

## ***CURRICULUM VITAE***

### **STEVEN M. EIGER**

Department of Cell Biology and Neuroscience and WWAMI Medical Program  
Montana State University, Bozeman, MT 59717-3148  
(406) 994-5672      email: eiger@montana.edu

#### **Education:**

University of Rochester, Rochester, N.Y., 1967-69; Chemistry  
University of Miami, Miami, Fl., 1969-72; **B.Sc.; Architecture**  
University of Michigan, Ann Arbor, MI, 1979-84; **Ph.D., Physiology**  
University of California, Berkeley, 1984-85; Post-Doctoral Fellow  
University of California, San Francisco, 1986-89; Post-Doctoral Fellow  
Mills College, Oakland, CA. 1989-90; Teaching certificate in Science Education

#### **Professional Experience:**

Lecturer, Department of Physiological Nursing  
University of California, San Francisco; 1987  
Assistant Professor, College of Notre Dame  
Belmont, CA; 1988-90  
Science Teacher Trainee, The Exploratorium  
San Francisco, CA; Summer, 1991.  
Co-Organizer and Head Teacher, Particles and Interactions Workshop  
Stanford Linear Accelerator, Stanford University, Stanford, CA; Summer, 1992.  
Instructor in Science, San Francisco University High School  
San Francisco, CA; 1990-94: Physics; Relativity and Particle Physics; Physiology  
Assistant Professor, Dept. of Cell Biology and Neuroscience and WWAMI  
Medical Education Program; 1996 – present; promoted to Associate (2002)  
Affiliate Assistant Professor, Department of Physiology and Biophysics,  
University of Washington, Seattle, WA; 1996, associate, 2002.  
Professor, Department of Cell and Molecular Biology, American University of the Caribbean  
Medical School, Sint Maarten, 2006-present

#### **Honors:**

- Award for Excellence, 2005
- Outstanding Faculty Recognition Award, 2004
- Award for Excellence, 2004
- Professor of the Month, Mortar Board, October, 2003 (First of renewed award)
- Presidential Teaching Award, 2002
- Invited Lecturer, Mortar Board's Last Lecture, 2002
- Anna Fridley Distinguished Teaching Award, 2001
- Nominated for Presidential Teaching Award, 2001
- Teaching Improvement Fellow, 2001-02
- Most Influential Educator Award; Mortar Board, 2000
- Most Influential Educator Award; Mortar Board, 1999
- Professor of the Month, Mortar Board, April, 1998
- Rackham Predoctoral Fellow; University of Michigan, Ann Arbor, MI; 1981-82

**Publications in peer-reviewed journals:**

- R.L.Malvin, D.Schiff, and **S. Eiger**. 1980. Angiotensin and drinking rates in the euryhaline killifish. *Am.J. Physiol.* 239 (Regulatory Integrative Comp.Physiol.B):R31-34.
- **S.M.Eiger**, J.R.Hirsch, and L.G.D'Alecy. 1980. Hypoxic tolerance enhanced by  $\beta$ -hydroxybuturate glucagon in the mouse. *Stroke.* 11(5):513-517.
- M.J.Kluger and **S.M.Eiger**.1983. Cryogenic activity in the urine of dogfish shark, *Squalus acanthias*. *Bulletin of the Mount Desert Island Biological Laboratory.* 22:18-19.
- **S.M.Eiger** and S.D.Black. 1985. Analysis of plasma cyanate as 2-nitro-5-thiocarbamylbenzoic acid by high performance liquid chromatography. *Analytical.Biochem.* 146:321-326.
- **S.M.Eiger** and M.J.Kluger. 1985. Cyanate and temperature regulation in anephric rabbits. *Am.J.Physiol.*249:F69-73.
- M.J.Kluger, R.Singer, **S.M.Eiger** and S.D.McGraw. 1985. Polymixin B does not ensure endotoxin-free solution. *J.Immunol.Meth.* 83(1):201-207.
- J.A.Weingast, K.M.Van Der Kherkhove, **S.M.Eiger**, M.J.Kluger and F.K.Port. 1985. Release of pyrogens during clinical hemodialysis. *Am. Soc. Artif. Intern. Organs* 31:359-362.
- M.J.Kluger, K.M.Van Der Kherkhove, **S.M.Eiger** and F.K.Port. 1987. Enhanced thermolability in anephric rabbits. *Am.J.Kidney Dis.* 10(2):89-91.
- **S.M.Eiger**, K.T. Mills and H.A. Bern. 1990. Steroid binding alterations in tissue compartments of the vagina of control and neonatally diethylstilbestrol-treated adult mice. *J.Steroid Biochem.* 35(5):617-621. 1990.
- Yu, V., **S.M.Eiger**, R.Duan, and W.Sadee. 1990. Regulation of cAMP by the mu-opioid receptor in human neuroblastoma SH-SY5Y cells. *J.Neurochem.* 55:1390-1396.
- H.Farsam, **S.M.Eiger**, J.Lameh, A.Rezvani, D.W.Gibson, and W.Sadee. 1990. Morphine impurity with opioid activity is identified as 10-alpha hydroxymorphine. *Pharm.Res.* 7:1205-1207.
- J.Lameh, **S.M.Eiger** and W.Sadee. 1992. Interaction among Mu-opioid receptors and alpha-2-adrenoreceptors on SH-SY5Y human neuroblastoma cells. *Eur.J.Pharm.Molecular Pharmacology.* 227:12-24.
- H.Lefcort and **S.M.Eiger**. 1993. Anti-predator behavior of feverish tadpoles: implications for pathogen transmission. *Behaviour,* 120(1-2):13-27.
- Lefcort, H, Ammann, E and **S.M.Eiger**. 2000. Antipredatory behavior as an index of heavy-metal pollution? A test using snails and caddisflies. *Archives of Environmental Contamination and Toxicology* 38:311-316.
- H.Lefcort and **S.M.Eiger**. 2002. Preparatory vs. Practice Homework: A Test Using University Biology Students. *Journal of College Science Teaching* vol. 33, #1, 2003: 16-18

**Invited Reviews:**

- **S. Eiger**, 1999. Review of *Concepts of Human Physiology*, *The Physiologist* 42: 6: 453

**Local Publications:**

- **S Eiger**. 2001. "Experiments in Teaching" in *Faculty Teaching Highlights: Sharing What Works*, p. 7-8

**Books and Book Chapters:**

1. **S Eiger**. Lecture Notes: Human Physiology, John Wiley and Sons Inc. 2004
2. **S.M.Eiger** and M.J.Kluger. 1983. Thermogenesis and Fever. Mammalian Thermogenesis. Ed. L.Girardier and M.J.Stock. Chapman and Hall Ltd. London, U.K.: 305-320.
3. R.L.Malvin, C.Harker, and **S.M.Eiger**.1983. Text for Independent study course, Physiology 101. The University of Michigan Press.

#### **Abstracts or Conference presentations:**

- **S.M.Eiger**, J.R. Hirsch and L.G.D'Alecy. 1979. Hypoxia tolerance induced by ketosis with elevated glucagon. Fed.Proc. 38:1390.
- **S.M.Eiger**, P.Cox and M.J.Kluger. 1983. Shark and mammalian urine contain a substance that lowers the body temperature of rabbits. Fed.Proc. 42(3):118.
- **S.M.Eiger** and M.J.Kluger.1984. Cyanate and temperature regulation in anephric rabbits. Fed.Proc.43(4):908.
- D.G.Burt, T.C.Holland, **S.M.Eiger** and M.J.Kluger. 1984. Further characterization of an endogenous cryogen that appears in urine. The Physiologist 27(4):249.
- M.J.Kluger, R.Singer, **S.M.Eiger** and S.D.McGraw. 1985. Polymixin B cannot be used to ensure that solution is endotoxin free. Fed.Proc.44:1195.
- **S.M.Eiger**, K.T.Mills and H.A.Bern. 1985. Changes in steroid receptor level in the vagina and uterus of mice treated neonatally with diethylstilbestrol (DES).Gordon Research Conference on Hormonal Carcinogenesis.
- **S.M.Eiger**, M.J.Kluger, K.M.Van Der Kherkhove and F.K.Port. 1986. Enhanced thermolability in anephric rabbits. The Physiologist.
- **S.M.Eiger**, J.Gavrilovic, K.Dryer and M.J.Banda. 1986. Secretion of type IV collagenase activity from microvascular endothelial cells. J.Cell Biol. (5)256a.
- W.Sadee, V.C.Yu, and **S.M.Eiger**. 1988. Regulation of cAMP in differentiated cells expressing the mu opiod receptor. INRC.
- **S.M. Eiger**, 2001. Recitation Sections in Physiology and Anatomy. National Human Anatomy and Physiology Society Conference

#### **Grant Proposals Submitted:**

- “*Coming Alive Workshop*” To the Big Sky Institute, Professional Development Visitor Series; with Gwen Jacobs, Barbara Hudson, Linda Sherwood, Funded.
- “*Anatomy and Physiology Conference*” to the Office of the President, with Susan Gibson, Funded
- “*Investigating the Ordinary, Extraordinary, and Wrong*” To the Big Sky Institute, with Jeff Adams, Larry Watson, Linda Sherwood.
- “*On the Nature of Nature*” with Valerie Copie; to the Big Sky Institute, Curricular Review Grants
- “*Student Response to Changes Instituted in Biology 211(Anatomy and Physiology)*”, To Teaching/Learning Committee Instructional Innovation Grants Program
- “*Billy Goes to College, a Primer on How to do Well in College*”, To the College of Letters and Science, Retention Program
- “*Teaching and Learning Fellowship*”, To the Teaching and Learning Program, with John Miller, Adele Pittendrigh, Katherine Neilsen, funded
- Hewlett Foundation course pairing fellowship with Ed Dratz, funded
- Research Course Proposal to the Hewlett Committee, 2001
- Retention and Recruitment Proposal, 2001; funded
- The Charles and Anne Morrow Lindberg Fund, 2003

- CORE 2.0 award, 2003, funded, \$500

**Conference Organized:**

Physiology and Anatomy teachers of Montana, June, 1997

**Lecture courses taught at Montana State University:**

Mechanisms Cell Physiology, for medical school

Physiology II

Physiology I

Comparative Vertebrate Anatomy

Life and Other Big Questions

Senior Capstone Course

**Guest lectures:**

Presentation on “Thinking” for the New Graduate Teaching Assistant Orientation; August 27, 2004.

Panelist for “Is there a role for God in Academia?”, 2004; Guest Lecturer for Mortar Board’s Last Lecture Series, 2002;

After dinner speaker for Golden Key Honor Society Awards Dinner, Nov. 1999;

MCAT Reviews; Physics Department guest lecture;

Biology 400: Native American Health Issues; WWAMI

UDOC, 2000; 2 hours per year in Animal Physiology; Biol. 410, 1999-2003, 6 hours in 2004

Base Camp Earth, 2001;

**Graduate student committees:**

Sulayman Alkhayyatt (Education) 1998-2000 Ph.D.

Robin Gerlach (Biofilm Engineering) 1998-2001 Ph.D.

David James Cole (Chemistry) 2001-present (Ph.D.)

**Undergraduate student committees:**

Sandra McIntyre (Interdisciplinary Studies) 1996

**Academic service:**

Faculty Council, Fall 2004-

Future Physicians Student Organization, 2004-

Student Health Advisory Committee, Spring 2004-

Executive Committee, Dept. of Biology, 1997-2000

CBN PPAC Committee (pre-Medical School interviews) 2001-

Search Committees, Dept. of Biology, (2), 1998

Awards Committee, College of Letters and Sciences, 1999  
Curriculum Committees (College and departmental level) 1997-2000

**Professional service:**

Study section panel member; Division of Undergraduate Education:

Instrumentation and Laboratory Improvement: National Science Foundation, 1998

Proposal review: Murdock College Research Program for the Life Sciences, 1998, 1999

Journal Review: *Archives of Environmental Contamination and Toxicology*, 1998-present

Book Review: *The Physiologist*, 1999

Textbook review: Benjamin Cummings, 2000-present

Exploratorium pinhole, 1995-present