharmacology* 121(5): 861-6.
- Gene** Isakova, G. K. and Zhogoleva, N. N. 1997. activity of mink embryonic genome during diapause (cytogenetic analysis): number of cells and size of cell nuclei in blastocysts of various size and age. *Genetika (Moskva)* 33(6): 822-830.
- FL** Isakova, G. K. and Zhogoleva, N. N. 1997. [activity of the embryonal genome of mink during diapause (cytogenetic analysis): number of cells and cell nucleus size in blastocysts or various size and age]. <original> aktivnost' embrional'nogo genoma norki vo vremia diapauzy (tsitogeneticheskii analiz): chislo kletok i razmer kletochnykh iader v blastotsistakh raznogo razmera i vozrasta. *Genetika* 33(6): 822-30.
- Method** Ishimura, R., Noda, K., Hattori, N., Shiota, K., and Ogawa, T. 1995. analysis of rat placental plasma membrane proteins by two-dimensional gel electrophoresis. *Molecular and Cellular Endocrinology* 115(2): 149-59.
- Prim** Itoh, K., Wakita, M., and Kobayashi, S. 1981. innervation of the periodontium in the monkey. *Archivum Histologicum Japonicum* 44(5): 453-66.
- HHE** Itoh, Y., Yagishita, S., and Nakano, T. ultrastructural study on the effect of thio semi carbazide for the detection of poly saccharide on rat and human tissues including poly glucosan bodies in the human brain. *Journal of Clinical Electron Microscopy*. 16 (3-4). 1983 (Recd. 1984). 343-352.
- FL** Iudica, C. E. and Alberio, R. H. 1995. preliminary study of the sexual cycle of the south american nutria (myocastor coypus) by the method of exfoliative colpocytology. *Scientifur* 19(1): 33-42.
- FL** Ivanics, E., Glavits, R., and Hadhazy, A. 1982. occurrence of tyzzer's disease in brown hares (lepus europaeus). *Magyar Allatorvosok Lapja* 37(8): 525-527.
- FL** Iwasaki Taizo(A), Kojima Toshiyuki, Zeniya Yumie, and Totsukawa Kiyoshi(A). 1995. viability of porcine embryos after thawing at various temperatures with freezing slowly. *Animal Science and Technology* 66(8): 705-712.
- CP** Jackson-Lewis, V., Jakowec, M. W., Burke, R. E., and Przedborski, S. 1995. time course and morphology of mptp-induced neuronal death. *Society for Neuroscience Abstracts* 21(1-3): 2002.
- Phys** Jacquin, M. F., McCasland, J. S., Henderson, T. A., Rhoades, R. W., and Woolsey, T. A. 1993. 2-dg uptake patterns related to single vibrissae during exploratory behaviors in the hamster trigeminal system. *Journal of Comparative Neurology* 332(1): 38-58.
- CP** Jalkanen, L., <Book> Concannon P W, England, G. C. W., Verstegen, J. P., and Russell, H. A: Eds. 1994. sperm abnormalities in silver fox (vulpes vulpes) semen selected for artificial insemination. <book> journal of reproduction and fertility; fertility and infertility in dogs, cats and other carnivores. *Journal of Reproduction and Fertility (SUPPL. 47)*: 287-290.

- CP** Jalkanen, L. Kuopio Univ. Finland Veterinary Research Station and Skrede, A. ed. 1992. embryonal development and embryo losses during the preimplantation period in the silver fox. progress in fur animal science. proceedings from the vth international scientific congress in fur animal production. P. 108-114. No. 9(Suppl.)
- In Vit** James, W. M. and Klein, W. L. 1988. localization of acetylcholine receptors on isolated cns neurons: cellular and subcellular differentiation. *Journal of Neuroscience* 8(11): 4225-38.
- Drug** Jelenko, C., Wheeler, M. L., Anderson, A. P., Callaway, B. D., and McKinley, J. C. 1975. studies in burns: xiv, heling in burn wounds treated with ethyl linoleate alone or in combination with selected topical antibacterial agents. *Annals of Surgery* 182(5): 562-6.
- In Vit** Jenö, P., Jaggi, N., Luther, H., Siegmann, M., and Thomas, G. 1989. purification and characterization of a 40 s ribosomal protein s6 kinase from vanadate-stimulated swiss 3t3 cells. *Journal of Biological Chemistry* 264(2): 1293-7.
- Abstract** Jensen, L. S. interactions of silver and copper with selenium in chicks. *Federation Proceedings*. 33 (3 Part 1). 1974 694
- Abstract** Jensen, L. S., Werho, D. B., and Leyden, D. E. hepatic selenium content of chicks fed toxic levels of selenium as affected by copper silver and linseed meal. *Federation Proceedings*. 35 (3). 1976 577
- In Vit** Jensen, S., Sorensen, T., Moller, A. G., and Zimmer, J. 1984. intraocular grafts of fresh and freeze-stored rat hippocampal tissue: a comparison of survivability and histological and connective organization. *Journal of Comparative Neurology* 227(4): 559-68.
- No Dose** Jeppesen, L. L. and Pedersen, V. 1988. effect of visual isolation during pregnancy and lactation on reproductive success in silver fox vixens. *Scientifur*. V. 12(4) P. 257-259
- CP** Jeppesen, L. L., Pedersen, V. Copenhagen Univ. Denmark Inst. of Population Biology, and Skrede, A. ed. 1992. correlation between levels of cortisol, behaviour and nest box use in silver fox vixens. progress in fur animal science. proceedings from the vth international scientific congress in fur animal production. P. 505-511. No. 9(Suppl.)
- FL** Jesewska, G., Leznicki, A., Geisler, W., and Maciejowski, J. 1994. the polish white neck fox. *Scientifur* 18(2): 101-103.
- Phys** Jhaveri, S., Edwards, M. A., and Schneider, G. E. 1991. initial stages of retinofugal axon development in the hamster: evidence for two distinct modes of growth. *Experimental Brain Research. Experimentelle Hirnforschung*.
- Phys** Jin, C. 1996. study on dna synthesis of aging mouse colon by light and electron microscopic radioautography. *Cellular and Molecular Biology* 42(2): 255-68.
- Phys** Johkura Kohei. 1996. the aging change of glycoconjugate synthesis in mouse kidney studied by 3h-glucosamine radioautography. *Acta Histochemica Et Cytochemica* 29(1): 57-63.
- Anat** Johnson, M. C. and Beebe, D. C. 1984. growth, synthesis and regional specialization of the embryonic chicken lens capsule. *Experimental Eye Research* 38(6): 579-92.
- Drug** Johnson, T. L., Kenney, R. M., McGee, W. R., and Polk, H. C. Jr. 1980. pseudomonas infection in a stallion: a case report. *Proceedings of the American Association of Equine Practitioners* 26: 111-116.

- Bio Acc** Jones, Allen M. and Bailey, James A. 1974. effect of silver from cloud seeding on cecal flora of rabbits. *Water Air, Soil Pollut.* 3(3): 353-63 .
- Phys** Jones, B. E., Holmes, C. J., Rodriguez-Veiga, E., and Mainville, L. 1991. gaba-synthesizing neurons in the medulla: their relationship to serotonin-containing and spinally projecting neurons in the rat. *Journal of Comparative Neurology* 313(2): 349-67 .
- Acu** Jones, M. M., Schoenheit, J. E., and Weaver, A. D. 1979. pretreatment and heavy metal Id50 values. *Toxicology and Applied Pharmacology* 49(1): 41-4.
- Alt** Jones, T. E. and Munger, B. L. 1985. early differentiation of the afferent nervous system in glabrous snout skin of the opossum (*monodelphis domesticus*). *Somatosensory Research* 3(2): 169-84.
- Phys** Jordan, C. L., Breedlove, S. M., and Arnold, A. P. 1991. ontogeny of steroid accumulation in spinal lumbar motoneurons of the rat: implications for androgen's site of action during synapse elimination. *Journal of Comparative Neurology* 313(3): 441-8.
- Method** Jorritsma-Byham, B., Witter, M. P., and Wouterlood, F. G. 1994. combined anterograde tracing with biotinylated dextran-amine, retrograde tracing with fast blue and intracellular filling of neurons with lucifer yellow: an electron microscopic method. *Journal of Neuroscience Methods* 52(2): 153-60.
- Aquatic** Joseph, D. 1981. partial replacement of concentrated fish food (pellets) with chickendroppings. *Bamidgeh* 33(1): 24-28.
- FL** Julkunen-Tiitto, R., Rousi, M., Bryant, J., Sorsa, S., Keinaenen, M., and Sikanen, H. 1996. chemical diversity of several betulaceae species: comparison of phenolics and terpenoids in northern birch stems. <original> [chemische diversitaet einiger betulaceae-arten: vergleich von phenolischen verbindungen und terpenoiden in den staemmen nordischer birken]. *Trees. V. 11(1)* P. 16-22
- Chem Meth** Kacimi, Ghouti, Nguyen Phu Lich, Fabiani, Paul, and Truhaut, Rene. 1986. determination of silver by flameless atomic spectrometry: application to biological materials. *C. R. Acad. Sci.Ser. 2* 302(7): 421-6..
- FL** Kacmar, P., Samo, A., and Knezik, J. 1980. chemical diagnosis of sodium chloride poisoning in purebred furbearing animals (fox, coypu), turkeys and pheasants. *Veterinarni Medicina* 25(12): 733-738.
- FL** Kacmar, P., Samo, A., and Knezik, J. chemical diagnostics of sodium chloride poisoning in thoroughbred fur bearing animals fox coypu and in turkey and pheasants. *Veterinarni Medicina (Prague)*. 25 (12). 1980 (Recd. 1981). 733-738.
- Bact** Kalachnyuk, H. I(A), Marounek, M., Kalachnyuk, L. H., and Savka, O. H. 1994. rumen bacterial metabolism as affected by extracellular redox potential. *Ukrainskii Biokhimicheskii Zhurnal* 66(1): 30-40.
- FL** Kaleta T. observations and investigations concerning the reproduction of silver foxes (*vulpes vulpes*). *Zeszyty Problemowe Postepow Nauk Rolniczych No.* 259 1981. 122: 75-80.
- No Dose** Kaleta, T. and Brozowski, M. 1985. the activity of farm silver fox (*vulpes vulpes*) in summer. *Scientifur. V. 9(3)* P. 179-180

- No Dose** Kaleta, T. and Lewandowska, A. 1987. the escape distance in farm silver foxes with regard to cronism problem. *Scientifur*. V. 11(3) P. 187-189
- FL** Kaleta T and Plochocka D. 1990. the escape distance in young farm silver foxes. *Scientifur* 14. 127(3): 167-168, illustr.
- FL** Kaleta, T. and Stosznajder, R. 1990. an attempt to evaluate the relationship between the keeping system and behaviour in young silver foxes. *Scientifur*. V. 14(3) P. 163-166
- Prim** Kalil, K. 1981. projections of the cerebellar and dorsal column nuclei upon the thalamus of the rhesus monkey. *Journal of Comparative Neurology* 195(1): 25-50.
- Bio Acc** Kalistratova, V. S., Kogan, A. G., and Kozlova, M. D. behavior of silver-111 in animals. *Raspred. Biol. Deistvie Radioakt. Izot. (1966)* : 146-51.
- FL** Kalugina, M. A. nervous apparatus of the extraembryonic fetal organs of albino rats. *Arkhiv Anatomii Gistologii i Embriologii*. 91 (10). 1986 (Recd. 1987). 21-27.
- In Vit** Kanematsu, Nobutake, Hachinohe, Masaki, Naito, Koichi, Oogane, Kiyoshi, Kawahara, Haruyuki, and Kuroda, Yukiaki. effect of metal ions on tissue culture cells. iii. effect of metal ions on aggregation of embryonic quail liver cells in rotation culture. *Shika Kiso Igakkai Zasshi (1979)* 21(3): 498-510.
- FL** Kang, M. H., Chung, K. H., Choi, W. J., and Kim, C. S. 1980. toxicity of chromium and its interaction with copper and silver in chicks. *Korean Journal of Animal Sciences*. 22 (4). 1980 (Recd. 1981). 314-322. 22(4): 314-322.
- No Oral** Kapicioglu S(A), Mollamehmetoglu, M., Kutlu, N., Can, G., and Ozgur, G. K(A). 1998. inhibition of penile erection in rats by a long-acting somatostatin analogue, octreotide (sms 201-995). *British Journal of Urology* 81(1): 142-145.
- Phys** Kar, S., Chabot J-G, and Quirion, R. quantitative autoradiographic localisation of iodine-125 endothelin-1 binding sites in spinal cord and dorsal root ganglia of the rat. *Neuroscience Letters*. 133 (1). 1991. 117-120.
- FL** Karamanlidis, A. N. 1973. (ascending spinal fibres in the brain stem of the horse. anexperimental study with the silver impregnation method). *Zentralblatt Fur Veterinarmedizin, C* 2(Heft 3): 209-220.
- Aquatic** Karlsson, L. 1985. behavioral-responses of european silver eels (*anguilla-anguilla*) to the geomagnetic-field. *Helgolander Meeresuntersuchungen* 39(1): 71-81.
- Phys** Karoumi, A., Meiniel, R., Belin, M. F., and Meiniel, A. 1991. a comparative immunocytochemical and immunochemical analysis of glycoproteins synthesized in the bovine subcommissural organ. *Journal of Neural Transmission* 86(3): 205-16.
- HHE** Kasper, L. H. and Ware, P. L. 1985. recognition and characterization of stage-specific oocyst/sporozoite antigens of *toxoplasma gondii* by human antisera. *Journal of Clinical Investigation* 75(5): 1570-7.
- CP** Kato, K., Yokose, S., and Tajima, Y. the use of silver enhancement technique for immunohistochemical demonstration of rat egf. *Thirtieth Annual Meeting of the Japan Society of Histochemistry and Cytochemistry, Kyoto, Japan, October 23-25, 1989. Acta Histochem Cytochem*. 22 (6). 1989. 718.

- Phys** Kato, K., Yokose, S., and Tajima, Y. 1991. use of silver enhancement technique for immunohistochemical detection of epidermal growth factor in rat submandibular gland. *Biotechnic & Histochemistry* 1(2): 87-8.
- HHE** Kawabata Shigeki, Higgins Gerald A, and Gordon Jon W(A). 1991. alzheimer's retraction. retraction of ba 93055525. amyloid plaques, neurofibrillary tangles and neuronal loss in brains of transgenic mice overexpressing a carboxyl-terminal fragment of human amyloid precursor protein. shigeki kawabata, gerald a. higgins and jon w. gordon. *nature (lond)* vol. 354. iss. 6353. 1991. pp. 476-478. *Nature (London)* 356(6364): 23.
- Phys** Kawabuchi, M., Cintra, W. M., Deshpande, S. S., and Albuquerque, E. X. 1991. morphological and electrophysiological study of distal motor nerve fiber degeneration and sprouting after irreversible cholinesterase inhibition. *Synapse* 8(3): 218-28.
- No COC** Kawakami, I. distribution of ascorbic-acid in chick embryo during development. *Zoological Magazine (Tokyo)*. 81 (4). 1972 (Recd 1973) 262
- Method** Kawamata Seiichi(A) and Igarashi Yoshikazu. 1993. glycoconjugates in the cochlea as revealed by the silver methenamine method. *Hearing Research* 67(1-2): 75-82.
- Method** KAWAMURA, M., WASHIZU, T., ISHIDA, T., and MOTOYOSHI, S. electron-microscopic observations on the distribution of copper in biopsied liver of toxic milk mice. *Bulletin of the Nippon Veterinary and Animal Science University; 0 (44)*. 1995. 34-40.
- Phys** Kawata, M., McCabe, J. T., Chung, S. K., Dutt, A., Yuri, K., Hirakawa, M., Kumamoto, K., Hirayama, Y., and Pfaff, D. W. the effect of progesterone on oxytocin messenger rna in hypothalamic neurons of estrogen-treated female rats studied with quantitative in-situ hybridization histochemistry. *BIOMED RES. Biomedical Research*. 12 (6). 1991. 405-415.
- No Dose** Kayamori, T., Yamada, J., Yamashita, T., and Misu, M. ontogeny of the endocrine cells in the pyloric region of the japanese quail coturnix-coturnix-japonica. *I. Research Bulletin of Obihiro University Series I*. 11 (1). 1978 (Recd. 1979). 1-12.
- Phys** Kayar, S. R. and Weiss, H. R. 1991. capillary recruitment and heterogeneity of perfused capillary distribution in dog myocardium. *Microcirculation, Endothelium, and Lymphatics* 7(1-3): 77-108.
- No Oral** Kazimov, M. A. 1984. effect of cadmium and vanadium on the behavior of silver in [experimental] animals. *Aktual. Vopr. Gig. Tr. Profpatol. Prom-Sti. Sel'Sk. Khoz. (1984)*: 63-9. Editor(s): Eglite, M. Ya. Publisher: Rizh. Med. Inst., Riga, USSR.
- Drug** Kenyon, A. J., Hamilton, S. G., and Douglas, D. M. 1986. comparison of antipseudomonad activity of chlorine dioxide/chlorous acid-containing gel with commercially available antiseptics. *American Journal of Veterinary Research* 47(5): 1101-4.
- Chem Meth** Khachaturov, E. N. 1980. cytochemical method of detecting dna based on reduction of metallic silver from solution of silver ammine by aldehyde groups of apurinic dna. *Biology Bulletin of the Academy of Sciences of the USSR* 7(3): 188-94.
- Aquatic** Khangarot, B. S., Ray, P. K., and Chandra, H. daphnia magna as a model to assess heavy metal toxicity: comparative assessment with mouse system. *Acta Hydrochim. Hydrobiol. (1987)* 15(4): 427-32.

- FL** Kharchenko, P. D., Berdishev, G. D., Stepanenko, P. Z., and Velikoivaneko, O. O. 1973. [changes in the nucleic acid content of the brain and liver in rats following prolonged administration of silver ions in drinking water]. <original> zmina vmistu nukleinykh kyslot u holovnomu mozku i pechintsi shchuriv pry tryvalomu vvedenni ioniv sribla z pytnoiu vodoiu. *Fiziolohichniy Zhurnal* 19(3): 362-8.
- FL** Kharchenko, P. D., Berdyshev, G. D., Stepanenko, P. Z., and Velikoivanenko, A. A. change in the nucleic acid level in rat brain and liver during long-term introduction of silver ions in drinking water. *Fiziol. Zh. (Kiev)* (1973) 19(3): 362-8.
- FL** Kharchenko, P. D., Berdyshev, G. D., Stepanenko, P. Z., and Velikonvanenko, A. A. change in the content of brain nucleic acids of rats following long-term intake of ionic silver with the drinking water. *Vodopodgotovka i Ochistka Prom. Stokov* (1973) (10): 108-17 From: Ref. Zh., Biol. Khim. 1974, Abstr. No. 15F2345.
- FL** Kharchenko, P. D., Berdyshev, H. D., Stepanenko, P. Z., and Velykoivanenko, O. O. change in nucleic-acid content in rat brain and liver during long-term introduction of silver ions with drinking water. *FIZIOL ZH (AKAD NAUK UKR RSR)*. 19 (3). 1973 362-368.
- FL** KHARCHENKO, P. D. and STEPANENKO, P. Z. characteristics of disturbances in albino rat higher nervous activity during the action of silver electrolytic solutions. *FIZIOL ZH (AKAD NAUK UKR RSR)*; 18 (5). 1972 596-600
- FL** Kharchenko, P. D. and Stepanenko, P. Z. disturbance of albino rat higher nervous activity during the action of electrolytic solutions of silver. *Fiziol. Zh. (Kiev)* (1972) 18(5): 596-600.
- Gene** Khatib, H. and Soller, M. 1992. mononucleotide repeat polymorphism at the myhe locus in chicken. *Animal Genetics* 23(5): 478.
- FL** Khokhol'kova, G. A. and Pestova, A. G. the dynamics of the accumulation and distribution of diptal in the organism of white rats after a single administration via the gastrointestinal tract. *Vrachebnoe Delo No.*; 5: 99-102 1969; (REF:4)
- FL** Khudoerkov, R. M. 1992. [ammoniacal silver method in alkaline ph range as a technique for detection of morpho-functional features of nerve tissue elements]. <original> ammiachno-serebrianyi metod v shchelochnom diapazone ph kak sposob vyiavleniia morfo-funktsional'nykh osobennosti nervnykh elementov. *Biulleten' Eksperimental'Noi Biologii i Meditsiny* 113(6): 660-3.
- FL** Khudoerkov, R. M. 1991. [autoradiography of protein synthesis as a method of assessment of morphofunctional changes in brain structures]. <original> avtoradiografiia sinteza belka kak metod otsenki morfofunksional'nykh izmenenii v strukturakh mozga. *Biulleten' Eksperimental'Noi Biologii i Meditsiny* 112(9): 321-3.
- In Vit** Kim G-S and Lee T-H. the activities of glyoxalase i ec-4.4.1.5 in some animal liver and erythrocytes. *Journal of Catholic Medical College*. 38 (1). 1985. 55-62.
- In Vit** Kim, S. U. 1972. light and electron microscope study of mouse cerebral neocortex in tissue culture. *Experimental Neurology* 35(2): 305-21.
- Phys** Kim Suhn Hee(A), Cho Kyung Woo, Oh Seon Hee, Hwang Yun Hwa, Lim Seong= Hee, Ryu Hoon, Seul Kyung Hwan, Jeong Goo Bo, and Yoon Sik. 1993. immunoreactive atrial natriuretic peptides in the oocyte. *Comparative Biochemistry and Physiology A Comparative Physiology* 104(2): 219-223.

- Prim** Kimura, K. and Takahashi, Y. 1985. [application of silver impregnation to peripheral nerve fiber analysis in topographic anatomy--a communicating branch of the lateral sural cutaneous nerve to the sural nerve in the crab-eating monkey (*macaca fascicularis*)]. *Kaibogaku Zasshi* 60(1): 8-10.
- Phys** Kingsley Paul D(A), Zinkin Adam S, Silver Louise S, Pendola Frank L, and Palis James. 1996. development regulation and primary structure of murine cellular nucleic acid-binding protein, a zinc finger-containing protein whose general structure is present in evolutionarily diverse eukaryotes. *Development Growth & Differentiation* 38(6): 697-706.
- Anat** Kirby, M. L., McKenzie, J. W., and Weidman, T. A. 1980. developing innervation of the chick heart: a histofluorescence and light microscopic study of sympathetic innervation. *Anatomical Record* 196(3): 333-40.
- Method** Kiupel, M., Bostock, D., and Bergmann, V. 1998. a semiquantitative method for the evaluation of agnors in caninemalignant lymphomas. *European Journal of Veterinary Pathology* 4(2): 67-71.
- Drug** Klaue, P., Aman, G., and Romen, W. chemical debridement of the burn eschar in rats with bromelain combined with topical anti microbial agents. *European Surgical Research*. 11 (5). 1979 (Recd. 1980). 353-359.
- FL** Kletskin, P. T., Glazov, E. M., Kolchanova, N. V., and Kulikov, N. E. 1983. nutritive value of feather meal for polar foxes and silver-black foxes. *Nauchnye Trudy Nauchno-Issledovatel'Skogo Instituta Pushnogo Zverovodstva i Krolikovodstva* 29: 170-178.
- FL** Kletskin, P. T., Snytko, V. S., and Glazov, E. M. 1978. using fish meat, silkworm pupae, by-products from fur farms and grainfor feeding foxes and arctic foxes. *Nauchnye Trudy. Nauchno-Issledovatel'Skii Institut Puchnogo Zverovodstva i Krolikovodstva* 18: 125-136.
- FL** Klimenko, V. M. and Pugovkin, A. P. 1985. [morphofunctional restructuring of the nervous system of the lymphoid organs during electrostimulation of the hypothalamus]. <original> morfofunktsional'naia perestroika nervnogo apparata limfoidnykh organov pri elektrostimulatsii gipotalamusa. *Biulleten' Eksperimental'Noi Biologii i Meditsiny* 99(6): 750-2.
- Unrel** Klimstra, W. D. and Dooley, A. L. foods of the key deer. *Florida Scientist*. 53 (4). 1990. 264-273.
- FL** Klinger, G. 1970. [histochemical and electron microscopical studies on the kidney basement membrane in hydronephrotic rats]. <original> histochemische und submikroskopische untersuchungen an renalen basalmembranen der hydronephrotischen ratte. *Experimentelle Pathologie* 4(1): 69-80.
- In Vit** Kobayashi, T., Tsukagoshi, H., and Shimizu, Y. trophic effects of sympathetic ganglia on normal and dystrophic chicken skeletal muscles in tissue culture. *Experimental Neurology*. 77 (2). 1982. 241-253.
- HHE** Kobayashi, Y., Cavallotti, D., Ricci, A., and Amenta, F. 1994. localisation of dopamine d2-like receptors in pulmonary artery of the human and rabbit but not of the rat. *European Journal of Pharmacology* 261(3): 229-36.
- Nut def** Koh, E. T. and Min, K. W. 1991. fructose precipitates calcium phosphate in the kidneys of female rats fed magnesium-deficient diets. *Magnesium Research* 4(3-4): 171-6.
- Phys** Koh, T., Maeda, T., Nakazawa, M., and Kani, K. 1991. [a double-labeling study of serotonin neurons that project to the visual cortex of developing rat brain]. *Nippon Ganka Gakkai Zasshi* 95(3): 249-53.

- Diss** Koivisto, M. 1986. [reproductive physiology in silver foxes (*vulpes fulva argentata*) and arctic foxes (*alopex lagopus*) with special regard to histological ovarian findings before and during mating season]. <subtitle> [contribution within the scope of the working group "reproduction and insemination" at the tierärztliche hochschule hannover]. <original> zur fortpflanzungsphysiologie bei silberfuchs (*vulpes fulva argentata*) und blaufuchs (*alopex lagopus*) unter besonderer beruecksichtigung histologischer ovarbefunde vor und waehrend der paarungssaison. <original subtitle> beitrage im rahmen der arbeitsgruppe "fortpflanzung und besamung" an der tierärztlichen hochschule hannover. 70 P.
- No Dose** Kojima, T., Soma, T., and Oguri, N. 1988. effect of ice nucleation by droplet of immobilized silver iodide on freezing of rabbit and bovine embryos. *Theriogenology*. 30(6): 1199-1207.
- In Vit** Kojima, T., Soma, T., and Oguri, N. 1986. effect of silver iodide as an ice inducer on viability of frozen-thawed rabbit morulae. *Theriogenology*. 26(3): 341-352.
- FL** Kolesnikova L A. 1991. some quantitative characteristics of blastocysts of silver foxes under Domestication. *Sibirskii Biologicheskii Zhurnal* 1991. 128(6): 21-24, illustr.
- FL** Kolesnikova, L. A. 1996. structural and functional features of the pineal gland of silver foxes: changes under the effect of domestication. *Scientifur*. V. 20(1) P. 13-25
- FL** Kolesnikova, L. A., Trut, L. N., and Belyaev, D. K. changes in morphology of silver fox pineal gland at domestication. *Zhurnal Obshchei Biologii*. 49 (4). 1988. 487-492.
- Method** Kolodziejczyk, E., Serrant, P., and Fernandez-Graf, M. R. 1990. a simple rapid method to slice biological specimens: an application for non-embedded and embedded golgi-stained tissue. *Journal of Neuroscience Methods* 31(3): 183-6.
- Phys** Konaka Shuntaro, Yamada Masanobu(A), Satoh Tetsuro, Ozawa Hitoshi, Watanabe Eri, Takata Kuniaki, and Mori Masatomo. 1997. expression of thyrotropin-releasing hormone (trh) receptor mrna in somatotrophs in the rat anterior pituitary. *Endocrinology* 138(2): 827-830.
- Phys** Konig, M. F., Weibel, E. R., and Batra, S. 1996. comparison of in vivo microvascular perfusion pattern between skeletal muscle and heart: colloidal gold particles as in vivo plasma marker. *Advances in Experimental Medicine and Biology* 388: 197-204.
- Unrel** Kool, K. M. food selection by the silver leaf monkey *trachypithecus-auratus-sondaicus* in relation to plant chemistry. *Oecologia (Heidelb)*. 90 (4). 1992. 527-533.
- Method** Kornhauser, G. V., Krum, J. M., and Rosenstein, J. M. 1992. an innovative coating technique for light and electron microscopic autoradiography. *Journal of Histochemistry and Cytochemistry* 40(6): 879-82.
- HHE** Kosik, K. S., Gilbert, J. M., Selkoe, D. J., and Strocchi, P. 1982. characterization of postmortem human brain proteins by two-dimensional gel electrophoresis. *Journal of Neurochemistry* 39(6): 1529-38.
- No Oral** Kotti, T., Halonen, T., Sirvio, J., Riekkinen, P. Sr, and Miettinen, R. comparison of nadph diaphorase histochemistry, somatostatin immunohistochemistry, and silver impregnation in detecting structural and functional impairment in experimental status epilepticus. *Neuroscience (Oxford) (1997)* 80(1): 105-117.

- Phys** Kouretas, D., Trnovsky, J., Holdridge, M., and Theoharides, T. C. two-dimensional gel electrophoretic profile of rat basophilic leukemia rbl and mast cells. *Life Sciences*. 49 (18). 1991. 1289-1294.
- Mix** Kramer, J. K. G., Sehat, N., Dugan, M. E. R., Mossoba, M. M., Yurawecz, M. P., Roach, J. A. G., Eulitz, K., Aalhus, J. L., Schaefer, A. L., and Ku, Y. 1998. distributions of conjugated linoleic acid (cla) isomers in tissue lipidclasses of pigs fed a commercial cla mixture determined by gaschromatography and silver ion-high-performance liquid chromatography. *Lipids* 33(6): 549-558.
- FL** Krass, P. M., Bazhan, N. M., Reshetnikov, S. S., and Trut, L. N. age changes of adrenal reactivity to acth in silver foxes with different heredity determined forms of defensive behavior. *Izvestiya Akademii Nauk Sssr Seriya Biologicheskaya*. 0 (3). 1979. 365-370.
- In Vit** Kratky, R. G. and Roach, M. R. 1983. relationship between aortic endothelial cell morphology and atherosclerosis in rabbits. *Scanning Electron Microscopy* (Pt 3): 1461-6.
- Chem Meth** Krikelis, H. and Smith, A. A. 1988. palladium toning of silver-impregnated reticular fibers. *Stain Technology* 63(2): 97-100.
- No Dose** Kristensen, M. P. 1988. an evaluation of exploratory and fear-motivated behaviour as predictors of reproductive success in silver fox vixens. *Scientifur* 12(3): 199-205.
- No Dose** Kristensen, M. P. Copenhagen Univ. Denmark Inst. of Population Biology. 1988. an evaluation of exploratory and fear-motivated behaviour as a predictor of reproductive succes in silver fox vixens. *Scientifur*. V. 12(3) P. 199-205
- Drug** Krizek, T. J., Robson, M. C., and Groskin, M. G. 1974. experimental burn wound sepsis--evaluation of enzymatic debridement. *Journal of Surgical Research* 17(4): 219-27.
- FL** Krogmeier, D. and Dzapo, V. 1991. performance traits of new zealand white and giant silver rabbits andtheir reciprocal crosses. 2. heterotic effects on carcass yield andcomposition and meat quality. *Archiv Fur Geflugelkunde* 55(4): 162-169.
- FL** Krogmeier, D. and Dzapo, V. 1991. performance traits of new zealand white and silver giant rabbits andtheir reciprocal crosses. 1. heterotic effects on growth, reproduction and viability. *Archiv Fur Geflugelkunde* 55(4): 158-162.
- FL** Krzywiecki, S., Kuzniewicz, J., Filistowicz, A., and Przysiecki, P. 1996. effect of single or group keeping of young common foxes (*vulpes vulpes*) on feed consumption, growth rate and fur quality. *Scientifur* 20(2): 173-177.
- Method** Kubis, H. P. and Gros, G. 1997. a rapid electrophoretic method for separating rabbit skeletal muscle myosin heavy chains at high resolution. *Electrophoresis* 18(1): 64-6.
- No COC** Kubo, H., Otsuki, Y., Magari, S., and Sugimoto, O. comparative study of lymphatics and blood vessels. *Acta Histochemica Et Cytochemica*. 23 (5). 1990. 621-636.
- Prim** Kucera, P. and Wiesendanger, M. do ipsilateral corticospinal fibers participate in the functional recovery following unilateral pyramidal lesions in monkeys? *BRAIN RES. Brain Research*. 348 (2). 1985. 297-303.
- Phys** Kuchiiwa, S. 1990. intraocular projections from the pterygopalatine ganglion in the cat. *Journal of Comparative Neurology* 300(3): 301-8.

- FL** Kueng-Hitz, N., Rol, P., and Niemeyer, G. 1999. [the electroretinogram (erg) of the mouse: normal values, optimal stimulation and recording]. <original> das elektroretinogramm (erg) der maus: normative werte, optimierte stimulation und ableitung. *Klinische Monatsblätter Fur Augenheilkunde* 214(5): 288-90.
- FL** Kul'skii, L. A., Kharchenko, P. D., and Stepanenko, P. Z. dynamics of cortical activity changes in albino rats after chronic silver intoxication. *Dopov. Akad. Nauk Ukr. RSR. Ser. B* (1972): 34(7), 660-2 .
- Herp** Kuljis, R. O. and Karten, H. J. 1982. laminar organization of peptide-like immunoreactivity in the anuran optic tectum. *Journal of Comparative Neurology* 212(2): 188-201.
- FL** Kumar, V. R. and Suryawanshi, S. A. 1980. the histomorphology of pancreatic islets in the bandicoot, *bandicota bengalensis* (gray). *Zeitschrift Fur Mikroskopisch-Anatomische Forschung* 94(4): 743-8.
- FL** Kupriyanov, V. P. 1989. [without decreasing results [expediency of decreased sizes of cages for silver foxes and arctic foxes]]. <original> bez snizheniya rezul'tatov. *Krolikovodstvo i Zverovodstvo. (No.5) P. 10*
- BioX** Laakkonen, J. and Sukura, A. 1997. pneumocystis carinii of the common shrew, *sorex araneus*, shows a discrete phenotype. *Journal of Eukaryotic Microbiology* 44(2): 117-21 .
- FL** Laborit, H., Baron, C., and Weber, B. 1967. [definitive survival after experimental irreversible hemorrhagic shock. roles of metabolic correction and oral treatment by neomycin. development of acid phosphatases]. <original> survies definitives apres choc hemorrhagique irreversible experimental. roles de la correction metabolique et du traitement oral par la neomycine. evolution des phosphatases acides. *Agressologie: Revue Internationale De Physio-Biologie Et De*
- Phys** Lacroix, R. P., Duncan, J. R., Jenkins, R. P., Leitch, R. A., Perry, J. A., and Richards, J. C. 1993. structural and serological specificities of pasteurilla haemolytica lipopolysaccharides. *Infection And Immunity.* 61(1): 170-181.
- Surv** LaDelfe, C. M. 1981. *Detailed Geochemical Survey Data Release for the San Andres-Oscura Mountains Special Study Area, New Mexico. GJBX-215-81; LA-8016-MS*
- Method** Ladukar, O. N. and Pandit, R. V. 1993. nerve supply to buffalo pancreas, gross and microscopic perivascular plexus. *Indian Veterinary Journal* 70(10): 937-941.
- Phys** Lafarga, M., Andres, M. A., Berciano, M. T., and Maquiera, E. 1991. organization of nucleoli and nuclear bodies in osmotically stimulated supraoptic neurons of the rat. *Journal of Comparative Neurology* 308(3): 329-39.
- Drug** Lai, C. S., Miskell, P., Gonce, S. J., Alexander, J. W., and Babcock, G. F. 1987. combined use of topical cyclosporin a and silver sulphadiazine on allografts infected with pseudomonas in burned rats. *Burns, Including Thermal Injury* 13(3): 181-4.
- No COC** LANDAUER, W. genetic and environmental factors in the teratogenic effects of boric acid on chicken embryos. *GENETICS* 38:216-228,1953
- FL** Lanszki, J. and Lengyel, K. 1996. effect of melatonin treatment on the development of fur in carnivores: review article. *Magyar Allatorvosok Lapja* 51(5): 307-309.

- FL** Lapenkova, I. Z. effects of gravitational stress and hypo knesia on the structure of rabbit tongue blood vessels. *Arkhiv Anatomii Gistologii i Embriologii*. 69 (10). 1975 (Recd 1976) 55-61.
- BioX** Larochelle, R., Sauvageau, R., and Magar, R. 1994. immunohistochemical detection of swine influenza virus and porcine reproductive and respiratory syndrome virus in porcine proliferative and necrotizing pneumonia cases from quebec. *Canadian Veterinary Journal* 35(8): 513-515.
- BioX** Larochelle R(A) and Magar, R. 1997. detection of porcine reproductive and respiratory syndrome virus in paraffin-embedded tissues: comparison of immunohistochemistry and in situ hybridization. *Journal of Virological Methods* 63(1-2): 227-235.
- Anat** Larsson, L. I., Sundler, F., Hakanson, R., Rehfeld, J. F., and Stadil, F. 1974. distribution and properties of gastrin cells in the gastrointestinal tract of chicken. *Cell and Tissue Research* 154(4): 409-21.
- Chem Meth** Lascano, E. F., Gomez, R. M., and Berria, M. I. a controlled silver impregnation method to characterize cultured cardiomyocytes. *Stain Technology*. 63 (4). 1988. 221-228.
- FL** Lassmann, G. 1967. [morphological findings of the innervation of blood vessels]. <original> morphologische befunde zur nervenversorgung der blutgefasse. *Wiener Klinische Wochenschrift* 79(46): 845-50.
- Aquatic** Latif Muhammad A(A), Alam Mohammad J, and Rahman Mohammad A. 1993. integrated duck-cum-fish farming in bangladesh. *Journal of the World Aquaculture Society* 24(3): 402-409.
- HHE** Lauweryns, J. M., van Ranst, L., Lloyd, R. V., and O'Connor, D. T. 1987. chromogranin in bronchopulmonary neuroendocrine cells. immunocytochemical detection in human, monkey, and pig respiratory mucosa. *Journal of Histochemistry and Cytochemistry* 35(1): 113-8.
- CP** Le Douarin, N. M., Teillet, M. A., Ziller, C., and Smith, J. 1978. adrenergic differentiation of cells of the cholinergic ciliary and remak ganglia in avian embryo after in vivo transplantation. *Proceedings of the National Academy of Sciences of the United States of*
- No COC** Le Vay, S. JR, Meier, C. JR, and Glees, P. JR. effects of tri-ortho-cresyl-phosphate on spinal ganglia and peripheral nerves of chicken. *Acta Neuropathol.*; 17(2): 103-13 1971; (REF:17)
- Drug** Lee, J. C., Niu, C. S., Hsu, C. T., Kuo, D. H., and Cheng, J. T. 1932. therapeutic effect of two mineral drugs on thermal skin injury in rabbits. *Chin. Pharm. J. (Taiwan)* 50 ISS 1 1998
- Plant** Lee, J. S. and Sang, C. K. studies on the present status of cultivation and utilization of foliage plants i. present status of cultivation. *J KOREAN SOC HORTIC SCI*. 32 (3). 1991. 368-381.
- BioX** Lee, K. H., Park, H. W., and Lee, J. B. 1990. detection of keratinolytic proteinase in skin tissues from guinea pigs infected with *microsporum canis* by an immunoperoxidase technique [published erratum appears in *j dermatol sci* 1991 jan;2(1):74]. *Journal of Dermatological Science* 1(6): 447-53.
- In Vit** Lee, T. C., Wu, R., Brody, A. R., Barrett, J. C., and Nettesheim, P. 1984. growth and differentiation of hamster tracheal epithelial cells in culture. *Experimental Lung Research* 6(1): 27-45.
- FL** Leibnitz, L. 1975. [problems and experience in the light optical and histological presentation of glia cells]. <original> probleme und erfahrungen bei der lichtoptischen histologischen darstellung der gliazellen. *Zeitschrift Fur Mikroskopisch-Anatomische Forschung* 89(4): 727-43.

- FL** Leibnitz, L. problems and experiences with the optical microscopic histological preparation of glial cells. *Zeitschrift Fuer Mikroskopisch-Anatomische Forschung (Leipzig)*. 89 (4). 1975 (Recd 1976) 727-743.
- Prim** Leichnetz, G. R. 1981. the median subcallosal fasciculus in the monkey: a unique prefrontal corticostriate and corticocortical pathway revealed by anterogradely transported horseradish peroxidase. *Neuroscience Letters* 21(2): 137-42.
- Prim** Leichnetz, G. R. and Astruc, J. 1975. efferent connections of the orbitofrontal cortex in the marmoset (*saguinus oedipus*). *Brain Research* 84(2): 169-80.
- Prim** Leichnetz, G. R. and Astruc, J. 1976. the efferent projections of the medial prefrontal cortex in the squirrel monkey (*saimiri sciureus*). *Brain Research* 109(3): 455-72.
- Imm** Leite, L. T., Resende, M., de Souza, W., Camargos, E. R., and Koury, M. C. 1996. production and characterization of monoclonal antibodies to the edta extract of leptospira interrogans, serovar icterohaemorrhagiae. *Revista Da Sociedade Brasileira De Medicina Tropical* 29(5): 483-9.
- CP** Lema Gizachew (IAR, Addis Abeba Ethiopia. 1993. comparison of legumes hay, urea, and noug cake as protein supplements to horro sheep fed on tef straw. proceedings of the fourth national livestock improvement conference. P. 211-215
- HHE** Leong, A. S. Y. and Gilham, P. 1989. silver staining of nucleolar organizer regions in malignant-melanoma and melanotic nevi. *Human Pathology* 20(3): 257-262.
- Prim** Leuba, G. and Garey, L. J. 1984. orientation of dendrites in the lateral geniculate nucleus of the monkey. *Experimental Brain Research. Experimentelle Hirnforschung*.
- BioX** Leung, K., Nesbitt, W. E., Okamoto, M., and Fukushima, H. 1999. identification of a fimbriae-associated haemagglutinin from prevotella intermedia. *Microbial Pathogenesis* 26(3): 139-48.
- Prim** LeVay, S., Hubel, D. H., and Wiesel, T. N. 1975. the pattern of ocular dominance columns in macaque visual cortex revealed by a reduced silver stain. *Journal of Comparative Neurology* 159(4): 559-76.
- Prim** Levay, S., Wiesel, T. N., and Hubel, D. H. the development of ocular dominance columns in normal and visually deprived monkeys. *Journal of Comparative Neurology*. 191 (1). 1980. 1-52.
- In Vit** Levine, S. and Sowinski, R. tin salts prevent the plasma cell response to metallic tin in lewis rats. *Toxicology and Applied Pharmacology*. 68 (1). 1983. 110-115.
- CP** Levinson, W., Faras, A., Woodson, B., Jackson, J., and Bishop, J. M. 1973. inhibition of rna-dependent dna polymerase of rous sarcoma virus by thiosemicarbazones and several cations. *Proceedings of the National Academy of Sciences of the United States of*
- Phys** Lewis, V., Goldfien, A. C., Day, J. P., and Roberts, J. M. 1990. rabbit alveolar beta-adrenergic receptors increase with gestational age. *American Journal of Obstetrics and Gynecology* 162(1): 269-72.
- No COC** Leyshon-Sorland, K., Jasani, B., and Morgan, A. J. 1994. the localization of mercury and metallothionein in the cerebellum of rats experimentally exposed to methylmercury. *Histochemical Journal* 26(2): 161-9 .

- Drug** Li, Y., McGivern, R. F., Nagahara, A. H., and Handa, R. J. 1997. alterations in the estrogen sensitivity of hypothalamic proenkephalin mRNA expression with age and prenatal exposure to alcohol. *Brain Research. Molecular Brain Research* 47(1-2): 215-22.
- FL** Liberman, S. S., Kutchak, S. N., Rudzitis, E., and Shakhnazarova, N. G. antiinflammatory activity of estocin. *Farmakol. Toksikol. (Moscow)* (1972) 35(3): 333-5.
- In Vit** Lim, R., Liu, Y., and Zaheer, A. cell-surface expression of glia maturation factor beta in astrocytes. *FASEB (Federation of American Societies for Experimental Biology) Journal*. 4 (15). 1990. 3360-3363.
- Method** Limon, I., Coupry, I., Lanier, S. M., and Parini, A. 1992. purification and characterization of mitochondrial imidazoline-guanidinium receptive site from rabbit kidney. *Journal of Biological Chemistry* 267(30): 21645-9.
- Phys** Lin C-S, Polsky, K., Nadler, J. V., and Crain, B. J. selective neocortical and thalamic cell death in the gerbil after transient ischemia. *NEUROSCIENCE. Neuroscience*. 35 (2). 1990. 289-300.
- Phys** Lin, L. F., Armes, L. G., Sommer, A., Smith, D. J., and Collins, F. 1990. isolation and characterization of ciliary neurotrophic factor from rabbit sciatic nerves. *Journal of Biological Chemistry* 265(15): 8942-7.
- CP** Lincoln, G. A. significance of seasonal cycles in prolactin secretion in male mammals. *SERIO, M. (ED.). Serono Symposia Publications from Raven Press, Vol. 53. Perspectives in Andrology; Ivth International Congress of Andrology, Florence, Italy, May 14-18, 1989. Xx+544p. Raven Press: New York, New York, Usa. Illus. ISBN 0-88167-561-X. 0 (0). 1989. 299-306.*
- Alt** Liu, Z., Yang, Y., Silveira, D. C., Sarkisian, M. R., Tandon, P., Huang L-T, Stafstrom, C. E., and Holmes, G. L(A). 1999. consequences of recurrent seizures during early brain development. *Neuroscience* 92(4): 1443-1454.
- Phys** Liu, Z. Z., Dalecki, T. M., Kashihara, N., Wallner, E. I., and Kanwar, Y. S. 1991. effect of puromycin on metanephric differentiation: morphological, autoradiographic and biochemical studies. *Kidney International* 39(6): 1140-55.
- Fate** Llewellyn-Smith, I. J., Minson, J. B., Wright, A. P., and Hodgson, A. J. 1990. cholera toxin b-gold, a retrograde tracer that can be used in light and electron microscopic immunocytochemical studies. *Journal of Comparative Neurology* 294(2): 179-91.
- FL** Lobko, P. I. and Khil'kevich, S. I. 1992. [the intermediate nerve system]. <original> sistema promezhutochnogo nerva. *Morfologiya* 102(5): 42-50.
- FL** Logvinenko, N. S., Krass, P. M., Trut, L. N., Ivanova, L. N., and Belyaev, D. K. the effect of illumination regimen on ontogenesis of endocrine functions of the gonads and adrenals in female silver foxes *vulpes-vulpes* of 2 genetically determined behavioral types. *Zhurnal Evolyutsionnoi Biokhimii i Fiziologii*. 16 (2). 1980. 143-147.
- No Dose** Logvinenko, N. S., Krass, P. M., Trut, L. N., Ivanova, L. N., and Belyaev, D. K. genetics and pheno genetics of hormonal characteristics of animals 5. effect of domestication on the ontogenesis of estrogen and progesterone secreting functions of the ovaries and adrenals in silver fox females. *Soviet Genetics (English Translation of Genetika)*. 15 (2). 1979. 208-212.
- No Dose** Logvinenko, N. S., Krass, P. M., Trut, L. N., Ivanova, L. N., and Belyaev, D. K. genetics and pheno genetics of the hormonal characteristics of animals 4 effect of domestication on ontogenesis

and androgen secreting function of testicles and adrenals in male silver foxes *vulpes-fulva* *Soviet Genetics (English Translation of Genetika)*. 14 (12). 1978 (1979). 1516-1521.

- Method** Long-Rowe, K. O. and Burnett, J. W. 1994. sea nettle (*chrysaora quinquecirrha*) lethal factor: purification by recycling on m-aminophenyl boronic acid acrylic beads. *Toxicon* 32(4): 467-78.
- FL** Loos-Frank, B. 1980. the common vole, *microtus arvalis* pall. as intermediate host of mesocestoides (cestoda) in germany. *Zeitschrift Fur Parasitenkunde* 63(2): 129-36.
- Prim** Lovell, M., Sutton, D., and Lindeman, R. C. 1977. muscle spindles in nonhuman primate extrinsic auricular muscles. *Anatomical Record* 189(3): 519-23.
- Phys** Lowel, S. and Singer, W. 1990. tangential intracortical pathways and the development of iso-orientation bands in cat striate cortex. *Brain Research. Developmental Brain Research* 56(1): 99-116.
- Prim** Lund, J. S., Hawken, M. J., and Parker, A. J. 1988. local circuit neurons of macaque monkey striate cortex: ii. neurons of laminae 5b and 6. *Journal of Comparative Neurology* 276(1): 1-29.
- Method** Lundqvist, M., Arnberg, H., Candell, J., Malmgren, M., Wilander, E., Grimelius, L., and Oberg, K. 1990. silver stains for identification of neuroendocrine cells. a study of the chemical background. *Histochemical Journal* 22(11): 615-23.
- CP** Luque, J. M., Adams, W. B., and Nicholls, J. G. 1997. techniques for visualizing cells labeled by immunohistochemistry and in situ hybridization in wholemounts of newborn opossum and embryonic mouse CNS. *Society for Neuroscience Abstracts* 23(1-2): 1163.
- FL** Lutsenko, N. D. and Ivanova, L. N. studies on the nuclear and nucleolar volume in the reticular zone of the adrenal cortex of wild and domesticated silver fox *vulpes-fulva* kept at different light regimes. *Zhurnal Evolyutsionnoi Biokhimii i Fiziologii*. 21 (1). 1985. 40-43.
- FL** Lutsenko, N. D. and Trut, L. N. morphological and functional condition of the adrenal cortex in females of silver fox and the effect of domestication and photoperiod on it. *Zhurnal Evolyutsionnoi Biokhimii i Fiziologii*. 23 (6). 1987. 761-764.
- FL** Lutsenko N D, Trut L N, and Ivanova L N. 1980. adrenocortical structure of the domesticated silver fox *vulpes fulvus* during postnatal ontogenesis. *Zhurnal Evolyutsionnoi Biokhimii i Fiziologii* 16. 117(5): 483-487, illustr.
- CP** Lynch, G., Rose, G., and Gall, C. 1977. anatomical and functional aspects of the septo-hippocampal projections. *Ciba Foundation Symposium* (58): 5-24.
- Phys** Mackay-Sim, A. and Kittel, P. 1991. cell dynamics in the adult mouse olfactory epithelium: a quantitative autoradiographic study. *Journal of Neuroscience* 11(4): 979-84.
- Phys** Madison, R. D. and Macklis, J. D. 1993. noninvasively induced degeneration of neocortical pyramidal neurons in vivo: selective targeting by laser activation of retrogradely transported photolytic chromophore. *Experimental Neurology* 121(2): 153-9.
- No Oral** Maffei Massimo(A), Berteza Cinzia Margherita, Garneri Francesca, and Scannerini Silvano. 1999. effect of benzoic acid hydroxy- and methoxy- ring substituents during cucumber (*cucumis sativus* l.) germination. i. isocitrate lyase and catalase activity. *Plant Science (Shannon)* 141(2): 139-147.

- BioX** Magar Ronald(A), Larochelle Renee(A), Robinson Yves(A), and Dubuc Claude. 1993. immunohistochemical detection of porcine reproductive and respiratory syndrome virus using colloidal gold. *Canadian Journal of Veterinary Research* 57(4): 300-304.
- FL** Mahnel, H., Holejsovsky, J., Bartak, P., and Czerny, C. P. 1993. [congenital "ectromelia" in fur-bearing animals caused by orthopoxvirus muris]. <original> kongenitale "ektromelie" bei pelztieren durch orthopoxvirus muris. *Tierarztliche Praxis* 21(5): 469-72.
- FL** Majno, G., Underwood, J. M., Zand, T., and Joris, I. 1985. the significance of endothelial stomata and stigmata in the rat aorta. an electron microscopic study. *Virchows Archiv* 408(1): 75-91.
- Aquatic** Makeeva, A. P. and Shakha, D. N. cytological study of ovulated oocytes and embryos in artificial reproduction of bigheads and grass carps. *BIOL NAUKI (MOSC). Biologicheskije NAUKI (Moscow). 0 (7). 1985. 38-43.*
- FL** Makevina, V. A. 122. histology of the endocrine part of the pancreas of standard mink, silver-grey foxes and blue (arctic) foxes. *Uchenye Zapiski Kazanskogo Gosudarstvennogo Veterinarnogo Instituta*
- Bact** Malaisrie, S. C., Malekzadeh, S., and Biedlingmaier, J. F. 1998. in vivo analysis of bacterial biofilm formation on facial plastic bioimplants. *Laryngoscope* 108(11 Pt 1): 1733-8.
- Bact** Manaresi, S., Marescalchi, O., and Scali, V. silver detected nor and c-banding patterns in bacillus-rossius insecta phasmatodea from sicily. *Caryologia. 44 (3-4). 1991. 265-286.*
- No Dose** MANKES, R., ESTEL, G., ABRAHAM, R., and SKALKO, R. reproductive effects of intrauterine devices in the rat. *Toxicol Appl Pharmacol* 37:125-126,1976
- Prim** Maples, W. R., Brown, A. B., and Hutchens, P. M. introduced monkey populations at silver springs florida. *American Journal of Physical Anthropology. 41 (3). 1974 492*
- Alt** Mapother, M. E., Joens, L. A., and Glock, R. D. 1987. experimental reproduction of porcine proliferative enteritis. *Veterinary Record* 121(23): 533-536.
- No Dose** Marco, O. N. di and Garrido, G. 1989. weight gain and fur length in nutria fed three balanced diets of 16, 21 and 27% of crude protein, without green forage. *Scientifur* 13(4): 305-307.
- FL** Marco, O. N. di and Garrido, G. G. 1990. effect of feeding growing and finishing balanced rations to coypus, with and without green forages. *Scientifur* 14(1): 37-38.
- Method** MARHAN, O. and JELINEK, R. efficiency of embryotoxicity testing procedures. 2. comparison between the official, mest and chest methods. *TOXICOL LETT* 4:389-392,1979
- Aquatic** Marking, L. L., Bills, T. D., and Crowther, J. R. effects of 5 diets on sensitivity of rainbow trout salmo-gairdneri to 11 chemicals. *Progressive Fish-Culturist. 46 (1). 1984. 1-5.*
- FL** Markov, I. u. G., Berzin', N. I., and Val'dman, A. R. 1992. [morphofunctional analysis of zinc-accumulating capacity of digestive system organs]. <original> morfofunksional'nyi analiz tsinkdeponiruiushchei sposobnosti organov pishchevaritel'noi sistemy. *Biulleten' Eksperimental'Noi Biologii i Meditsiny* 113(3): 324-7.
- Fate** Markov Yu G(A), Berzin', N. I., and Val'dman, A. R. 1992. morphological analysis of zinc-accumulation capacity in organs of the digestive system. *Byulleten' Eksperimental'Noi Biologii i Meditsiny* 113(3): 324-327.

- Unrel** Structural development of endo cardiac cushions :
- Method** Marsala, J., Sulla, I., Santa, M., Marsala, M., Zacharias, L., and Radonak, J. 1991. mapping of the canine lumbosacral spinal cord neurons by nauta method at the end of the early phase of paraplegia induced by ischemia and reperfusion. *Neuroscience* 45(2): 479-94.
- No Tox** Martin, P. and Lewis, J. 1989. origins of the neurovascular bundle: interactions between developing nerves and blood vessels in embryonic chick skin. *Vol. 33, No. 3, Pp. 379-387* Int. J. Dev. Biol.
- HHE** Mascolo, N., Summa, V., and Tateo, F. 1999. characterization of toxic elements in clays for human healing use. *Appl. Clay Sci.* 15(5-6): 491-500.
- FL** Maslenko, A. A. effect of "silver water" and water preserved with silver on the digestive organs. *Vrach. Delo (1976) (5):* 88-90.
- FL** Maslenko, A. A. 1976. [effects of "silver water" and silver-treated water on the digestive organs]. <original> vliianie "serebrianoi vody" i vody, konservirovannoi serebrom, na organy pishchvareniiia. *Vrachebnoe Delo (5):* 88-90.
- FL** Maslova, G. B. and Avgustinovich, D. F. 1989. [serotonin receptors in the brain of animals selected for their domesticated type of behavior]. <original> serotoninovye retseptory v mozge zhivotnykh, selektsioniruemykh na domestikatsionnyi tip povedeniia. *Zhurnal Vysshei Nervnoi Deiatelnosti Imeni I P Pavlova* 39(4): 627-32.
- Phys** Massaro, G. D. and Massaro, D. 1993. postnatal lung growth: evidence that the gas-exchange region grows fastest at the periphery. *American Journal of Physiology* 265(4 Pt 1): L319-22.
- CP** Masuko, S., Kuromi, H., and Shimada, Y. 1979. isolation and culture of motoneurons from embryonic chicken spinal cords. *Proceedings of the National Academy of Sciences of the United States of*
- Phys** Matera, G., Liberto, M. C., Berlinghieri, M. C., and Foca, A. 1991. biological effects of veillonella parvula and bacteroides intermedius lipopolysaccharides. *Microbiologica* 14(4): 315-23.
- CP** Mathur, R. neuro histological investigation of the cardiac tissue of pre natal stages of anas-poecilorhyncha. *Indian Sci Cong Assoc Proc. 62. 1975 (Recd 1976) 141*
- Anat** Mathur, R. and Mathur, A. 1976. cardiac innervation in the prenatal stages of anas poecilorhyncha. *Anatomischer Anzeiger* 140(5): 443-50.
- In Vit** Matsunaga Toshiyuki, Usui Shigeyuki, Ukai Shigeo, Kiho Tadashi, and Hirano Kazuyuki(A). 1999. activation of macrophages and neutrophils by an endothelium growth suppressing factor. *Bioscience Biotechnology and Biochemistry* 63(7): 1228-1237.
- In Vit** Maxwell, M. H. 1978. electron cytochemistry of developing and mature eosinophils in the bonemarrow of the fowl and the duck. *Histochemical Journal* 10(1): 63-77.
- FL** Mazurova, Y. and Nemecek, S. 1990. [histological technic for imaging the blood vessels in the central nervous system: impregnation of the basal endothelial membrane using the method of gallyas]. <original> histologicka technika ke znazorneni cev v cns: impregnace bazalni membrany endotelu podle gallyase. *Sbornik Vedeckych Praci Lekarske Fakulty Karlovy Univerzity v Hradci*

- Drug** McDaniel, M. D., Schned, A. R., and Beck, J. R. 1986. efficacy of silver sulfadiazine in the treatment of prosthetic arterial bypass graft infection. *Surgery, Gynecology & Obstetrics* 162(2): 169-73.
- CP** MCDERMOTT, J. G., KAMEL, H. MH, GILMORE, R. SC, MCCULLOUGH, S., and CARR, K. E. 1991. radiation changes in small intestinal silver-staining nucleolar organizer regions. *Meeting of the Association for Radiation Research*
- Anat** McDonald, F. and Houston, W. J. 1990. an in vivo assessment of muscular activity and the importance of electrical phenomena in bone remodelling. *Journal of Anatomy* 172: 165-75.
- Chem Meth** McIsaac, G. and Kiernan, J. A. 1974. complete staining of neuromuscular innervation with bromoindigo and silver. *Stain Technology* 49(4): 211-4.
- No Dose** McKenzie, R. A., Dunster, P. J., Twist, J. O., Dimmock, C. K., Oelrichs, P. B., Rogers, R. J., and Reichmann, K. G. 1985. the toxicity of sawfly larvae (*lophyrrotoma interrupta*) to cattle. <Document Title>*Bulletin, Queensland Department of Primary Industries (QB85001)*: x + 48pp.
- HHE** McNamara, D. J., Proia, A., and Miettinen, T. A. 1981. thin-layer and gas-liquid chromatographic identification of neutral steroids in human and rat feces. *Journal of Lipid Research* 22(3): 474-84.
- HHE** Mcnamara, D. J., Proia, A., and Miettinen, T. A. thin layer chromatographic and gas liquid chromatographic identification of neutral steroids in human and rat feces. *J LIPID RES. Journal of Lipid Research*. 22 (3). 1981. 474-484.
- FL** Mee, R. 1994. an investigation into feeding carnivorous fur bearing farm animals inestonia. *Scientifur* 18(2): 121-123.
- Abstract** Meharq, S., Dinh, T. T., and Ritter, S. neurotoxicity of systemic monosodium glutamate in the adult rat analysis with silver stain degeneration techniques. *15th Annual Meeting of the Society for Neuroscience, Part 2, Dallas, Tex., USA, OCT. 20-25, 1985. SOC NEUROSCI ABSTR.* 11 (2). 1985. 1195.
- Phys** Meller, D., Schmidt-Kastner, R., and Eysel, U. T. 1993. immunohistochemical studies on neurofilamentous hypertrophy in degenerating retinal terminals of the olivary pretectal nucleus in the rat. *Journal of Comparative Neurology* 331(4): 531-9.
- FL** Meller, K., Breipohl, W., and Glees, P. 1968. synaptic organization of the molecular and the outer granular layer in the motor cortex in the white mouse during postnatal development. a golgi- and electronmicroscopical study. *Zeitschrift Fur Zellforschung Und Mikroskopische Anatomie* 92(2)
- No Oral** Mello, L. E. and Covolán, L. 1996. spontaneous seizures preferentially injure interneurons in the pilocarpine model of chronic spontaneous seizures. *Epilepsy Research* 26(1): 123-9.
- Prim** Menetrey, D., de Pommery, J., and Roudier, F. 1985. propriospinal fibers reaching the lumbar enlargement in the rat. *Neuroscience Letters* 58(2): 257-61.
- No Tox** Merat, P. 1973. possible relationships between embryonic and post-embryonic mortalityrates and the presence of certain known genes in the fowl. *Annales De Genetique Et De Selection Animale* 5(1): 39-51.
- FL** Mertin D, Rafay J, Berestov V, and Stepanok V. 1991. content of some mineral elements in hair of silver foxes during Ontogenesis. *Scientifur* 15. 128(3): 183-189, illustr.

- FL** Mertin, D., Suvegova, K., Fl'ak, P., Sviatko, P., Podolanova, E., and Tocka, I. 1998. repeatability of mineral element content in the fur of female silvernutria. *Scientifur* 22(3): 197-201.
- CP** Mertin, D. Research Inst. of Animal Production Nitra Slovak Republic Dept. of Fur Animal Breeding, Stepanok, V. V. All Russian Research Inst. of Agricultural Using Meliory Soils Tver Russian Federation, Georgijevskij, V. I. Agricultural Academy of K. A. Timiriazev Moscow Russian Federation, and Skrede, A. ed. 1992. effects of dietary zinc, silicium and selenium on mineral content of fur in silver foxes during maturity. progress in fur animal science. proceedings from the vth international scientific congress in fur animal production. P. 620-625. No. 9(Suppl.)
- HHE** Meyer, I., Heinrich, J. *, Trepka M.J., Krause, C., Schulz, C., Meyer, E., and Lippold, U. 19980100. the effect of lead in tap water on blood lead in children in a smelter town. *SCI. TOTAL ENVIRON* VOL. 209, NO. 2-3: pp. 255-271.
- FL** Miadelets, O. D. 1995. [epidermal keratinocyte proliferation, differentiation and apoptosis in rats in postnatal ontogeny]. <original> proliferatsiia, differentsirovka i apoptoz keratinotsitov epidermisa krysa v postnatal'nom ontogeneze. *Ontogenez* 26(1): 62-7.
- No Tox** Miceli, D., Reperant, J., Villalobos, J., and Dionne, L. 1987. extratelencephalic projections of the avian visual wulst. a quantitative autoradiographic study in the pigeon columbia livia. *Journal Fur Hirnforschung* 28(1): 45-57.
- An Prod** Miclea, M., Papay, Z., Damian, A., and Miresan Vioara. 1994. comparative study of structural features of hair in four mink and two ferret varieties. *Buletinul Universitatii De Stiinte Agricole Cluj-Napoca Seria Zootehnie Si Medicina Veterinara* 48(0): 67-74.
- Prim** Migaki, G., Schmidt, R. E., Toft, J. D. 2d, and Kaufmann, A. F. 1982. mycotic infections of the alimentary tract of nonhuman primates: a review. *Veterinary Pathology* 7: 93-103.
- FL** Migunov, V. P. status of the micro circulatory bed in the cat ventricular myo cardium after the effect of gravitational overloading on the body. *Arkhiv Anatomii Gistologii i Embriologii.* 73 (10). 1977 (Recd 1978) 44-49.
- FL** Mihaly, A. 1982. histochemistry and functional significance of putative neocortical transmitter substances: a review. *Zeitschrift Fur Mikroskopisch-Anatomische Forschung* 96(6): 916-36.
- Anat** Mikami, S. 1988 . on the sensory endings in the avian integument. *Vol. 37, No. 2, Pp. 77-82* Jap. J. Ornithol.
- Gene** Mikawa, T., Takeda, S., Shimizu, T., and Kitaura, T. 1981. gene expression of myofibrillar proteins in single muscle fibers of adult chicken: micro two dimensional gel electrophoretic analysis. *Journal of Biochemistry* 89(6): 1951-62.
- In Vit** Miki, A. and Mizoguti, H. appearance of acetyl choline receptors in the myotome cells of the early chick embryo. *Acta Histochemica Et Cytochemica.* 16 (5). 1983 (Recd. 1984). 445-455.
- Method** Miller, C. C(A), Fayer-Hosken, R. A(A), Timmons, T. M., Lee, V. H., Caudle, A. B., and Dunbar, B. S. 1992. characterization of equine zona pellucida glycoproteins by polyacrylamide gel electrophoresis and immunological techniques. *Journal of Reproduction and Fertility* 96(2): 815-825.
- Drug** MILLER, M. W. experimental fetal alcohol syndrome. *Crisp Data Base National Institutes Of Health*

- FL** Milovanov, L. V. and Pereldik, D. N. 1998. rational feeding of furbearing animals in the summer-autumn period. *Krolikovodstvo i Zverovodstvo* (3): 6-9.
- No Tox** Minezawa, M. and Wakasugi, N. 1977. studies on a plumage mutant (black at hatch) in the japanese quail. *Japanese Journal of Genetics* 52(3): 183-195.
- FL** Mironov, V. A., Mironov, A. A., Bobyrev, V. N., and Voskresenskii, O. N. relief of the internal aortal surface in mature and old animals. *Arkhiv Anatomii Gistologii i Embriologii.* 94 (5). 1988. 23-26.
- Method** Mitez, V. I., Angelov, I. V., and Marekov, L. N. identification and purification of a novel serine-threonine messenger-independent growth-related protein kinase from lactating goat mammary gland. *Biochimica Et Biophysica Acta.* 1117 (1). 1992. 90-96.
- CP** MIURA, K., NIMURA, E., and IMURA, N. 1986. effects of methylmercury on nerve fiber outgrowth of cultured chick dorsal root Ganglia. *Fourth International Congress of Toxicology*
- Abstract** Miyabara, S. animal model of congenital anomalies induced by chromosome aberrations. *Teratology* 1989;40(6):650
- FL** Miyake, K., Yamamoto, M., and Mitsuya, H. 1986. pharmacological and histological evidence for adrenergic innervation of the myoid cells in the rat seminiferous tubule. *Tohoku Journal of Experimental Medicine* 149(1): 79-87.
- In Vit** Moav, R., Wohlfarth, G., Schroeder, G. L., Hulata, G., and Barash, H. intensive poly culture of fish in fresh water ponds part 1 substitution of expensive feeds by liquid cow manure. *Aquaculture.* 10 (1). 1977 25-43.
- FL** Moe, R. O. 1997. investigation of methods to assess stress in farmed silver foxes(vulpes vulpes). a contribution to the scientific assessment of animalwelfare. *Scientifur* 21(2): 104-109.
- Drug** Moe, R. O. and Bakken, M. 1998. anxiolytic drugs inhibit hyperthermia induced by handling in farmedsilver foxes (vulpes vulpes). *Animal Welfare* 7(1): 97-100.
- Alt** Moechars, D., Lorent, K., Dewachter, I., Baekelandt, V., De Strooper, B., and Van Leuven F. 1998. transgenic mice expressing an alpha-secretion mutant of the amyloid precursor protein in the brain develop a progressive cns disorder. *Behavioural Brain Research* 95(1): 55-64.
- No Control** Moffat, D. B. and Creasey, Margaret. distribution of ingested silver in the kidney of the rat and of the rabbit. *Acta Anat.* (1972) 83(3): 346-55.
- FL** Mohr, W., Wild, A., and Wolf, H. P. 1978. incorporation of 3h-proline into hyaline articular cartilage. an autoradiographic study in rats with and without adjuvant-induced arthritis. *Virchows Archiv. B: Cell Pathology* 28(1): 1-12.
- Unrel** Montero Maite, Lebelte Nadine, King Judy A, Millar Robert P, and Dufour Sylvie(A). 1995. differential regulation of the two forms of gonadotropin-releasing hormone (mgnrh and cgnrh-ii) by sex steroids in the european female silver eel (anguilla anguilla). *Neuroendocrinology* 61(5): 525-535.
- HHE** Montgomery, B. and Lala, P. K. 1983. ontogeny of the mhc antigens on human trophoblast cells during the first trimester of pregnancy. *Journal of Immunology* 131(5): 2348-55.

- Unrel** Montie, T. C. and Montie, D. B. 1973. selective detoxification of murine toxin from yersinia pestis. reaction of heavy metals with essential sulfhydryl and tryptophan residues. *Biochemistry*. 12(24): 4958-65.
- Mix** Moore, E. P., Copeland, E. M., Dudrick, S. J., and Weisbrodt, N. W. effect of an elemental diet on the electrical activity of the smallintestine in dogs. *Journal of Surgical Research/ SN- 0022-4804/ PY- 1976/ VO- 20/ IS- 6 : 533-537| LA- English| DT- Journal article| AB-*
- Method** Moos, T. 1993. simultaneous application of timm's sulphide silver method and immunofluorescence histochemistry. *Journal of Neuroscience Methods* 48(1-2): 149-56.
- FL** Morinaga, K. histopathological studies of periodontal tissue reactions to perforations in the furcations of dog teeth treated with various materials and agents . *Shikwa Gakuho*. 85 (4). 1985. 413-451.
- Phys** Morita, T. 1993. radioautographic study on the aging change of 3h-glucosamine uptake in mouse ileum. *Cellular and Molecular Biology* 39(8): 875-84.
- No Dose** Moriwaki, M. and Horiuchi, T. 1974. histopathological observation on eye abnormality, so-called ocularlymphomatosis, of chickens. *National Institute of Animal Health Quarterly, Japan* 14(No.2): 72-80.
- Phys** Morrison, S. F., Callaway, J., Milner, T. A., and Reis, D. J. 1991. rostral ventrolateral medulla: a source of the glutamatergic innervation of the sympathetic intermediolateral nucleus. *Brain Research* 562(1): 126-35.
- Method** Mortarino Michele, Tedeschi Gabriella, Negri Armando, Ceciliani Fabrizio, Gottardi Lucinao, Maffeo Giovanni, and Ronchi Severino(A). 1998. two-dimensional polyacrylamide gel electrophoresis map of bull seminal plasma proteins. *Electrophoresis* 19(5): 797-801.
- Method** Mortarino Michele, Vigo Daniele, Maffeo Giovanni, and Ronchi Severino(A). 1999. two-dimensional polyacrylamide gel electrophoresis map of bovine ovarian fluid proteins. *Electrophoresis* 20(4-5): 866-869.
- Unrel** Mosconi, T. M. and Rice, F. L. 1991. sensory innervation of the mystacial pad fur of the ferret. *Neuroscience Letters* 121(1-2): 199-202.
- Unrel** Mosconi, T. M. and Rice, F. L. 1993. sequential differentiation of sensory innervation in the mystacial pad of the ferret. *Journal of Comparative Neurology* 333(3): 309-25.
- In Vit** Moses Marsha A(A), Sudhalter Judith(A), and Langer Robert. 1992. isolation and characterization of an inhibitor of neovascularization from scapular chondrocytes. *Journal of Cell Biology* 119(2): 475-482.
- Phys** Mosgoeller Wilhelm, Kastner Philomena, Fang-Kircher Susanne, Kitzmueller Erwin, Hoeger Harald, Seither Peter, Labudova Olga, Lubec Gert, and Lubec Barbara(A). 2000. brain rna polymerase and nucleolar structure in perinatal asphyxia of the rat. *Experimental Neurology*. 161(1): 174-182.
- FL** Motorina, M. V. 1976. [distribution of reticulospinal fibers and theri endings in the lumbar segments of the rat spinal cord]. <original> raspredelenie retikulo-spinal'nykh volokon i ikh v poiasnichnykh segmentakh spinnogo mozga krysy. *Zhurnal Evoliutsionnoi Biokhimii i Fiziologii* 12(6): 584-90.

- FL** Muenke, M. and Schmiady, H. a simple one-step procedure for staining the nucleolus organizer regions. *Experientia* (1979) 35(5): 602-3.
- FL** Muller, A. and Geyer, G. 1968. [studies on the submicroscopic heavy metal demonstration]. <original> untersuchungen uber den submikroskopischen schwermetallnachweis. *Acta Histochemica* 31(1): 98-110.
- FL** Muller-Peddinghaus, R. and Trautwein, G. 1977. analysis of dog urine by sda-polyacrylamide gel electrophoresis. | ti-hund. *Zentralblatt Fur Veterinarmedizin* 24A(9): 731-755.
- Anat** Muller, T. 1994. large nerve cells with long axons in the granular layer and white matter of the murine cerebellum. *Journal of Anatomy* 184(Pt 2): 419-23.
- Alt** Munnell, E. R. and Gregg, D. E. 1949. *The Production of Chronic Systemic Hypertension in the Rat With a Small Adjustable Renal Artery Clamp. USAMRL-31*
- No Org** Murakami, Takuro, Su, Wei Dong, Hong, Luo Jia, Piao, Da Xun, Ohtsuka, Aiji, and Seo, Kenji. physical development of tissue-reacted cationic iron colloid with protein silver and gold chloride. *Okayama Igakkai Zasshi* (1997) 109(7-12): 151-156 .
- Chem Meth** Murgatroyd, L. B. chemical and spectrometric evaluation of glycogen after routine histological fixatives. *STAIN TECHNOL. Stain Technology.* 46 (3). 1971 111-119.
- Gene** Muscarella, D. E., Vogt, V. M., and Bloom, S. E. 1985. the ribosomal rna gene cluster in aneuploid chickens: evidence for increased gene dosage and regulation of gene expression. *Journal of Cell Biology* 101(5 Pt 1): 1749-56.
- CP** Myer Jeannie(A) and Ellison Gaylord(A) . 1999. mapping the neuronal degeneration in new-born rat pups using silver stains. *Society for Neuroscience Abstracts* 25(1-2): 1776 .
- Drug** Nadeem, Ayesha, Khanna, T., and Vohora, S. B. 1999. silver preparations used in indian systems of medicine: neuropsychobehavioural effects. *Indian J. Pharmacol.* 31(3): 214-221 .
- FL** Nador, A. newer observations on the clarification of the bacteriological background and epizootiology of urticarial lesions of swine erysipelas introductory article for discussion. *Magyar Allatorvosok Lapja.* 44 (12). 1989. 750-754.
- FL** Naeser, P. and Rastad, J. 1982. silver labeling of vascular basement membranes in streptozotocin diabetic mice. *Experientia* 38(8): 937-8.
- Method** Nagato, Y., Sekiguchi, M., Kushida, H., and Shimai, K. 1991. histochemical demonstration of heavy metals in the hippocampal formation embedded in quetol 523m. *Okajimas Folia Anatomica Japonica* 68(5): 299-304.
- Prim** Nakagawa, S., Tamai, Y., Yasui, M., and Konishi, N. 1982. termination of retinal fibers in lateral preoptic and hypothalamic areas of the crab-eating monkey, macaca irus. *Archivum Histologicum Japonicum* 45(2): 207-12.
- Prim** Nakagawa, S. and Tanaka, S. 1984. retinal projections to the pulvinar nucleus of the macaque monkey: a re-investigation using autoradiography. *Experimental Brain Research. Experimentelle Hirnforschung.*
- Prim** Nakaoka, T. 1983. experimental tremor produced by ventromedial tegmental lesion in monkeys. neuroanatomical study. *Applied Neurophysiology* 46(1-4): 92-106.

- Phys** Namiki, T. 1990. [autoradiographic study on the distribution of gonadotropin-releasing hormone receptor in the rat ovary]. *Nippon Sanka Fujinka Gakkai Zasshi* 42(9): 1175-81.
- Phys** Napoleone, P., Bronzetti, E., Cavallotti, C., and Amenta, F. predominant epithelial localization of type a gamma aminobutyric acid receptor sites within rat seminal vesicles and prostate glands. *Pharmacology (Basel)*. 41 (1). 1990. 49-56.
- Rev** NAS, Subcommittee on Mineral Toxicity Committee on Animal Nutrition. 1980.: 588.
- Phys** Nash, S. and Paulsen, D. generalized lentigines in a silver cat. *Journal of the American Veterinary Medical Association*. 196 (9). 1990. 1500-1501.
- No Dose** Naumenko, E. V., Trut, L. N., Pavlova, S. I., and Belyaev, D. K. genetics and pheno genetics of hormonal characteristics in animals part 1 functional correlation between adrenal and gonadal glands in silver foxes and changes of the correlation under selection according to behavior. *Soviet Genetics (English Translation of Genetika)*. 10 (10). 1974 (1976) 1232-1235
- FL** Negm, H. M., Darwish, M. Y. Tanta Univ. Kafr El Sheikh Egypt Faculty of Agriculture, Abdel Ghany, A. I., and Abdel Salam, F. E. Ministry of Agriculture Cairo Egypt Agricultural Research Inst. 1978. the performance of laying hens [silver montazah and matrouh] fed various dietary protein levels in the starting and growing periods [egypt]. *Agricultural Research Review*. <Subtitle>Albohouth Azziraiya. V. 56(6) En Ed.: P. 63-71; Ar Ed.: P. 43-51
- Nutrition** Negm, H. M., Ghany, A. I. A., Salam, F. E. A., and Darwish, M. Y. 1978. the effects of diet and breed of chickens on the metabolic efficiency of nitrogen utilization. *Agricultural Research Review* 56(6): 47-51.
- Nut def** Nelson, S. D. 1992. response of several wildland shrubs and forbs of arid regions to iron-deficiency stress. *Journal Of Plant Nutrition*. 15(10): 2015-2023.
- FL** Nguyen Duk Hung. 1988. body weight development of hens of the auto-sexing hybrid type c3-80, and of its parental lines. *Zhivotnov"Dni Nauki* 25(6): 28-32.
- Prim** Nielsen, J. T. and Moller, M. 1975. nervous connections between the brain and the pineal gland in the cat (*felis catus*) and the monkey (*cercopithecus aethiops*). *Cell and Tissue Research* 161(3): 293-301.
- Method** Niglio, T., Caporali, M. G., Scotti de Carolis, A., Ricci, A., and Amenta, F. 1990. absence of right-left asymmetries in the rat hippocampus as demonstrated by timm staining. *Acta Anatomica* 139(3): 283-6.
- Method** Niikawa, S., Hara, A., Zhang, W., Sakai, N., Yamada, H., and Shimokawa, K. 1992. proliferative assessment of craniopharyngioma and epidermoid by nucleolar organizer region staining. *Child's Nervous System* 8(8): 453-6.
- Phys** Nikulina, E. M. 1991. neural control of predatory aggression in wild and domesticated animals. *Neuroscience and Biobehavioral Reviews* 15(4): 545-7.
- In Vit** Ninomiya, T. morphological changes of rat dorsal root ganglion cells in the process-forming period ii. time-sequential observation of dorsal root ganglion cells in culture. *Sapporo Medical Journal*. 55 (1). 1986. 1-10.

- Alt** Nixon, B. J., Doucette, R., Jackson, P. C., and Diamond, J. 1984. impulse activity evokes precocious sprouting of nociceptive nerves into denervated skin. *Somatosensory Research* 2(2): 97-126.
- Method** Noergaard, Jan O. R., Moeller-Madsen, Bjarne, Hertel, Niels, and Danscher, Gorm. silver enhancement of tissue mercury: demonstration of mercury in autometallographic silver grains from rat kidneys. *J. Histochem. Cytochem.* (1989) 37(10): 1545-7.
- Method** Nogami, Y. Okayama-ken. Center for Animal Husbandry and Research Asahi Japan, Oda, Y., Hanaoka, Y., and Mori, D. 1990. study on cryopreservation of bovine embryos by method of using silver iodine. *Bulletin of the Okayama Prefectural Center for Animal Husbandry and Research.* (No.1) P. 1-6
- Gene** Nohno Tsutomu(A), Koyama Eiki, Miyokai Fumio, Taniguchi Shigehiko, Ohuchi Hideyo, Saito Taiichi(A), and Noji Sumihare. 1993. a chicken homeobox gene related to drosophila paired is predominantly expressed in the developing limb. *Developmental Biology* 158(1): 254-264.
- FL** Nojiri, H., Sato, M., and Urano, A. increase in the vasopressin messenger rna levels in the magnocellular neurosecretory neurons of water-deprived rats in-situ hybridization study with the use of synthetic oligonucleotide probe. *Zoological Science (Tokyo).* 3 (2). 1986. 345-350.
- Phys** Nolan, E. M., Masters, J. N., and Dunn, A. 1990. growth hormone regulation of hepatic glutamine synthetase mrna levels in rats. *Molecular and Cellular Endocrinology* 69(2-3): 101-10.
- HHE** Nolting, S. F. and Campbell, W. G. Jr. 1981. subepithelial argyrophilic spicular structures in renal amyloidosis--an aid in diagnosis. pathogenic considerations. *Human Pathology* 12(8): 724-34.
- QAC** Nomiyama, K., Nomiyama, H., Kikuchi, T., and Yotoriyama, M. 1987. tissue metal shifts by a single exposure to metals in rats. *Sangyo Ika Daigaku Zasshi* 9 Suppl: 95-110.
- No Oral** Nomiyama, Kazuo, Nomiyama, Hiroko, Kikuchi, Toru, and Yotoriyama, Mamoru. tissue metal shifts by a single exposure to metals in rats. *J. UOEH (1987)* 9(Suppl.): 95-110.
- Drug** Nonclercq, D., Toubeau, G., Laurent, G., Schaudies, R. P., Zanen, J., and Heuson-Stiennon, J. A. 1993. immunocytological localization of epidermal growth factor in the rat kidney after drug-induced tubular injury. *European Journal of Morphology* 31(1-2): 65-71.
- No Oral** Nonclercq, D., Wrona, S., Toubeau, G., Zanen, J., Heuson-Stiennon, J. A., Schaudies, R. P., and Laurent, G. 1992. tubular injury and regeneration in the rat kidney following acute exposure to gentamicin: a time-course study. *Renal Failure* 14(4): 507-21.
- No Oral** Norgaard, J. O., Ernst, E., and Juhl, S. 1994. efficiency of autometallographic detection of mercury in the rat kidney. *Histochemical Journal* 26(2): 100-2.
- Unrel** North, M. O. 1984. commercial chicken production manual. (Book) (Ed. 3): viii + 710 pp.
- Diss** Novero, R. P. 1982. genotype-nutrition interaction in laying performance of japanese quails (coturnix coturnix japonica) [study conducted in the philippines]. *122 Leaves*
- FL** Novikov, Yu. V., Plitman, S. I., Levin, A. I., Shniger, N. Kh., Ershova, T. N., Kagiroy, V. N., Tsareva, L. G., Kochetkova, T. A., Lastochkina, K. O., Tyuleneva, I. S., and Noarov, Yu. A. 1980. health status of the population in relation to use of soft drinkingwater low in minerals. *Gigiena i Sanitariya* (12): 3-6.

- Prim** Novotny, G. E. 1979. observations on the lateral geniculate nucleus of the monkey (*macaca fascicularis*) after eye removal: a light and electron microscopic study. i. classification and degeneration of optic fibre terminals. *Journal Fur Hirnforschung* 20(6): 561-80.
- Anat** Novotny, G. E., Heuer, T., Schottelndreier, A., and Fleisgarten, C. 1994. plasticity of innervation of the medulla of axillary lymph nodes in the rat after antigenic stimulation. *Anatomical Record* 238(2): 213-24.
- Anat** Novotny, G. E. K(A), Schoettelndreier, A., and Heuer, T. 1993. a light and electron microscopic quantitative analysis of the innervation of axillary lymph nodes in juvenile and old rats. *Journal of Anatomy* 183(1): 57-66.
- Phys** Nunes Cardozo, B. and Van der Want, J. 1990. ultrastructural organization of the retino-pretectolivary pathway in the rabbit: a combined wga-hrp tracing and gaba immunocytochemical study. *Journal of Comparative Neurology* 291(2): 313-27.
- FL** Nyukhalov, A. P. 1989. [high grade herd of arctic foxes [reproduction of silver fox herd on the "saltikov" farm of the moscow region]]. <original> stado pestsov vysokogo klassa. *Krolikovodstvo i Zverovodstvo*. (No.3) P. 6-7
- FL** Nyukhalov, A. P., Chekalova, T. M., Maksimov, A. P., and Shumilina, N. N. 1988. breeding colour types of fox. *Krolikovodstvo i Zverovodstvo* (6): 13-15.
- HHE** O'Rahilly, R. and Muller, F. 1984. the early development of the hypoglossal nerve and occipital somites in staged human embryos. *American Journal of Anatomy* 169(3): 237-57.
- Anat** O'Reilly, P. M. and FitzGerald, M. J. 1990. fibre composition of the hypoglossal nerve in the rat. *Journal of Anatomy* 172: 227-43.
- Unrel** O'Toole, D., Williams, E. S., Welch, V., Nunamaker, C. E., and Lynn, C. 1993. subepidermal vesiculobullous filarial dermatitis in free-ranging american badgers (*taxidea taxus*). *Veterinary Pathology* 30(4): 343-51.
- HHE** Obara, T. detection of keratin messenger rna and human origin of xenotransplanted human tracheobronchial epithelium by in situ hybridization. *Hokkaido Journal of Medical Science*. 64 (6). 1989. 695-704.
- No COC** Obara, Y., Mizui, K., and Sato, T. chromosome banding analysis of a new stemline of hypodiploid hirosaki sarcoma established by single cell transplantation. *Cancer Genetics and Cytogenetics*. 50 (1). 1990. 75-88.
- An Prod** Obispo, N. E. and Dehority, B. A(A). 1999. feasibility of using total purines as a marker for ruminal bacteria. *Journal of Animal Science* 77(11): 3084-3095.
- FL** Ocetkiewicz, J., Kawinska, J., Niedzwiadek, S., and Tuczynska, J. 1979. the performance of french silver rabbits. *Roczniki Naukowe Zootechniki* 6(1): 117-125.
- Chem Meth** Ogden, T. E., Green, J. D., and Peterson, R. G. 1974. graded impregnation of nervous tissue stained by the golgi procedure. *Stain Technology* 49(2): 81-3.
- Bact** Ohno, A., Isii, Y., Tateda, K., Matumoto, T., Miyazaki, S., Yokota, S., and Yamaguchi, K. 1995. role of lps length in clearance rate of bacteria from the bloodstream in mice. *Microbiology* 141(Pt 10): 2749-56.

- Phys** Ojio, K., Kitamura, H., Shimada, T., and Nakamura, M. 1993. a morphometrical study of the postnatal development of rat pancreatic islets, with special regard to the differences between wistar and sprague-dawley strains. *Kaibogaku Zasshi* 68(2): 190-203.
- FL** Okada, A. and Okamoto, E. 1969. [silver impregnation of the peripheral nerves]. *Shinkei Kenkyu No Shimpo* 13(1): 216-9.
- Anat** Okamoto, T., Sugimura, M., and Kudo, N. 1976. distribution of endocrine cells in duck digestive tracts. *Journal of the Faculty of Fisheries and Animal Husbandry, Hiroshima University* 15(2): 127-134.
- FL** Okano, K. Kyushu Univ. Fukuoka Japan Faculty of Agriculture and Koga, O. 1994. genetic study on silver plumage of the kureko-dori [japan]. *Japanese Poultry Science*. V. 31(3) P. 195-200
- FL** Olausson, A. <translated> genetics and reproduction (arctic fox, silver fox, mink). genetik och reproduktion. *Vara Palsdjur* Nov 15, 1978. v. 49 (11) p. 271-274. ill.
- Rev** Olcott, CT. 1948. experimental argyrosis. *Am. J. Pathol.* 24: 813.
- Method** Oliveira, S. F., Nagata, T., Abrahamsohn, P. A., and Zorn, T. M. 1991. electron microscopic radioautographic study on the incorporation of 3h-proline by mouse decidual cells. *Cellular and Molecular Biology* 37(3): 315-23.
- Aquatic** Olivereau, M. and Olivereau, J. effect of transfer to sea water and back to fresh water on the histological structure of the eel kidney. *Journal of Comparative Physiology B Metabolic and Transport Functions*. 115 (2). 1977 223-239.
- Diss** Olivier, M. 1985. [investigations on heat diagnosis in silver foxes (*vulpes fulva argentata*) and blue foxes (*alopex lagopus*)]. <subtitle> [contribution within the scope of the working group "reproduction and insemination" at the tieraerztliche hochschule hannover]. <original> untersuchungen zur laeufigkeitsdiagnostik beim silberfuchs (*vulpes fulva argentata*) und blaufuchs (*alopex lagopus*). <original subtitle> beitrag im rahmen der arbeitsgruppe "fortpflanzung und besamung" an der tieraerztlichen hochschule hannover. 65 P.
- CP** Olmos, S., Marquez, M. G., and Roux, M. E. 1998. frequency of ag-nors in chromosomes 3,11 and 12 of wistar rats fed a protein free diet (pf) at weaning and in controls of 21 and 60 days of age. *FASEB Journal* 12(5): A872.
- In Vit** Oo Tinmarlar F, Blazeski Richard, Harrison Susan M W, Henchcliffe Claire, Mason Carol A, Roffler-Tarlov Suzanne K, and Burke Robert E(A). 1996. neuron death in the substantia nigra of weaver mouse occurs late in development and is not apoptotic. *Journal of Neuroscience* 16(19): 6134-6145.
- No COC** Opel, H. and Proudman, J. A. 1980. failure of mammalian prolactin to induce incubation behavior in chickens and turkeys. *Poultry Science* 59(11): 2550-2558.
- Prim** Orstavik, D. and Mjor, I. A. 1992. usage test of four endodontic sealers in macaca fascicularis monkeys. *Oral Surgery, Oral Medicine, and Oral Pathology* 73(3): 337-44.
- HHE** Ortman, R. 1989. [the sensory cells of the fetal vomeronasal organ in the human. a contribution to the variability of their differentiation and rudimentary development]. <original> uber sinneszellen am fetalen vomeronasalen organ des menschen. ein beitrag zur variabilitat seiner differenzierung bzw. rudimentierung. *HNO* 37(5): 191-7.

- FL** Os'kina, I. N., Trut, L. N., and Bazhan, N. M. the effect of domestication on age changes in the pituitary-adrenocortical system of silver fox *vulpes-fulva*. *Zhurnal Evolyutsionnoi Biokhimii i Fiziologii*. 21 (4). 1985. 348-353.
- CP** Osadchuk, L. V. 1996. adrenal cortisol biosynthesis and its stimulation by acth in male and female silver foxes during prenatal life. *Journal of Endocrinology* 148(SUPPL.): P64.
- FL** Osadchuk, L. V. 1999. age-dependent features in the reproductive performance of domesticated silver fox males. *Scientifur*. V. 23(2) P. 113-118
- FL** Osadchuk, L. V. 1991. endocrine gonadal function in silver fox under domestication. *Scientifur* 16(2): 116-121.
- CP** Osadchuk, L. V. 1994. fetal sex steroids and cortisol in silver foxes selected for reduced aggressiveness towards man. *European Journal of Endocrinology* 130(SUPPL. 2): 128.
- CP** Osadchuk, L. V. 1995. fetal testicular and adrenal steroid hormones in silver fox males. *Journal of Endocrinology* 144(SUPPL.): P351.
- FL** Osadchuk, L. V. significance of zoosocial contacts in control of endocrine function of the testes in silver fox during domestication. *Izvestiya Akademii Nauk Ssr Seriya Biologicheskaya*. 0 (1). 1991. 88-93.
- FL** Osadchuk, L. V. 1992. some peculiarities in reproduction in silver fox males under domestication. *Scientifur*. V. 16(4) P. 285-288
- FL** Osadchuk, L. V. 1999. steroid hormone concentrations in relation to sexual activity in domesticated silver fox males. *Scientifur*. V. 23(2) P. 119-124
- FL** Osadchuk, L. V. 1999. testosterone, estradiol and cortisol responses to sexual stimulation with reference to mating activity in domesticated silver fox males. *Scientifur*. V. 23(3) P. 215-220
- FL** Osadchuk L V and Trut L N. 1989. gonad endocrine function in female silver fox at selection for domesticative behavior. *Zhurnal Obshchei Biologii* 50. 126(2): 189-198, illustr.
- CP** Osadchuk, L. V(A). 1999. effects of artificial photoperiod on annual hormonal and reproductive rhythms in silver fox females. *Journal of Endocrinology* 160(SUPPL.): P202.
- FL** Osadchuk, L. V(A) and Voitenko, N. N. 1992. the sex steroids and brain serotonin in silver foxes during estrus cycle. *Fiziologicheskii Zhurnal SSSR Imeni I M Sechenova* 78(4): 118-123.
- CP** Osadchuk, L. V. Inst. of Cytology and Genetics Novosibirsk Russian Federation Siberian Branch of the Academy of Sciences of Russia and Skrede, A. ed. 1992. genetic and endocrine aspects in the regulation of the reproductive function in silver fox [*vulpes vulpes*]. progress in fur animal science. proceedings from the vth international scientific congress in fur animal production. P. 161-166. No. 9(Suppl.)
- FL** Osadchuk, L. V. Academy of Sciences Novosibirsk Russian Federation. 1996. effects of domestication on the adrenal cortisol production in silver foxes during embryonic development. *Scientifur*. V. 20(4) P. 336-344
- Unrel** Osikowicz, G., Booyse, F. M., and Quarfoot, A. J. 1981. effects of chronic oral consumption of nicotine on the rabbit aortic endothelium. *Am. J. Pathol.* 102(2): 229-238.

- FL** Oskina, I. N. 1996. analysis of the functional state of the pituitary-adrenal axis during postnatal development of domesticated silver foxes (*vulpes vulpes*). *Scientifur. V. 20(2) P. 159-167*
- CP** Oskina, I. N. 1995. ontogenesis of endocrine function in silver foxes under domestication. *Applied Animal Behaviour Science 44(2-4): 273-274.*
- FL** Ostos, M. V., Caballero, J. L., Carmona, R., and Abadia Fenoll, F. 1984. [analysis of various structures of the central nervous system revealed by the "en bloque" procedure of the tartrate-chrome-silver impregnation technic]. <original> analisis de diversas estructuras del s. n. c puestas de manifiesto por el proceder "en bloque" de la tecnica tartrato-cromo- impregnacion argantica. *Trabajos Del Instituto Cajal 75(1-4): 73-9.*
- FL** Ouyang, Qimei, Zhu, Zhengmei, and Gu, Tianjue. an improved silver-staining method for detection of membrane proteins in polyacrylamide gels. *Shanghai Diyi Yixueyuan Xuebao (1982) 9(6): 433-6, 22.*
- Alt** Ozeki, H., Ito, S., Wakamatsu, K., and Hirobe, T. 1995. chemical characterization of hair melanins in various coat-color mutants of mice. *Journal of Investigative Dermatology 105(3): 361-6.*
- In Vit** Paino, C. L., Fernandez-Valle, C., Bates, M. L., and Bunge, M. B. 1994. regrowth of axons in lesioned adult rat spinal cord: promotion by implants of cultured schwann cells. *Journal of Neurocytology 23(7): 433-52.*
- FL** Pak, Z. P. and Petina, V. P. effect of silver on the activity of the sulfhydryl groups of white rat blood serum. *Vodopodgot. Ochistka Prom. Stokov (1973): 10, 80-3.*
- BioX** Palluault, F., Dei-Cas, E., Slomianny, C., Soulez, B., and Camus, D. 1990. golgi complex and lysosomes in rabbit derived pneumocystis carinii. *Biology of the Cell 70(1-2): 73-82.*
- No Oral** PAMPHLETT, R. and PNG, F. Y. shrinkage of motor axons following systemic exposure to inorganic Mercury. *Journal of Neuropathology & Experimental Neurology; 57 (4). 1998. 360-366.*
- Prim** Pandya, D. N. and Kuypers, H. G. 1969. cortico-cortical connections in the rhesus monkey. *Brain Research 13(1): 13-36.*
- FL** Panella, F., Castellini, C., Santi, F., and Costantini, F. 1989. genetic and environmental effects on the main reproductive traits of pigeons. *Rivista Di Avicoltura 58(10): 41-43.*
- HHE** Panigrahi, P., Losonsky, G., DeTolla, L. J., and Morris, J. G. Jr. 1992. human immune response to campylobacter jejuni proteins expressed in vivo [published erratum appears in infect immun 1993 mar;61(3):1167]. *Infection and Immunity 60(11): 4938-44.*
- CP** Panneton, W. M., Arends, J. J. A., and Jacquin, M. F. 1992. new and improved methods for assessing dendritic developing relative to somatotopic patch borders in the barrel neuraxis. *Society for Neuroscience Abstracts 18(1-2): 620.*
- FL** Pap, K., Pajic, M., and Ivanovic, V. 1989. [effects of anhidrin on dog's dental pulp in vivo]. <original> dejstvo anhidrin-a na pulpu zuba pasa u in vivo uslovima. *Stomatoloski Glasnik Srbije 36(4): 309-18.*
- No Oral** Parks, T. N. and Rubel, E. W. 1978. organization and development of the brain stem auditory nuclei of the chicken: primary afferent projections. *Journal of Comparative Neurology 180(3): 439-48.*

- FL** Pavlov, A. V. and Antipanova, E. M. 1989. [biosynthetic activity of parathyroid cells during different function of the parathyroid glands]. <original> biosinteticheskaia aktivnost' paratirotsitov pri razlichnoi funktsii okoloshchitovidnykh zhelez. *Biulleten' Eksperimental'Noi Biologii i Meditsiny* 107(1): 98-9.
- FL** Pearse, A. G. and Bussolati, G. 1972. the identification of gastrin cells as g cells. *Virchows Archiv. A: Pathology. Pathologische Anatomie* 355(2)
- No Oral** Pecoits-Filho, R. F., Twardowski, Z. J., Kim, Y. L., Khanna, R., Moore, H., and Nolph, K. D. 1998. the absence of toxicity in intraperitoneal iron dextran administration: a functional and histological analysis [see comments]. *Peritoneal Dialysis International* 18(1): 64-70.
- FL** Pedersen, V. and Jeppesen, L. L. Copenhagen Univ. Denmark Inst. of Population Biology. 1992. defecation patterns in the cage and in various types of whole-year shelters in farmed silver foxes and blue foxes. *Scientifur. V. 16(4) P. 275-284*
- FL** Pedersen, V. and Jeppesen, L. L. Copenhagen Univ. Denmark Zoological Inst. 1998 . different cage sizes and effects on behaviour and physiology in farmed silver and blue foxes. *Scientifur. V. 22(1) P. 13-22*
- CP** Pedersen, V. Copenhagen Univ. Denmark Inst. of Population Biology and Skrede, A. ed. 1992. handling of silver foxes at different ages pre-weaning and post-weaning and effects on later behaviour and stress-sensitivity. progress in fur animal science. proceedings from the vth international scientific congress in fur animal production. P. 529-535. No. 9(Suppl.)
- Phys** Pedroni, P., Perez, G. N., and Mattiazzi, A. 1990. calcium sensitivity of isometric tension in intact papillary muscles and chemically skinned trabeculae in different models of hypertensive hypertrophy. *Cardiovascular Research* 24(7): 584-90.
- Aquatic** Pemberton, D., Brothers, N., and Copson, G. predators on marine fish farms in tasmania. *PAP PROC R SOC TASMAN. Papers and Proceedings Royal Society of Tasmania.* 125 (0). 1991. 33-35.
- No Oral** Pencheva Ivanka(A), Kostova Irena, Konstantinov Spiro, Naidenova Elinka, Kraivanova Margarita, and Manolov Ilia . 1998. cardioprotective efficacy of new esculin metal complexes. *Acta Pharmaceutica (Zagreb)* 48(2): 127-131.
- Phys** Pennefather Peter S(A) and Decoursey Thomas E. 1994. a scheme to account for the effects of rb+ and k+ on inward rectifier k channels of bovine artery endothelial cells. *Journal of General Physiology* 103(4): 549-581.
- CP** Pereira, G. 1977. localization of silver in the spleen of argyric rats by energy dispersive x-ray analysis coupled with scanning and transmission electron microscopy. *Proc. - Annu. Meet. Electron Microsc. Soc. Am.* 35: 504-5 .
- Imm** Pereira, M. M., Andrade, J., Lacerda, M. D., Batoreu, N. M., Marchevsky, R. S., and Ribeiro, d. o. s. Santos R. 1997. demonstration of leptospiral antigens on tissues using monoclonal antibodies and avidin-biotin peroxidase staining. *Experimental and Toxicologic Pathology* 49(6): 505-11.
- FL** Perez Casas, A., Vega Alvarez, J. A., Prado Gonzalez, J., Bengoechea GonzalezM. E. , and Lopez Muniz, A. 1985. [innervation of the pulmonary vessels: autonomic microganglia]. <original> innervation des vaisseaux pulmonaires: microganglions vegetatifs. *Bulletin De L'Association Des Anatomistes* 69(205): 49-53.

- No Tox** Perry, M. M. and Siller, W. G. 1980. incorporation of 3h-oleic acid by the proximal convoluted tubule cells of the chick (*Gallus domesticus*). electron microscopic autoradiographic study. *Cell and Tissue Research* 210(3): 447-59.
- Anat** Pessacq-Asenjo, T. P. 1984. the nerve endings of the glycogen body of embryonic and adult avian spinal cord: on the existence of two different varieties of nerve fibers. *Growth* 48(3): 385-90.
- Prim** Peters, E. H. grading in the vocal repertoire of silver springs rhesus monkeys. *ELSE, J. G. AND P. C. LEE (ED.). Selected Proceedings of the Congress of the International Primatological Society, Vol. 3. Primate Ontogeny, Cognition and Social Behavior; 10th Meeting, Nairobi, Kenya, July 1984. Xiii+410p. Cambridge University Press: New York, New York, Usa; Cambridge, England. Illus. Isbn 0-521-31013-x(paper); Isbn 0-521-32452-1(cloth). 0 (0). 1986. 161-168.*
- FL** 1968. An osmiophilic bilaminar lining film at the respiratory surfaces of avian lungs. 88 (2) :
- FL** Petrova, E. S., Chumasov, E. I., and Otellin, V. A. 1997. [the developmental characteristics of the embryonic anlagen of rat neocortex and spinal cord when transplanted into the distal end of the dissected sciatic nerve of adult animals]. <original> osobennosti razvitiia embrional'nykh zakladok neokorteksa i spinnogo mozga krysa v usloviakh transplantatsii v distal'nyi konets pererezannogo sedalishchnogo nerva vzroslykh zhivotnykh. *Tsitologiya* 39(9): 784-8.
- FL** Petrova, E. S., Chumasov, E. I., and Otellin, V. A. implantation of the embryonal cerebral tissue into the regeneration peripheral nerve. *Arkhiv Anatomii Gistologii i Embriologii*. 93 (10). 1987. 43-49.
- CP** Phares, C. K. and Ruegamer, W. R. 1973. pigeon crop sac stimulation due to a factor produced by plerocercoids of the tapeworm, *Spirometra mansonioides*. *Proceedings of the Society for Experimental Biology and Medicine* 143(1): 147-151.
- FL** Phichet Kamonsin (Ban Phai School, Khon Kaen Thailand and Narit Litasuwan. 1987. comparative study on postembryonic and behavioral development between jones's silver pheasant and chinese ring-necked pheasant. <original> kan sukpa priap thiap kan charoen toep to lae phatthanakan thang phruttkam rawang luk kai fa lang khao kap luk kai fa kho waen. [proceedings of animal wildlife in thailand 1987]. <original> kan sammama ruang satpa muang thai. *P*. 25:1-2
- Nut def** Phillips, S. C. and Cragg, B. G. 1984. blood-brain barrier dysfunction in thiamine-deficient, alcohol-treated rats. *Acta Neuropathologica* 62(3): 235-41.
- In Vit** Pihl, E., Gustafson, G. T., Josefsson, B., and Paul, K. G. 1967. heavy metals in the granules of eosinophilic granulocytes. *Scandinavian Journal of Haematology* 4(5): 371-9.
- FL** Pino, L. A., Matinella, L., and Morales, G. 1999. [the size polymorphism of the cercariae of a venezuelan strain of *Schistosoma mansoni*]. <original> polimorfismo de tallas en las cercarias de una cepa venezolana de *Schistosoma mansoni*. *Revista Da Sociedade Brasileira De Medicina Tropical* 32(4): 443-6.
- Aquatic** Pinuela, C., Baatrup, E., and Geneser, F. A. 1992. histochemical distribution of zinc in the brain of the rainbow trout, *Oncorhynchus mykiss*. i. the telencephalon. *Anatomy and Embryology* 185(4): 379-88.
- Mineral** Pittman, T. L. 1992. *Minerals Yearbook, 1990: Alaska*. <NOTE> Annual Rept

- Anat** Plaschke, M., Souphanthong, M., and Wenzel, J. 1995. morphological alterations of hippocampal pyramidal neurons heterotopically transplanted into the somatosensory cortex of adult rats: a quantitative golgi study. *Anatomy and Embryology* 192(4): 351-61 .
- FL** Plusnina, I. Z., Os'kina, I. N., Nikulina, E. M., Serova, L. I., and Kozlova, O. N. 1997. [selection vector and ontogenetic development of behavior under domestication of wild norway rats]. <original> vektor otbora i ontogeneticheskie zakonomernosti formirovaniia povedeniia pri deomestikatsii serykh krysh. *Genetika* 33(8): 1149-54.
- Nutrition** Ploth, D. W. and Mackenzie, H. S. 1991. tubuloglomerular feedback in one-kidney, one-clip hypertensive rats. *Kidney International. Supplement* 32: S115-8.
- FL** Plyusnina I Z, Oskina I N, Onopchenko L G, and Lutsenko N D. 1988. participation of fear reaction in the limitation of the period of primary socialization in silver foxes. *Zhurnal Vysshei Nervnoi Deyatel'nosti Imeni I P Pavlova* 38. 125(5): 945-951, illustr.
- FL** Plyusnina, I. Z. and Os'kina, I. N. role of corticosteroids in the ontogenetic development of behavior in silver-black foxes. *Zhurnal Vysshei Nervnoi Deyatel'nosti Imeni I P Pavlova*. 38 (1). 1988. 67-71.
- FL** Plyusnina I Z and Oskina I N. 1988. role of corticosteroids in behaviour ontogenetic development of silver-black foxes. *Zhurnal Vysshei Nervnoi Deyatel'nosti Imeni I P Pavlova* 38. 125(1): 67-71, illustr.
- FL** Plyusnina, I. Z. Russian Academy of Sciences Novosibirsk Russian Federation. 1995. the effects of cross-mating on the development of behaviour during the primary socialization period in silver foxes (*vulpes vulpes*). *Scientifur*. V. 19(3) P. 171-177
- Prim** Podlisny, M. B., Stephenson, D. T., Frosch, M. P., Lieberburg, I., Clemens, J. A., and Selkoe, D. J. 1992. synthetic amyloid beta-protein fails to produce specific neurotoxicity in monkey cerebral cortex. *Neurobiology of Aging* 13(5): 561-7.
- Prim** Poirier, L. J. and Giguere, M. 1980. an autoradiographic study of the striatofugal fibers in the monkey. *Journal of Neural Transmission* (16): 25-31.
- FL** Polak, J. M., Pearse, A. G., Grimelius, L., and Marks, V. 1975. gastrointestinal apudosis in obese hyperglycaemic mice. *Virchows Archiv. B: Cell Pathology* 19(2): 135-50.
- HHE** Polak, J. M., Pearse, A. G., and Heath, C. M. 1975. complete identification of endocrine cells in the gastrointestinal tract using semithin-thin sections to identify motilin cells in human and animal intestine. *Gut* 16(3): 225-9.
- In Vit** Polimeni, P. I., Cutilletta, A. F., and Otten, M. D. 1983. cation distributions in the hypertrophic myocardium (aortic constriction) of the rat. *Cardiovascular Research* 17(3): 170-6.
- No Oral** Pollitt, C. C. 1994. the basement membrane at the equine hoof dermal epidermal junction. *Equine Veterinary Journal* 26(5): 399-407.
- FL** Pomytko, V. N. and Miroshnichenko, T. K. 1974. comparison of does of different breeds housed indoors. *Nauchnye Trudy. Nauchno-Issledovatel'Skii Institut Pushnogo Zverovodstva i Krolikovodstva* 12: 90-96.
- FL** Pomytko, V. N. and Miroshnichenko, T. K. 1973. the growth of young, caged rabbits of several breeds. *Zhivotnovodstvo* (No.10): 77-79.

- FL** Pomytko, V. N., Vladimirov, A. V., and Bautina, E. P. 1973. use of artificial insemination in hybridisation of the arctic fox with the silver-black fox. *Nauchnye Trudy. Nauchno-Issledovatel'Skii Institut Pushnogo Zverovodstva i Krolikovodstva* 12: 162-165.
- FL** Pomytko, V. N., Vladimirov, A. V., Syrnikov, N. I., and Nosova, N. G. 1974. characteristics of reproductive function of hybrids of foxes with arctic foxes. *Nauchnye Trudy. Nauchno-Issledovatel'Skii Institut Pushnogo Zverovodstva i Krolikovodstva* 13: 142-145.
- Mix** Popham, J. D. and Webster, W. S. 1976. the ultrastructural localisation of cadmium. *Histochemistry*. 46(3): 249-59.
- FL** Popova N K and Nikulina E M. 1983. the inhibitory role of serotonin in manifestation of predatory aggression in minks and silver-black Foxes. *Zhurnal Vysshei Nervnoi Deyatel'nosti Imeni I P Pavlova* 33. 120(6): 1098-1102, illustr.
- FL** Popova, N. K. and Nikulina, E. M. 1983. [inhibitory role of serotonin in manifestations of predatory aggression in the mink and silver fox]. <original> ingibiruiushchaia rol' serotoninina v proiavlennii khishchnicheskoi agressii u norok i serebristo-chernykh lisits. *Zhurnal Vysshei Nervnoi Deyatel'nosti Imeni I P Pavlova* 33(6)
- FL** Popova, N. K., Nikulina, E. M., Voitenko, N. N., Abgustinovich, D. F., and Trapezov, O. V. 1996. [effect of a single-locus mutation of the silver-blue color allele in mink on the dopaminergic system of the brain]. <original> vliianie odnolokusnoi mutatsii allelia serebristo-goluboi okraske norok (pp) na dofaminovuiu sistemu mozga. *Genetika* 32(3): 452-4.
- FL** Popova, N. K., Voitenko, N. N., and Trut, L. N. changes in the brain content of serotonin and 5 hydroxy iaa in the selection of silver foxes for behavior. *Dokl Akad Nauk Sssr Ser Biol.* 223 (6). 1975 1498-1500.
- FL** Popova, N. K., Voitenko, N. N., and Trut, L. N. 1975. determination of the contents of serotonin and 5-oxyindoleacetic acid in the brain of silver-foxes, in relation to the behaviour of the animals. *Doklady Akademii Nauk SSSR* 223(6): 1498-1500.
- Prim** Porrino, L. J., Crane, A. M., and Goldman-Rakic, P. S. 1981. direct and indirect pathways from the amygdala to the frontal lobe in rhesus monkeys. *Journal of Comparative Neurology* 198(1): 121-36.
- FL** Povazhenko, I. O., Teres, M. O., and Borodinya, I. V. 1973. (lymphatics of the synovial membrane of digital tendon sheaths of horses, and changes in inflammation). *Visnik Silskogospodarskoi Nauki, Kiev* (No.1): 102-105, 124.
- Prim** Powell, E. W. 1978. the cingulate bridge between allocortex, isocortex and thalamus. *Anatomical Record* 190(4): 783-93.
- Chem Meth** Powell, E. W. and Schnurr, R. 1972. silver impregnation of degenerating axons; comparisons of postoperative intervals, fixatives and staining methods. *Stain Technology* 47(2): 95-100.
- FL** Prasolova, L. A. 1996. coat colour mutations in domesticated foxes. *Krolikovodstvo i Zverovodstvo* (5): 8-9.
- Diss** Prateep Duengkae. 1996. breeding biology of silver-breasted broadbill, *serilophus lunatus* (gould) in huai kha kaeng wildlife sanctuary, changwat uthai-thani. <original> chiwawitthaya kan supphan khong nok phaya pakkwang ok si-ngoan (*serilophus lunatus* (gould)) nai khet raksa phan satpa huai kha kaeng changwat uthai-thani. *76 Leaves*

- FL** Pribyl, T., Monakhov, N. K., Vasilyev, V. B., Shavlovskii, M. M., Gorbunova, V. N., and Aleynikova, T. D. 1982. silver-containing ceruloplasmin without polyphenol oxidase activity in rat serum. *Physiol. Bohemoslov. (1982)*. 31(6): 569-71 .
- Phys** Price, D. J., Ferrer, J. M., Blakemore, C., and Kato, N. 1994. functional organization of corticocortical projections from area 17 to area 18 in the cat's visual cortex. *Journal of Neuroscience* 14(5 Pt 1): 2732-46.
- Method** Prieto, J. J., Beneyto, M., Riquelme, R., and Rueda, J. 1995. ultrastructural detection of glycogen in the supporting cells of the organ of corti with the periodic acid-thiocarbohydrazide-silver proteinate method. *Journal Fur Hirnforschung* 36(1): 67-75.
- Aquatic** Prinsloo, J. F. and Schoonbee, H. J. 1984. observations on fish growth in polyculture during late summer and autumn in fish ponds at the umtata dam fish research centre, transkei.3. the use of chicken manure with and without pelleted fish feed. *Water S.A.* 10(1): 30-35.
- An Prod** Prinsloo, J. F., Schoonbee, H. J., and Theron, J. 1999. the production of poultry in integrated aquaculture-agriculturesystems. part ii: the integration of laying hens with fish and vegetables in integrated aquaculture-agriculture food productionsystems. *Water SA* 25(2): 231-238.
- FL** Privitera, E. 1981. silver staining in drosophila melanogaster: nor behaviour in heteroploid cultured cells. *Experientia* 37(7): 705-6.
- HHE** Puchner, M. J., Ludecke, D. K., Knappe, U. J., Saeger, W., and Herrmann, H. D. 1992. autoradiographic demonstration of in vivo 125i-growth hormone-releasing hormone (ghrh) binding by human gh-secreting pituitary adenomas transplanted on athymic nude mice. *Molecular and Cellular Endocrinology* 85(3): 157-64.
- FL** Purwar, R. S. 1977. neuro-histochemical study of the tongue of gallus domesticus (white leghorn). *Zeitschrift Fur Mikroskopisch-Anatomische Forschung* 91(1): 119-30.
- BioX** Putnak, R., Cassidy, K., Conforti, N., Lee, R., Sollazzo, D., Truong, T., Ing, E., Dubois, D., Sparkuhl, J., Gastle, W., and Hoke, C. 1996. immunogenic and protective response in mice immunized with a purified, inactivated, dengue-2 virus vaccine prototype made in fetal rhesus lung cells. *American Journal of Tropical Medicine and Hygiene* 55(5): 504-10.
- Phys** Qu, M., Lu, Z., and Zilles, K. 1994. aging of nucleolar organizer region in rat basal forebrain neurons related to learning and memory. *Anatomischer Anzeiger* 176(1): 39-43.
- FL** Quade, R., Halbhuber, K. J., and Stibenz, J. 1970. [use of zapon lacquer membranes as inert medium for the suppression of positive chemography effects in emulsions of light optical autoradiograms]. <original> die verwendung von zaponlackmembranen als inertes intermedium zur verhinderung positiv-chemographischer effekte in emulsionen lichtoptischer autoradiogramme. *Acta Histochemica* 38(2): 270-7.
- BioX** Quan, N., Mhlanga, J. D. M., Whiteside, M. B., McCoy, A. N., Kristensson, K., and Herkenham, M. 1999. chronic overexpression of proinflammatory cytokines and histopathology in the brains of rats infected with trypanosoma brucei. *Vol. 414, No. 1, Pp. 114-130* Journal Of Comparative Neurology
- Gene** Querat, B., Cardinaud, B., Hardy, A., Vidal, B., and D'Angelo, G. 1994. sequence and regulation of european eel prolactin mrna. *Vol. 102, No. 1-2, Pp. 151-160* Mol. Cell. Endocrinol.

- Abstract** Quevedo, W. C. Jr, Fleischmann, R. D., and Dyckman, J. premature loss of melanocytes from hair follicles of light b-l-t and silver si mice. *11th International Pigment Cell Conference, Sendai, Miyagi, Japan, Oct. 14-17, 1980. Yale J Biol Med.* 53 (5). 1980 (Recd. 1981). 419.
- Method** Quitadamo, I. J. and Schelling, M. E. 1998. efficient purification of mouse anti-fgf receptor igm monoclonal antibody by magnetic beads. *Hybridoma* 17(2): 199-207.
- Phys** Racekova, E., Vanicky, I., and Zigova, T. 1994. correlation of functional alteration with lesion extent after olfactory bulbectomy in rats. *International Journal of Neuroscience* 79(1-2): 13-20.
- Aquatic** Rady Amal A(A), Nour, A. M., and Abou-Akkada, A. R. 1992. comparative study on fish farming in egypt. *Acta Universitatis Szegediensis Acta Biologica* 38(1-4): 25-31.
- No Dose** Radzhabli, S. I., Isaenko, A. A., and Volobuev, V. T. investigation of the nature and role of the supernumerary chromosomes in the silver fox part 4 behavior of the supernumerary chromosomes in meiosis. *Soviet Genetics (English Translation of Genetika).* 14 (3). 1978 296-301
- FL** Rafay, J., Parkanyi, V., and Jakubicka, I. Vyskumny Ustav Zivocisnej Vyroby Nitra Czechoslovakia. 1989. dynamics of some biochemical indices in the blood of silver foxes before the onset of their sexual activity. <original> dynamika niektorých biochemických ukazovateľov v krvi lisok strieborných pred nastupom pohlavnej aktivity. *Polnohospodarstvo.* V. 35(11) P. 1023-1028
- Chem Meth** Rager, G., Lausmann, S., and Gallyas, F. an improved silver stain for developing nervous tissue. *STAIN TECHNOL. Stain Technology.* 54 (4). 1979. 193-200.
- Prim** Ralston, D. D. and Ralston, H. J. the terminations of corticospinal tract axons in the macaque monkey. *Journal of Comparative Neurology.* 242 (3). 1985 (Recd. 1986). 325-337.
- Nutrition** Ranaweera, K. N. P., Siriwardene, J. A. De S., Manamperi, H. B., Jayawardena, K. M., and Poulter, R. G. 1979. dried fish silage as a protein source for poultry. 1. feeding trialswith broiler chickens. *Ceylon Veterinary Journal* 27(1/4): 5-9.
- Prim** Rani, R., Sharma, J. K., Nand, R., and Ghosh, P. K. 1981. heterogeneity of silver staining in the marker chromosome of rhesus monkey (macara mulatta). *Vol. 10, No. 5, Pp. 409-412* J. Hum. Evol.
- FL** Rapos, M. metallophilic cells in the white pulp of the spleens of young mice. *BIOLOGIA (Bratislava).* 34 (9). 1979. 701-708.
- Alt** Ras, V. R. and Nava, P. B. 1986. age-related changes of neurites in meissner corpuscles of diabetic mice. *Experimental Neurology* 91(3): 488-501.
- Anat** Rasmussen, L. E. and Munger, B. L. 1996. the sensorineural specializations of the trunk tip (finger) of the asian elephant, *elephas maximus.* *Anatomical Record* 246(1): 127-34 .
- Phys** Rees Sandrra(A), Rawson John, Nitsos Ilias, and Brumley Carolyn. 1994. the structural and functional development of muscle spindles and their connections in fetal sheep. *Brain Research* 642(1-2): 185-198.
- Prim** Reese, B. E. and Cowey, A. 1983. projection lines and the ipsilateral retino-geniculate pathway in the hooded rat. *Neuroscience* 10(4): 1233-47.

- Unrel** Reese Benjamin E(A) and Baker Gary E. 1993. the re-establishment of the representation of the dorso-ventral retinal axis in the chiasmatic region of the ferret. *Visual Neuroscience* 10(5): 957-968.
- FL** Reidy, M. A. and Bowyer, D. E. 1978. scanning electron microscope studies of rabbit aortic endothelium in areas of haemodynamic stress during induction of fatty streaks. *Virchows Archiv. A, Pathological Anatomy and Histology* 377(3)
- In Vit** Reidy, M. A. and Schwartz, S. M. 1980. developments in the study of endothelial cells by scanning electron microscopy. *Artery* 8(3): 236-43.
- Gene** Reimer, D. L. and Singh, S. M. in-situ hybridization studies on murine catalase messenger rna expression during embryonic development. *DEV GENET. Developmental Genetics.* 11 (4). 1990. 318-325.
- In Vit** Reinecke, R. K. and Reinecke, N. D. 1994. identification of first stage larvae 11 of bovine nematodes. *Pesquisa Veterinaria Brasileira* 14(1): 1-4.
- Nut def** Reis, Brenda L. and Evans, Gary W. hereditary influence on zinc requirements of mice. *Nutr. Rep. Int. (1976)* 13(2): 213-16.
- Method** Reisinger, P. W. and Unger, J. W. 1990. direct immunoblotting from histological sections of brain onto nitrocellulose: evaluation with the protein neurophysin. *Electrophoresis* 11(8): 631-4.
- Phys** Rekila, T., Harri, M., Jalkanen, L., and Mononen, J. 1999. relationship between hyponeophagia and adrenal cortex function infarmed foxes. *Physiology & Behavior* 65(4/5): 779-783.
- HHE** Richmond, F. J., Johnston, W. S., Baker, R. S., and Steinbach, M. J. 1984. palisade endings in human extraocular muscles. *Investigative Ophthalmology & Visual Science* 25(4): 471-6.
- No Oral** Ridgway, L. P. and Karnofsky, D. A. 1952. the effects of metals on the chick embryo: toxicity and production of abnormalities in development. *Ann N Y Acad Sci.* 55: 203-215.
- FL** Riegger, A. J. and Kromer, E. P. 1990. [angiotensin-converting-enzyme inhibitor and heart hypertrophy]. <original> angiotensin-converting-enzymhemmer und herzhypertrophie. *Wiener Medizinische Wochenschrift* 140(1-2): 46-9.
- FL** Risopatron, P. 1990. heritability of fear-motivated responses of silver fox cubs. *Scientifur* 14(3): 211.
- Drug** Robb, E. C. and Nathan, P. 1981. control of experimental burn wound infections: comparative delivery of the antimicrobial agent (silver sulfadiazine) either from a cream base or from a solid synthetic dressing. *Journal of Trauma* 21(10): 889-93.
- Anat** Roberts, L. A. 1991. morphological innervation pattern of the developing rabbit heart. *American Journal of Anatomy* 190(4): 370-84.
- Anat** Roberts, L. A. 1991. the sinoatrial ring bundle: a cardiac neural communication system? *American Journal of Anatomy* 191(3): 250-60.
- BioX** Rocha, E. M. M., Correa-Oliveira, R., Carneiro, C. R. W., Lopes, J. D., and Krettli, A. U. 1990. the immunodominant surface antigen of plasmodium gallinaceum is presentin both the salivary gland and oocyst sporozoites. *Brazilian Journal of Medical and Biological Research* 23(11): 1117-1125.

- BioX** Rocha, M. A., Barbosa, E. F., Guedes Rmc, Lage, A. P., Leite, R. C., and Gouveia Amg(A). 1999. detection of bhv-1 in a naturally infected bovine fetus by a nested pcr assay. *Veterinary Research Communications* 23(2): 133-141.
- Chem Meth** Rodier, P. M. and Kates, B. 1988. histological localization of methylmercury in mouse brain and kidney by emulsion autoradiography of 203hg. *Toxicology and Applied Pharmacology* 92(2): 224-34.
- Chem Meth** Rodier, P. M., Kates, B., and Simons, R. 1988. mercury localization in mouse kidney over time: autoradiography versus silver staining. *Toxicology and Applied Pharmacology* 92(2): 235-45.
- Prim** Rodrigo, J., Hernandez, J., Vidal, M. A., and Pedrosa, J. A. 1975. vegetative innervation of the esophagus. ii. intraganglionic laminar endings. *Acta Anatomica* 92(1): 79-100.
- BioX** Roelke-Parker, M. E., Munson, L., Packer, C., Kock, R., Cleaveland, S., Carpenter, M., O'Brien, S. J., Pospischil, A., Hofmann-Lehmann, R., and Lutz, H. 1996 . a canine distemper virus epidemic in serengeti lions (panthera leo). *Nature*. 379(6564): 441-445.
- Plant** Rohrbach, H. the european mistletoe-d viscum-album-d. *ARNOLDIA (BOSTON)*. *ARNOLDIA (Boston)*. 29 (10). 1969 69-72.
- Aquatic** Rojik, I., Nemcsok, J., and Boross, L. 1983. morphological and biochemical studies on liver, kidney and gill of fishes affected by pesticides. *Acta Biologica Hungarica* 34(1): 81-92.
- Aquatic** Roper, J. M., Cherry, D. S., Simmers, J. W., and Tatem, H. E. 1997. bioaccumulation of toxicants in the zebra mussel, dreissena polymorpha, at the times beach confined disposal facility, buffalo, new york. *Environ. Pollut.* 94(2): 117-129 .
- BioX** Rosengarten Renate(A), Behrens Annett, Stetefeld Anja, Heller Martin, Ahrens Meike, Sachse Konrad, Yogev David, and Kirchhoff Helga. 1994. antigen heterogeneity among isolates of mycoplasma bovis is generated by high-frequency variation of diverse membrane surface proteins. *Infection and Immunity* 62(11): 5066-5074.
- Prim** Rosiepen, G., Arslan, M., Clemen, G., Nieschlag, E., and Weinbauer, G. F. 1997. estimation of the duration of the cycle of the seminiferous epithelium in the non-human primate macaca mulatta using the 5-bromodeoxyuridine technique. *Cell and Tissue Research* 288(2): 365-9.
- CP** Rossdale, P. D. Chairman, Koterba, A. M., Adams, R., Rose, R. J., Stewart, J. H., Hillidge, C. J., Webb, A. I., Kosch, P. C., Ousey, J. C., Silver, M., Fowden, A. L., Dudan, F. E., and Cash, R. S. G. 1983. panel: management and treatment of the premature foal. *Proceedings of the Annual Convention of the American Association of Equine Practitioners* 29: 125...211.
- Phys** Rossi, F., van der Want, J. J., Wiklund, L., and Strata, P. 1991. reinnervation of cerebellar purkinje cells by climbing fibres surviving a subtotal lesion of the inferior olive in the adult rat. ii. synaptic organization on reinnervated purkinje cells. *Journal of Comparative Neurology* 308(4): 536-54.
- Method** Rossini, K., Rizzi, C., Sandri, M., Bruson, A., and Carraro, U. 1995. high-resolution sodium dodecyl sulfate-polyacrylamide gel electrophoresis and immunochemical identification of the 2x and embryonic myosin heavy chains in complex mixtures of isomyosins. *Electrophoresis* 16(1): 101-4.
- Phys** Roughan, J. V(A) and Laming, P. R. 1998. epicortical slow potential shifts and sensory-evoked potentials are related to seizure propensity in gerbils. *Journal of Comparative Physiology A Sensory Neural and Behavioral Physiology* 182(6): 827-838.

- Aquatic** Rouvinen, K. I., Anderson, D. M., and Alward, S. R. 1997. effects of high dietary levels of silver hake and atlantic herring on growing-furring performance and blood clinical-chemistry of mink (*Mustela vison*). *Canadian Journal Of Animal Science*. 77(3): 509-517.
- No Dose** Rowland, A. C. and Hutchings, D. A. necrotic enteritis and regional ileitis in pigs at slaughter. *Veterinary Record/ SN- 0042-4900/ PY- 1978/ VO- 103/ IS- 15/ PG-*.
- Gene** Rubino, R. 1993. goat breeds in italy. *Animal Genetic Resources Information* (11): 47-62.
- Drug** Rud, J., Munksgaard, E. C., Andreasen, J. O., Rud, V., and Asmussen, E. 1991. retrograde root filling with composite and a dentin-bonding agent. 1. *Endodontics & Dental Traumatology* 7(3): 118-25.
- Anat** Ruiz Pesini, P., Cifuentes, J. M., and Fernandez-Troconiz, P. 1991. the nucleus of the tractus solitarius of the dog. a morphological and morphometric analysis. *Journal of Anatomy* 176: 113-32.
- Bio Acc** Rungby, J. and Danscher, G. 1983. localization of exogenous silver in brain and spinal cord of silver-exposed rats. *Acta Neuropathol.* 60(1-2): 92-8 .
- In Vit** Rungby, J., Ellermann-eriksen, S., and Danscher, G. effects of selenium on toxicity and ultrastructural localization of silver in cultured Macrophages. *Arch Toxicol; 61 (1). 1987. 40-45.*
- Abstract** Rungby, J., Moller-madsen, B., Thorlacius-ussing, O., Schroder, H. D., and Danscher, G. 1985. experimental silver intoxication of nervous tissue. *Annual Meeting of the Scandinavian Neuropathological Society*
- No Oral** Rungby, J., Slomianka, L., Danscher, G., Anderseen, A. H., and West, M. J. a quantitative evaluation of the neurotoxic effect of silver on the volumes of the components of the developing rat hippocampus. *TOXICOLOGY.* 43(3): 261-268.
- HHE** Rungby, J., Thorlacius-ussing, O., Moller-andersen, B., and Danscher, G. 1985 . experimental argyrosis. *Nordic Symposium on Metabolism of Trace Elements Related to Human Diseases*
- Abstract** Rungby, J., Thorlacius-ussing, O., Moller-madsen, B., and Danscher, G. 1985. distribution of exogenous silver in peripheral nervous system structures. *2ND NORDIC NEUROCHEMICAL SYMPOSIUM*
- Bio Acc** Rungby, Joergen. experimental argyrosis: ultrastructural localization of silver in rat eye. *Exp. Mol. Pathol. (1986)* 45(1): 22-30 .
- No Oral** Rungby, Jorgen and Danscher, Gorm. 1984. hypoactivity in silver exposed mice. *Acta Pharmacol. Toxicol.* 55(5): 398-401.
- In Vit** Rungby, Jorgen, Hultman, Per, and Ellermann-Eriksen, Svend. silver affects viability and structure of cultured mouse peritoneal macrophages and peroxidative capacity of whole mouse liver. *Arch. Toxicol. (1987)* 59(6): 408-12.
- No COC** Ryan, L. J., Linder, J. C., Martone, M. E., and Groves, P. M. 1990. histological and ultrastructural evidence that d-amphetamine causes degeneration in neostriatum and frontal cortex of rats. *Brain Research* 518(1-2): 67-77.

- Phys** Sabato, S., Agresta, C. A., Freeman, G. M., and Salzman, S. K. 1991. safety versus efficacy of spinal cord stimulation for the generation of motor-evoked potentials in the rat. *Journal of Neurotrauma* 8(1): 27-44.
- FL** Saer, J. B., Chen, I., Yates, R. D., and Ichinose, H. 1981. age-related alterations in epicardial arteries of spontaneously hypertensive rats. *Virchows Archiv* 36(1): 77-86.
- Drug** Safavi, K. E., Pascon, E. A., and Langeland, K. 1983. evaluation of tissue reaction to endodontic materials. *Journal of Endodontics* 9(10): 421-9.
- Phys** Safronova, L. D(A). 1999. electron microscopic analysis of synaptonemal complexes in male hybrids. *Ontogenez* 30(4): 255-266.
- Method** Saganova, K., Marsala, J., Orendacova, J., and Orlovsky, V. demonstration of ischemic damage of rabbit ventral spinal cord by nauta impregnation method. *BIOLOGIA (Bratislava)*. 45 (7). 1990. 547-554.
- No COC** Sahota, A. W. and Gillani, A. H. 1995. effect of ascorbic acid supplementation on performance and cost of production in layers maintained under high ambient temperatures. *Pakistan Veterinary Journal* 15(4): 155-158.
- Bact** Saidi, I. S., Biedlingmaier, J. F., and Whelan, P. 1999. in vivo resistance to bacterial biofilm formation on tympanostomy tubes as a function of tube material. *Otolaryngology--Head and Neck Surgery* 120(5): 621-7.
- Imm** Sakai, C., Kawakami, Y., Law, L. W., Furumura, M., and Hearing, V. J. Jr. 1997. melanosomal proteins as melanoma-specific immune targets. *Melanoma Research* 7(2): 83-95.
- In Vit** Salama, G. and Abramson, J. 1984. silver ions trigger ca^{2+} release by acting at the apparent physiological release site in sarcoplasmic reticulum. *Journal of Biological Chemistry* 259(21): 13363-9.
- No Oral** Salem, Harry Aberdeen Proving Ground MD and Katz, Sidney A. Rutgers Univ Camden NJ. speciation, bioavailability, and systemic distribution of chromium from. *Sci Total Environ*. V86, N1-2, P59(6)
- Drug** Salisbury, R. E., Bevin, A. G., Steinkraus, G. E., and Enterline, D. S. 1980. burn wound sepsis: effect of delayed treatment with topical chemotherapy on survival. *Journal of Trauma* 20(2): 120-2.
- FL** Salyi, G. and Sztojkov, V. 1993. biotin deficiency in foxes. *Magyar Allatorvosok Lapja* 48(3): 157-161.
- FL** Samkov, Yu. A. and Efremov, Yu. M. 1976. protein nutrition of young coloured mink. *Krolikovodstvo i Zverovodstvo* (5): 15-17.
- Nutrition** Samy, M. S., El-Hawary, M., Radwan, M. H., and Abdou, S. B. effect of feeding different levels of dietary protein to chicks during the rearing period on the quality of the subsequently produced eggs. *Annals of Agricultural Science (Cairo)*. 31 (1). 1986. 453-476.
- FL** Sanna, L., Zedda, M., Acone, F., Palmieri, G. Sassari Univ. Italy Istituto di Anatomia Normale degli Animali Domestici, and Bo Minelli, L. Parma Univ. Italy Istituto di Anatomia Normale degli Animali Domestici. 1993. sensitive innervation of the femorotibial articulation in the horse.

<original> sulla innervazione sensitiva del comparto articolare femoro-tibiale nel cavallo. *Atti Della Societa Italiana Delle Scienze Veterinarie*. V. 47(Pt.1) P. 119-121

- Drug** Sanner, C., Elliott, J. L., and Snider, W. D. 1994. upregulation of nmdar1 mrna induced by mk-801 is associated with massive death of axotomized motor neurones in adult rats. *Neurobiology of Disease* 1(3): 121-9.
- Phys** Sano, H., Mera, Y., Arai, K., Suzuki, M., Sato, H., and Matsuda, K. 1991. localization of 14c-nizatidine in the gastric wall of rats. *Arzneimittel-Forschung* 41(9): 958-61 .
- HHE** Santesson, B., BOOK, J. A., and Kjessler, B. 1973. the mortality of human xo embryos. *Journal of Reproduction and Fertility* 34(1): 51-5.
- Phys** Sasa, M., Hara, M., and Takaori, S. 1991. dopamine d-1 receptor-mediated inhibition of nucleus accumbens neurons from the ventral tegmental area. *Progress in Neuro-Psychopharmacology & Biological Psychiatry* 15(1)
- No Oral** Sasaki, T., Ramamurthy, N. S., and Golub, L. M. 1994. bone cells and matrix bind chemically modified non-antimicrobial tetracycline. *Vol. 15, No. 3, Pp. 373-375 Bone*
- Prim** Sathian, K. and Devanandan, M. S. 1983. receptors of the metacarpophalangeal joints: a histological study in the bonnet monkey and man. *Journal of Anatomy* 137(Pt 3): 601-13.
- Imm** Sato, R. and Tanaka, M. 1997. intestinal distribution and intraluminal localization of orally administered clostridium butyricum in rats. *Microbiology and Immunology* 41(9): 665-71.
- FL** Savluk, O. S. effect of anodically dissolved silver on the reticuloendothelial system of experimental animals. *Vodopodgot. Ochistka Prom. Stokov (1973)*: 10, 72-7.
- FL** Savlyk, O. S. and Moroz, O. G. reaction of rats to long-term intake of silver with the drinking water. *Vodopodgotovka i Ochistka Prom. Stokov (1973)* (10): 99-108 From: Ref. Zh., Biol. Khim. 1974, Abstr. No. 15F2344.
- Drug** Savory John(A), Rao Jagannatha K S, Huang Yue, Letada Philip R, and Herman Mary M. 1999. age-related hippocampal changes in bcl-2:bax ratio, oxidative stress, redox-active iron and apoptosis associated with aluminum-induced neurodegeneration: increased susceptibility with aging. *Neurotoxicology (Little Rock)* 20(5): 805-818.
- Abstract** Sawatzki, G. and Wendel, A. 1975. inhibition of the seleno enzyme glutathione peroxidase by silver ions. *Chemica Scripta*. 8a. 115.
- Anat** Sawicki Boguslaw. 1993. c-cells of the thyroid and of ultimobranchial remnants of the european bison. *Annals of Anatomy* 175(4): 343-347.
- Prim** Scallet, A. C., Binienda, Z., Caputo, F. A., Hall, S., Paule, M. G., Rountree, R. L., Schmued, L., Sobotka, T., and Slikker, W. Jr. 1993. domoic acid-treated cynomolgus monkeys (m. fascicularis): effects of dose on hippocampal neuronal and terminal degeneration. *Brain Research* 627(2): 307-13.
- Phys** Scherini, E. and Mares, V. 1993. renewal of dna in purkinje cell nuclei of mouse cerebellum. a 9-month follow-up autoradiographic study. *Physiological Research* 42(3): 193-9.
- Unrel** Scheuhammer, A. M. and Dickson, K. M. 1996. patterns of environmental lead exposure in waterfowl in eastern canada. *AMBIO*. 25(1): 14-20.

- FL** Schilew, P. G. and Babmindra, W. P. 1968. [experimental morphological studies on interneuronal synapses]. <original> experimentelle norphologische untersuchungen an den interneuronalen synapsen. *Zeitschrift Fur Mikroskopisch-Anatomische Forschung* 79(1): 1-13.
- FL** Schlolaut, W. and Lange, K. 1972. a comparison of fattening and slaughter performance in hybrid andlight-coloured large silver rabbits. *Archiv Fur Geflugelkunde* 36(4): 134-137.
- Phys** Schmidt, R. E., Spencer, S. A., Coleman, B. D., and Roth, K. A. 1991. immunohistochemical localization of gap-43 in rat and human sympathetic nervous system--effects of aging and diabetes. *Brain Research* 552(2): 190-7.
- FL** Schmidt, W. 1967. [the argyrophilia of reticular fibers in vivo]. <original> die argyrophilie von retikulinfasern in vivo. *Zeitschrift Fur Anatomie Und Entwicklungsgeschichte* 126(2): 176-81.
- FL** Schobber, W. 1981. [efferent and afferent connections of the nucleus lateralis posterior thalami ("pulvinar") in the albino rats (author's transl)]. <original> efferente und afferente verbindungen des nucleus laterlia posterior thalami ("pulvinar") der ablinoratte. *Zeitschrift Fur Mikroskopisch-Anatomische Forschung* 95(5): 827-44 .
- FL** Schober, W. and Gruschka, H. subcortical projections of the striate cortex in the adult albino rat and during post natal development. *Zeitschrift Fuer Mikroskopisch-Anatomische Forschung (Leipzig)*. 97 (5). 1983 (Recd. 1984). 797-815.
- FL** Schober, W. and Gruschka, H. 1983. [subcortical projections of the visual cortex in the adult albino rat and during postnatal development]. <original> zur subkortikalen projektion des visuellen kortex bei der adulten albinoratte und wahrend der postnatalen entwicklung. *Zeitschrift Fur Mikroskopisch-Anatomische Forschung* 97(5): 797-815.
- In Vit** Schoenle, E. J., Adams, L. D., and Sammons, D. W. 1984. insulin-induced rapid decrease of a major protein in fat cell plasma membranes. *Journal of Biological Chemistry* 259(19): 12112-6.
- CP** Schroeder, G. L. microorganisms as the primary diet in fish farming. *Halver, J. E. and K. Tiews (Ed.). Finfish Nutrition and Fishfeed Technology, Vol. 1. Proceedings of a World Symposium, Hamburg, West Germany, June 20-23, 1978. X+593p. Heenemann Verlagsgesellschaft: Berlin, West Germany. Illus. Paper. ISBN 3-87903-052-9. 0 (0). 1979 (Recd. 1980). P379-386.*
- Aquatic** Schroeder, G. L. sources of fish and prawn growth in poly culture ponds as indicated by stable carbon isotope analysis. *Aquaculture*. 35 (1). 1983. 29-42.
- FL** Schultka, R., Schmidt, R., and Drosner, H. P. 1971. [histochemical localization of heavy metal in the kidneys of white rats during embryonal and postnatal development]. <original> histochemischer schwermetallnachweis in den nieren weisser ratten wahrend der embryonalen und postnatalen entwicklung. *Acta Histochemica* 40(1): 123-30.
- Chem Meth** Schultze, A. E. and Jensen, R. K. 1989. sodium dodecyl sulfate polyacrylamide gel electrophoresis of canineurinary proteins for the analysis and differentiation of tubular andglomerular diseases. *Veterinary Clinical Pathology* 18(4): 93-97.
- Alt** Schulze, E. and Neuhoff, V. 1983. artificial release of super(3)h-taurine after electrical stimulation of retinae. *Vol. 21, No. 1-2, Pp. 15-24 Int. J. Neurosci.*
- Prim** Schwartz, M. L., Dekker, J. J., and Goldman-Rakic, P. S. 1991. dual mode of corticothalamic synaptic termination in the mediodorsal nucleus of the rhesus monkey. *Journal of Comparative Neurology* 309(3): 289-304.

- Chem Meth** Schweisthal, M. R., Frost, C. C., and Brinn, J. E. 1975. stains for a, b, and d cells in fetal rat islets. *Stain Technology* 50(3): 161-70.
- No Dose** Sciesinski, K. and Kaleta, T. 1986. the effect of suacron on silver fox matings. *Scientifur*. V. 10(1) P. 42-43
- FL** Sciesinski, K. and Pieta, B. 1995. the use of receptal (busereline) in the course of reproduction in female silver foxes, 2. *Scientifur*. V. 19(3) P. 201-205
- FL** Seeland, G., Rossler, B., and Roder, B. 1996. analysis of growth in rabbits of different breeds with selected growthfunctions. *Archiv Fur Tierzucht* 39(5): 533-544.
- CP** Sefton, A. J., Lund, R. D., and Perry, V. H. co-transplantation of appropriate target regions prolongs the survival and stimulates the outgrowth of ganglion cells in retinae transplanted to cortex. *Seventh Meeting of the Australian Neuroscience Society, Newcastle, North South Wales, Australia, February 3-5, 1987. Neurosci Lett Suppl.* 0 (27). 1987. S122.
- In Vit** Seil, F. J. 1972. neuronal groups and fiber patterns in cerebellar tissue cultures. *Brain Research* 42(1): 33-51.
- Gene** Selkirk, J. K., Hite, M. C., Godfrey, V., Merrick, B. A., He, C., Griesemer, R. A., Daluge, D. R., and Mansfield, B. K. 1992. two-dimensional polyacrylamide gel electrophoretic characterization of proteins from organs of c3h mice expressing the scurfy (sf) genetic mutation during early and late stages of disease progression. *Applied and Theoretical Electrophoresis* 3(2): 97-107.
- Prim** Seltzer, B. and Pandya, D. N. 1980. converging visual and somatic sensory cortical input to the intraparietal sulcus of the rhesus monkey. *Brain Research* 192(2): 339-51.
- FL** Seo, K. D., Kwon, K. Yonam Junior Coll. of Livestock and Horticulture Sungwhan Korea R. Dept. of Animal Science, Han, K. Y. Ansung Junior Coll. Ansung Korea R., and Kim, S. K. Taejon Junior Coll. Taejon Korea R. 1989. a survey on the reproductive statistics of silver fox raised in korea. *Korean Journal of Animal Sciences*. V. 31(5) P. 281-283
- HHE** Sergi, I., Papandreou, M. J., Medri, G., Canonne, C., Verrier, B., and Ronin, C. 1991. immunoreactive and bioactive isoforms of human thyrotropin. *Endocrinology* 128(6): 3259-68.
- Prim** Sesack, S. R., Snyder, C. L., and Lewis, D. A. 1995. axon terminals immunolabeled for dopamine or tyrosine hydroxylase synapse on gaba-immunoreactive dendrites in rat and monkey cortex. *Journal of Comparative Neurology* 363(2): 264-80.
- FL** Sharma, R. and Schumacher, U. 1996. the diet and gut microflora influence the distribution of enteroendocrine cells in the rat intestine. *Experientia* 52(7): 664-70.
- No COC** Sharp FrankR, M. D. National Technical Information Service (NTIS). drug induced neurotoxicity. *FEDRIP DATABASE*
- FL** Shavlovskii, M. M., Chebotar', N. A., Konopistseva, L. A., Zakharova, E. T., Kachurin, A. M., Vasil'ev, V. B., and Gaitskhoki, V. S. 1994. [influence of ceruloplasmin on the embryotoxic effect of silver ions]. <original> vliianie tseruloplazmina na embriotoksicheskii effekt ionov serebra. *Biokhimiia* 59(8): 1164-74.
- FL** Shavlovsky, M. M., Chebotar, N. A., Konopistseva, E. A., Zakharova, E. T., Kachurin, A. M., Vasilyev, V. B., and Gaitskhoki, V. S. effect of ceruloplasmin on silver embryotoxicity. *Biokhimiya (Moscow) (1994)* 59(8): 1164-73 .

- In Vit** Sherif, M. F., al-Zuhair, A. G., and Kharbat, B. A. 1991. identification of sensory neurons supplying receptors in lingual muscles of the rat: histochemical and retrograde labeling study with horseradish peroxidase. *Histology and Histopathology* 6(4): 549-58.
- Prim** Shi, L., Liu, R., and Chen, Y. observation on silver-stained synaptonemal complex in rhesus monkey spermatocytes by light microscopy. *Acta Genetica Sinica*. 11 (4). 1984 (Recd. 1985). 302-305.
- Method** Shibata, Noriharu. light microscopic histochemical methods for the detection of acidic glycoconjugates by means of a physical development procedure and their application to rat connective tissues. *Connect. Tissue (1995)* 26(4): 307-16..
- No Oral** Shinogi, Masaki and Maeizumi, Satoko. effect of preinduction of metallothionein on tissue distribution of silver and hepatic lipid peroxidation. *Biol. Pharm. Bull. (1993)* 16(4): 372-4 .
- FL** Shiota, T., Yamada, M., and Yoshida, Y. 1986. morphology, development and behavior of pneumocystis carinii observed by light-microscopy in nude mice. *Zentralblatt Fur Bakteriologie, Mikrobiologie, Und Hygiene. Series A*,
- No Oral** Shipley, L. A., Blomquist, S., and Danell, K. 1998. diet choices made by free-ranging moose in northern sweden in relation to plant distribution, chemistry, and morphology. *Canadian Journal of Zoology* 76(9): 1722-1733.
- No COC** Shirasawa, N., Hirano, M., and Ishikawa, H. immunocytochemistry of mammoth and somatotroph in fetal and adult bovine pituitary by three different methods. *Jikeikai Medical Journal*. 37 (4). 1990. 433-446.
- FL** Shmuter, G. M., Izotova, P. V., Maslenko, A. A., Furman, A. A., and Sobolevskaya, T. T. hygienic evaluation of the electrochemical method of water decontamination with silver. *Gigiena i Sanitariya*. 0 (12). 1986 (Recd. 1987). 10-12.
- In Vit** Sholley, M. M., Ferguson, G. P., Seibel, H. R., Montour, J. L., and Wilson, J. D. 1984. mechanisms of neovascularization. vascular sprouting can occur without proliferation of endothelial cells. *Laboratory Investigation* 51(6): 624-34.
- Drug** Shteffens, V., Lider, I., Virt, M., and Mit, G. 1992. importance of the silver carp as a component of a diet in the prevention and treatment of cardiovascular diseases. *Voprosy Ikhtiologii* 32(1): 180-182.
- FL** Shvarts, G. I. a., Liberman, S. S., Mashkovskii, M. D., and Berliand, E. A. 1975. [experimental study of the anti-inflammatory action of pyridinolcarbamate]. <original> eksperimental'noe izuchenie protivovospalitel'nogo deistviia piridinolkarbamata. *Farmakologiya i Toksikologiya* 38(4): 434-6.
- FL** Shvarts, G. Ya., Liberman, S. S., Mashkovskii, M. D., and Berlyand, E. A. antiinflammatory action of pyridinol carbamate. *Farmakol. Toksikol. (Moscow)* (1975) 38(4): 434-6.
- CP** Silver Daniel P(A), Spanopoulou Eugenia, Mulligan Richard C(A), and Baltimore David. 1993. dispensable sequence motifs in the rag-1 and rag-2 genes for plasmid v(d)j recombination. *Proceedings of the National Academy of Sciences of the United States of America* 90(13): 6100-6104.

- FL** Simkova, M. and Vrabec, J. 1970. [experimental corneal trepanation with subsequent freezing. ii. study of silver impregnations]. <original> experimentalni rtrepance rohovsky s naslednym zmrazenim. ii. studie impregnaci sribrem. *Sbornik Lekarsky* 72(8): 224-30.
- Anat** Singh, G. D. and Moxham, B. J. 1993. cellular activity in the developing palate of the rat assessed by the staining of nucleolar organiser regions. *Journal of Anatomy* 182(Pt 2): 163-8.
- HHE** Singh, J. P. and Bonin, P. D. 1988. purification and biochemical properties of a human monocyte-derived growth factor. *Proceedings of the National Academy of Sciences of the United States of*
- FL** Sirotnina, M. F. morphological and functional changes in the micro vascular bed under development of adrenal hypertension. *Fiziologicheskii Zhurnal (Kiev)*. 25 (1). 1979. 68-75.
- FL** Sirotkina, L. N. and Tyutyunnik, N. N. 1998. endocrine thyroid gland, adrenal cortex and gonadal functions in furanimals in the postnatal period and reproductive season. *Scientifur* 22(4): 299-302.
- FL** Skrede, A. 1987. trials with concentrated fish silage for foxes and mink. *Va Ra Palsdjur* 58(5-6): 192, 194-196.
- FL** Skuba, N. D., Adamian, A. A., Dan, V. N., Trosteniuk, N. V., and Lopour, P. 1989. [morphological validation of the use of polyhydroxyethyl methacrylate-based x-ray contrast emboli for vascular occlusion]. <original> morfologicheskoe obosnovanie primeneniia rentgenokonstrastnykh embolov na osnove poligidroksietilmetakrilata dlia okkliuzii sosudov. *Biulleten' Eksperimental'noi Biologii i Meditsiny* 107(3): 379-82.
- Method** Slany Robert K(A) and Mueller Stefan O. 1995. trna-guanine transglycosylase from bovine liver: purification of the enzyme to homogeneity and biochemical characterization. *European Journal of Biochemistry* 230(1): 221-228.
- FL** Slesarenko, N. A. and Babichev, N. V. 1996. skin characteristics of fur bearers. *Krolikovodstvo i Zverovodstvo* (5): 14-15.
- Prim** Slikker, W. Jr, Ali, S. F., Scallet, A. C., Frith, C. H., Newport, G. D., and Bailey, J. R. neurochemical and neurohistological alterations in the rat and monkey produced by orally administered methylenedioxymethamphetamine mdma. *Toxicology and Applied Pharmacology*. 94 (3). 1988. 448-457.
- In Vit** Smetana, K. Jr(A) and Broulik, P. 1994. nuclear and nucleolar kinetics in multinucleate osteoclasts in the chick development and after the hormonal treatment. *Folia Biologica (Prague)* 40(4): 201-207.
- FL** Smielewska-Los, E. and Klimentowski, S. 1996. microbiological investigations into mortality of newborn foxes. *Medycyna Weterynaryjna* 52(6): 397-399.
- An Prod** Smielewska-Los Ewa&&Ast And Stanislaw Klimentowski. 1996. death rate of new-born foxes in the light of the bacteriological examinations. *Medycyna Weterynaryjna* 52(6): 397-399.
- Prim** Smith, A. W., Skilling, D. E., and Benirschke, K. 1985. calicivirus isolation from three species of primates: an incidental finding. *American Journal of Veterinary Research* 46(10): 2197-9.
- Anat** Smith, C. E., Dahan, S., Fazel, A., Lai, W., and Nanci, A. correlated biochemical and radioautographic studies of protein turnover in developing rat incisor enamel following pulse-chase

- labeling with l sulfur-35 and l methyl-tritiated methionine. *Anatomical Record*. 232 (1). 1992. 1-14.
- Anat** Smith, C. E. and Nanci, A. 1996. protein dynamics of amelogenesis. *Anatomical Record* 245(2): 186-207.
- Unrel** Smith, D. H., Soares, H. D., Pierce, J. S., Perlman, K. G., Saatman, K. E., Meaney, D. F., Dixon, C. E., and McIntosh, T. K. 1995. a model of parasagittal controlled cortical impact in the mouse: cognitive and histopathologic effects. *Journal of Neurotrauma* 12(2): 169-78.
- Rev** Smith, I. C. and Carson, B. L. 1977.(Book) : 469 pp.
- In Vit** Smith, R. A. and McInnes, I. B. 1986. phase contrast and electron microscopical observations of adult mouse dorsal root ganglion cells maintained in primary culture. *Journal of Anatomy* 145: 1-12.
- Prim** Smith, R. L. 1975. axonal projections and connections of the principal sensory trigeminal nucleus in the monkey. *Journal of Comparative Neurology* 163(3): 347-75.
- Alt** Smith, S. D. and Winter, W. G. 1980.Studies of Rat Limb Peripheral Nerve Regeneration. <NOTE> Annual Rept. 1 Apr 79-1 Jan 80. TR-1
- BioX** Smyth, J. M., Sheahan, B. J., and Atkins, G. J. 1990. multiplication of virulent and demyelinating semliki forest virus in the mouse central nervous system: consequences in balb/c and sjl mice. *Journal of General Virology* 71(Pt 11): 2575-83.
- Drug** Snelling, C. F., Roberts, F. J., Germann, E., Gillespie, K., Coderre, S., and Henry, D. 1988. comparison of standard and chlorhexidine-derivative topical antibacterial agents on the infected burned rat wound. *Burns, Including Thermal Injury* 14(2): 91-100.
- Phys** Snyder, D. C., Coltman, B. W., Muneoka, K., and Ide, C. F. 1991. mapping the early development of projections from the entorhinal cortex in the embryonic mouse using prenatal surgery techniques. *Journal of Neurobiology* 22(9): 897-906.
- FL** Sobolev, A. D. 1988. [for feed purposes [experiments into the use of feed meal produced from hide industry wastes in the diet of silver foxes on the state farm "saltykovsky", moscow region]]. <original> na kormovye tseli. *Krolikovodstvo i Zverovodstvo*. (No.6) P. 14-15
- Alt** Soh, B. M., Fox, L. E., and Moscona, A. A. changes in patterns and synthesis of proteins in embryonic neural retina studied by 2 dimensional gel electrophoresis. *Developmental Brain Research*. 3 (3). 1982. 329-340.
- FL** Soldatov, I. B., Peshtein, N. N., and Kvetnoi, I. M. endocrine cells of the internal ear in normal rabbits and rabbits with a specific labyrinthine lesion. *Vestnik Otorinolaringologii*. 0 (2). 1989. 20-24.
- FL** Soldatov, I. B., Reshtein, N. N., and Kvetnoi, I. M. 1989. [endocrine cells of the internal ear in the normal state and in specific labyrinthine lesion in rabbits]. <original> endokrinnye kletki vnutrennego ukha v norme i pri spetsificheskome porazhenii labirinta u krolika. *Vestnik Otorinolaringologii* (2): 20-4.
- Diss** Somsak Wanichachiwa, Pansiri Puchito, and Sombun Anantalaphochai (Chiang Mai Univ. (Thailand). Faculty of Science, Dept. of Biology. 1984. development of the tibia in japanese quail. <original> kan charoen khong kraduk tibia nai nok kratha phan yipun. 5 Leaves

- FL** Sonderup, M. 1986. it pays to provide shelter for silver foxes. *Va Ra Palsdjur* 57(11): 368-369.
- Phys** Soonpaa, M. H. and Field, L. J. 1997. assessment of cardiomyocyte dna synthesis in normal and injured adult mouse hearts. *American Journal of Physiology* 272(1 Pt 2): H220-6.
- Phys** Sorensen, M. B(A), Stoltenberg, M., Juhl, S., Danscher, G., and Ernst, E. 1997. ultrastructural localization of zinc ions in the rat prostate: an autometallographic study. *Prostate* 31(2): 125-130.
- Phys** Sotelo, C. 1990. axonal abnormalities in cerebellar purkinje cells of the 'hyperspiny purkinje cell' mutant mouse. *Journal of Neurocytology* 19(5): 737-55.
- HHE** Sotelo, C. and Guenet, J. L. 1988. pathologic changes in the cns of dystonia musculorum mutant mouse: an animal model for human spinocerebellar ataxia. *Neuroscience* 27(2): 403-24.
- In Vit** Spanakis, E., Lamina, P., and Bennett, D. C. 1992. effects of the developmental colour mutations silver and recessive spotting on proliferation of diploid and immortal mouse melanocytes in culture. *Development* 114(3): 675-80.
- Drug** Sparago, M., Wlos, J., Yuan, J., Hatzidimitriou, G., Tolliver, J., Dal Cason, T. A., Katz, J., and Ricaurte, G. 1996. neurotoxic and pharmacologic studies on enantiomers of the n-methylated analog of cathinone (methcathinone): a new drug of abuse. *Journal of Pharmacology and Experimental Therapeutics* 279(2): 1043-52.
- Phys** Sparks, R. L., Zschunke, M. A., Seibel-Ross, E. I., Tracy, R., Zalitis, J. G., Boman, B. M., Hoerl, B. J., and Scott, R. E. specific expression of proteins and phosphoproteins in 3t3 t mesenchymal stem cells at distinct growth arrest and differentiation states. *Cell and Tissue Kinetics*. 23 (2). 1990. 71-88.
- Anat** Spiga, S., Lallai, L., Mulargia, C., Loy, F., Orru, F., Siddi, A., Argiolas, M., and Serra, G. P. 1997. application of the cajal-de castro method to the laser scanning confocal microscope in studying the peripheral nervous system. *Italian Journal of Anatomy and Embryology* 102(3): 179-93.
- Phys** Sprick, U. 1991. transient and long-lasting beneficial behavioral effects of grafts in the damaged hippocampus of rat. *Behavioural Brain Research* 42(2): 187-99.
- Phys** Springer, J. E., Robbins, E., Meyer, S., Baldino, F. Jr, and Lewis, M. E. localization of nerve growth factor receptor messenger rna in the rat basal forebrain with in situ hybridization histochemistry. *Cellular and Molecular Neurobiology*. 10 (1). 1990. 33-40.
- FL** Springorum, H. W., Bertram, E., Kohnlein, H. E., and Winckler, S. 1975. [the local effect of a silver chelate on standardized scald wounds of the rat]. <original> die lokale wirkung eines silberchelates auf die standardisierte verbruhungswunde der ratte. *Arzneimittel-Forschung* 25(11): 1782-3.
- No Oral** Srivastava, R. C., Hasan, S. K., Jyotsana, and Gupta, Sanjay. protective role of metallothionein in nickel induced oxidative damage. *Biochem. Mol. Biol. Int.* (1993) 30(2): 261-70.
- No Oral** Srivastava, R. C., Husain, M. M., Srivastava, S. K., Hasan, S. K., and Lal, A. 1995. effect of pre-exposure to cadmium and silver on nickel induced toxic manifestations in mice : possible role of ceruloplasmin and metallothionein. *Bull. Environ. Contam. Toxicol.* (1995) 54(5): 751-9
- In Vit** St-Pierre Jacques-Andre, Dumont Yvan, Nouel Dominique, Herzog Herbert, Hamel Edith, and Quirion Remi(A). 1998. preferential expression of the neuropeptide y y1 over the y2 receptor

subtype in cultured hippocampal neurones and cloning of the rat γ 2 receptor. *British Journal of Pharmacology* 123(2): 183-194.

- Chem Meth** Steele, K. E., Rikihisa, Y., and Walton, A. M. 1986. ehrlichia of potomac horse fever identified with a silver stain. *Veterinary Pathology* 23(4): 531-533.
- FL** Steffens, W. 1996. fat in fish feed - necessary and beneficial. *Muhle + Mischfuttertechnik* 133(32): 509-514.
- Alt** Steward Oswald. 1992. signals that induce sprouting in the central nervous system: sprouting is delayed in a strain of mouse exhibiting delayed axonal degeneration. *Experimental Neurology* 118(3): 340-351.
- Diss** Stewart, P. S. 1973. a study of methods for the preservation and identification of lactose within the lactating mammary secretory cell of the rat. *Dissertation Abstracts International, B* 34(3): 939.
- CP** Stewart, W. L., Anderson, D. M., and Rouvinen, K. I. 1994. relationship between organ development and body size of ranched silver foxes birth 10 120 days of age. *Canadian Journal of Animal Science* 74(1): 165.
- No Oral** Stinnett, J. D., Alexander, J. W., Morris, M. J., Dreffer, R. L., Craycraft, T. K., Anderson, P. E., Ogle, C. K., and MacMillan, B. G. 1981. improved survival in severely burned animals using intravenous corynebacterium parvum vaccine post injury. *Surgery* 89(2): 237-42.
- Anat** Stocker Susanne, Guettinger Hans Rudolf(A), and Herth Guenther. 1994. exogenous testosterone differentially affects myelination and neurone soma sizes in the brain of canaries. *Neuroreport* 5(12): 1449-1452.
- No Oral** Stozowska, W., Yilinkou, R. Gami, and Kaliszan, R. urinary silver and sulfathiazole levels in thermally injured guinea pigs during treatment with silver sulfathiazole cream. *S.T.P. Pharma Sci. (1995)* 5(6): 452-5.
- Prim** Strom, D., Holm, S., and Moller, A. 1994. fatigue development during electrical stimulation in the masseter muscle of rhesus monkeys (macaca mulatta). *Archives of Oral Biology* 39(5): 417-23.
- Prim** Strom, D., Holm, S., and Moller, A. 1998. frequency-dependent fatigue development during electrical stimulation in the masseter muscle of pigtail monkeys. *Journal of Orofacial Pain* 12(4): 279-86.
- Phys** Styrna, J., Klag, J., and Moriwaki, K. 1991. influence of partial deletion of the y chromosome on mouse sperm phenotype. *Journal of Reproduction and Fertility* 92(1): 187-95.
- Phys** Suematsu, N. and Mizuno, T. analysis of epithelial protein profiles of prostatic glands induced heterotypically in the bladder epithelium of the rat. *Development Growth & Differentiation*. 33 (4). 1991. 379-390.
- Acu** Sugawara, N. and Sugawara, C. 1984. comparative-study of effect of acute administration of cadmium and silver on ceruloplasmin and metallothionein - involvement of disposition of copper, iron, and zinc. *Environmental Research* 35(2): 507-515.
- Bact** Summers, A. O., Wireman, J., Vimy, M. J., Lorscheider, F. L., Marshall, B., Levy, S. B., Bennett, S., and Billard, L. 1993. mercury released from dental "silver" fillings provokes an increase in mercury- and antibiotic-resistant bacteria in oral and intestinal floras of primates [see comments]. *Antimicrobial Agents and Chemotherapy* 37(4): 825-34.

- CP** Suvegova, K. and Mertin, D. 1997. health in the fur animals breeding. <original> zdravie v chove kozusinovych zvierat. topical and prospective tasks in rearing and breeding of farm animals. part 2. [proceedings from the international conference held on the occasion of the 50th anniversary of the research institute of animal production]. <original> aktualne a perspektivne ulohy v chove a slachteni hospodarskych zvierat. 2 cast. zbornik referatov z konferencie s medzinarodnou ucastou poriadanej pri prilezitosti 50. vyrocia zalozenia ustavu. (Pt.2) P. 256-258
- FL** Suvorova, L. V., Zavalishina, O. A., and Katinas, G. S. thyroxine and methyl thio uracil effect on development of intra mural ganglia in the chick embryo digestive tube *Arkhiv Anatomii Gistologii i Embriologii*. 82 (2). 1982. 24-31.
- In Vit** Suzuki, Keiji, Kawaharada, Umeko, Tamura, Yuji, and Nakajima, Katsuyuki. 1991. effects of metals on rat glioma cells (c6). *Biomed. Res. Trace Elem* 2(2): 111-12 .
- Mineral** Swainbank, R. C., Bundtzen, T. K., and Wood, J. 1990. *Alaska's Mineral Industry, 1990*. <NOTE> *Special Rept. SR-45*
- Abstract** Swanson, A. B., Wagner, P. A., Ganther, H. E., and Hoekstra, W. G. antagonistic effects of silver and tri-o cresyl phosphate on selenium and glutathione peroxidase in rat liver and erythrocytes. *FED PROC; 33 (3 PART 1)*. 1974 693
- Unrel** Switonski, M. and Stranzinger, G. 1998. studies of synaptonemal complexes in farm mammals-a review. *Journal of Heredity*. 89(6): 473-480.
- FL** Szito, A., Simonne Kiss, I. Ontozesi Kutatoint. Szarvas Hungary, Janurik, E., Liska, J, Gorda, S., and Szabo, P. Halteny. Kut. Int. Szarvas Hungary. 1996. experiments with rice field fish culture technologies. <original> kiserletek rizsfoldi halnevelési technologiák kidolgozasahoz. *Halaszat*. V. 89(1) P. 41-47
- No Oral** Taha, A. A. and King, A. S. 1983. autoradiographic observations on the innervation of the carotid body of the domestic fowl. *Brain Research* 266(2): 193-201.
- BioX** Tajima, Y., Kato, K., Maruyama, S., and Hosoi, K. 1996. in vivo modulation of proliferating cell nuclear antigen in growth plate chondrocytes from normal, hypophysectomized, growth hormone-treated hypophysectomized rats: a comparative immunohistochemical study with image analysis. *Journal of Histochemistry and Cytochemistry* 44(7): 713-20.
- HHE** Takahashi, J. A., Fukumoto, M., Igarashi, K., Oda, Y., Kikuchi, H., and Hatanaka, M. 1992. correlation of basic fibroblast growth factor expression levels with the degree of malignancy and vascularity in human gliomas. *Journal of Neurosurgery* 76(5): 792-8.
- Anat** Takehana, K., Abe, M., Yamaguchi, M., Iwasa, K., Hiraga, T., Masty, J., Miyata, H., and Yamada, O. 1994. ultracytochemistry of glycoconjugates in pig duodenal gland. *Annals of Anatomy* 176(6): 565-570.
- FL** Talakin Yu N, Chernykh, L. V., and Ivanova, L. A. toxicity of silver palladium resistive pastes r 075 rapan 2000 rm 07100 rm 07500 rm 071k rm 073k rm 076k rm 072k rm 0750k and conductor pastes p-0701 and p-0703. *Gigiena i Sanitariya*. 0 (4). 1991. 89.
- No Oral** Tamimi, Salah O., Zmeili, Suheil M., Gharaibeh, Munir N., Shubair, Mohammad S., and Salhab, Abdulazim S. toxicity of a new antismoking mouthwash 881010 in rats and rabbits. *J. Toxicol. Environ. Health Part A* (1998): 53(1), 47-60.

- Method** Tan, Yanxi, Ager, Patrick, and Marshall, William D. 1996. approaches to the determination of metallothionein(s) by high-performance liquid chromatography-quartz tube atomic absorption spectrometry. *J. Anal. At. Spectrom.* (1996) 11(12): 1183-1187 .
- Prim** Tanaka, D. and Goldman, P. S. 1976. silver degeneration and autoradiographic evidence for a projection from the principal sulcus to the septum in the rhesus monkey. *Brain Research* 103(3): 535-40.
- No COC** Tanaka, D. Jr and Bursian, S. J. 1989. degeneration patterns in the chicken central nervous system induced by ingestion of the organophosphorus delayed neurotoxin tri-ortho-tolyl phosphate. a silver impregnation study. *Brain Research* 484(1-2): 240-56.
- Unrel** Tanaka, D. Jr., Bursian, S. J., and Aulerich, R. J. 1994. age-related effects of triphenyl phosphite-induced delayed neuropathy on central visual pathways in the european ferret (*Mustela putorius furo*). *Fundamental And Applied Toxicology*. 22(4): 577-587.
- Phys** Tanaka, E., Habu, T., Letic-Gavrilovic, A., and Abe, K. 1990. protein secretion by rat submandibular glands in response to isoproterenol, alpha-methylnoradrenaline and clonidine during aging. *Mechanisms of Ageing and Development* 54(3): 221-33.
- Phys** Tanaka, M., Ichitani, Y., Okamura, H., Tanaka, Y., and Ibata, Y. 1993. the direct retinal projection to vip neuronal elements in the rat scn. *Brain Research Bulletin* 31(6): 637-40.
- BioX** Tanaka, S., Kaji, Y., Taniyama, H., Matsukawa, K., Ochiai, K., and Itakura, C. 1994. pneumocystis carinii pneumonia in a thoroughbred foal. *Journal of Veterinary Medical Science* 56(1): 135-137.
- Unrel** Tang Yu Ping, Kashon Michael L, and Sisk Cheryl L(A). 1997. brain region-specific regulation of luteinizing hormone-releasing hormone messenger ribonucleic acid in the male ferret: interactions between pubertal maturation and testosterone. *Endocrinology* 138(11): 4740-4747.
- Prim** Taub, E., Harger, M., Grier, H. C., and Hodos, W. some anatomical observations following chronic dorsal rhizotomy in monkeys. *Neuroscience*. 5 (2). 1980. 389-402.
- FL** Tavitov, M. D. and Uisinbaev, B. S. 1982. types of bokhara sur karakul lambs produced from different mating types in relation to nutrition of the dam. *Vestnik Sel'Skokhozyaistvennoi Nauki Kazakhstana* (10): 63-65.
- HHE** Taylor, G. N. and Mays, C. W. fetal injury induced by ca-dtpa in dogs. *HEALTH PHYSICS/ VO-35(6)/ PG- 858-860/ PY- Dec. 1978*
- HHE** Ten, S. A., Pak, T. S., and Gainulin, N. R. nervous connections of the heart and the superior vena cava in the rabbit and the human. *Arkhiv Anatomii Gistologii i Embriologii*. 94 (3). 1988. 36-39.
- CP** Tennessen, T. growth of silver fox pups to age 16 weeks. *Meeting of Eastern Branch of the Canadian Society of Animal Science, Truro, Nova Scotia, Canada, June 14-15, 1988. CAN J ANIM SCI*. 68 (4). 1988. 1327.
- CP** Tennessen, T. some effects of early handling on the behavior of ranched silver foxes. *Symposium on Energy Usage in Livestock Production Systems Held at the Canadian Society of Animal Science Annual Meeting, Calgary, Alberta, Canada, August 24, 1988. Can J Anim Sci*. 69 (1). 1989. 280.
- HHE** Terner, K. and Javor, T. 1983. the effect of pgf sub(2) alpha on human and rat oral mucosa. *Vol. 5, No. 3, Pp. 279-284 Int. J. Tissue React.*

- HHE** Terner, K. and Javor, T. 1983. the effect of pgf2 alpha on human and rat oral mucosa. *International Journal of Tissue Reactions* 5(3): 279-84.
- Drug** Teuchert-Noodt, G. and Dawirs, R. R. age-related toxicity in prefrontal cortex and caudate-putamen complex of gerbils meriones-unguiculatus after a single dose of methamphetamine. *Neuropharmacology*. 30 (7). 1991. 733-744.
- In Vit** Thampy, K. G., Sauls, C. D., Brinkley, B. R., and Barnes, E. M. Jr. neurons from chick embryo cerebrum ultrastructural and biochemical development in-vitro. *Developmental Brain Research*. 8 (1). 1983. 101-110.
- In Vit** Thiebaut, F., Rigaut, J. P., Feren, K., and Reith, A. 1984. smooth-surfaced control and transformed c3h/10t-1/2 cells differ in cytology: a study by secondary electron, backscattered electron and image analysis. *Scanning Electron Microscopy (Pt 3)*: 1249-55.
- In Vit** Thomas, B. R., Vekilov, P. G., and Rosenberger, F. 1996. heterogeneity determination and purification of commercial hen egg-white lysozyme. *Acta Crystallographica Section D Biological Crystallography* 52(4): 776-784.
- Phys** Thor, P. J., Sendur, R., and Laskiewicz, J. effect of stimulation of the vagus nerves and vagotomy on myoelectric activity of small bowel. *ACTA PHYSIOL POL. Acta Physiologica Polonica*. 40 (2). 1989 (1990). 255-261.
- Abstract** Thorlacius-ussing, O., Rungby, J., Moller-madsen, B., Schroder, H. D., and Danscher, G. 1985. ultrastructural localization of exogenous silver and mercury in the anterior pituitary of the rat. *Annual Meeting of the Scandinavian Neuropathological Society*
- Drug** Thornton, J. W., Hess, C. A., Cassingham, V., and Bartlett, R. H. 1982. epidermal growth factor in the healing of second degree burns: a controlled animal study. *Burns, Including Thermal Injury* 8(3): 156-60.
- Prim** Tiber, A. 1971. the pattern of incorporation of (3 h)-leucine by the enamel and dentine matrices of the rhesus monkey: an autoradiographic study. *Archives of Oral Biology* 16(10): 1231-6.
- Phys** Tien, L. F., McLaughlin, B. J., and Cooper, N. G. 1991. glycoproteins in the retinal pigment epithelium of normal and dystrophic rats. *Investigative Ophthalmology & Visual Science* 32(2): 319-26.
- Prim** Tigges, M., Hendrickson, A. E., and Tigges, J. 1984. anatomical consequences of long-term monocular eyelid closure on lateral geniculate nucleus and striate cortex in squirrel monkey. *Journal of Comparative Neurology* 227(1): 1-13.
- BioX** Tilley, M. and Upton, S. J. 1990. identification of sporozoite surface proteins and antigens of eimerianieschulzi (apicomplexa). *Journal of Protozoology* 37(2): 86-90.
- Phys** Tokuno, H., Nakamura, Y., Kudo, M., and Kitao, Y. 1990. laminar organization of the substantia nigra pars reticulata in the cat. *Neuroscience* 38(1): 255-70.
- Abstract** Tolbert, D. L., Marshall, C. A., Vogler, G. A., and Dunn, R. C. Jr. post natal development of cortico trigeminal projections in kittens. *95th Annual Meeting of the American Association of Anatomists, Indianapolis, Indiana, Usa, April 4-8, 1982. Anat Rec.* 202 (3). 1982. 191a-192a.

- FL** Tolivia, D. 1977. [silver impregnation of the nervous centers in paraffin sections]. <original> impregnacion argentica de los centros nerviosos en cortes por parafina. *Trabajos Del Instituto Cajal De Investigaciones Biologicas* 69(3-4)
- Method** Tomczok, J., Sliwa-Tomczok, W., and Grzybek, H. 1991. the small intestinal enterocytes of rats during lead poisoning: the application of the timm sulphide silver method and an ultrastructural study. *Experimental Pathology* 42(2): 107-13.
- Imm** Tomita, A., Radike, E. L., and Parker, C. J. 1993. isolation of erythrocyte membrane inhibitor of reactive lysis type ii. identification as glycophorin a. *Journal of Immunology* 151(6): 3308-23.
- FL** Toshkov, I. and Zafirova, M. histologic and immunocytochemical studies on the endocrine pancreas of the guinea fowl numida-meleagris. *Obshta i Sravnitelna Patologiya. 16 (0). 1984 (Recd. 1985). 8-14.*
- FL** Treilhou-Lahille, F. 1976. [uptake and storage of indolamines in the ultimobranchial body of the fetal murine thyroid. 1-autoradiographic histological study]. <original> captage et stockage d'indolamines dans le corps ultimobranchial et la thyroide de foetus de souris. i. etude histologique autoradiographique. *Comptes Rendus Des Seances De La Societe De Biologie Et De Ses Filiales*
- No Dose** Tribe, G. W., Whitbread, T. J., and Watson, G. L. 1989. fatal enteritis in rabbits associated with a spirochaete. *Veterinary Record* 124(22): 595.
- Method** Trigo, C. I., Tato, A., Ferrer, J. M., and Stockert Juan C(A). 1992. localization of metal cations in horse eosinophil leucocytes as revealed by the timm sulphide-silver method and energy dispersive x-ray microanalysis. *European Archives of Biology* 103(4): 231-237.
- No Oral** Trolliet, M. R., Kurnjek, M. L., Mikulic, L., Basso, N., and Taquini, A. C. 1990. development of renovascular hypertension after central serotonin depletion. *Hypertension* 15(2 Suppl): I166-9.
- HHE** Trott, D. J., Huxtable, C. R., and Hampson, D. J. 1996. experimental infection of newly weaned pigs with human and porcine strains of serpulina pilosicoli. *Infection and Immunity* 64(11): 4648-4654.
- FL** Trut, L. N. 1995. domestication of the fox: roots and effects. *Scientifur* 19(1): 11-17.
- No Dose** Trut, L. N., Naumenko, E. V., and Belyaev, D. K. change in the pituitary adrenal function of silver foxes during selection according to behavior. *Soviet Genetics (English Translation of Genetika).* 8 (5). 1972 (1974) 585-591
- FL** Tsarenko, R. and Shnur, A. 1975. the effect of spermosan-3 and silver ions on turkey spermatozoa. *Ptitsevodstvo* (7): 26-27.
- FL** Tsarenko, R. G. and Shnur, A. I. 1976. the improvement of media for the dilution and storage of turkey semen. *Sbornik Nauchnykh Trudov. Vsesoyuznyi Nauchno-Issledovatel'Skii Institut Razvedeniya i Genetiki Sel'Skokhozyaistvennykh Zhivotnykh* (23): 104-110.
- Phys** Tsuji, Hiroshi, Sato, Hiroko, Baba, Takahiro, Gotoh, Yasuhito, and Ishikawa, Junzo. a negative ion beam application to artificial formation of neuron network in culture. *Rev. Sci. Instrum.* (2000) 71(2, Pt. 2): 797-799 .
- Method** Tsukise, A., Fujimori, O., and Yamada, K. an efficient histochemical method for deoxyribonucleic acids using a silver enhancement procedure. *Histochem. J.* (1990) 22(8): 409-15.

- Method** Tsukise, A., Fujimori, O., and Yamada, K. an efficient histochemical method for dna using a silver enhancement procedure. *Histochemical Journal*. 22 (8). 1990. 409-415.
- Phys** Tsuyama Shinichiro, Yang Dong Hua, Kanae Takako, Kasamo Hiroshi, and Murata Fusayoshi. 1994. immunoelectron microscopic labelling of digestive tract stem cells by means of bromodeoxyuridine antibody. *Acta Histochemica Et Cytochemica* 27(4): 339-345.
- Chem Meth** Tunturi, A. R. 1973. a method for impregnating myelinated axons in adult central nervous system. *Stain Technology* 48(6): 297-304.
- Prim** Turner, B. H. and Zimmer, J. 1984. the architecture and some of the interconnections of the rat's amygdala and lateral periallocortex. *Journal of Comparative Neurology* 227(4): 540-57.
- Phys** Ueda, T., Hokimoto, M., Shibata, N., Fujimori, O., and Yamada, K. 1993. lectin-binding glycoconjugates in the tongues of the rat and guinea pig as revealed by lectin-gold-silver methods. *Okajimas Folia Anatomica Japonica* 70(1): 13-27.
- Method** Ueda, T., Kawamura, S., Hattori, O., and Fujimori, O. 1994. dual staining methods for carbohydrates using lectin-gold silver techniques. *Okajimas Folia Anatomica Japonica* 70(6): 301-11.
- Method** Ueda, T., Terada, S., Fujimori, O., and Yamada, K. 1993. a dual staining method for neutral carbohydrates and dna (deoxyribonucleic acid) using periodic acid-thiocarbohydrazide-silver protein-physical development (pa-tch-sp-pd) and feulgen (hot hcl-schiff) techniques. *Okajimas Folia Anatomica Japonica* 69(6): 315-9.
- Method** Ueda, Takashi, Fujimori, Osamu, and Yamada, Kazuyori. a new histochemical method for detection of sialic acids using a physical development procedure. *J. Histochem. Cytochem.* (1995) 43(10): 1045-51.
- Method** Ueda, Takashi, Fujimori, Osamu, and Yamada, Kazuyori. the use of periodic acid-thiocarbohydrazide-silver protein-physical development (pa-tch-sp-pd) procedure for the histochemical detection of neutral carbohydrates in the circumventricular organs of the rat. *Okajimas Folia Anat. Jpn.* (1994) 71(5): 325-33.
- Phys** Uemura, Y., Kowall, N. W., and Beal, M. F. 1990. selective sparing of nadph-diaphorase-somatostatin-neuropeptide y neurons in ischemic gerbil striatum. *Annals of Neurology* 27(6): 620-5.
- FL** Umurzakov, T. 1984. the use of wool growth rate in selection of grey karakul sheep. *Doklady Vsesoyuznoi Akademii Sel'Skokhozyaistvennykh Nauk* (4): 22-23.
- Prim** Usai, C., Ratto, G. M., and Bisti, S. 1991. two systems of branching axons in monkey's retina. *Journal of Comparative Neurology* 308(2): 149-61.
- Anat** Usenko, V. S., Kornilovskaya, I. N., Lizogubov, V. V., Apostolov, E. O., Gubkina, E. A., Ushakova, G. A., and Lepekhn, E. A. 1997. some morphological changes in the rat thyroid gland during experimental hyperphenylalaninemia. *Anatomical Record* 248(2): 251-8.
- Anat** Ushiki, T., Ohtani, O., and Abe, K. 1995. scanning electron microscopic studies of reticular framework in the rat mesenteric lymph node. *Anatomical Record* 241(1): 113-22.
- FL** Vagin Yu V. deviation from expected fur coloration segregation in color hetero zygos mink progeny. *Tsitologiya i Genetika*. 13 (3). 1979. 221-227.

- Bact** Valladares De La Cruz J C, Cervantes Olivares R, and Trigo Tavera F. pathogenesis of lung aspergillosis in rabbits diagnosed by immunoperoxidase technique. *Revista Latinoamericana De Microbiologia*. 32 (1). 1990. 11-15.
- CP** Valtonen, M. and Jalkanen, L. species-specific features of oestrous development and blastogenesis in domestic canine species. *Fertility And Infertility In Dogs, Cats And Other Carnivores : Proceedings Of The Second International Symposium On Canine And Feline Reproduction, Held At The University Of Liege, Liege, Belgium, August 1992 /* p. 133-137.
- FL** Valueva, T. K. 1987. [improvement of rabbit breeds: vienna blue and silver]. <original> sovershenstvovat' porody [krolikov] venskij goluboj i serebristyj. *Krolikovodstvo i Zverovodstvo*. (No.1) P. 14
- Anat** van den Berge, H. and van der Wal, J. C. 1990. the innervation of the middle ear muscles of the rat. *Journal of Anatomy* 170: 99-109.
- In Vit** Van Der Elst Josiane, Van Den Abbeel Etienne, Nerinckx Sigrid, and Van Steirteghem Andre. 1992. parthenogenetic activation pattern and microtubular organization of the mouse oocyte after exposure to 1,2-propanediol. *Cryobiology* 29(5): 549-562.
- Unrel** Van der Horst, G., Curry, P. T., Kitchin, R. M., Burgess, W., Thorne, E. T., Kwiatkowski, D., Parker, M., and Atherton, R. W. 1991. quantitative light and scanning electron microscopy of ferret sperm. *Molecular Reproduction and Development* 30(3): 232-40.
- Prim** Van Hoesen, G. and Pandya, D. N. 1975. some connections of the entorhinal (area 28) and perirhinal (area 35) cortices of the rhesus monkey. i. temporal lobe afferents. *Brain Research* 95(1): 1-24.
- Prim** Van Hoesen, G., Pandya, D. N., and Butters, N. 1975. some connections of the entorhinal (area 28) and perirhinal (area 35) cortices of the rhesus monkey. ii. frontal lobe afferents. *Brain Research* 95(1): 25-38.
- Prim** Van Hoesen, G. W. and Pandya, D. N. 1975. some connections of the entorhinal (area 28) and perirhinal (area 35) cortices of the rhesus monkey. iii. efferent connections. *Brain Research* 95(1): 39-59.
- Prim** Van Hoesen, G. W., Yeterian, E. H., and Lavizzo-Mourey, R. 1981. widespread corticostriate projections from temporal cortex of the rhesus monkey. *Journal of Comparative Neurology* 199(2): 205-19.
- HHE** Van Rooyen, R. J., Kouwenberg, J., and Bressers, J. 1974. the biological standardisation of human growth hormone (hgh stroud). *South African Medical Journal* 48(54): 2247-52.
- Mix** Van Vleet, J. F. 1982. amounts of 8 combined elements required to induce selenium vitamin e deficiency in ducklings and protection by supplements of selenium and vitamin e. *AM J VET RES*. 43(6): 1049-1055.
- Mix** Van Vleet, J. F. 1982. amounts of twelve elements required to induce selenium vitamin e deficiency in ducklings. *Am. J. Vet. Res.* 43(5): 851-857.
- Nut def** Van Vleet, J. F. and Ferrans, V. J. 1992. etiologic factors and pathologic alterations in selenium-vitamin e deficiency and excess in animals and humans. *Biological Trace Element Research* 33: 1-21.

- Mix** Van Vleet, John F. amounts of eight combined elements required to induce selenium-vitamin e deficiency in ducklings and protection by supplements of selenium and vitamin e. *Am. J. Vet. Res. (1982)* 43(6): 1049-55.
- Phys** Vandenbulcke, F., Pollard, H., Mitchell, V., and Beauvillain, J. C. 1993. radioimmunocytochemical distribution of neutral endopeptidase (enkephalinase e.c.3.4.24.11) at the ultrastructural level in the rat median eminence. *Journal of Neuroendocrinology* 5(2): 205-12.
- Plant** Vanha-Majamaa Ilkka(A), Tuittila Eeva-Stiina, Tonteri Tiina, and Suominen Raili. 1996. seedling establishment after prescribed burning of a clear-cut and a partially cut mesic boreal forest in southern finland. *Silva Fennica* 30(1): 31-45.
- Anat** Vanicky, I., Marsala, M., Orendacova, J., and Marsala, J. 1992. silver impregnability of ischemia-sensitive neocortical neurons after 15 minutes of cardiac arrest in the dog. *Anatomy and Embryology* 186(2): 167-73.
- Method** Varnell, R. J., Maitchouk, D. Y., Beuerman, R. W., Salvatore, M. F., Carlton, J. E., and Haag, A. M. 1997. analysis of rabbit tear fluid using capillary electrophoresis with uv or laser-induced fluorescence detection. *Journal of Capillary Electrophoresis* 4(1): 1-6.
- FL** Vasil'eva, L. L. and Chepkasov, I. L. 1991. phenogenetic analysis of domesticated behaviour of silver foxes: 2. comparative analysis of inheritance and variability of three domesticated behavioural phenotypes. *Sibirskii Biologicheskii Zhurnal* 0(6): 24-27.
- Method** Vasil'eva, L. L. and Trut, L. N. the use of the method of principal components for phenogenetic analysis of the integral domestication trait. *Genetika.* 26 (3). 1990. 516-524.
- FL** Vasilyeva, L. L. 1995. changes in behavioural traits of the silver fox (*vulpes vulpes*) under domestication and specific genotype-environment interactions. *Scientifur.* V. 19(2) P. 87-94
- FL** Vasilyeva L L. 1991. phenogenetic analysis of domesticated behaviour of silver foxes 1. correlations and genotype-environment interaction of three domesticated behavioural phenotypes. *SIBIRSKII BIOLOGICHESKII ZHURNAL* 1991. 128(5): 22-27, illustr.
- FL** Vassalli, G. and Russi, E. 1991. [cat-scratch disease]. <original> katzenkratzkrankheit. *Schweizerische Rundschau Fur Medizin Praxis* 80(47): 1324-6.
- In Vit** Vaughn, J. E., Barber, R. P., and Sims, T. J. 1988. dendritic development and preferential growth into synaptogenic fields: a quantitative study of golgi-impregnated spinal motor neurons. *Synapse* 2(1): 69-78.
- Prim** Veazey, R. B., Amaral, D. G., and Cowan, W. M. 1982. the morphology and connections of the posterior hypothalamus in the cynomolgus monkey (*macaca fascicularis*). i. cytoarchitectonic organization. *Journal of Comparative Neurology* 207(2): 114-34 .
- Phys** Venkatesh, N., Lynch, J. J., Uprichard, A. C., Kitzen, J. M., Singh, B. N., and Lucchesi, B. R. 1991. hypothyroidism renders protection against lethal ventricular arrhythmias in a conscious canine model of sudden death. *Journal of Cardiovascular Pharmacology* 18(5): 703-10.
- In Vit** Vertel Barbara M(A), Walters Linda M, Flay Nina, Kearns Ann E, and Schwartz Nancy B. 1993. xylosylation is an endoplasmic reticulum to golgi event. *Journal of Biological Chemistry* 268(15): 11105-11112.

- FL** Vetesi, F. 1982. occurrence of tyzzer's disease on hungarian rabbit farms. *Magyar Allatorvosok Lapja* 37(8): 519-524.
- Chem Meth** Vice, P. 1968. collagenase digestion for distinguishing neural from reticular fibres in silver stains. *Stain Technology* 43(4): 183-6.
- Plant** Victoria Ana Ines(A), Pons Patricia, Harte Cornelia, and Noher De Halac= Ines. 1999. immunolabelling of alpha and beta tubulin in pollen of oenothera hhookeri. velans. *Biocell* 23(1): 37-42.
- Phys** Viebahn, C., Miething, A., and Wartenberg, H. 1998. primordial germ cells of the rabbit are specifically recognized by a monoclonal antibody labelling the perimitochondrial cytoplasm. *Histochemistry and Cell Biology* 109(1): 49-58.
- In Vit** Vielvoye, G. J. and Voogd, J. 1977. time dependence of terminal degeneration in spino-cerebellar mossy fiber rosettes in the chicken and the application of terminal degeneration in successive degeneration experiments. *Journal of Comparative Neurology* 175(2): 233-42.
- Anat** Viglietti-Panzica, C. and Besse, M. C. 1984. the organum vasculosum laminae terminalis of the domestic fowl: a golgi and ultrastructural study. *Anatomischer Anzeiger* 155(1-5): 341-53.
- Method** Vocanson, C., Honnorat, J., Aguera, M., Antoine, J. C., Caudie, C., and Belin, M. F. 1994. high resolution two-dimensional polyacrylamide gel electrophoresis using immobilines. application to the study of brain proteins. *Cellular and Molecular Biology* 40(1): 9-16.
- Method** Volonte Cinzia(A) and Greene Lloyd A. 1992. nerve growth factor-activated protein kinase n: characterization and rapid near homogeneity purification by nucleotide affinity exchange chromatography. *Journal of Biological Chemistry* 267(30): 21663-21670 .
- FL** Votyakov, A. V. and Krasovskii, G. N. activity of .beta.-galactosidase in seminal fluid and gonad tissue as a biochemical criterion of gonadotoxic effects of chemical substances. *Gig. Sanit. (1989)* (3): 62-3.
- FL** Vrablic, J. contribution to the understanding of macro gamogony and oogony of toxoplasma-gondii. *BIOLOGIA (Bratislava)*. 32 (11). 1977 841-850.
- FL** Vshivtseva, V. V. and Lesova, L. D. innervational features of the rat fasciae and their microvessel bed. *Arkhiv Anatomii Gistologii i Embriologii*. 88 (5). 1985. 16-22.
- Drug** Waeber, B., Evequoz, D., Aubert, J. F., Fluckiger, J. P., Juillerat, L., Nussberger, J., and Brunner, H. R. 1990. prevention of renal hypertension in the rat by neuropeptide y. *Journal of Hypertension* 8(1): 21-5.
- FL** Wagner K-U, Schueler L(A), Saar, W., and Apitz, M. 1996. comparison of activity of chromosomal nucleolus organizer regions in embryonic tissues and fibroblast cultures of japanese quail. *Archiv Fuer Gefluegelkunde* 60(2): 58-64.
- Diss** Wagner, Patricia Anthony. 1975. studies on the interaction of selenium with silver and methylmercury in the rat. Avail.: Xerox Univ. Microfilms. Ann Arbor, Mich., Order No. 75-28,033 From: *Diss. Abstr. Int. B* 1976, 36. 9. 4394. 229 pp.
- Phys** Wahnschaffe, U., Fredow, G., Heintz, P., and Loscher, W. 1990. neuropathological studies in a mutant hamster model of paroxysmal dystonia. *Movement Disorders* 5(4): 286-93 .

- CP** Wakeling, E. L(A), Abu-Amero, S. N(A), Stanier P(A), Preece, M. A., and Moore, G. E. A. 1997. imprinted genes on chromosome 7: their role in silver-russell syndrome. *American Journal of Human Genetics* 61(4 SUPPL.): A322.
- Nutrition** Waldie, G. A., Olomu, J. M., Cheng, K. M., and Sim, J. 1991. effect of two feeding systems, two protein levels, and different dietary energy sources and levels on performance of squabbing pigeons. *Poultry Science* 70(5): 1206-1212.
- No Org** Walkenhorst William F(A), Krezel Andrzej M, Rhyu Gyung Ihm, and Markley John L. 1994. solution structure of reactive-site hydrolyzed turkey ovomucoid third domain by nuclear magnetic resonance and distance geometry methods. *Journal of Molecular Biology* 242(3): 215-230.
- BioX** Warner, C. K., Whitfield, S. G., Fekadu, M., and Ho, H. 1997. procedures for reproducible detection of rabies virus antigen mrna and genome in situ in formalin-fixed tissues. *Journal of Virological Methods* 67(1): 5-12.
- FL** Watanabe, G. and Honma, K. 1982. analysis of abnormal oviduct function in a mutant japanese quail line(recessive silver) by immunoelectrophoresis and enzyme histochemistry. *Japanese Poultry Science* 19(3): 157-164.
- FL** Watanabe, G. NKKGA and Honma, K. <translated> concurrent analysis for the abnormal oviducal function in a mutant line of the japanese quail (recessive silver) with immunoelectrophoresis and enzyme histochemistry. *Japanese Poultry Science* May 1982. v. 19 (3) p. 157-164. ill.
- No Oral** Waterfall, A. H., Clarke, R. W., and Bennett, G. W. 1993. detection of thyrotrophin releasing hormone in rat brain in vivo using novel antibody microprobes: effects of amphetamine. *Neuroscience Letters* 151(1): 97-100.
- Prim** Weber, J. T. 1985. pretectal complex and accessory optic system of primates. *Brain, Behavior and Evolution* 26(2): 117-40.
- Prim** Weber, J. T., Young, R., and Hutchins, B. 1981. morphologic and autoradiographic evidence for a laminated pretectal olivary nucleus in the squirrel monkey. *Brain Research* 224(1): 153-9.
- Mineral** Weinreb, M., Shinar, D., and Rodan, G. A. 1990. different pattern of alkaline phosphatase, osteopontin, and osteocalcin expression in developing rat bone visualized by in situ hybridization. *Journal of Bone and Mineral Research* 5(8): 831-42.
- Prim** Weller, R. E., Dagle, G. E., Malaga, C. A., and Baer, J. F. 1990. hypercalcemia and disseminated histoplasmosis in an owl monkey. *Journal of Medical Primatology* 19(7): 675-80.
- FL** Wenzel, J. and Barlehner, E. 1969. [regeneration of the cortex cerebri of mus musculus. ii. morphological findings in regenerative processes after reimplantation of cortex segment]. <original> zur regeneration des cortex cerebri bei mus musculus. ii. morphologische befunde regenerativer vorgange nach replantation eines cortexabschnittes. *Zeitschrift Fur Mikroskopisch-Anatomische Forschung* 81(1): 32-70.
- FL** Wenzel, J., Barlehner, E., Wenzel, M., and Ilius, D. 1969. [regeneration of the cortex cerebri of mus musculus. i. morphological findings in regenerative processes after extirpation of a cortex segment]. <original> zur regeneration des cortex cerebri bei mus musculus. i. morphologische befunde regenerativer vorgange nach exstirpation eines cortexabschnittes. *Zeitschrift Fur Mikroskopisch-Anatomische Forschung* 81(1): 1-31.

- Phys** Westrum, L. E. and Henry, M. A. 1991. contralateral degeneration in the cat spinal trigeminal nucleus following unilateral retrogasserian trigeminal rhizotomy. *Neuroscience Letters* 121(1-2): 143-6.
- FL** Weyrauch, K. D. and Schnorr, B. 1978. [the fine structure of the epithelium of the main outlets from the liver and pancreas of the domestic chicken (author's transl)]. <original> die feinstruktur des epithels der hauptausführungsgänge der leber und des pankreas vom haushuhn. *Anatomischer Anzeiger* 143(1): 37-49.
- Rev** Whanger, P. D. 1985. metabolic interactions of selenium with cadmium, mercury, and silver. *Advances In Nutritional Research* 7: 221-250.
- No Control** Whanger, P. D. and Deagen, J. T. 1962. rat liver metallothionein. interactions of silver, zinc, and cadmium. *Biol. Trace Elem. Res.* 4(2-3): 199-210 .
- Nut Def** Whanger, P. D., Weswig, P. H., Schmitz, J. A., and Oldfield, J. E. 1976. effects of selenium, cadmium, mercury, tellurium, arsenic, silver and cobalt on white muscle disease in lambs and effect of dietary forms of arsenic on its accumulation in tissues. *Nutr Rep Int.* 14(1): 63-72.
- In Vit** Whittemore, S. R., White, L. A., and Sanon, H. R. 1991. acidic and basic fibroblast growth factor levels in spinal cord cultures are not regulated by alterations in heparan sulfate proteoglycan expression. *International Journal of Developmental Neuroscience* 9(6): 521-35.
- Aquatic** Whittington, R. J(A), Kearns C(A), Hyatt, A. D., Hengstberger, S., and Rutzou, T. 1996. spread of epizootic haematopoietic necrosis virus (ehnv) in redfin perch (*perca fluviatilis*) in southern australia. *Australian Veterinary Journal* 73(3): 112-114.
- Abstract** Wiener, S. L., Shahoda, P., and Venton, D. 1984. inhibition of an inflammatory fluid and cell growth inhibitor and cytotoxic factor by zinc-ii or cadmium-ii or mixtures of metals. *24th Annual Meeting of the American Society for Cell Biology, Kansas City, Mo., Usa, Nov. 12-16, 1984. J Cell Biol.* 99 (4 Part 2):. 390a.
- Phys** Wilczynski, E. A., Yuan, B., and Leenen, F. H. 1992. dietary sodium restriction and the development of two-kidney, one-clip hypertension in young versus adult rats. *Canadian Journal of Physiology and Pharmacology* 70(4): 452-7.
- Drug** Wilson, M. E., Bollnow, M. R., and Handa, R. J. gonadotropin releasing hormone (gnrh) mrna and gonadotropin beta-subunit mrna expression in the adult female rat exposed to ethanol in utero. *Alcohol Clin Exp Res* 1995 Apr;19(2 Suppl):19A
- Plant** Wilson, S. Mcg(A), Malcolm, D. C(A), and Rook, D. A(A). 1999. locating natural populations of scottish native trees. *Scottish Forestry* 53(4): 215-224.
- FL** Wirth, M., Moritz, V., Heine, H., Wagenknecht, C., Mieth, G., Friedrich, M., Steffens, W., and Lieder, U. 1990. [the effect of silver carp oil on the blood pressure and lipids of spontaneously hypertensive rats]. <original> zur wirkung von silberkarpfenöl auf blutdruck und lipide von spontanhypertonen ratten. *Die Nahrung* 34(6): 575-8.
- Phys** Wirth, P. J., Fujimoto, Y., Takahashi, H., Mori, M., Yoshida, M. C., Sugimura, T., and Nagao, M. 1990. two-dimensional electrophoretic analysis of hepatitis-associated polypeptides in liver of lec rats developing spontaneous hepatitis. *Japanese Journal of Cancer Research* 81(5): 477-82.
- Anat** Wold, J. E. 1979. the vestibular nuclei in the domestic hen (*gallus domesticus*). vii.--afferents from the spinal cord. *Archives Italiennes De Biologie* 117(1): 30-44.

- Anat** Wold, J. E. and Hall, J. G. 1975. the distribution of primary afferents to the cochlear nuclei in the domestic hen (*Gallus domesticus*). *Anatomy and Embryology* 147(1): 75-89 .
- Prim** Wolfe, L. D. reproductive biology of rhesus macaca-mulatta and japanese macaques macaca-fuscata. *Primates*. 27 (1). 1986. 95-102.
- Prim** Wolfe, L. D., Kollias, G. V., Collins, B. R., and Hammond, J. A. 1991. sterilization and its behavioral effects on free-ranging female rhesus monkeys (*Macaca mulatta*). *Journal of Medical Primatology* 20(8): 414-8.
- Prim** Wolfe L D and Peters E H. 1987. history of the freeranging rhesus monkeys (*Macaca mulatta*) of silver springs. *Florida Scientist* 50. 125(4): 234-245, illustr.
- Method** Wong M(A), Wuethrich, P., Egli, P., and Hunziker, E. 1996. zone-specific cell biosynthetic activity in mature bovine articular cartilage: a new method using confocal microscopic stereology and quantitative autoradiography. *Journal of Orthopaedic Research* 14(3): 424-432.
- FL** Woohsmann, H. and Treptow, K. 1966. [histological and histochemical studies on the tissue ability to tolerate depth electrodes and their insulation in the central nervous system]. <original> histologische und histochemische untersuchungen uber die gewebevertraglichkeit von tiefelektroden und ihrer isolierung im zentralnervensystem. *Acta Biologica Et Medica Germanica* 17(2): 207-16.
- FL** Woossmann, H., Thybusch, D., Zeschke, G., and Treptow, K. 1969. [histological and histochemical studies of the tissue tolerance to deep electrodes and their isolation in the central nervous system. ii]. <original> histologische und histochemische untersuchungen uber die gewebevertraglichkeit von tiefelektroden und ihrer isolierung im zentralnervensystem. ii. *Acta Biologica Et Medica Germanica* 22(3): 577-88.
- Chem Meth** Wouterlood, F. G., Paniry, S., and Pattiselanno, A. 1987. stabilization of silver chromate golgi impregnation in rat central nervous system neurons using photographic developers. ii. electron microscopy. *Stain Technology* 62(1): 7-21.
- No Oral** Wu, H. Q. and Schwarcz, R. 1998. focal microinjection of gamma-acetylenic gaba into the rat entorhinal cortex: behavioral and electroencephalographic abnormalities and preferential neuron loss in layer iii. *Experimental Neurology* 153(2): 203-13.
- Anat** Wullimann, M. F. and Puelles, L. 1999. postembryonic neural proliferation in the zebrafish forebrain and its relationship to prosomeric domains. *Anatomy and Embryology* 199(4): 329-48.
- Phys** Xu, Q. and Grant, G. 1990. the projection of spinocerebellar neurons from the sacrococcygeal region of the spinal cord in the cat. an experimental study using anterograde transport of wga-hrp and degeneration. *Archives Italiennes De Biologie* 128(2-4): 209-28.
- Method** Yamada, A. T. 1993. timely and topologically defined protein synthesis in the peri-implanting mouse endometrium revealed by light and electron microscopic radioautography. *Cellular and Molecular Biology* 39(1): 1-12.
- Anat** Yamada, J., Yoshino, M., Yamashita, T., Misu, M., and Yanaihara, N. 1979. distribution and frequency of gastrin cells in the digestive tract of the japanese quail. *Archivum Histologicum Japonicum* 42(1): 33-9.

- No COC** Yamada, S., Kubota, R., Kubota, K., Ishiwata, K., and Ido, T. localization of fluorine-18 fluorodeoxyglucose in mouse brain neurons with micro-autoradiography. *Neuroscience Letters*. 120 (2). 1990. 191-193.
- QAC** Yamaguchi, K., Barbe, M. F., Brown, I. R., and Tytell, M. 1990. induction of stress (heat shock) protein 70 and its mrna in rat corneal epithelium by hyperthermia. *Current Eye Research* 9(9): 913-8.
- Nutrition** Yamashiro, S., Umemura, T., Bhatnagar, M. K., David, L., Sadiq, M., and Slinger, S. J. 1977. haemorrhagic liver syndrome of broiler chickens fed diets containing rapeseed products. *Research in Veterinary Science* 23(2): 179-84.
- Anat** Yamauchi, K. and Yasuda, M. 1985. cyto-, dendro- and fibro-architectonic studies on the chicken hypothalamus. *Journal Fur Hirnforschung* 26(5): 509-19.
- Aquatic** Yan, Y., Bi, R., Lin, Z., Tang, Y., and Fang, J. crystallographic studies of silver carp insulin. *Scientia Sinica Series B (Chemical Biological Agricultural Medical & Earth Sciences)*. 28 (3). 1985. 273-280.
- In Vit** Yano, M. and Tanishima, T. shrinkage of corneal endothelial cells during tissue processing. *Acta Societatis Ophthalmologicae Japonicae*. 89 (1). 1985. 235-238.
- Anat** Yazama Futoshi(A), Esaki Michiyo, and Sawada Hajime. 1997. immunocytochemistry of extracellular matrix components in the rat seminiferous tubule: electron microscopic localization with improved methodology. *Anatomical Record* 248(1): 51-62.
- Prim** Yeager, C. P(A), Silver, S. C., and Dierenfeld, E. S. 1997. mineral and phytochemical influences on foliage selection by the proboscis monkey (nasalis larvatus). *American Journal of Primatology* 41(2): 117-128.
- HHE** Yokoya, S. and Friesen, H. G. 1986. human growth hormone (gh)-releasing factor stimulates and somatostatin inhibits the release of rat gh variants. *Endocrinology* 119(5): 2097-105.
- HHE** Yokoya, S. and Friesen, H. G. human growth hormone releasing factor stimulates and somatostatin inhibits the release of rat growth hormone variants. *Endocrinology*. 119 (5). 1986. 2097-2105.
- Nut def** Yoshida, M. changes in serum thyroid hormone levels and urinary ketone body excretion caused by a low selenium diet or silver loading in rats. *J. Trace Elem. Electrolytes Health Dis. (1993)* 7(1): 25-8 .
- Nut def** Yoshida, Munehiro. 1992. variation of urinary ketone body excretion and serum thyroid hormone levels by feeding a low selenium diet and its modification by silver loading. *Biomed. Res. Trace Elem.* 3(2): 189-90.
- Nut def** Yoshida, Munehiro, Tashiro, Hiroyuki, Iwami, Kimikazu, Yasumoto, Kyoden, and Iwai, Kazuo. 1983. bioavailability of selenite, selenomethionine and selenocystine in rats with silver loading. *Agric. Biol. Chem.* 47(4): 807-13 .
- Acu** Yoshikawa, Hiroshi. preventive effect of pretreatment with low dose of metals on the acute toxicity of metals in mice. *Ind. Health (1970)* 8(4): 184-91.
- FL** Yoshikawa, Mikio. subacute toxicities of silver ammonium fluoride in rats. *Shika Igaku (1975)* 38(5): 459-75.

- Phys** Yoshiki, A., Sakakura, T., and Kusakabe, M. 1993. the mouse chimera during intrauterine stages: immunohistochemical analysis with the c3h strain-specific antibody. *Journal of Histochemistry and Cytochemistry* 41(10): 1583-90.
- No Oral** Yoshimura Noriaki(A), Kida Kazuyuki, Usutani Saburo, and Nishimura Masahiko. 1995. histochemical localization of copper in various organs of brindled mice after copper therapy. *Pathology International* 45(1): 10-18.
- Aquatic** Yu, J. Y. L. Academia Sinica Taipei Taiwan Inst. of Zoology, Shen, S. T., Liu, C. T., Weng, C. F., Peng, H. K., and Liu, F. G. 1995. comparative effects of avian and piscine gonadotrophins on gonadal steroidogenesis, and of avian and piscine pituitaries on induction of spermiation and ovulation in the loach and white silver carp. *Aquaculture*. V. 135(1-3) P. 59-72
- In Vit** Yu John Yuh-Lin(A), Shen San-Tai, Yang Wei-Hsiung, Papkoff Harold, and Ishii Susumu. 1996. comparative effects of diverse vertebrate gonadotropins on estradiol-17-beta formation in vitro in an immature rat sertoli cell bioassay. *General and Comparative Endocrinology* 104(2): 253-261.
- FL** Yurisoa, M. N. functional condition of the hypothalamo hypophyseal neuro secretory system in the silver fox vulpes-fulva at the beginning and the end of rut. *ZH EVOL BIOKHIM FIZIOL. Zhurnal Evolyutsionnoi Biokhimii i Fiziologii*. 19 (3). 1983. 256-261.
- FL** Yurisoa M N. 1983. functional condition of the hypothalamo-hypophysial neurosecretory system in the silver fox vulpes fulvus at the beginning and the end of rut. *Zhurnal Evolyutsionnoi Biokhimii I Fiziologii* 19. 120(3): 256-261, illustr.
- FL** Yurisoa M N, Kolesnikova L A, and Ivanova L N. 1987. morpho-functional properties of hypothalamic and pineal gland structures in relatively wild and domesticated silver foxes during oestrus. *Zhurnal Evolyutsionnoi Biokhimii I Fiziologii* 23. 123(3): 355-360, illustr.
- FL** Yurisoa, M. N., Kolesnikova, L. A., and Ivanova, L. N. morphofunctional properties of hypothalamic and pineal gland structures in relatively wild and domesticated silver foxes during estrus. *Zhurnal Evolyutsionnoi Biokhimii i Fiziologii*. 23 (3). 1987. 355-360.
- Phys** Zaccheo, D., De Michele, M., Mancini, M., and Amenta, F. 1991. decreased density of beta-adrenergic and muscarinic cholinergic receptor sites in the vasa nervorum of aged rats. *Mechanisms of Ageing and Development* 60(3): 255-65.
- HHE** Zang, X. and Nilaver, G. astrocytes of the human ovine rat and guinea-pig brain an immunocytochemical analysis with gfap antiserum. *Chinese Medical Journal (English Edition)*. 99 (9). 1986 (Recd. 1987). 708-712.
- FL** Zapadnyuk, V. I., Stepanenko, P. Z., Savluk, O. S., and Elmuratov, S. N. biological role of copper and silver and their effect on the passive defense reactions of white rats. *Vodopodgot. Ochistka Prom. Stokov (1973)* : 10, 91-9 .
- CP** ZDOLSEK, J. M., FREDRIKSSON, B. A., and BRUNK, U. T. 1990. visualization of heavy metals in cultured macrophages and hepatocytes a cytochemical light and electron microscopical study using the silver enhancement technique physical development. *42nd Annual Meeting of the Scandinavian Society for Electron Microscopy*
- FL** Zelnik, J. and Granat, J. 1973. growth and meat production in reciprocal crosses of californian white and french silver rabbits. *Zivocisna Vyroba* 18(5): 373-384.

- FL** Zelnik, J and Granat, J. rast a masova uzitkovost reciprocných krizencov kalifornskeho a francuzskeho strieborneho kralika; the growth and meat efficiency of the reciprocal crossbreds of thecalifornian and french silver rabbits. *Zivocisna Vyroba* May 1973 18 (5): 373-384. Ref. Eng. sum.
- FL** Zelnik, J., Granat, J., and Terlanday, L. heritability of growth and effect of inbreeding on live weight in rabbits. *Vedecke Prace Vyskumneho Ustavu Zivocisnej Vyroby v Nitre. (11). 1973 (Recd 1974) 147-154.*
- FL** Zelnik, J., Granat, J., and Terlanday, L. 1973. inheritance of growth and the effect of inbreeding on body weight of rabbits. *Vedecke Prace Vyskumneho Ustavu Zivocisnej Vyroby v Nitre (11): 147-154.*
- Bact** Zimmer, C., Daeschlein, G., Patt, S., and Weigel, K. 1991. strategy for diagnosis of toxoplasma gondii in stereotactic brain biopsies. *Stereotactic and Functional Neurosurgery* 56(1): 66-75.
- No Oral** Zipper, J., Medel, M., and Prager, R. 1969. suppression of fertility by intrauterine copper and zinc in rabbits. a new approach to intrauterine contraception. *American Journal of Obstetrics and Gynecology* 105(4): 529-34.
- CP** Zipper, J., Mendel, M., and Prager, R. 1970. experimental suppression of fertility by intrauterine copper and zinc in rabbits. *Proc. World Congr. Fert. Steril. 6th. Meeting Date 1968, 380-5* Publisher: Isr. Acad. Sci. Humanities, Jerusalem, Israel.
- FL** Zybina E V, Zybina T G, Zhelezova A I, Kiknadze I I, and Stein G I. 1989. trophoblast cells in the placenta of the silver fox: their peculiarities and polyploidization. *Tsitologiya* 31. 126(4): 492-495, illustr.
- CP** Zybina, T. and Zybina, E. 1994. ultrastructure and nor activity in the cambial trophoblast cells of the rat placenta. *Cell Biology International* 18(5): 412.
- CP** Zybina T(A), Zybina E(A), Kiknadze I(A), and Zhelezova A(A). 1999. growth and polyploidization of the trophoblast and uterine epithelium in silver fox placentation. *Placenta* 20(5-6): A74.

This Page Intentionally Left Blank

Literature Rejection Categories		
Rejection Criteria	Description	Receptor
ABSTRACT (Abstract)	Abstracts of journal publications or conference presentations.	Wildlife Plants and Soil Invertebrates
ACUTE STUDIES (Acu)	Single oral dose or exposure duration of three days or less.	Wildlife
AIR POLLUTION (Air P)	Studies describing the results for air pollution studies.	Wildlife Plants and Soil Invertebrates
ALTERED RECEPTOR (Alt)	Studies that describe the effects of the contaminant on surgically-altered or chemically-modified receptors (e.g., right nephrectomy, left renal artery ligation, hormone implant, etc.).	Wildlife
AQUATIC STUDIES (Aquatic)	Studies that investigate toxicity in aquatic organisms.	Wildlife Plants and Soil Invertebrates
ANATOMICAL STUDIES (Anat)	Studies of anatomy. Instance where the contaminant is used in physical studies (e.g., silver nitrate staining for histology).	Wildlife
BACTERIA (Bact)	Studies on bacteria or susceptibility to bacterial infection.	Wildlife Plants and Soil Invertebrates
BIOACCUMULATION SURVEY (Bio Acc)	Studies reporting the measurement of the concentration of the contaminant in tissues.	Wildlife Plants and Soil Invertebrates
BIOLOGICAL PRODUCT (BioP)	Studies of biological toxicants, including venoms, fungal toxins, <i>Bacillus thuringiensis</i> , other plant, animal, or microbial extracts or toxins.	Wildlife Plants and Soil Invertebrates
BIOMARKER (Biom)	Studies reporting results for a biomarker having no reported association with an adverse effect and an exposure dose (or concentration).	Wildlife
CARCINOGENICITY STUDIES (Carcin)	Studies that report data only for carcinogenic endpoints such as tumor induction. Papers that report systemic toxicity data are retained for coding of appropriate endpoints.	Wildlife Plants and Soil Invertebrates
CHEMICAL METHODS (Chem Meth)	Studies reporting methods for determination of contaminants, purification of chemicals, etc. Studies describing the preparation and analysis of the contaminant in the tissues of the receptor.	Wildlife Plants and Soil Invertebrates
CONFERENCE PROCEEDINGS (CP)	Studies reported in conference and symposium proceedings.	Wildlife Plants and Soil Invertebrates
DEAD (Dead)	Studies reporting results for dead organisms. Studies reporting field mortalities with necropsy data where it is not possible to establish the dose to the organism.	Wildlife Plants and Soil Invertebrates
DISSERTATIONS (Diss)	Dissertations are excluded. However, dissertations are flagged for possible future use.	Wildlife
DRUG (Drug)	Studies reporting results for testing of drug and therapeutic effects and side-effects. Therapeutic drugs include vitamins and minerals. Studies of some minerals may be included if there is potential for adverse effects.	Wildlife Plants and Soil Invertebrates
DUPLICATE DATA (Dup)	Studies reporting results that are duplicated in a separate publication. The publication with the earlier year is used.	Wildlife Plants and Soil Invertebrates

Literature Rejection Categories		
Rejection Criteria	Description	Receptor
ECOLOGICAL INTERACTIONS (Ecol)	Studies of ecological processes that do not investigate effects of contaminant exposure (e.g., studies of “silver” fox natural history; studies on ferrets identified in iron search).	Wildlife Plants and Soil Invertebrates
EFFLUENT (Effl)	Studies reporting effects of effluent, sewage, or polluted runoff.	Wildlife Plants and Soil Invertebrates
ECOLOGICALLY RELEVANT ENDPOINT (ERE)	Studies reporting a result for endpoints considered as ecologically relevant but is not used for deriving Eco-SSLs (e.g., behavior, mortality).	Plants and Soil Invertebrates
CONTAMINANT FATE/METABOLISM (Fate)	Studies reporting what happens to the contaminant, rather than what happens to the organism. Studies describing the intermediary metabolism of the contaminant (e.g., radioactive tracer studies) without description of adverse effects.	Wildlife Plants and Soil Invertebrates
FOREIGN LANGUAGE (FL)	Studies in languages other than English.	Wildlife Plants and Soil Invertebrates
FOOD STUDIES (Food)	Food science studies conducted to improve production of food for human consumption.	Wildlife
FUNGUS (Fungus)	Studies on fungus.	Wildlife Plants and Soil Invertebrates
GENE (Gene)	Studies of genotoxicity (chromosomal aberrations and mutagenicity).	Wildlife Plants and Soil Invertebrates
HUMAN HEALTH (HHE)	Studies with human subjects.	Wildlife Plants and Soil Invertebrates
IMMUNOLOGY (IMM)	Studies on the effects of contaminants on immunological endpoints.	Wildlife Plants and Soil Invertebrates
INVERTEBRATE (Invert)	Studies that investigate the effects of contaminants on terrestrial invertebrates are excluded.	Wildlife
IN VITRO (In Vit)	<i>In vitro</i> studies, including exposure of cell cultures, excised tissues and/or excised organs.	Wildlife Plants and Soil Invertebrates
LEAD SHOT (Lead shot)	Studies administering lead shot as the exposure form. These studies are labeled separately for possible later retrieval and review.	Wildlife
MEDIA (Media)	Authors must report that the study was conducted using natural or artificial soil. Studies conducted in pore water or any other aqueous phase (e.g., hydroponic solution), filter paper, petri dishes, manure, organic or histosols (e.g., peat muck, humus), are not considered suitable for use in defining soil screening levels.	Plants and Soil Invertebrates
METHODS (Meth)	Studies reporting methods or methods development without usable toxicity test results for specific endpoints.	Wildlife Plants and Soil Invertebrates
MINERAL REQUIREMENTS (Mineral)	Studies examining the minerals required for better production of animals for human consumption, unless there is potential for adverse effects.	Wildlife
MIXTURE (Mix)	Studies that report data for combinations of single toxicants (e.g. cadmium and copper) are excluded. Exposure in a field setting from contaminated natural soils or waste application to soil may be coded as Field Survey.	Wildlife Plants and Soil Invertebrates

Literature Rejection Categories		
Rejection Criteria	Description	Receptor
MODELING (Model)	Studies reporting the use of existing data for modeling, i.e., no new organism toxicity data are reported. Studies which extrapolate effects based on known relationships between parameters and adverse effects.	Wildlife Plants and Soil Invertebrates
NO CONTAMINANT OF CONCERN (No COC)	Studies that do not examine the toxicity of Eco-SSL contaminants of concern.	Wildlife Plants and Soil Invertebrates
NO CONTROL (No Control)	Studies which lack a control or which have a control that is classified as invalid for derivation of TRVs.	Wildlife Plants and Soil Invertebrates
NO DATA (No Data)	Studies for which results are stated in text but no data is provided. Also refers to studies with insufficient data where results are reported for only one organism per exposure concentration or dose (wildlife).	Wildlife Plants and Soil Invertebrates
NO DOSE or CONC (No Dose)	Studies with no usable dose or concentration reported, or an insufficient number of doses/concentrations are used based on Eco-SSL SOPs. These are usually identified after examination of full paper. This includes studies which examine effects after exposure to contaminant ceases. This also includes studies where offspring are exposed in utero and/or lactation by doses to parents and then after weaning to similar concentrations as their parents. Dose cannot be determined.	Wildlife Plants and Soil Invertebrates
NO DURATION (No Dur)	Studies with no exposure duration. These are usually identified after examination of full paper.	Wildlife Plants and Soil Invertebrates
NO EFFECT (No Efect)	Studies with no relevant effect evaluated in a biological test species or data not reported for effect discussed.	Wildlife Plants and Soil Invertebrates
NO ORAL (No Oral)	Studies using non-oral routes of contaminant administration including intraperitoneal injection, other injection, inhalation, and dermal exposures.	Wildlife
NO ORGANISM (No Org) or NO SPECIES	Studies that do not examine or test a viable organism (also see in vitro rejection category).	Wildlife Plants and Soil Invertebrates
NOT AVAILABLE (Not Avail)	Papers that could not be located. Citation from electronic searches may be incorrect or the source is not readily available.	Wildlife Plants and Soil Invertebrates
NOT PRIMARY (Not Prim)	Papers that are not the original compilation and/or publication of the experimental data.	Wildlife Plants and Soil Invertebrates
NO TOXICANT (No Tox)	No toxicant used. Publications often report responses to changes in water or soil chemistry variables, e.g., pH or temperature. Such publications are not included.	Wildlife Plants and Soil Invertebrates
NO TOX DATA (No Tox Data)	Studies where toxicant used but no results reported that had a negative impact (plants and soil invertebrates).	Plants and Soil Invertebrates
NUTRIENT (Nutrient)	Nutrition studies reporting no concentration related negative impact.	Plants and Soil Invertebrates
NUTRIENT DEFICIENCY (Nut def)	Studies of the effects of nutrient deficiencies. Nutritional deficient diet is identified by the author. If reviewer is uncertain then the administrator should be consulted. Effects associated with added nutrients are coded.	Wildlife
NUTRITION (Nut)	Studies examining the best or minimum level of a chemical in the diet for improvement of health or maintenance of animals in captivity.	Wildlife
OTHER AMBIENT CONDITIONS (OAC)	Studies which examine other ambient conditions: pH, salinity, DO, UV, radiation, etc.	Wildlife Plants and Soil Invertebrates

Literature Rejection Categories		
Rejection Criteria	Description	Receptor
OIL (Oil)	Studies which examine the effects of oil and petroleum products.	Wildlife Plants and Soil Invertebrates
OM, pH (OM, pH)	Organic matter content of the test soil must be reported by the authors, but may be presented in one of the following ways; total organic carbon (TOC), particulate organic carbon (POC), organic carbon (OC), coarse particulate organic matter (CPOM), particulate organic matter (POM), ash free dry weight of soil, ash free dry mass of soil, percent organic matter, percent peat, loss on ignition (LOI), organic matter content (OMC). With the exception of studies on non-ionizing substances, the study must report the pH of the soil, and the soil pH should be within the range of \$4 and #8.5. Studies that do not report pH or report pH outside this range are rejected.	Plants and Soil Invertebrates
ORGANIC METAL (Org Met)	Studies which examine the effects of organic metals. This includes tetraethyl lead, triethyl lead, chromium picolinate, phenylarsonic acid, roxarsone, 3-nitro-4-phenylarsonic acid, zinc phosphide, monomethylarsonic acid (MMA), dimethylarsinic acid (DMA), trimethylarsine oxide (TMAO), or arsenobetaine (AsBe) and other organo metallic fungicides. Metal acetates and methionines are not rejected and are evaluated.	Wildlife
LEAD BEHAVIOR OR HIGH DOSE MODELS (Pb Behav)	There are a high number of studies in the literature that expose rats or mice to high concentrations of lead in drinking water (0.1, 1 to 2% solutions) and then observe behavior in offspring, and/or pathology changes in the brain of the exposed dam and/or the progeny. Only a representative subset of these studies were coded. Behavior studies examining complex behavior (learned tasks) were also not coded.	Wildlife
PHYSIOLOGY STUDIES (Phys)	Physiology studies where adverse effects are not associated with exposure to contaminants of concern.	Wildlife
PLANT (Plant)	Studies of terrestrial plants are excluded.	Wildlife
PRIMATE (Prim)	Primate studies are excluded.	Wildlife
PUBL AS (Publ as)	The author states that the information in this report has been published in another source. Data are recorded from only one source. The secondary citation is noted as Publ As.	Wildlife Plants and Soil Invertebrates
QSAR (QSAR)	Derivation of Quantitative Structure-Activity Relationships (QSAR) is a form of modeling. QSAR publications are rejected if raw toxicity data are not reported or if the toxicity data are published elsewhere as original data.	Wildlife Plants and Soil Invertebrates
REGULATIONS (Reg)	Regulations and related publications that are not a primary source of data.	Wildlife Plants and Soil Invertebrates
REVIEW (Rev)	Studies in which the data reported in the article are not primary data from research conducted by the author. The publication is a compilation of data published elsewhere. These publications are reviewed manually to identify other relevant literature.	Wildlife Plants and Soil Invertebrates

Literature Rejection Categories		
Rejection Criteria	Description	Receptor
SEDIMENT CONC (Sed)	Studies in which the only exposure concentration/dose reported is for the level of a toxicant in sediment.	Wildlife Plants and Soil Invertebrates
SCORE (Score)	Papers in which all studies had data evaluation scores at or lower than the acceptable cut-off (#10 of 18) for plants and soil invertebrates).	Plants and Soil Invertebrates
SEDIMENT CONC (Sed)	Studies in which the only exposure concentration/dose reported is for the level of a toxicant in sediment.	Wildlife Plants and Soil Invertebrates
SLUDGE	Studies on the effects of ingestion of soils amended with sewage sludge.	Wildlife Plants and Soil Invertebrates
SOIL CONC (Soil)	Studies in which the only exposure concentration/dose reported is for the level of a toxicant in soil.	Wildlife
SPECIES	Studies in which the species of concern was not a terrestrial invertebrate or plant or mammal or bird.	Plants and Soil Invertebrates Wildlife
STRESSOR (QAC)	Studies examining the interaction of a stressor (e.g., radiation, heat, etc.) and the contaminant, where the effect of the contaminant alone cannot be isolated.	Wildlife Plants and Soil Invertebrates
SURVEY (Surv)	Studies reporting the toxicity of a contaminant in the field over a period of time. Often neither a duration nor an exposure concentration is reported.	Wildlife Plants and Soil Invertebrates
REPTILE OR AMPHIBIAN (Herp)	Studies on reptiles and amphibians. These papers flagged for possible later review.	Wildlife Plants and Soil Invertebrates
UNRELATED (Unrel)	Studies that are unrelated to contaminant exposure and response and/or the receptor groups of interest.	Wildlife
WATER QUALITY STUDY (Wqual)	Studies of water quality.	Wildlife Plants and Soil Invertebrates
YEAST (Yeast)	Studies of yeast.	Wildlife Plants and Soil Invertebrates

This Page Intentionally Left Blank



Appendix 5-1

*Avian Toxicity Data Extracted and Reviewed for Wildlife Toxicity
Reference Value (TRV) - Silver*

September 2006

This page intentionally left blank

Appendix 5.1 Avian Toxicity Data Extracted for Wildlife Toxicity Reference Value (TRV)

Silver
Page 1 of 1

Result #	Ref No.	Reference	Chemical Form	MW%	Test Species	Exposure																	Effects						Conversion to mg/kg bw/day			Result		Data Evaluation Score													
						Phase #	# of Conc/ Doses	Conc/ Doses	Conc/Dose Units	Wet Weight Reported?	Percent Moisture	Application Frequency	Method of Analyses	Route of Exposure	Exposure Duration	Duration Units	Age	Age Units	Lifestage	Sex	Control Type	Test Location	Endpoint #	General Effect Group	Effect Type	Effect Measure	Response Site	Study NOAEL	Study LOAEL	Body Weight Reported?	Body Weight in kg	Ingestion Rate Reported?	Ingestion Rate in kg/day or L/day	NOAEL Dose (mg/kg/day)	LOAEL Dose (mg/kg/day)	Data Source	Dose Route	Test Concentrations	Chemical form	Dose Quantification	Endpoint	Dose Range	Statistical Power	Exposure Duration	Test Conditions	Total	
Biochemical																																															
1	9892	Jensen et al, 1974	Silver acetate	100	Turkey (<i>Meleagris gallopavo</i>)	2	3	0/300/900	mg/kg	N	na	ADL	U	FD	5	w	1	d	JV	B	C	Lab	3	BIO	CHM	PCLV	BL	300	900	Y	0.662	N	0.04449	20.2	60.5	10	10	5	5	6	1	10	10	4	71		
2	9892	Jensen et al, 1974	Silver acetate	100	Turkey (<i>Meleagris gallopavo</i>)	1	4	0/100/300/900	ppm in mg/kg	N	na	ADL	U	FD	4	w	1	d	JV	B	C	Lab	2	BIO	CHM	PCLV	BL	300	900	Y	0.380	N	0.03100	24.5	73.4	10	10	5	5	6	1	10	10	4	71		
3	9232	Peterson et al, 1973	Silver nitrate	100	Turkey (<i>Meleagris gallopavo</i>)	1	2	0/900	ppm in mg/kg	N	na	ADL	U	FD	4	w	1	d	JV	B	C	Lab	3	BIO	CHM	HMGL	BL		900	Y	0.422	N	0.03319		70.8	10	10	5	10	6	1	4	10	10	4	70	
Behavior																																															
4	1403	Jensen, 1975	Silver nitrate	100	Chicken (<i>Gallus domesticus</i>)	1	2	0/1000	ppm in mg/kg	N	na	ADL	U	FD	14	d	1	d	JV	NR	C	Lab	3	BEH	FDB	FCNS	WO		1000	Y	0.1730	Y	0.0153		88.4	10	10	5	10	7	4	4	10	10	4	74	
Physiology																																															
5	6899	Petersen and Jensen, 1975	Silver nitrate	100	Chicken (<i>Gallus domesticus</i>)	1	2	0/900	ppm in mg/kg	N	na	ADL	U	FD	28	d	1	d	JV	NR	C	Lab	4	PHY	PHY	GPHY	WO		900	Y	0.390	N	0.03153		72.8	10	10	5	10	6	4	4	10	10	4	73	
Pathology																																															
6	9892	Jensen et al, 1974	Silver acetate	100	Turkey (<i>Meleagris gallopavo</i>)	2	3	0/300/900	mg/kg	N	na	ADL	U	FD	5	w	1	d	JV	B	C	Lab	2	PTH	HIS	GHIS	HE	300	900	Y	0.662	N	0.04449	20.2	60.5	10	10	5	5	6	4	10	10	4	74		
7	9892	Jensen et al, 1974	Silver acetate	100	Turkey (<i>Meleagris gallopavo</i>)	1	4	0/100/300/900	ppm in mg/kg	N	na	ADL	U	FD	4	w	1	d	JV	B	C	Lab	3	PTH	HIS	GHIS	HE	300	900	Y	0.380	N	0.03100	24.5	73.4	10	10	5	5	6	4	10	10	4	74		
8	9232	Peterson et al, 1973	Silver nitrate	100	Turkey (<i>Meleagris gallopavo</i>)	1	2	0/900	ppm in mg/kg	N	na	ADL	U	FD	4	w	1	d	JV	B	C	Lab	2	PTH	ORW	SMIX	HE		900	Y	0.422	N	0.03319		70.8	10	10	5	10	6	4	4	10	10	4	73	
9	6901	Peterson and Jensen, 1975	Silver nitrate	100	Chicken (<i>Gallus domesticus</i>)	1	2	0/900	ppm in mg/kg	N	na	ADL	U	FD	28	d	1	d	JV	B	C	Lab	2	PTH	ORW	ORWT	HE		900	Y	0.286	N	0.02576		81.1	10	10	5	10	6	4	4	10	10	4	73	
10	6778	Van Vleet, 1977	Silver acetate	64.6	Duck (<i>Anas platyrhynchos</i>)	1	2	0/0.2	% in diet	N	na	ADL	U	FD	3	w	1	d	JV	M	C	Lab	1	PTH	HIS	GHIS	MU		0.2	N	0.460	N	0.03511		98.6	10	10	5	5	5	4	4	10	10	4	67	
11	80	Van Vleet et al, 1981	Silver acetate	100	Duck (<i>Anas platyrhynchos</i>)	1	2	0/3000	mg/kg	N	na	ADL	U	FD	15	d	1	d	JV	M	C	Lab	1	PTH	HIS	NCRO	GZ		3000	N	0.092	N	0.01231		401	10	10	5	5	5	4	4	10	10	4	67	
Growth																																															
12	9892	Jensen et al, 1974	Silver acetate	100	Turkey (<i>Meleagris gallopavo</i>)	2	3	0/300/900	mg/kg	N	na	ADL	U	FD	5	w	1	d	JV	B	C	Lab	1	GRO	GRO	BDWT	WO		300	Y	0.662	N	0.04449		20.2	10	10	5	5	6	8	4	10	10	4	72	
13	9892	Jensen et al, 1974	Silver acetate	100	Turkey (<i>Meleagris gallopavo</i>)	3	2	0/900	mg/kg	N	na	ADL	U	FD	5	w	1	d	JV	B	C	Lab	1	GRO	GRO	BDWT	WO		900	Y	0.528	N	0.03840		65.5	10	10	5	5	6	8	4	10	10	4	72	
14	9232	Peterson et al, 1973	Silver nitrate	100	Turkey (<i>Meleagris gallopavo</i>)	1	2	0/900	ppm in mg/kg	N	na	ADL	U	FD	4	w	1	d	JV	B	C	Lab	1	GRO	GRO	BDWT	WO		900	Y	0.422	N	0.03319		70.8	10	10	5	10	6	8	4	10	10	4	77	
15	6899	Petersen and Jensen, 1975	Silver nitrate	100	Chicken (<i>Gallus domesticus</i>)	1	2	0/900	ppm in mg/kg	N	na	ADL	U	FD	28	d	1	d	JV	NR	C	Lab	2	GRO	GRO	BDWT	WO		900	Y	0.390	N	0.03153		72.8	10	10	5	10	6	8	4	10	10	4	77	
16	6901	Peterson and Jensen, 1975	Silver nitrate	100	Chicken (<i>Gallus domesticus</i>)	1	2	0/900	ppm in mg/kg	N	na	ADL	U	FD	28	d	1	d	JV	B	C	Lab	1	GRO	GRO	BDWT	WO		900	Y	0.286	N	0.02576		81.1	10	10	5	10	6	8	4	10	10	4	77	
17	1403	Jensen, 1975	Silver nitrate	100	Chicken (<i>Gallus domesticus</i>)	1	2	0/1000	ppm in mg/kg	N	na	ADL	U	FD	14	d	1	d	JV	NR	C	Lab	1	GRO	GRO	BDWT	WO		1000	Y	0.173	Y	0.01530		88.4	10	10	5	10	7	8	4	10	10	4	78	
Survival																																															
18	1403	Jensen, 1975	Silver nitrate	100	Chicken (<i>Gallus domesticus</i>)	1	2	0/1000	ppm in mg/kg	N	na	ADL	U	FD	14	d	1	d	JV	NR	C	Lab	2	MOR	MOR	MORT	WO		1000	Y	0.1890	Y	0.0135		71.4	10	10	5	10	7	9	4	10	10	4	79	
19	6899	Petersen and Jensen, 1975	Silver nitrate	100	Chicken (<i>Gallus domesticus</i>)	1	2	0/900	ppm in mg/kg	N	na	ADL	U	FD	28	d	1	d	JV	NR	C	Lab	1	MOR	MOR	MORT	WO		900	Y	0.3900	N	0.0315		72.8	10	10	5	10	6	9	4	10	10	4	78	
20	6901	Peterson and Jensen, 1975	Silver nitrate	100	Chicken (<i>Gallus domesticus</i>)	1	2	0/900	ppm in mg/kg	N	na	ADL	U	FD	28	d	1	d	JV	B	C	Lab	4	MOR	MOR	MORT	WO		900	Y	0.2860	N	0.0258		81.1	10	10	5	10	6	9	4	10	10	4	78	
21	6778	Van Vleet, 1977	Silver acetate	64.6	Duck (<i>Anas platyrhynchos</i>)	1	2	0/0.2	% in diet	N	na	ADL	U	FD	3	w	1	d	JV	F	C	Lab	2	MOR	MOR	MORT	WO		0.2	N	0.4600	N	0.0351		98.6	10	10	5	5	5	9	4	10	10	4	72	
22	80	Van Vleet et al, 1981	Silver acetate	100	Duck (<i>Anas platyrhynchos</i>)	1	2	0/3000	mg/kg	N	na	ADL	U	FD	15	d	1	d	JV	M	C	Lab	3	MOR	MOR	MORT	WO		3000	N	0.0920	N	0.0123		401	10	10	5	5	5	9	4	10	10	4	72	
Data Not Used to Derive TRV																																															
23	6899	Petersen and Jensen, 1975	Silver nitrate	100	Chicken (<i>Gallus domesticus</i>)	1	2	0/900	ppm in mg/kg	N	na	ADL	U	FD	28	d	1	d	JV	M	C	Lab	3	BIO	CHM	PCLV	BL	900		Y	0.3900	N	0.0315		72.8		10	10	5	10	6	1	4	1	10	4	61
24	9892	Jensen et al, 1974	Silver acetate	100	Turkey (<i>Meleagris gallopavo</i>)	1	4	0/100/300/900	ppm in mg/kg	N	na	ADL	U	FD	4	w	1	d	JV	B	C	Lab	1	GRO	GRO	BDWT	WO	900		Y	0.316	N	0.02749		78.3		10	10	5	5	6	8	4	1	10	4	63
25	6901	Peterson and Jensen, 1975	Silver nitrate	100	Chicken (<i>Gallus domesticus</i>)	1	2	0/900	ppm in mg/kg	N	na	ADL	U	FD	28	d	1	d	JV	B	C	Lab	3	BIO	CHM	PCLV	BL	900		Y	0.2860	N	0.0258		81.1		10	10	5	10	6	1	4	1	10	4	61
26	9892	Jensen et al, 1974	Silver acetate	100	Turkey (<i>Meleagris gallopavo</i>)	3	2	0/900	mg/kg	N	na	ADL	U	FD	5	w	1	d	JV	B	C	Lab	2	BIO	CHM	PCLV	BL		900	Y	0.5280	N	0.0384		65.5	10	10	5	5	6	1	4	10	10	4	65	
27	9892	Jensen et al, 1974	Silver acetate	100	Turkey (<i>Meleagris gallopavo</i>)	3	2	0/900	mg/kg	N	na	ADL	U	FD	5	w	1	d	JV	B	C	Lab	3	PTH	HIS	GHIS	HE		900	Y	0.5280	N	0.0384		65.5	10	10	5	5	6	4	4	10	3	4	61	
28	80	Van Vleet et al, 1981	Silver acetate	100	Duck (<i>Anas platyrhynchos</i>)	1	2	0/3000	mg/kg	N	na	ADL	U	FD	15	d	1	d	JV	M	C	Lab	2	BIO	ENZ	GLPX	BL		3000	N	0.0920	N	0.0123		401	10	10	5	5	5	1	4	10	10	4	64	



Appendix 6-1

*Mammalian Toxicity Data Extracted and Reviewed for Wildlife
Toxicity Reference Value (TRV) - Silver*

September 2006

This page intentionally left blank

Appendix 6.1 Mammalian Toxicity Data Extracted for Wildlife Toxicity Reference Value (TRV)

Silver
Page 1 of 1

Ref	Exposure		Effects													Conversion to mg/kg bw/day				Result		Data Evaluation Score																								
Result #	Ref N.	Reference	Chemical Form	MW%	Test Species	Phase #	# of Conc/Doses	Conc/Doses	Conc/Dose Units	Wet Weight Reported?	Percent Moisture	Application Frequency	Method of Analyses	Route of Exposure	Exposure Duration	Duration Units	Age	Age Units	Lifestage	Sex	Control Type	Test Location	General Effect Group	Effect Type	Effect Measure	Response Site	Study NOAEL	Study LOAEL	Body Weight Reported?	Body Weight in kg	Ingestion Rate Reported?	Ingestion Rate in kg or L/day	NOAEL Dose (mg/kg/day)	LOAEL Dose (mg/kg/day)	Data Source	Dose Route	Test Concentrations	Chemical form	Dose Quantification	Endpoint	Dose Range	Statistical Power	Exposure Duration	Test Conditions	Total	
Biochemical																																														
1	23825	Pribyl et al, 1980	Silver nitrate	100	Rat (<i>Rattus norvegicus</i>)	1	2	0/6.47	mg/org/d	N	na	ADL	U	FD	4	d	NR	NR	JV	M	C	FieldU	BIO	ENZ	GENZ	SR		6.47	Y	0.2	N	0.018298		32.3	10	10	5	10	6	1	4	10	10	4	70	
Behavior																																														
2	1244	Cabe, et al., 1979	Silver nitrate	100	Rat (<i>Rattus norvegicus</i>)	1	2	0/1000	mg/L	N	na	ADL	U	DR	13	w	50	d	JV	M	C	Lab	BEH	FDB	WCN	WO		1000	Y	0.2	N	0.023257		116	10	5	5	10	6	4	4	10	10	4	68	
Pathology																																														
3	22589	Van Vleet, 1976	Silver acetate	64.63	Pig (<i>Sus scrofa</i>)	2	2	0/0.2	% in diet	N	na	ADL	U	FD	40	d	NR	NR	JV	NR	C	Lab	PTH	HIS	NCRO	LI	0.2		Y	8.86	N	0.41281	60.2		10	10	5	5	6	4	4	10	10	4	68	
4	149	Van Vleet et al, 1981	Silver acetate	100	Pig (<i>Sus scrofa</i>)	1	2	0/3000	mg/kg diet	N	na	ADL	U	FD	25	d	NR	NR	JV	M	C	Lab	PTH	HIS	GLSN	HE		3000	Y	16.4	N	0.68479		125	10	10	5	5	6	4	4	10	10	4	68	
5	22589	Van Vleet, 1976	Silver acetate	64.63	Pig (<i>Sus scrofa</i>)	1	2	0/0.5	% in diet	N	na	ADL	U	FD	28	d	NR	NR	JV	NR	C	Lab	PTH	HIS	NCRO	LI		0.5	Y	13.52	N	0.58428		140	10	10	5	5	6	4	4	10	10	4	68	
Reproduction																																														
6	21093	Shavlovski et al, 1995	Silver chloride	75.2	Rat (<i>Rattus norvegicus</i>)	1	2	0/50	mg/org/d	N	na	DLY	U	FD	20	d	NR	NR	GE	F	C	Lab	REP	REP	PROG	WO		50	Y	0.2	N	0.018298		188	10	10	5	10	6	10	4	10	10	4	79	
Growth																																														
7	22589	Van Vleet, 1976	Silver acetate	64.63	Pig (<i>Sus scrofa</i>)	2	2	0/0.2	% in diet	N	na	ADL	U	FD	40	d	NR	NR	JV	NR	C	Lab	GRO	GRO	BDWT	WO		0.2	Y	8.86	N	0.41281		60.2	10	10	5	5	6	8	4	10	10	4	72	
8	14503	Wagner et al, 1975	Silver acetate	100	Rat (<i>Rattus norvegicus</i>)	1	2	0/751	mg/L	N	na	ADL	U	DR	15	w	21	d	JV	B	C	Lab	GRO	GRO	BDWT	WO		751	N	0.4702	N	0.050198		80.2	10	5	5	5	8	4	10	10	4	66		
9	149	Van Vleet et al, 1981	Silver acetate	100	Pig (<i>Sus scrofa</i>)	1	2	0/3000	mg/kg diet	N	na	ADL	U	FD	4	w	NR	NR	JV	M	C	Lab	GRO	GRO	BDWT	WO		3000	Y	15.8	N	0.66413		126	10	10	5	5	6	8	4	10	10	4	72	
10	22589	Van Vleet, 1976	Silver acetate	64.63	Pig (<i>Sus scrofa</i>)	1	2	0/0.5	% in diet	N	na	ADL	U	FD	28	d	NR	NR	JV	NR	C	Lab	GRO	GRO	BDWT	WO		0.5	Y	13.52	N	0.58428		140	10	10	5	5	6	8	4	10	10	4	72	
11	22823	Matuk et al, 1981	Silver nitrate	63.5	Rat (<i>Rattus norvegicus</i>)	1	2	0/0.25	% in diet	N	na	ADL	U	DR	16	w	NR	NR	JV	M	C	Lab	GRO	GRO	BDWT	WO		0.25	Y	0.365	N	0.039967		174	10	5	5	10	6	8	4	10	10	4	72	
Survival																																														
12	22589	Van Vleet, 1976	Silver acetate	64.63	Pig (<i>Sus scrofa</i>)	2	2	0/0.2	% in diet	N	na	ADL	U	FD	40	d	NR	NR	JV	NR	C	Lab	MOR	MOR	MORT	WO	0.2		Y	8.86	N	0.41281	60.2		10	10	5	5	6	9	4	10	10	4	73	
13	1244	Cabe, et al., 1979	Silver nitrate	100	Rat (<i>Rattus norvegicus</i>)	1	2	0/1000	mg/L	N	na	ADL	U	DR	13	w	50	d	JV	M	C	Lab	MOR	MOR	MORT	WO	1000		Y	0.2	N	0.023257	116		10	5	5	10	6	9	4	10	10	4	73	
14	149	Van Vleet et al, 1981	Silver acetate	100	Pig (<i>Sus scrofa</i>)	1	2	0/3000	mg/kg diet	N	na	ADL	U	FD	25	d	NR	NR	JV	M	C	Lab	MOR	MOR	MORT	WO		3000	Y	16.4	N	0.68479		125	10	10	5	5	6	9	4	10	10	4	73	
15	22589	Van Vleet, 1976	Silver acetate	64.63	Pig (<i>Sus scrofa</i>)	1	2	0/0.5	% in diet	N	na	ADL	U	FD	28	d	NR	NR	JV	NR	C	Lab	MOR	MOR	MORT	WO		0.5	Y	13.52	N	0.58428		140	10	10	5	5	6	9	4	10	10	4	73	
Data Not Used to Derive TRV																																														
16	1244	Cabe, et al., 1979	Silver nitrate	100	Rat (<i>Rattus norvegicus</i>)	1	2	0/1000	mg/L	N	na	ADL	U	DR	13	w	50	d	JV	M	C	Lab	GRO	GRO	BDWT	WO	1000		Y	0.2	N	0.023257	116		10	5	5	10	6	8	4	1	10	10	4	63
17	1244	Cabe, et al., 1979	Silver nitrate	100	Rat (<i>Rattus norvegicus</i>)	1	2	0/1000	mg/L	N	na	ADL	U	DR	13	w	50	d	JV	M	C	Lab	PTH	ITX	INCO	WO	1000		Y	0.2	N	0.023257	116		10	5	5	10	6	4	4	1	10	10	4	59
18	21093	Shavlovski et al, 1995	Silver chloride	75.2	Rat (<i>Rattus norvegicus</i>)	1	2	0/50	mg/org/d	N	na	DLY	U	FD	20	d	NR	NR	GE	B	C	Lab	BIO	ENZ	CCOX	LI	50		Y	0.2	N	0.018298	188		10	10	5	10	6	1	4	1	10	10	4	61
19	14503	Wagner et al, 1975	Silver acetate	100	Rat (<i>Rattus norvegicus</i>)	1	2	0/751	mg/L	N	na	ADL	U	DR	15	w	21	d	JV	B	C	Lab	BIO	ENZ	GLPX	ER	751		N	0.4702	N	0.050198	80.2		10	5	5	5	5	1	4	1	10	10	4	50
20	22300	Whanger and Weswig, 1970	Silver acetate	100	Rat (<i>Rattus norvegicus</i>)	1	5	0/10/25/50/100	mg/kg diet	N	na	ADL	U	FD	8	w	21	d	JV	B	C	Lab	BIO	CHM	GBCM	BL	10		N	0.235	N	0.020892		0.889	10	10	5	5	5	1	4	10	10	4	64	
21	149	Van Vleet et al, 1981	Silver acetate	100	Pig (<i>Sus scrofa</i>)	1	2	0/3000	mg/kg diet	N	na	ADL	U	FD	2	w	NR	NR	JV	M	C	Lab	BIO	ENZ	GLPX	BL		3000	Y	12.7	N	0.55499		131	10	10	5	5	6	1	4	10	10	4	65	