

**ACLAM FOUNDATION
GRANT STATUS REPORT SSUMMARIES for 1997-2000**

2000 (\$113,933)

1) Anne Avery, VMD, PhD and Sue VandeWoude, DVM, Colorado State University
"The Effects of Environmental Enrichment on Murine Immune Responses"

In 2005: as a **PUBLICATION** Hutchinson E, Avery A, Vandewoude S. Environmental enrichment for laboratory rodents. ILAR J. 2005;46:148-161.

In 2002: **PRESENTED** at AALAS - Abstract in Contemporary Topics 41(4): 69.

In 2003: as a **POSTER** at the ACLAM Forum.

2) James E. Artwohl, DVM, MS, University of Illinois at Chicago

"Well-Being of Rabbits Immunized with Freund's Complete Adjuvant"

In 2002: as a **POSTER** at the ACLAM Forum.

In 2004 **PUBLISHED** Halliday LC, Artwohl JE, Bunte RM, Ramakrishnan V, Bennett BT. Effects of Freund's Complete Adjuvant on the Physiology, Histology, and Activity of New Zealand White Rabbits. Contemporary Topics 2004, Volume 43(1):8-13.

3) Richard W. Ermel, DVM, PhD, Texas A&M University with colleagues from U. of California, San Diego, and U. of California, Davis

"Surveillance of *Coxiella burnetii* Infection in Sheep: Detection of Shedders by DNA Amplification Using Polymerase Chain Reaction"

In 2002: as a **POSTER** at the ACLAM Forum.

4) Peter A. Barry, PhD, University of California, Davis

"Determination of Shedding Frequency of B Virus in Pair-Housed Rhesus Macaques"

In 2003: as a **POSTER** at the ACLAM Forum.

In 2003 **PUBLISHED** Huff, J., R. Eberle, J. Capitanio, S. S. Zhou, and **P. A. Barry**. 2003. Development and Application of a Real-Time PCR Assay for Detection of B Virus and Rhesus Cytomegalovirus in Rhesus Macaques. J. Genl. Virol. **84**:83-92.

In 2003 **PUBLISHED** Huff, J. E. and **P. A. Barry**, 2003. B virus infection in humans and macaques: the potential for zoonotic human disease. Emerging Infect. Dis.**9**:246-250.

Data from the ACLAM grant were presented as Preliminary Data for 3 FUNDED NIH grants:

R01 AI49342	Barry (PI)	12/01/01-11/30/05
NIH/NIAID	"A Non-Human Primate Model for Cytomegalovirus Vaccines"	
R01 AI063356	Barry (PI)	12/1/04 - 11/30/09
NIH/NIAID	"Evaluation of Protective CMV Vaccines in Rhesus Macaques"	
R21 AI061372	North (PI)	04/1/05 - 03/31/07
NIH/NIAID	"A Monkey Model for Anti-Cytomegalovirus Therapy"	

5) Mark Kristal, PhD, State University of New York, Buffalo

"Analgesic Efficacy of Oral Buprenorphine in Rats"

In 2002: as a **POSTER** at the ACLAM Forum.

In 2001 **PUBLISHED** Martin, L.B.E., Thompson, A.C., Martin, T., Kristal, M.B. 2001.

Analgesic efficacy of orally administered buprenorphine in rats. Comp. Med. 51:43-48.

In 2004 **PUBLISHED** Thompson AC, Kristal MB, Sallaj A, Acheson A, Martin LB, Martin T.

Analgesic efficacy of orally administered buprenorphine in rats: methodologic considerations. Comp Med. 2004; 54:293-300.

6) **Henry and Lois Foster Grant** - Robert S. Livingston, DVM, PhD, U. of Missouri-Columbia

"Development of a Recombinant Antigen-Based Immunoassay for Mouse T Lymphotropic Virus"

OUTCOME grant terminated by the ACLAM Foundation - partial refund to ACLAM.

7) Grant made with **AAALAC, International** assistance - Lisa Krugner-Higby, DVM, PhD, University of Wisconsin-Madison

"Development of Long-Acting Analgesics for Relief of Postoperative Pain in Rodents"

In 2002: as a **POSTER** at the ACLAM Forum (**Forum Poster Award Winner**).

In 2003: as a **PUBLICATION** Krugner-Higby L, Smith L, Clark M, Heath TD, Dahly E, Schiffman B, Hubbard-VanStelle S, Ney D, Wendland A. Liposome-encapsulated oxymorphone hydrochloride provides prolonged relief of postsurgical visceral pain in rats. *Comp. Med.* 2003 53:270-279.

In 2003: as a **PUBLICATION** Smith LJ, Krugner-Higby L, Clark M, Wendland A, Heath TD. A single dose of liposome-encapsulated oxymorphone or morphine provides long-term analgesia in an animal model of neuropathic pain. *Comp. Med.* 2003 53:280-287.

8) Grant made with **AAALAC, International** assistance - Joy Mench, PhD, University of California, Davis

"The Spacing Behavior and Social Preferences of Laboratory Rabbits"

In 2002: as a **POSTER** at the ACLAM Forum.

In 2001 **PRESENTED** at International Congress of the International Society for Applied Ethology, and In 2002 **PRESENTED** at the Charles River Short Course

In 2002 **PRESENTED** at the annual meeting of the Animal Behavior Society

In 2002 **PRESENTED** at the annual meeting of AALAS.

1999 (\$47,014)

1) A. Courtney DeVries, PhD, Johns Hopkins University School of Medicine

"Effects of Social Environment on Behavioral and Physiological Indices of Surgical Stress"

In 2001: as a **POSTER** at the ACLAM Forum.

2) Gwendolyn Carroll, MS, DVM, Texas A&M University College of Veterinary Medicine

"Pharmacokinetics and Pharmacodynamics of Intrathecal Morphine in Calves Undergoing Thoracotomy for Ventricular Assist Device Placement"

OUTCOME grant terminated by investigator with all funds returned to ACLAM.

3) **Henry and Lois Foster Grant** - Felix R. Homberger, DVM, FVH, PhD, Yale University Medical School (moved to Sloan-Kettering Cancer Center)

"Development of an ELISA for the Detection of Serum Antibodies to Guinea Pig Adenovirus"

OUTCOME grant terminated by the ACLAM Foundation - partial refund to ACLAM.

4) Grant made with **AAALAC, International** assistance - Tracy A. Peace, DVM, MS, Battelle Memorial Institute

"Retrospective Analysis of Foot Lesion Development in Rats Housed on Wire-bottom Caging Versus Solid-bottom Caging, and Between Rats from Different Sprague-Dawley Suppliers"

SUMMARY report posted at www.aclam.org

In 2000: **PRESENTED** at the ACLAM Forum.

In 2001: as a **POSTER** at the ACLAM Forum (**Forum Poster Award Winner**).

In 2001: **PUBLISHED** in *Contemporary Topics* 40(5):17-21

1998 (\$62,166)

1) Lela K. Riley, PhD, University of Missouri-Columbia

"Evaluation of Environmental Testing Techniques for Detection of Pathogens of Laboratory Animals"

SUMMARY report posted at www.aclam.org

In 2000: as a **POSTER** at the ACLAM Forum.

2) Craig W. Stevens, PhD, Oklahoma State University

"Testing and Comparison of Analgesic Drug Action in Amphibians"

SUMMARY report posted at www.aclam.org

In 2000: as a **POSTER** at the ACLAM Forum.

In 2001 **PUBLISHED** Stevens, C.W., MacIver, D. N., Newman, L.C., Testing and comparison of

non-opioid analgesics in amphibians, Cont. Topics in Lab. Animal Sciences 40: 47-51, 2001.

3) Sanford H. Feldman, DVM, PhD, University of Virginia

"Development of Molecular Assays for Detection of Adventitial Murine Pathogens in Cell Lines, Transplantable Tumors, and Other Biological Materials Derived From Rodents"

SUMMARY report posted at www.aclam.org

In 2000: as a **POSTER** at the ACLAM Forum (**Forum Poster Award Winner**).

4) Norman C. Peterson, DVM, PhD, Johns Hopkins University

"Assessment of Distress in Mice Used for Monoclonal Antibody Production by the Ascites Method"

SUMMARY report posted at www.aclam.org

In 2000: as a **POSTER** at the ACLAM Forum.

In 2000: **PUBLISHED** in Comp. Med. 50(5): 516-526; **PRESENTED** at the ACLAM Forum.

5) **Henry and Lois Foster Grant** - Mark T. Whary, DVM, PhD and James G. Fox, DVM, MS, Massachusetts Institute of Technology

"Epidemiology of *Helicobacter hepaticus* Infection and Disease in Mouse Colonies"

SUMMARY report posted at www.aclam.org

In 1999: as a **POSTER** at the ACLAM Forum.

In 2001 **PUBLISHED Whary, M.T., Cline, J., King, A., Ge, Z., Shen, Z., Sheppard, B., and Fox, J.G.** 2001. Long-term colonization levels of *Helicobacter hepaticus* in the cecum of hepatitis-prone A/JCr mice are significantly lower than those in hepatitis-resistant C57BL/6 mice. Comp Med., 51:413-417.

In 2001 **PUBLISHED Ge, Z., White, D.A., Whary, M.T., and Fox, J.G.** 2001. Fluorogenic PCR-based quantitative detection of a murine pathogen, *Helicobacter hepaticus*. J.Clin.Microbiol., 39:2598-2602.

In 2000 **PUBLISHED Whary, M.T.** 2000. Containment of *Helicobacter hepaticus* by use of husbandry practices. Comp Med., 50:584

In 2000 **PUBLISHED Whary, M.T., Cline, J.H., King, A.E., Hewes, K.M., Chojnacky, D., Salvarrey, A., and Fox, J.G.** 2000. Monitoring sentinel mice for *Helicobacter hepaticus*, *H. rodentium*, and *H. bilis* infection by use of polymerase chain reaction analysis and serologic testing. Comp Med., 50:436-443.

In 2000 ORAL PRESENTATION: American Association for Laboratory Animal Science Platform Session, San Diego, CA 2000. Enhanced Th1 responses of young A/JCr mice to *Helicobacter hepaticus* is associated with more severe hepatitis and lower enteric colonization compared to C57BL/6 mice. *Contemporary Topics In Laboratory Animal Science* 39 (4): 50.

1997 (\$40,000)

1) Barry S. Levine, D.Sc., DABT, University of Illinois at Chicago

"Stress Produced by Gavage Administration in the Rat"

SUMMARY report posted at www.aclam.org

In 1999: as a **POSTER** at the ACLAM Forum.

In 2000: **PUBLISHED** in Contemporary Topics 39(1): 17-21.

2) Mark T. Whary, DVM, PhD and James G. Fox, DVM, MS, Massachusetts Institute of Technology

"ELISA-Based Monitoring and Epidemiology of *Helicobacter hepaticus* Infection in Mouse Colonies"

SUMMARY report posted at www.aclam.org

In 1999: as a **POSTER** at the ACLAM Forum and **PRESENTED** at AALAS - Abstract in Contemporary Topics 38(4): 26.

In 2000: **PUBLISHED** in Comp. Med. 50(1): 78-81

In 2000: **PUBLISHED** in Comp. Med. 50(4): 436.

In 1999: as a **POSTER** at the ACLAM Forum.

In 2001 **PUBLISHED Whary, M.T., Cline, J., King, A., Ge, Z., Shen, Z., Sheppard, B., and Fox, J.G.** 2001. Long-term colonization levels of *Helicobacter hepaticus* in the cecum of hepatitis-prone A/JCr mice are significantly lower than those in hepatitis-resistant C57BL/6 mice. *Comp Med.*, 51:413-417.

In 2001 **PUBLISHED Ge, Z., White, D.A., Whary, M.T., and Fox, J.G.** 2001. Fluorogenic PCR-based quantitative detection of a murine pathogen, *Helicobacter hepaticus*. *J.Clin.Microbiol.*, 39:2598-2602.

In 2000 **PUBLISHED Whary, M.T.** 2000. Containment of *Helicobacter hepaticus* by use of husbandry practices. *Comp Med.*, 50:584

In 2000 **PUBLISHED Whary, M.T., Cline, J.H., King, A.E., Hewes, K.M., Chojnacky, D., Salvarrey, A., and Fox, J.G.** 2000. Monitoring sentinel mice for *Helicobacter hepaticus*, *H. rodentium*, and *H. bilis* infection by use of polymerase chain reaction analysis and serologic testing. *Comp Med.*, 50:436-443.

In 2000 ORAL PRESENTATION: American Association for Laboratory Animal Science Platform Session, San Diego, CA 2000. Enhanced Th1 responses of young A/JCr mice to *Helicobacter hepaticus* is associated with more severe hepatitis and lower enteric colonization compared to C57BL/6 mice. *Contemporary Topics In Laboratory Animal Science* 39 (4): 50.

3) David G. Besselsen, DVM, PhD, University of Arizona

"Development and Evaluation of Diagnostic Assays for Newly Recognized Rodent Parvoviruses"

SUMMARY report posted at www.aclam.org

In 1999: as a **POSTER** at the ACLAM Forum.

In 1999: **PRESENTED** at AALAS as two papers.

In 2000: **PUBLISHED** in *Comp. Med.* 50(5): 498-502

Data from the ACLAM grant led to the funding of 2 NIH Grants:

1 RO1 RR018488-01 Besselsen (PI) 07/1/03-06/30/08 \$800,000 NIH/NCRR

Pathogenesis of murine parvovirus field strains. Role: PI

The major goals of this project are to examine the molecular biology, epidemiology, pathogenesis, and host response to several murine parvovirus field strains.

1 RO1 RR14072-01 Besselsen (PI) 06/15/99-05/31/03 \$361,078 NIH/NCRR

5 α Nuclease Assays for Rodent Health Monitoring Role: PI

The major goals of this project were to develop and validate fluorogenic 5 α nuclease assays for a number of infectious agents that are pathogenic in rodents and/or may adversely affect research.