

## DEPARTMENT OF PHYSIOLOGICAL SCIENCES

### Administration

Chair:  
 Associate Chair:  
 Graduate Studies Coordinator:  
 Graduate Admissions Director:  
 Chief, Clinical Pathology Service:  
 Coordinator, Clinical Pathology Residency Program:  
 Director, Computerized Image Analysis Laboratory:  
 Director, Center for Environmental & Human Toxicology:  
 Director, Analytical Toxicology Core Laboratory:  
 Director, Aquatic Toxicology Facility:  
 Administrative Assistant Director, UF Racing Laboratory:

John W. Harvey, DVM, PhD  
 Alistair I. Webb, BVSc, PhD, FRCVS  
 Roger L. Reep, PhD  
 Kevin J. Anderson, PhD  
 Rose E. Raskin, DVM, PhD  
 Rose E. Raskin, DVM, PhD  
 Roger L. Reep, PhD  
 Stephen M. Roberts, PhD  
 Nancy Szabo, PhD  
 Evan P. Gallagher, PhD  
 Cynthia Kollias-Baker, DVM, PhD

### Mission

The Department's overall mission is to provide teaching, research, and service to the citizens of the State of Florida. The primary instructional mission of the Department is the education of veterinary medical students in a variety of disciplines, including anatomy, cell biology, clinical pathology, pharmacology, physiology, and toxicology. In addition to the instruction of professional degree (DVM) students, the Department is responsible for the Physiological Sciences graduate program. The mission of graduate instruction involves a wide variety of specific disciplines, as described above. The education of graduate students is closely tied to the critical mission of research, in which we focus on comparative aspects of biology and disease. The requirements of these missions have led us to develop a blend of basic science and clinically oriented faculty members. This combination of disciplines and interests has proven to be a very successful means of fulfilling our extensive instructional mission while maintaining an excellent research program.

The clinical pathology service of the Veterinary Medical Teaching Hospital (VMTH), in its provision of necessary laboratory information for the diagnosis and management of patients in the VMTH, represents the combined missions of instruction and service. Service is also provided to the University and State through programs offered by the Center for Environmental & Human Toxicology. Services include analysis of drugs in biological tissues by the Analytical Toxicology Core Laboratory, drug testing of horses and dogs by the UF Racing Laboratory, and maintenance of the Aquatic Toxicology Facility.

### Departmental Issues

#### A. Research

As in the past, faculty members have been competitive and successful in the procurement of funds from a variety of agencies, including the National Institutes of Health. Faculty and technologist salaries paid from grants were at record levels. The salary savings funds that resulted from these appointments are essential in providing graduate student stipends and tuition, department personnel and infrastructure, support for pilot research projects, and research bonuses. The salary savings funds also allowed us to meet a mandated budget cuts without the loss of faculty or staff positions.

The toxicology program has had a particularly successful year in attracting a record amount of extramural grant funds, with 3.75 million dollars being obtained by 5.1 faculty FTEs, of which only 3 FTE are paid from state general revenue dollars. This is especially noteworthy considering the limited amount of poor quality space available to this program. The Center of Environmental and Human Toxicology (CEHT) and our toxicology faculty members are currently housed in old IFAS buildings on land between Mowry and Archer Road. The quality and quantity of space available is not sufficient to support the continued growth of our toxicology program. In addition, the new Genetics/Cancer building and one or more additional Health Center buildings are likely to be placed on this property, putting the long-term availability of the current buildings in jeopardy. For these reasons, we have developed plans for a new CEHT

building and have asked the UF lobbyists to attempt to obtain 13 million dollars from the federal government to pay for this building, the site of which is yet to be determined. Dr. Steve Roberts, Director of the CEHT, is currently exploring the possibility of developing CEHT expertise and funding in the area of nanotoxicology.

## **B. Instruction**

The Department has continued to be actively involved in the professional degree (DVM) program. With the exception of ethology, we have had the full complement of faculty members needed to teach courses required of our department in the veterinary curriculum. Dr. Jacqueline Neilson has been well received teaching the Veterinary Ethology course, and she has agreed to teach it for the foreseeable future. Although Dr. Ian Tebbett has accepted a position at the National Forensic Science Technology Center (NFSTC), he retains an appointment in the Department and continues to supervise the distance education program in forensic toxicology which generates graduate teaching credit for the College and participating faculty members. The distance education Forensic Toxicology Program has grown slightly over last year with a total of 131 students currently enrolled in the program. The first seven students completed the requirements for the 30-credit non-thesis Masters of Forensic Toxicology program in the summer and fall terms of 2002. In addition to the distance education forensic toxicology program, Drs. Davenport, Bolser, and Hayward will teach a distance education mammalian physiology graduate course in the fall.

## **C. Clinical Service**

Service responsibilities of the Department include the Clinical Pathology Service of the VMTH. This clinical service has continued to be a responsive provider of essential laboratory data for clinical patient care and instruction. The Analytical Toxicology Core Laboratory (ATCL) has provided increasing service to the University, State, and Nation in the form of fee-for-service testing of compounds in biological tissues. In addition, the CVM Racing Laboratory has served the State of Florida by analyzing blood and urine from racing horses and dogs for illegal drugs. The Aquatic Toxicology Facility has provided fee-for-service facilities for fish research that is being used

by faculty members inside and outside the Department.

In addition, the category of service includes such activities as University, State, and national committees, and leadership in professional organizations. Service activities outside the University are no longer assigned, but faculty members continue to participate in them on their own time because they are good citizens.

## **D. Goals for Next Year**

A major goal for next year continues to be the recruitment of new high-quality graduate students. As a department, we will still give high priority to DVMs as graduate students, even though this results in an increased demand for stipend support over the cost of non-DVM graduate students.

Faculty members will aggressively continue to seek extramural support that is vital to the discovery of new information and needed for the support of graduate students and the department infrastructure. The Physiological Sciences Department has few technologists above the Biological Scientist's category, and a goal is to identify the resources necessary to upgrade appropriate positions.

Dr. Reep's research program is in urgent need of additional space which we will make every effort to identify this coming year. We will continue in our efforts to expand the toxicology program both in faculty numbers and in adequate high-quality research space. It is also essential that we maintain the space needed for our department to flourish in the BSB.

## **E. Changes in Faculty**

Dr. Ian Tebbett left his position as Director of the UF Racing Laboratory to assume a position with the National Forensic Science Technology Center (NFSTC) in Tampa on July 1, 2002. Fortunately, we were able to recruit Dr. Cynthia Kollias-Baker to replace Dr. Tebbett as Director. Dr. Nancy Szabo has been promoted to Assistant Scientist and given the

responsibility of directing the operations of the ATCL.

### Faculty Roster:

#### Professors

Professors	Degrees/University	Area of Research
Davenport, Paul W.	PhD/Kentucky	Neurophysiological/ Control of Breathing
Harvey, John W.	DVM/Kansas St. Univ. PhD/Univ. of CA (Davis)	Comparative Hematology
Johnson, Richard D.	PhD/Univ. of CA (Davis)	Neuroanatomy/Neurophysiology
Reep, Roger	PhD/Michigan St. Univ.	Neuroanatomy
Robert, Stephen M.	PhD/Univ. of Utah	Toxicology
Tebbett, Ian R.	PhD/Univ. Of Strathclyde, Glasgow, Scotland	Toxicology
Vickroy, Thomas W.	PhD/Univ. of Texas	Neuropharmacology
Webb, Alistair I.	BVSc/Queensland, Australia PhD/Briston, England	Pharmacokinetics/Anesthesiology
Wronski, Thomas J.	PhD/Univ. of Utah	Bone Pathology in Deficiency & Space Flight

#### Emeritus Professor

Emeritus Professor	Degrees/University	Area of Research
Besch, Emerson L.	PhD/Univ. of CA (Davis)	Environmental Physiology
Himes, James A.	DVM/Pennsylvania PhD/Cornell	Liver Function

#### Associate Professors

Associate Professors	Degrees/University	Area of Research
Alleman, Arthur R.	DVM/Louisiana St. Univ. PhD/Univ. of FL	Hema Parasites/ Molecular Biology
Anderson, Kevin J.	PhD/Kentucky	Neuroanatomy/Neurobiology of Aging
Bolser, Donald C.	PhD/Univ. of South FL	Mechanisms of Cough
Gallagher, Evan P.	PhD/Duke Univ.	Environmental Toxicology
Raskin, Rose E.	DVM/Purdue Univ. PhD/Michigan St. Univ.	Clinical Pathology/ Immunopathology

Thompson, Floyd J.

PhD/Indiana

Neuroscience

**Assistant Professors****Degrees/University****Area of Research**

Barber, David S.

PhD/University of AZ

Toxicology

Hayward, Linda F.

PhD/Northwestern Univ.

Cardiovascular/Neurophysiology

**Associate Scientists****Degrees/University****Area of Research**

Gross, Timothy

PhD/Univ. of Maryland

Ecotoxicology/Endocrinology

James, Robert C.

PhD/Univ. of Utah

Mechanism on Toxicity-risk  
Assessment**Assistant Scientists****Degrees/University****Area of Research**

Iwaniec, Urszula

PhD/Univ. of Wisconsin

Anthropology/Bone Biology

Sepulveda, Maria

DVM/Univ. Of Chile  
PhD/Univ. of FL

Ecotoxicology/Endocrinology

Szabo, Nancy

PhD/Univ. of FL

Toxicology

**Assistant In****Degrees/University****Area of Research**

Ochoa-Acuna, Hugo

Univ. of FL

Toxicology

**Visiting Assistant In****Degrees/University****Area of Research**

Larkin, Iske

PhD/Univ. of FL

Manatee Reproduction

**Courtesy Faculty  
Name/Location****Degrees/University****Area of Research**Battles, August H.  
UF, Animal Services

PhD/Univ. f FL

Laboratory Animal Sci/Med

Bauer, Gordon B.  
Univ. of South FL

PhD/Univ. Of Hawaii

Marine Mammal Research

Borgert, Christopher J.  
Applied Pharm. & Tox., Inc  
Alachua, FLPhD/Univ. of FL  
Courtesy Scientist

Environmental Toxicology

Brooks, Dennis E. CVM/SACS	PhD/Univ. of FL Joint Professor	Ophthalmology
Burrows, Colin F. CVM/SACS	PhD/Univ. of PA Joint Professor	Comparative Gastroenterology/
Buss, Daryl D. Univ. of Wisconsin Madison, WI	PhD/Univ. of Wisc. Courtesy Professor	Cardiovascular/Physiology
Butcher, Gary D. CVM/LACS	DVM/Texas A&M Univ. PhD/Texas A&M Univ. Joint Professor	Avian Diseases
Campbell-Thompson, Martha COM/Dept. of Pathology	DVM/Univ. of FL PhD/Univ. of FL Affiliate Asst. Professor	Gastroenterology
Clemmons, Roger CVM/SACS	DVM/Wash. ST PhD/Wash. ST Affiliate Assoc. Professor	Comparative Hemostasis Platelet Physiology, Clinic, Neurology, Innovative Diagnostics
Cline, Patricia Golder & Assoc. 6241 NW 23 St. Gainesville, FL	PhD/Univ. of FL Courtesy Scientist	Environmental Toxicology
Davis, Jerry CVM/Pathobiology	DVM/Auburn Univ. PhD/Univ. of Alabama- Birmingham Diplomat, ACLAM Affiliate Professor	Mycoplasmal & Immunodeficiency Diseases
Flinchum, David K. IFAS/Belle Glade Res. Ctr	PhD/NC ST Univ. Affiliate Professor	Plant Toxicology
Guillette, Louis, Jr. Dept. of Zoology	PhD/Univ. of Colorado Courtesy Professor	Repro. Development & Endocrine- Disrupting Xenobiotics
Jacobson, Elliott R. CVM/SACS	DVM/Univ. Of Missouri PhD/Univ. of Missouri Diplomat, ACZM Joint Professor	Reptile Pathology & Disease/ Disease of Non-domestic Animals
Johnson, Isabel C. Golder & Assoc. Gainesville, FL	MS/Univ. of West FL Courtesy Scientist	Environmental Toxicology
Kilberg, Michael S. COM/Biochem & Molecular Biol.	PhD/Univ. of S. Dakota Affiliate Professor	Biochemistry/Molecular Biology/

Lester, Guy CVM/LACS	PhD/Murdoch Univ. Joint Asoc. Professor	Equine Digestive Physiology
Marshall, Christopher Texas A&M Galveston, TX	PhD/Univ. of FL Courtesy Asst. Professor	Marine Mammal Health Program
Merritt, Alfred M. CVM/LACS	DVM/Cornell Univ. MS/Penn ST Joint Professor	Gastroenterology & Internal Medicine
Miles, Richard IFAS/Dept. of Poultry Sci.	PhD/Purdue Affiliate Professor	Dietary Mineral Metabolism
Reier, Paul COM/Dept. of Neuroscience	PhD/Case Western Reserve Univ. Joint Eminent Scholar	Eminent Scholar/Neurobiology, Cell Biology
Samuelson, Don A. CVM/SACS	PhD/Univ. of FL Joint Professor	Cataract/Glaucoma/Retina/Comp Ocular Anatomy
Sharp, Daniel C., III COA/Animal Sciences	PhD/Univ. of Mass Joint Professor	Reproductive Physiology
Simmen, Frank A. IFAS/Dept. of Dairy & Poultry Sci	PhD/Univ. of Hawaii Affiliate Professor	Molecular Genetics of Mammalian Species
Sobel, Eric S. COM/Dept. of Medicine	MD/Case Western Reserve Univ. Joint Asoc. Professor	Rheumatology
Wood, Charles E. COM/Dept. of Physiology	PhD/Univ. of CA (San Francisco) Affiliate Professor	Physiology

**Postdoctoral Associates****Degrees/University****Area of Research**

Gadagbui, Bernard	PhD/Univ. of FL	Toxicology
Money Penny, Craig	PhD/Queens Univ., Belfast, Ireland	Molecular Toxicology
Power, Rachel	PhD/Kent ST Univ.	Bone Biology
Roy, Shukla	PhD/Oregon St Univ	Toxicology

**Graduate Students****Degrees/University****Area of Research**

Cheatwood, Joseph	MS/Univ. of FL	Molecular Biology
Chou, Yang-Ling	BS/P.R. of China	Physiology

Clifton, Kari	MS/Univ. of FL	Biomechanics
Golder, Frank	BVSc/Bphil/Massey Univ. New Zealand	Neuroscience
Harr, Kendal	DVM/Cornell	Marine Mammal Research
Keene, Jennifer	BS/Univ. of FL	Ecotoxicology
McKee, Erin	BS/Univ. of FL	Environmental Toxicology
Monch, Eileen	BS/Univ. of FL	Ecotoxicology
Muller, Jennifer	BS/Univ. of FL	Ecotoxicology
Noggle, Jessica	BS/Univ. of FL	Ecotoxicology
Pham, Robert	BS/Univ. of FL	Toxicology
Prezzano, Destiny	BS/Univ. of FL	Physiology
Rauschenberger, Heath	MS/Univ. Of Arkansas	Ecotoxicology
Wang, Cheng	MCLMD/China	Study of Cough Reflexes
Ward, James	BS/Univ. of FL	Respiratory Physiology
Zhang, Weirong	MS/China	Respiratory Physiology

**Residents****Degrees/University****Area of Research**

Casimire, Athema	DVM/Tuskegee Univ.	Toxicology
MacNeill, Amy	DVM/Univ. of FL	Immunology/Virology
Twomey, Leanne	DVM/Murdoch U, Perth, Australia PhD/Murdoch U, Perth, Australia	Canine Biology & Nutrition
Wamsley, Heather	DVM/Univ. of Wisconsin	Clinical Pathology

**Funded Grants**

**Alleman, AR** (PI), Knowles, T (CoI), Bélanger, M (CoI), Barbet, AF (CoI): UF/DSR, 2/01-7/02, \$7,490, "The characterization of the major antigenic protein 2 of *E. canis* and *E. chaffeensis* for the serodiagnosis of canine monocytic ehrlichiosis."

**Anderson, KJ**, Burchfield, DJ, **Roberts, S**, Schiffenbauer, J, **Tebbett, I** (All Co-PIs): College Incentive Fund, 7/00-6/03, \$125,000, "Developmental Toxicology of Cocaine."

Barbet, AF (PI), Bowie, MV (CoI), **Alleman, AR** (CoI): CVM/DSR, 1/99-10/02, \$226,549, "Control of Emerging Rickettsial Diseases."

Bélanger, M (PI), Barbet, AF (CoI), **Alleman, AR** (CoI)  
Bowie, MV (CoI): CVM/DSR, 3/00-5/02, \$7,480,  
"Molecular Analysis of the Major Antigenic Protein 2  
Homolog of the Human Granulocytic Ehrlichiosis Agent."

**Bolser, DC** (PI): GlaxoSmithKline Pharmaceuticals,  
3/02-6/03, \$40,012, "Pharmacology of Airway Function."

**Bolser, DC** (PI): Schering-Plough Research Institute,  
2/00-12/03, \$172,585, "Antitussive Action of Nociceptin  
and Its Synthetic Analogs."

**Bolser, DC** (PI): Baxter Healthcare Corp., 2/01-2/02,  
\$27,120, "Influence of Selected Synthetic Preparations on  
the Cough Reflex."

**Bolser, DC** (PI): Aventis Pharma, 5/01-4/02, \$73,050,  
"Pharmacology of Airway Reactivity."

**Bolser, DC** (PI), **Davenport, PW**, (CoI): Florida  
Department of Health, Biomedical Research Program,  
7/01-6/03, \$347,750, "Regulation of the Cough Reflex."

Cooper, BY (PI), **Johnson, RD** (CoPI): NIH, 7/01-6/05,  
\*\$800,000, "Capsaicin Insensitive Nociceptors of the  
DRG." \*\$74,540 administered by Physiological Sciences  
(RDJ)

Corwin, James V (PI), **Reep, RL** (CoI): NIMH, 5/00-4/03,  
\*\$675,000, "Role of dorsal central striatum in neglect and  
recovery." \*Dr. Reep's portion is administered as a  
subcontract through Northern Illinois University in the  
amount of \$236,931.

**Davenport, PW** (PI): NIH-NHLBI, 7/00-6/05,  
\$662,666, "Respiratory Sensation in Normal and  
Asthmatic Children."

**Davenport, PW** (PI): BSRCIRTF, 7/01-6/02, \$25,932,  
"The role of the MI motor cortex in spontaneous ventilation  
in mechanical ventilator dependent SCI patients: an animal  
model."

**Davenport, PW** (PI), Martin, AD (CoI), Sapienza, CM  
(CoI): BSRCIRTF, 7/02-6/03, \$36,000, "The effect of  
expiratory muscle strength training on Low  
cervical/thoracic SCI patients."

Fox, LE (CoPI), **Raskin, RE** (CoPI): Bernice Barbour Fd,  
12/98-present, \$11,600, "Are there geographic differences

in morphology and immunophenotyping of canine  
lymphomas?"

**Gallagher, EP** (PI): NIH, 5/99-4/04, \$606,978,  
"Human fetal liver glutathione transferase metabolism  
of 4-hydroxynonenal."

**Gallagher, EP** (PI): USEPA, 10/99-9/03, \$391,487,  
"Human fetal metabolism of aflatoxin B1 and  
susceptibility to childhood cancer."

**Gallagher, EP** (PI): NIH, 4/01-3/05, \$359,942,  
"Aquatic Toxicology Core Facility."

**Gallagher, EP** (CoPI), Denslow, ND (CoPI): NIH,  
4/01-3/05, \$947,254, "Molecular Mechanisms of  
Endocrine Disruption."

**Gallagher, EP** (PI): CVM, 5/98-4/04, \$40,000,  
"Enhancement of Aquatic toxicology facility."

**Gallagher, EP** (PI): CVM, 9/02-9/03, \$7500, "TDC  
isolation of the promoter of bass GSTA."

Globus, RK (PI), Damsky, CH (CoI), van der Meulen,  
MCH (CoI), **Wronski, TJ** (CoI): NASA, 10/00-9/03,  
\*\$631,242, "Do integrins mediate the skeletal  
response to altered loading in vivo?"  
\*\$18,556 administered by Physiological Sciences.

**Gross, TS** (PI), **Sepúlveda, MS** (CoPI): NIEHS,  
4/00-3/05, \$951,000, "Chlorinated pesticides and  
developmental mortality in wildlife."

**Gross, TS** (PI), **Sepúlveda, MS** (CoPI): SJRWMD,  
5/01-9/04, \$485,000, "Microcosm evaluation of the  
bioaccumulation of organochlorine pesticides from  
soils in the North Shore Restoration Area at Lake  
Apopka."

**Gross, TS** (PI): Syngenta/Ecorisk, 2/02-12/03,  
\$200,000, "Evaluation of amphibians exposed to  
sugarcane agriculture."

**Gross, TS** (PI): Georgia Pacific, 12/97-12/03,  
\$752,237, "Evaluation of effects of paper-mill  
effluents in wildlife."

**Gross, TS** (PI), **Borgert, C.** (CoPI): ACC, 8/01-8/04,  
\$585, "Evaluation of contaminant mixture effects in

wildlife."

**Gross, TS (PI), Sepúlveda, MS (CoPI):** NIEHS, 4/00-3/05, \$951,000, "Chlorinated pesticides and developmental mortality in wildlife."

**Gross, TS (PI), Sepúlveda, MS (CoPI):** SJRWMD, 5/01-9/04, \$335,000, "Microcosm evaluation of the bioaccumulation of organochlorine pesticides from soils in the North Shore Restoration Area at Lake Apopka."

**Gross, TS (PI):** NCASI, 4/01-4/04, \$162,000, "Evaluation of paper-mill effluent effects in gambusia."

**Golder, FJ (PI), Bolser, DC (CoPI), Reier, PJ (CoPI):** State of Florida Brain and Spinal Cord Injury Rehabilitation Trust Fund, 7/01-6/02, \$42,000, "The Role of Ipsilateral Functional Recovery in the Effects of C2 Hemisection on the Contralateral Phrenic Neurogram."

**Guillette, LJ Jr (PI), Larkin, ILV (CoPI):** CVM, 5/01-5/04, \$74,945, "Establishing Comprehensive Monitoring of Reproductive Endocrine Health in the Endangered Florida Manatee (*Trichechus manatus latirostris*)."

**Harvey, JW (PI):** Florida Fish and Wildlife Conservation Commission, 1/02-1/03, \$25,000, "In vitro manatee blood studies."

**Hayward, LF (PI):** NIH, 7/99-6/03, \$368,572, "Periaqueductal gray modulation of sympathetic drive."

**Hayward, LF (PI):** American Heart Association (Florida Affiliate), 7/02-6/04, \$120,000, "Contributions of the Parabrachial Nucleus and GABA-A Receptors in the Development and Maintenance of Hypertension."

**Hubscher, CH (PI), Johnson, RD (CoPI):** NIH, 12/00-11/03, \$375,000, "Male Urogenital Function and Chronic Spinal Cord Injury."

**Hubscher, CH (PI), Johnson RD (CoPI):** Christopher Reeve Paralysis Foundation, 1/00-12/02, \$90,800, "Chronic Spinal Cord Injury Pain: Modulation by Ovarian Steroids."

**Iwaniec, UI (PI), Wronski, TJ (CoI):** CVM Fall Consolidated Faculty Research Development Award, 12/01-11/02, \$7,500, "The Murine Model of Postmenopausal Osteopenia."

**Iwaniec, UT (PI), Wronski, TJ (CoI):** CVM Fall Consolidated Faculty Research Development Award, 12/01-11/02, \$7,500, "The murine model of postmenopausal osteopenia."

**Jacobson, E (PI), Raskin, RE (CoPI), Klein, P (CoPI), Bolten, A (CoPI), Bjorndal, K (CoPI), Laine, R (CoPI), Alleman, AR (CoPI):** 2001 Research Opportunity Fund, 1/02-12/02, \$39,500, "New initiative for health assessment of endangered sea turtle populations."

**James, MO (PI), Roberts, SM (CoPI):** NIH, 4/00-3/05, \$365,755, "Health Effects of Chlorinated Compounds, Administrative Core."

**Johnson, RD (PI):** Brain and Spinal Cord Injury Rehabilitation Trust Fund of Florida, 7/01-6/02, \$26,875, "Target Identification of Visceral Sensory Neurons Characterized by Current Signature and Histochemical Phenotype."

**Kristensen, H (PI), Otwell, S (CoI), Davenport, PW (CoI):** USDA Integrated Research, Education, and Extension Competitive Grants Program, 7/02-6/05, \$437,000, "Assessing the Use of Carbon Monoxide and Filtered Smoke on the Safety and Quality of Seafood Products."

**Martin, AD (PI), Davenport, PW (CoPI):** BSRCIRTF, 7/00-6/02, \$39,700, "The Effect of Inspiratory Muscle Strength Training on Mechanical Ventilator Dependent SCI Patients."

**Norton, TM (PI), Denslow, ND (CoPI), Masson, G (CoPI), Sepúlveda, MS (Co-PI), Winn, B (CoPI):** Morris Animal Foundation, 12/00-12/02, \*\$30,750, "The American oystercatcher (*Haematopus palliatus*)-A biosentinel species for assessing ecosystem health along the Georgia coast and Barrier Islands." \* \$2,500 administered by Physiological Sciences.

**Raskin, RE (PI):** Wildlife Trust, Conservation Medicine Program, 8/02-present, \$1,000, "Cytochemistry and immunocytochemistry of blood cells from Kemp ridley sea turtles."

**Raskin, RE (CoPI), Fox, LE (CoPI):** CVM Faculty Consolidated Research Development Award, 12/98-present, \$7,500, "A pilot study to evaluate

geographic regional differences in morphology and immunophenotype."

**Reep, RL** (PI): CVM, 9/02-10/03, \$47,500, "Sensory Evoked Potential Studies in Manatees."

**Reep, RL** (PI): CVM, 11/02-10/03, \$7,500, "Induced axon sprouting and functional recovery from hemispatial neglect following experimental infarct in the rat." (Joe Cheatwood PhD research.)

**Reep, RL** (PI): Florida Marine Research Institute/CVM, 5/01-4/02, \$40,000. "Florida Marine Mammal Health Conference."

**Reep, RL** (PI) Clifton, KB (CoI), Wheeler, DL (CoI): Florida Marine Research Institute/CVM, 5/01-4/04, \$74,288, "Skeletal mechanics of the Florida manatee."

**Reep, RL** (PI): CVM, 5/01-4/02, \$40,000, "Stipend support for Iske Larkin project."

Reier, PJ (PI), **Bolser, DC** (CoI): Phase II SBIR, 1R43NS38828-02, 11/01-10/03, \$47,665, "Optimize Human Neuronal Cells for Spinal Cord Transplants."

**Roberts, SM** (PI): NIH, 12/98-11/02, \$123,126, "Heat Shock and Toxicity Assays."

**Roberts, SM** (PI), Koroly, MJ (CoPI): NIH, 4/00-3/05, \$187,495, "Health Effects of Chlorinated Compounds, Outreach Core."

**Roberts, SM** (PI): NIH, 4/00-3/05, \$422,320, "Health Effects of Chlorinated Compounds, Training Core."

**Roberts, SM** (PI), Sobel, E (CoPI): NIH, 4/00-3/05, \$558,185, "Health Effects of Chlorinated Compounds, Project 5: Autoimmune Toxicity of Chlorinated Compounds."

**Roberts, SM** (PI): Florida Department of Environmental Protection, 7/01-6/02, \$230,000, "Toxicology Support Services (HW-447 extension)."

**Roberts, SM** (PI): Florida Department of Environmental Protection, 9/02-6/03, \$306,000, "Toxicology Support Services (WM-492)."

**Roberts, SM** (PI): Dade County, Environmental

Resource Management, 4/00-3/05, \$240,000, "Toxicology Support Services."

**Roberts, SM** (PI): Exponent, 1/01-12/02, \$154,300, "Assessment of Arsenic Bioavailability from Soils in Cebus Monkeys."

Rudi-Hoffman, B (PI), Sapienza, CM (CoI), **Davenport, PW** (CoI): American Parkinson Disease Association, 7/02-6/03, \$50,000, "Respiratory Muscle Training in Patients with Parkinson's Disease."

Samuelson, DA (PI), **Reep, RL** (CoI), Bauer, G (CoI): Florida Marine Research Institute /CVM, 5/01-4/04, \$75,000, "Corneal neovascularization and its impact on visual function in Florida manatees (*Trichechus manatus*)."

Sedaca, C (Fellow), **Vickroy, TW** (Mentor): NIH Medical Science Research Program (MSRP) Fellowship, Training Grant, 5/02-8/02, \$3914, "Microdialysis-based measurement of non-steroidal anti-inflammatory drug binding to plasma proteins in domestic horses: Evaluation as a predictive measure of competitive drug interactions."

**Sepúlveda, MS** (PI), Ross, P (CoPI), **Gross, TS** (CoPI), Honeyfield D (CoPI): Lake County Water Authority, 02/03-02/04, \$50,785, "An evaluation of the role of thiamine deficiency and organochlorine pesticides on alligator embryo mortality on lakes in central Florida."

Stechtman, O (PI), **Davenport, PW** (CoI): University of Florida Research Opportunity Fund, 7/02-6/03, \$35,000 'Identifying the Level of Effort During Grip Strength Testing'.

**Szabo, NJ** (PI): NIH, 4/02-3/03, \$41,836, "Analytical Toxicology Core A."

**Vickroy, TW** (PI), LeBlanc, M (CoPI), MacPherson, M (CoI): Florida Pari-Mutuel Wagering Trust Fund, 10/01-9/02, \*\$41,000, "Placental drug transfer and foal survival in an experimental model of placentitis." \*\$19,400 administered by LACS and \$21,600 administered by Physiological Sciences.

**Vickroy, TW** (PI), MacPherson, M (CoPI): Florida Pari-Mutuel Wagering Trust Fund, 10/02-9/03, \*\$59,019, "Placental drug transfer and foal survival in an experimental model of placentitis." \*\$30,293 administered by LACS and \$28,726 administered by Physiological Sciences.

**Vickroy, TW** (PI), **Webb, AI** (CoPI): Pari-Mutuel Wagering Research Trust 9/01-9/02, \$7500, FARAD (Food Animal Residue Avoidance Databank) - Florida Component: "Pilot study to evaluate microdialysis as a means of estimating tissue drug concentrations."

**Webb, AI** (PI), **Vickroy, TW** (CoPI): CVM Intramural Consolidated Research Development Award, 7/02-6/03, \$7500, "Pilot study to evaluate microdialysis as a means of estimating tissue drug residues."

**Webb, AI** (PI): USDA / CSREES, 5/99-4/02, \$100,00, "Food Animal Residue Avoidance Databank."

**Webb, AI** (PI): USDA / CSREES, 6/00-6/03, \$118,000, "Minor Use Animal Drugs: Southern Region."

**Webb, AI** (PI): USDA / CSREES, 4/01-3/04, \$73,163, "Food Animal Residue Avoidance Databank."

**Webb, AI** (PI): USDA / CSREES, 5/01-5/04, \$140,515, "Minor Use Animal Drugs: Southern Region."

## Faculty Presentations

**Alleman, AR:** Reptile Hematology: An Overview, The International Society of Animal Clinical Biochemistry (ISACB), Gainesville, FL, 6/02.

**Alleman, AR:** The Cytologic Evaluation of Lymphoid Tissue, The Annual Meeting of the Swiss Small Animal Medicine Veterinary Association, Interlaken, Switzerland, 6/02.

**Alleman, AR:** The use of cytology in the diagnosis of neoplasia, blood smear evaluation and bone marrow evaluation, The American Board of Veterinary Practitioner's 2002 Practitioner's Symposium, Manhattan Beach, CA, 5/02.

**Alleman, AR:** (1) The Dog with Hypercalcemia, will it turn to stone?; (2) Chronic Weight loss in the dog: Iron deficiency anemia and intestinal neoplasia, The Western

**Webb, AI** (PI): USDA / CSREES, 4/02-3/04, \$153,600  
"Food Animal Residue Avoidance Databank."

**Webb, AI** (PI): USDA / CSREES, 5/02-5/04, \$127,000,  
"Minor Use Animal Drugs: Southern Region."

**Webb, AI** (PI): NCSU Sub-Contract from FDA, 9/01-9/03, \$20,000, "Pharmacokinetic Consultation from the Food Animal Residue Avoidance Databank."

**Wronski, TJ** (PI): NIH, 8/98-7/03, \$661,996,  
"Restoration of lost bone mass after ovariectomy."

**Wronski, TJ** (PI): Glaxo SmithKline, 7/92-6/02, \$72,300, "Bone anti-resorptive effects of GR32191."

**Wronski, TJ** (PI): Glaxo SmithKline, 6/01-5/02, \$9,259,  
"Bone protective effects of calcitonin in ovariectomized rats."

**Wronski, TJ** (PI), **Iwaniec, UT** (CoI), Moore, K (CoI):  
NIH, 8/03-7/08, \$886,920, "Restoration of Lost Bone Mass After Ovariectomy."

States Veterinary Conference; Senior Care Symposium, Las Vegas, NV, 2/02.

**Alleman, AR:** (1) The Diagnosis of Neoplasia and the Cytologic Criteria for Malignancy; (2) The Dog with Hypercalcemia, Will it Turn to Stone?; (3) Iron deficiency anemia and intestinal neoplasia; (4) Cytology Wet Lab for Veterinarians, Dog and Cat Hematology Wet Lab for Technicians; (5) Comparative and Exotic Animal Hematology Wet Lab for Technicians, The North American Veterinary Conference, Orlando, FL, 1/02.

**Bolser, DC:** Regulation of the cough reflex: lessons from the actions of antitussive drugs, Invited speaker at the Cough: Recent Advances in Understanding, symposium, 4th International Congress of Pathophysiology, Budapest, Hungary, 7/02.

**Bolser, DC:** Neurogenesis of cough: antitussive drugs reveal the presence of a hidden regulatory element, Invited speaker at the symposium Cough: Basic Mechanisms and Therapeutic Implications, Pulmonary Research Symposium, Schering-Plough Research Institute, Kenilworth, NJ, 5/02.

**Davenport, PW:** Physiology of Respiratory Muscle Training, Department of Physiology, College of Medicine, University of Florida, Gainesville, FL, 4/02.

**Davenport, PW:** The role of perception and voluntary breathing in cough in humans, Cough: Basic Mechanisms and Therapeutic Implications, Pulmonary Research Group, Schering-Plough Research Institute, Kenilworth, NJ, 5/02.

**Davenport, PW:** Cough sensation and the urge-to-cough in humans, Workshop: Cough Therapy, 4th International Congress of Pathophysiology, Budapest, Hungary, 7/02.

**Davenport, PW:** Neural Mechanisms of Respiratory Sensation, Department of Physiology, Charing Cross Medical School, London, England, 7/02.

**Davenport, PW:** Respiratory muscle function, plasticity and ventilator dependence, Workshop and Continuing Education, American Physical Therapy Association National Meeting, Cincinnati, OH, 6/02.

**Gallagher, EP:** The role of variability in hepatic biotransformation enzyme expression in evaluating human susceptibility to toxicity, Invited lecture, Rosetta Inpharmatics, Kirkland, WA, 4/02.

**Gallagher, EP:** Individual and developmental susceptibility to 4-hydroxynonenal-mediated cell injury, Invited lecture, Department of Pharmaceutical Sciences, Colorado Health Sciences Center, Denver, CO, 5/02.

**Gross, TS:** Chlorinated Hydrocarbons as Hormonally-Active Agents and Developmental Toxicities in Alligators and Fish. Keynote speaker, EPA Risk-Assessors Conference, Philadelphia, PA, 4/02.

**Harvey, JW:** Diagnosis of myeloproliferative disorders, ECVIM/ESVIM Congress, Munich, Germany, 9/02.

**Harvey, JW:** Evaluation of erythrocytes, ESVCP Annual Meeting, Munich, Germany, 9/02.

**Hayward, LF:** The Role of the midbrain and pons in hypertension, Department of Medicine, UF College of Medicine, Research Seminars in Nephrology, Gainesville, FL, 12/02.

**Hayward, LF:** Opening the black box: The role of the brain in hypertension, Faculty Research Conference, UF College of Veterinary Medicine, Gainesville, FL, 10/02.

**Hayward, LF:** Central Modulation of Baroreflex Function: Neurochemical and Descending Inputs, Department of Pharmacodynamics Seminar Series, UF College of Pharmacy, Gainesville, FL, 4/02.

**Kollias-Baker, C:** Bain-Fallon Memorial Lecture Series, Australian Equine Veterinary Association, Gold Coast QLD, Australia, 7/02.

**Larkin, ILV, Gross, TS, Reep, RL:** Establishing the use of fecal radioimmunoassay to monitor reproductive patterns in the Florida manatee (*Trichechus manatus latirostris*). Florida Marine Mammal Health Conference, Gainesville, FL, 4/02 (Poster presentation)

**Raskin, RE:** An Interim Analysis of Geographic Differences in Morphology and Immunophenotype From 138 Cases of Canine Lymphoma, Veterinary Cancer Society Mid-Year Meeting, Galena, IL, 4/02.

**Raskin, RE:** Comparative hematology, The North American Veterinary Conference (Vet Tech Program), Orlando, FL, 1/02.

**Raskin, RE:** (1) Bone Marrow Aspiration & Core Biopsy (practice tip); (2) Cytologic Features of Discrete Cell/Round Cells (lecture); (3) Avian Hematology (lecture); (4) Myeloproliferative Disease (lecture), (5) Lymphoproliferative Disease (lecture); (6) Hematologic Parasites (lecture), Western Veterinary Conference, Las Vegas, NV, 2/02.

**Raskin, RE:** Avian Hematology, International Society of Animal Clinical Biochemistry Meeting, Gainesville, FL, 6/02.

**Raskin, RE:** Bone marrow histopathology, UF Dept. of Pathobiology Anatomic Pathology Residents Seminar, Gainesville, FL, 10/02.

**Reep RL:** Development of a rodent model of neglect, Department of Physiological Sciences, Univ of Florida College of Veterinary Medicine, Gainesville, FL, 9/02.

**Roberts, SM:** Examining Risk Approaches, Interstate Technology Regulatory Council Fall Meeting, Washington, DC, 11/02.

**Roberts, SM:** Toxic Gas Emissions from Contaminated Sites, Florida Department of Environmental Protection Waste Administrator's Meeting, Tallahassee, FL, 4/02.

**Roberts, SM:** Risk Assessment, University of Florida Environmental Health Partnership, Superfund Basic Research Program, Gainesville, FL, 6/02.

**Roberts, SM:** Responsible Conduct of Research, College of Dentistry Student Research Fellowship Program, University of Florida, Gainesville, FL, 6/02.

**Roberts, SM:** Evaluation of Dioxin/Furan Analytical Results, Florida Department of Environmental Protection, Waste Cleanup Workshop, Captiva Island, FL, 10/02.

**Roberts, SM:** What is Bioavailability?, First Annual Soil and Water Science Institute Symposium: Principles of Arsenic Behavior in Florida's Soils, Gainesville, FL, 3/02.

**Sepúlveda, MS:** Project No.2: Chlorinated pesticides and developmental mortality in wildlife, University of Florida Superfund Basic Research Program Annual Retreat, Gainesville, FL, 9/02.

**Sepúlveda, MS:** An introduction to the effects of organochlorine pesticides in wildlife, USGS, Center for Aquatic Research Studies, Gainesville, FL, 7/02.

### Faculty Refereed Publications

Bélanger, M, Sorenson, HL, France, MK, Bowie, MV, Barbet, AF, Breitschwerdt, EB, **Alleman, AR:** Comparison of Serological Detection Methods for the Diagnosis of Ehrlichia canis Infections in Dogs. J. Clin. Microbiol. 40(9):3506-3508, 2002.

Berlin, CM, LaKind JS, Sonawane, BR, Kacew, S,

**Sepúlveda, MS:** Developmental mortality in largemouth bass and alligators in Florida. USGS, Columbia Environmental Research Center, Columbia, MI, 12/02.

**Szabo, NJ:** Determination of organochlorine pesticides in loggerhead (Caretta caretta) sea turtle tissues, International SeaTurtle Symposium, Miami, FL, 4/02.

**Webb, AI:** Legal requirements for drug handling by Florida Veterinarians, Miracle Strip Veterinary Medical Society, Ft Walton, FL, 9/02.

**Webb, AI:** Legal requirements for drug handling by Florida Veterinarians, Alachua County Veterinary Medical Society, Gainesville, FL, 9/02.

**Webb, AI:** Legal requirements for drug handling by Florida Veterinarians, Pinellas County Veterinary Medical Association, St Petersburg, FL, 10/02.

**Webb, AI:** Legal requirements for drug handling by Florida Veterinarians, Hillsborough Veterinary Medical Association, Tampa, FL, 10/02.

**Webb, AI:** Legal requirements for drug handling by Florida Veterinarians, Ocala Equine Conference, Ocala, FL, 12/02.

**Borgert, CJ,** et al: Conclusions, research needs, and recommendations of the expert panel: Technical workshop on human milk surveillance and research for environmental chemicals in the United States. J. Toxicol. Environ. Health Part A 65:1929-35, 2002.

Birkenheuer, AJ, Breitschwerdt, EB, **Alleman, AR,** Pitulle, C: Differentiation of Haemobartonella canis and Mycoplasma haemofelis on the basis of

Comparative Analysis of Gene Sequences. *Am. J. Vet. Res.* 63(10):1385-1388, 2002.

**Bolser, DC, Davenport, PW:** Expiratory motor control during the cough reflex. *European Respiratory Review.* 12(85): 243-248, 2002.

Chou, CC, **Vickroy, TW:** Antagonism of adenosine receptors by caffeine and caffeine metabolites in equine forebrain tissues. *Amer.J.Vet. Res.* 64: 1-9, 2002.

Colahan, PT, **Kollias-Baker, C,** Leutenegger, CM, Jones, JH: Does training affect mRNA transcription for cytokine production in circulating leucocytes? *EVJ Suppl.* 34, pp 154-158, 2002.

**Davenport, PW,** Hutchison, AA: Cerebral cortical respiratory related evoked potentials elicited by inspiratory occlusion in awake, spontaneously breathing lambs. *Journal of Applied Physiology* 93: 31-36, 2002.

**Davenport, PW,** Sapienza, CM, **Bolser, DC:** Psychophysical assessment of the Urge-to-Cough. *European Respiratory Review.* 12(85): 249-253, 2002.

**Gallagher, EP,** Gardner, JL: Comparative expression of alpha class glutathione S-transferases in adult and prenatal human liver tissues. *Biochem. Pharmacol.* 7248: 1-12, 2002.

Harrus, S, **Alleman, AR,** Bark, H, Mahan, SM, Waner, T: Comparison of three enzyme-linked immunosorbant assays with the indirect immunofluorescent antibody test for the diagnosis of canine infection with *Ehrlichia canis*. *Vet. Microbiol.* 86(4):361-368, 2002.

**Hayward, LF,** Swartz, CL, **Davenport, PW:** Respiratory Response to Activation or Disinhibition of the Dorsal Periaqueductal Gray in Rats. *Journal of Applied Physiology* 10.1152/jappphysiol.00740.2002, 2002.

**Hayward, LF,** von Reiztenstein, M: Increased c-fos expression in central gray following both arterial chemoreceptor and baroreceptor stimulation in rats. *Amer. J. Physiol.* 283: H1975-H1984, 2002.

**Hayward, LF,** Riley, AP, Felder, RB: Alpha-2 adrenergic receptors in the NTS facilitate baroreflex function in adult SH rats. *Amer. J. Physiol.* 282: H2336-H2345, 2002.

Holt, GA, **Johnson, RD,** **Davenport, PW:** The

transduction properties of intercostal muscle mechanoreceptors. *BMC Physiology* 2:16, 2002.

Hubscher, CH, **Johnson, RD:** Differential effects of chronic spinal hemisection on somatic and visceral inputs to caudal brainstem. *Brain Res.* 947:234-242, 2002.

Julius, SM, Davenport, KL, **Davenport, PW:** Perception of Intrinsic and Extrinsic Respiratory Loads in Children with Life-Threatening Asthma. *Pediatric Pulmonology* 34(6): 425-433, 2002.

**Iwaniec, UT,** Haynatzki, GR, Fung, YK, Akhter, MP, Haven, MC, Cullen, DM: Effects of nicotine on bone and calciotropic hormones in aged ovariectomized rats. *J. Musculoskel. Neuron. Interact.* 2(5):469-478, 2002.

**Iwaniec, UT,** Mosekilde, Li, Mitova-Caneva, NG, Thomsen, JS, **Wronski, TJ:** Sequential treatment with basic fibroblast growth factor and parathyroid hormone is more efficacious than treatment with parathyroid hormone alone for increasing vertebral bone mass and strength in osteopenic ovariectomized rats. *Endocrinology* 143(7):2515-2526, 2002.

Källberg, ME, Brooks, DE, Garcia-Sanchez, GA, Komromy, AM, **Szabo, NJ,** Tian LT: Endothelin-1 Levels in the Aqueous Humor of Dogs with Glaucoma. *J. Glaucoma* 11: 105-109, 2002.

Kennedy RT, Thompson JE, **Vickroy TW:** In vivo monitoring of amino acids by direct sampling of brain extracellular fluid at ultralow flow rates and capillary electrophoresis. *J. Neurosci. Methods* 114: 39-49, 2002.

**Kollias-Baker, C,** Sams, R: Detection of morphine in blood and urine samples from horses administered poppy seeds and morphine sulfate orally. *J. Anal. Toxicol.* 26:81-86, 2002.

LaKind JS, Birnback, N, **Borgert, CJ,** Sonawane, BR, Tully, MR, Friedman, L: Human milk surveillance and research of environmental chemicals: Concepts for consideration in interpreting and presenting study results. *J. Toxicol. Environ. Health Part A* 65:1909-28, 2002.

- Martin, AD, **Davenport, PW**, Harman, E, Franceschi, A: Use of Inspiratory Muscle Strength Training to Facilitate Ventilator Weaning. *Chest* 122(1): 192-196, 2002.
- Ochoa-Acuña, H, Sepúlveda, MS, Gross, TS**: Mercury in feathers from Chilean birds: Influence of location, feeding strategy, and taxonomic affiliation. *Mar. Pollut. Bull.* 44(4):340-349, 2002.
- Ochoa-Acuna H, Montevecchi WA**: Basal metabolic rate of adult Leach's Storm-petrels during incubation. *Waterbirds.* 25 (2): 249-252, 2002.
- Peroni, DL, Stanley, S, **Kollias-Baker, C**, Robinson, NE: Prednisone per os is likely to have limited efficacy in horses. *Equine Vet. J.* 34:283-287, 2002.
- Petruska, JC, Napaporn, J, **Johnson, RD**, Cooper, BY: Chemical responsiveness and histochemical phenotype of electrophysiologically classified cells of the adult rat dorsal root ganglion. *Neuroscience* 115:15-30, 2002.
- Pham, R, Gardner, J, **Gallagher EP**: Conjugation of 4-hydroxynonenal by largemouth bass glutathione S-transferases. *Marine Environmental Research* 54: 291-295, 2002.
- Platt, SR, **Alleman, AR**, Lanz, OI, Chrisman, C.L: Comparison of Fine-Needle Aspiration and Surgical-Tissue Biopsy in the Diagnosis of Canine Brain Tumors. *Vet. Surg.* 31(1):65-69, 2002.
- Power, RA, Iwaniec, UT, Wronski, TJ**: Changes in gene expression associated with the bone anabolic effects of basic fibroblast growth factor in aged ovariectomized rats. *Bone* 31(1):143-148, 2002.
- Ramaiah, SK, **Alleman, AR**: Cytologic evaluation of the liver: Aspiration findings and limitations. *Comp.Cont. Edu.* 24:798-810, 2002.
- Ramaiah, SK, Seguin, MA, Carwile, HF, **Raskin, RE**: Biclonal gammopathy associated with immunoglobulin A in a dog with multiple myeloma. *Vet. Clin. Pathol.* 31:83-89, 2002.
- Raskin, RE**, Murray, KA, Levy, JK: Comparison of home monitoring methods for feline urine pH measurement. *Vet. Clin. Pathol.* 31:51-55, 2002.
- Reep, RL**, Marshall, CD, Stoll, ML: Tactile hairs on the postcranial body in Florida manatees: a mammalian lateral line? *Brain Behavior and Evolution* 59:141-154, 2002.
- Roberts, SM**, Weimar, WR, Vinson, JRT, Munson, JW, Bergeron, RJ: Measurement of arsenic bioavailability in soil using a primate model. *Tox. Sci.* 67:303-310, 2002.
- Roberts, SM**, Jordan, KE, Warren, DA, Britt, JK, **James, RC**: Evaluation of the carcinogenicity of 1,1-dichloroethylene (vinylidene chloride). *Reg. Toxicol. Pharmacol.* 35:44-55, 2002.
- Sapienza, CM, **Davenport, PW**, Martin, AD: Expiratory muscle training increases pressure support in high school band students. *Journal of Voice* 16(4): 495-501, 2002.
- Sepúlveda, MS**, Johnson, WE, Higman, JC, Denslow, ND, Schoeb, TR, **Gross, TS**: An evaluation of biomarkers of reproductive function and potential contaminant effects in Florida largemouth bass (*Micropterus salmoides floridanus*) sampled from the St. Johns River. *Sci. Tot. Environ.* 289:133-144, 2002.
- Tesch, AM, MacDonald, MH, **Kollias-Baker, C**, Benton, HP: Effects of an adenosine kinase inhibitor and an adenosine deaminase inhibitor on accumulation of extracellular adenosine by equine articular chondrocytes. *Am. J. Vet. Res.* 63:1512-1519, 2002.
- Tesch, AM, MacDonald, MH, **Kollias-Baker, C**, Benton, HP: Chondrocytes respond to adenosine via A(2)receptors and activity is potentiated by an adenosine deaminase inhibitor and a phosphodiesterase inhibitor. *Osteoarthritis Cartilage* 10:34-43, 2002.
- Van Vleet, TM, Heldt, SA, Guerrettaz, KR, Corwin, JV, **Reep, RL**: Unilateral destruction of the dorsocentral striatum in rats produces neglect but not extinction to bilateral simultaneous stimulation. *Behav. Brain Res.* 136:375-387, 2002.
- Wamsley, HL, **Alleman, AR**, Porter, MB, Long, MT: Findings in cerebrospinal fluids of horses infected with West Nile virus: 30 Cases (2001). *J. Am. Vet. Med. Assoc.* 221(9):1303-1305, 2002.

Zhao, W, Martin, AD, **Davenport, PW**: The Respiratory-Related Evoked Potentials in Response to Inspiratory Occlusions in Double Lung Transplant Recipients. *Journal of Applied Physiology* 93(3): 894-902, 2002.

Zhao, W, Martin, AD, **Davenport, PW**: The Resistive Load Detection in Double Lung Transplant Recipients. *Journal of Applied Physiology* 93(3): 1779-1785, 2002.

### Faculty Non-Refereed Publications

**Alleman, AR**, Couto, G, and Grauer, G: The dog with hypercalcemia: Will it turn to stone? Proceedings from the North American Veterinary Conference, Small Animal and Exotics, Volume 16:307, 2002.

**Alleman, AR**: The Cytological Diagnosis of Neoplasia: Interpreting the Criteria for Malignancy. Proceedings from the American Board of Veterinary Practitioners, Practitioner's Symposium, pp 185-194, 2002.

**Alleman, AR**: The Cytology of Tumors of the Limbs and the Importance of Tumor Location. Proceedings from the American Board of Veterinary Practitioners, Practitioner's Symposium, pp 195-200, 2002.

**Alleman, AR**: The Cytologic Evaluation of Lymph Nodes. Proceedings from the American Board of Veterinary Practitioners, Practitioner's Symposium, pp 201-206, 2002.

**Alleman, AR**: The Systematic Evaluation of Blood Smears: Significant Findings with Clinical Implications. Proceedings from the American Board of Veterinary Practitioners, Practitioner's Symposium, pp 207-211, 2002.

**Alleman, AR**: Bone Marrow Evaluation and the Diagnosis of Hematopoietic Disorders. Proceedings from the American Board of Veterinary Practitioners, Practitioner's Symposium, pp 213-222, 2002.

**Alleman, AR**: The Cytologic Evaluation of Lymphoid Tissue. In: Interpretation of Laboratory Results in Making a Diagnosis. Proceedings from the Annual Meeting of the Swiss Small Animal Medicine Vet. Assoc. pp 103-113, 2002.

**Alleman, AR**, Couto, G, Grauer, G: The dog with hypercalcemia: Will it turn to stone?, *Senior Care* 2002:

The Challenge of Caring for Older Pets. The Gloyd Group Inc., pp 19-26, 2002.

**Alleman, AR**: Reptile Hematology: An Overview. Proceedings from the 10th Congress of the International Society of Animal Clinical Biochemistry, pp 1-6, 2002.

Belvisi, MG, **Bolser, DC**: Animal models for cough. (invited). *Pulm. Pharmacol.* 15:249-250, 2002

**Bolser, DC, Davenport, PW**: Expiratory motor control during the cough reflex. (invited). *Eur. Respir. Rev.* 12:243-248, 2002.

**Bolser, DC, Davenport, PW**: Functional organization of the central cough generation mechanism. *Pulmonary Pharmacology & Therapeutics* 15(3): 221-225, 2002.

**Davenport, PW**: What caused the screech, whamity, bang and thump? *American Journal of Respiratory and Critical Care Medicine* 165(1): 2-3, 2002.

Eilittä, M, R Bressani, R, Carew, LB, Carsky, RJ, Flores, M, Gilbert, R, Huyek, L, St-Laurent, L, **Szabo, NJ**: Mucuna as a Food and Feed Crop: An Overview. In: Mucuna as a Food and Feed: Current Uses and the Way Forward. M. Flores, M. Eilittä, R. Myhrman, L. Carew, and R. Carsky, (eds). CIDICCO, Tegucigalpa, Honduras, pp 18-46, 2002.

Eilittä, M, Myhrman, R, Teixeira, A, St-Laurent, L, Flores, M, Carsky, RJ, Gilbert, R, **Szabo, NJ**, Bressani, R, Behre, T, Maasdorp, BV, Carew, L, Esnaola, MA: An Agenda for Future Research and Development of Mucuna as a Food and Feed. In: Mucuna as a Food and Feed: Current Uses and the Way Forward. M. Flores, M. Eilittä, R. Myhrman, L.

**Physiological Sciences**

Carew, and R. Carsky, (eds). CIDICCO, Tegucigalpa, Honduras, pp 376-396, 2002.

**Gross, TS, Sepúlveda, MS, Wieser, CM, Wiebe, JJ, Schoeb, TR, Denslow, ND:** Characterization of annual reproductive cycles for pond-reared Florida largemouth bass (*Micropterus salmoides floridanus*). *Am. Fish. Soc. Symp.* 31:205-212, 2002.

**Gross, TS, Arnold, BS, Sepúlveda, MS, and McDonald, K:** Endocrine disrupting chemicals and endocrine active agents. Chapter 39. In: *Handbook of Ecotoxicology*, 2nd Edition, Hoffman, DJ, Rattner, B, Burton, GA Jr., and Cairns, J, Jr. (eds.), CRC Press, Boca Raton, FL, pp 1033-1098, 2002.

**Harvey JW, MacNeil A, Ramaiah S, Wamsley H (eds):** Proceedings of the 10th Congress of the International Society of Animal Clinical Biochemistry. ISACB, Gainesville, FL, p 199, 2002.

**Harvey JW:** Diagnosis of myeloproliferative disorders. *Proc ECVIM/ESVIM Congress*, pp 54-56, 2002.

**Johnson, RD, Hubscher, CH:** Plasticity in supraspinal viscerosomatic convergent neurons following chronic spinal cord injury. In: *Spinal Cord Injury Pain: Assessment, Mechanisms, Management*. K. Burchiel, R. Yezierski eds. IASP Press, Seattle, WA, pp 205-217, 2002.

**Kollias-Baker, C:** A Review of Possible Environmental Sources of Drug Positives. *Proceedings of the 48th Annual AAEP Convention* 48:186-189, 2002.

Matthews, JC, **Anderson, KJ:** Recent advances in amino acid transporters and excitatory amino acid receptors. *Curr Opin Clin Nutr Metab Care* 5:77-84, 2002.

McLeod, RL, **Bolser, DC, Jia, Y, Parra, LE, Mutter, JC, Wang, X, Tulshian, DB, Egan, RW, Hey, JA:** Antitussive effect of nociceptin/orphanin FQ in experimental cough models. (invited). *Pulm. Pharmacol.* 215:213-216, 2002.

**Raskin, RE:** Avian hematology. *Proceedings of the 10th Congress of the International Society of Animal Clinical Biochemistry*, Gainesville, FL, pp 59-64, 2002.

**Raskin, RE:** Bone marrow aspiration & core biopsy, Online Proceedings of the Western Veterinary Conference, Las Vegas, NV, <http://www.vin.com/Members/Proceedings/Proceedings.plx?CID=WVC2002&PID=593&0=VIN>, 2002.

**Raskin, RE:** Cytologic features of discrete cell/round cells, Online Proceedings of the Western Veterinary Conference,

Las Vegas, NV,

<http://www.vin.com/Members/Proceedings/Proceedings.plx?CID=WVC2002&PID=681&0=VIN>, 2002.

**Raskin, RE:** Basic avian hematology, Online Proceedings of the Western Veterinary Conference, Las Vegas, NV, <http://222.vin.com/Members/Proceedings/Proceedings.plx?CID=WVC2002&PID=689&0=VIN>, 2002.

**Raskin, RE:** Myeloproliferative disease, Online Proceedings of the Western Veterinary Conference, Las Vegas, NV, <http://www.vin.com/Members/Proceedings/Proceedings.plx?CID=WVC2002&PID=684&0=VIN>, 2002.

**Raskin, RE:** Lymphoproliferative disease, Online Proceedings of the Western Veterinary Conference, Las Vegas, NV, <http://www.vin.com/Members/Proceedings/Proceedings.plx?CID=WVC2002&PID=685&0=VIN>, 2002.

**Raskin, RE:** Hematologic parasites, Online Proceedings of the Western Veterinary Conference, Las Vegas, Nevada, <http://www.vin.com/Members/Proceedings/Proceedings.plx?CID=WVC2002&PID=683&0=VIN>, 2002.

Reier, PJ, Golder, FJ, **Bolser, DC, Hubscher, C, Johnson, R, Schrimsher, GW, and Velardo, MJ:** Gray matter repair in the cervical spinal cord. In: *Spinal Cord Trauma: Regeneration, Neural Repair and Functional Recovery*. L. Mckerracher, G. Doucet and S. Rossignol (eds). *Prog. Brain. Res.* 137:49-70, 2002.

Sapienza, CM, **Davenport, PW:** Pulmonary Function and Breathing for Speech. In: *Vocal Rehabilitation for Medical Speech-Language Pathology*. Edited by C.M. Sapienza and J. Casper. Pro-ed. 2002.

Sellars, S, **Kollias-Baker, C:** Compounding Issues for the Veterinarian. *Clinical Pharmacology Section*, ed C Kollias-Baker In: *Current Therapy in Equine Medicine* 5. Ed NE Robinson. WB Saunders Co. pp 29-31, 2002.

**Sepúlveda, MS, Gross, DA, Johnson, WE, Wieser, CM, Wiebe, JJ, Gross, TS:** Baseline hematological parameters and organosomatic indices of Florida

largemouth bass. Am. Fish. Soc. Symp. 31:401-410, 2002.

Stanley, S, **Kollias-Baker, C**: Drug and Medication Control Programs in Performance Horses. Clinical Pharmacology Section, ed C Kollias-Baker In: Current Therapy in Equine Medicine 5. Ed NE Robinson. WB Saunders Co. pp 32-35, 2002.

**Szabo, NJ, Tebbett, IR**: The Chemistry and Toxicity of Mucuna Species. In: Mucuna as a Food and Feed: Current Uses and the Way Forward. M. Flores, M. Eilittä, R., Myhrman, L. Carew, and R. Carsky, (eds). CIDICCO, Tegucigalpa, Honduras, pp 120-141, 2002.

Taboada, J, **Alleman, AR**: Weight Loss and Anemia in a Senior Dog. Senior Care 2002: The Challenge of Caring for Older Pets. The Gloyd Group Inc. pp 55-69, 2002.

Taboada, J, **Alleman, AR**: Weight Loss and Anemia in a Senior Dog. Proceedings from the North American Veterinary Conference, Small Animal and Exotics, Volume 16:309-311, 2002.