

CURRICULUM VITA

MICHAEL S. FINKLER, Ph.D

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PROFESSIONAL EXPERIENCE

CURRENT POSITIONS

Associate Professor of Biology, Indiana University Kokomo (Since 2004)

Director, Master of Liberal Studies Program, Indiana University Kokomo (Since 2007)

Member of the Graduate Faculty, Indiana University (Since 2001)

PREVIOUS ACADEMIC POSITIONS

Assistant Professor of Biology, Department of Natural Information and Mathematical Sciences, Indiana University Kokomo, Kokomo, Indiana, USA. August 1998 - June 2004.

Adjunct Lecturer, Miami University, Oxford, Ohio, USA. June 1998 - August 1998.

Teaching Associate, Miami University, Oxford, Ohio, USA. August 1994 - May 1998

Graduate Assistant, Miami University, Oxford, Ohio, USA. August 1992 - May 1994

Teaching Assistant, Kalamazoo College, Kalamazoo, Michigan, USA. December - March 1991.

PREVIOUS RESEARCH POSITIONS

Visiting Scholar, Department of Biological Sciences, University of North Texas, Denton, Texas, USA (sabbatical leave), January - February 2006.

Report Writer / Research Technician II, Hazelton Research Products, Inc., Kalamazoo, Michigan, USA, July 1991 - August 1992.

Research Assistant, Department of Biology, Kalamazoo College, Kalamazoo, Michigan, USA. September - December 1990.

EDUCATION

Ph.D., Miami University, Oxford, Ohio, August 1998. Zoology.

Dissertation "The Influence of Water Availability During Incubation on Body Size, Body Composition, Locomotor Performance and Desiccation Tolerance in Neonatal Snapping Turtles (*Chelydra serpentina*) from North-Central Nebraska".

M.S., Miami University, Oxford, Ohio, December 1995. Zoology.

Thesis "Effects of Temperature, Substrate, Body Size and Season on Locomotor Performance in Three Species of Colubrid Snake (*Nerodia sipedon*, *Regina septemvittata* and *Thamnophis sirtalis*)".

B.A., Kalamazoo College, Kalamazoo, Michigan, June 1991. Biology and Religion Double Major.

Thesis "Allometric Engineering: Role of Egg Composition in Post Hatching Growth and Development in the Chicken (*Gallus gallus*)".

SHOLARSHIP

AREAS OF RESEARCH INTEREST

General: Ecological Physiology, Comparative Physiology, Reproductive Ecology, Herpetology.

Focus Areas: Energetic Cost of Reproduction, Overwintering Energetics, Water Balance and Desiccation Tolerance, Energetics of Locomotion and Locomotor Performance.

Study Organisms: turtles, salamanders, crayfish, anurans, snakes, large insects, bird eggs

BOOK

Steyermark, A.C., M. S. Finkler, and R.J. Brooks, eds., 2008. *Biology of the Snapping Turtle (*Chelydra serpentina*)*. Johns Hopkins University Press, Baltimore.

REFEREED JOURNAL ARTICLES

Finkler, M.S. 2006. Does variation in soil water content induce variation in the size of hatchling snapping turtles (*Chelydra serpentina*)? *Copeia* 2006(4):769-777.

Finkler, M.S. 2006. Effects of temperature, sex, and gravidity on the metabolism of small-mouthed salamanders, *Ambystoma texanum*, during the reproductive season. *Journal of Herpetology* 40(1):103-106.

Finkler, M. S., A. C. Steyermark, and K. E. Jenks. 2004. Geographic variation in snapping turtle (*Chelydra serpentina serpentina*) egg composition across a longitudinal transect. *Canadian Journal of Zoology*: 82(1):102-109.

Finkler, M. S., M. T. Sugalski, and D. L. Claussen. 2003. Sex-related differences in metabolic rate and locomotor performance in breeding spotted salamanders (*Ambystoma maculatum*). *Copeia* 2003(4): 887-893.

Finkler, M. S., and K. A. Cullum. 2002. Sex-related differences in metabolic rate and energy reserves in spring-breeding small-mouthed salamanders (*Ambystoma texanum*). *Copeia* 2002(3): 824-829.

Finkler, M. S., J. T. Bowen, T. M. Christman, and A. D. Renshaw. 2002. Effects of hydric conditions during incubation on body size and triglyceride reserves of overwintering hatchling snapping turtles (*Chelydra serpentina*). *Copeia* 2002(2): 504-510.

Finkler, M. S. 2001. Rates of water loss and estimates of survival time under varying humidity in juvenile snapping turtles (*Chelydra serpentina*). *Copeia* 2001(2): 521-525.

Finkler, M. S., D. L. Knickerbocker and D. L. Claussen. 2000. Influence of population and hydric conditions during incubation on overland movement of neonatal snapping turtles. *Journal of Herpetology* 34(3): 452-455.

Finkler, M. S. 1999. Influence of water availability during incubation on hatchling size, body composition, desiccation tolerance and terrestrial locomotor performance in the snapping turtle, *Chelydra serpentina*. *Physiological and Biochemical Zoology* 72(6): 714-722.

Finkler, M. S. and D. L. Claussen. 1999. Influence of temperature and body size on forced and voluntary swimming and crawling speeds in *Nerodia sipedon* and *Regina septemvittata*. *Journal of Herpetology* 33: 62-71.

Finkler, M. S., J. B. Van Orman and P. R. Sotherland. 1998. Experimental manipulation of egg quality in chickens: influence of albumen and yolk on the size and body composition of near-term embryos in a precocial bird. *Journal of Comparative Physiology B* 168: 17-24.

Claussen, D. L., M. S. Finkler and M. M. Smith. 1997. Thread trailing of turtles - methods for evaluating spatial movements and pathway structure. *Canadian Journal of Zoology* 75: 2120-2128.

Finkler, M. S. and D. L. Claussen. 1997. The use of the tail in terrestrial locomotor activities of juvenile *Chelydra serpentina*. *Copeia* 1997: 884-887.

Finkler, M. S. and D. L. Claussen. 1997. Variation in the composition of *Chelydra serpentina* eggs within and among clutches. *Journal of Herpetology* 31: 620-624.

BOOK CHAPTER

Finkler, M. S., and J. J. Kolbe. 2008. Physiology and ecology of hatchling snapping turtles. In R.J. Brooks, A.C. Steyermark, and M. S. Finkler, eds., *Biology of the Snapping Turtle*. Johns Hopkins University Press, Baltimore.

PUBLISHED ABSTRACTS, LIFE HISTORY NOTES, AND REPORTS

Finkler, M.S., and A. D. Gillem. 2005. Sex-related differences in stored energy reserves in spring-breeding hylid frogs. *Integrative and Comparative Biology* 45(6):996

Gillem, A.D., and M.S. Finkler. 2004. Sex-related differences in stored energy reserves in spring-breeding spotted salamanders (*Ambystoma maculatum*). *Integrative and Comparative Biology* 44(6):700

Finkler, M.S., and A. D. Gillem. 2004. A comparison of stored energy reserves before and after oviposition in female *Ambystoma texanum* and sympatric *Ambystoma jeffersonianum-laterale* complex gynogenetics. *Integrative and Comparative Biology* 44(6):695

Finkler, M.S. 2003. Effects of temperature, sex, and gravidity on the metabolism of small-mouthed salamanders, *Ambystoma texanum*. *Integrative and Comparative Biology* 43(6):1038

Finkler, M.S., and A. E. Schultz. 2003. *Sternotherus odoratus* (Common Musk Turtle) and *Chelydra serpentina* (Common Snapping Turtle). Reproduction. *Herpetological Review* 34(1):58.

Miller, T., and M. S. Finkler. 2003. Bacterial clearance from snapping turtle eggs during early embryonic development. *Integrative and Comparative Biology* 42(6):1279

Finkler, M. S. 2003. Variation in soil water content influences the size of laboratory-reared *Chelydra serpentina* from eggs incubated in natural nest soil. *Integrative and Comparative Biology* 42(6):1230

Finkler, M. S. and B. T. Kressley. 2002. Post-hatching yolk consumption and stored energy reserves in hatchling snapping turtles, *Chelydra serpentina* *The Physiologist* 45(4):345.

Finkler, M. S. and K. A. Cullum. 2001. Interspecific and sex-related differences in metabolism and post-reproductive energy reserves in spring-breeding Ambystomid salamanders. *American Zoologist* 41(6): 1443-1444.

Finkler, M. S., A. C. Steyermark, J. W. Lang, K. E. Jenks and P. R. Sotherland. 2001. Geographical variation in snapping turtle egg composition across a longitudinal transect. *American Zoologist* 41(6): 1642.

Christman, T. M. and M. S. Finkler. 2000. Overwintering energetics of the red-backed salamander, *Plethodon cinereus*. *American Zoologist* 40(6): 973-974

Finkler, M. S., M. T. Sugalski, and D. L. Claussen. 2000. Sex-related differences in locomotor performance and metabolism in breeding spotted salamanders (*Ambystoma maculatum*). *American Zoologist* 40(6): 1015

Finkler, M. S., J. T. Bowen, T. M. Christman and A. D. Renshaw. 1999. Long-term effects of hydric conditions during incubation on body size and triglyceride content of neonatal snapping turtles: is wetter better in the long run? *American Zoologist* 39(5): 70A.

Finkler, M. S., 1998. Influence of water availability during incubation on hatching water content and deiscation tolerance in neonatal snapping turtles. *American Zoologist* 38(5): 116A.

Finkler, M. S., D. L. Knickerbocker and D. L. Claussen. 1997. Field measures of movement, evaporative water loss, and body temperature in neonatal snapping turtles following nest exodus. *American Zoologist* 37(5): 36A.

Finkler, M. S. 1997. Impact of egg content on post-hatching size, body composition and performance in the common snapping turtle (*Chelydra serpentina*). Linnaeus Fund Research Report. *Chelonian Conservation and Biology* 2: 424-428.

Finkler, M. S., J. N. Van Orman and P. R. Sotherland. 1994. Experimental manipulation of egg quality in chickens: influence of egg composition on embryo and hatchling size. *American Zoologist* 34(5): 30A.

INVITED PRESENTATIONS

Hoosier Herpetological Society. September 20, 2006.

“Salamander Springtime Love-In: A Look at the Physiological Ecology of Ambystomatids During Reproduction.”

Hoosier Herpetological Society. March 15, 2006.

“Effects of Water Availability During Incubation on Hatchling Phenotype in Snapping Turtles.”

Biology Seminar, Huntington College. April 11, 2005. “Amphibian Sex and Baby Turtles: a Look at the Physiological Ecology of Reproduction in Herps.”

Science Seminar, Manchester College. April 4, 2005. “Sexual Dimorphism and the Cost of Reproduction in Mole Salamanders.”

Indiana College Biology Teacher's Association Annual Meeting, Franklin College. March 4, 2005. “Amphibian Sex and Baby Turtles: a Look at the Physiological Ecology of Reproduction in Herps.”

Biology Department Seminar, Central Michigan University. March 18, 2004.

”Surviving the First Cut: The Physiological Ecology of Snapping Turtle Eggs and Hatchlings.”

Indiana Academy of Science, 55th Annual Student Talent Search, Indiana University Kokomo, Keynote Lecture. October 26, 2002. ”Turtles of North-Central Indiana. ”

Biology Department Seminar, Indiana University South Bend. March 15, 2002.

”The Physiological Ecology of Snapping Turtle Eggs and Hatchlings: Surviving the First Cut. ”

Life Sciences Department Seminar, Indiana State University. October 30, 2001. “Nest Environments and Post-hatching Quality in Snapping Turtles: Is Wetter Really Better?”

Biology Department Seminar, Indiana University-Purdue University Fort Wayne. February 18, 2000.
 "Is Wetter Better? Insights on Nest Environments and Post-hatching Quality in Snapping Turtles."

CONTRIBUTED PRESENTATIONS

Finkler, M.S., M.K. Williams, and R.T. McElveen. Physiological dimorphisms in pre-and post-reproductive spotted salamanders: endocrine and mitochondrial density differences. Meeting of the Society for Integrative and Comparative Biology, San Antonio, Texas. January 2008

Irwin, J.T, and M.S Finkler. Sex differences in freeze tolerance and cryoprotectant mobilization of spring peepers (*Pseudacris crucifer*) and western chorus frogs (*Pseudacris triseriata*). Meeting of the Society for Integrative and Comparative Biology, San Antonio, Texas. January 2008

Finkler, M. S. Differences in organ mass and hematology between male and female Spotted Salamanders (*Ambystoma maculatum*) during the reproductive season. Meeting of the Society for Integrative and Comparative Biology, Phoenix, Arizona. January 2007

Finkler, M. S., and W.W. Burggren. Experimental manipulation of egg quality in chickens: Influence of albumen volume and protein content on body size and organ mass in embryos and hatchlings. Meeting of the Society for Integrative and Comparative Biology, Phoenix, Arizona. January 2007.

Gillem, A. D. and M. S. Finkler. Sex-related differences in stored energy reserves in spring-breeding hylid frogs. Meeting of the Society for Integrative and Comparative Biology, Orlando, Florida. January 2006.

Finkler, M. S. and A. D. Gillem. A comparison of stored energy reserves before and after oviposition in female *Ambystoma texanum* and sympatric *Ambystoma jeffersonianum* complex hybrids. Meeting of the Society for Integrative and Comparative Biology, San Diego, California. January 2005.

Gillem, A. D. and M. S. Finkler. Sex-related differences in stored energy reserves in spring-breeding spotted salamanders (*Ambystoma maculatum*). Meeting of the Society for Integrative and Comparative Biology, San Diego, California. January 2005.

Finkler, M. S. and A. D. Gillem. Sex-related differences in stored energy reserves in spring-breeding small-mouthed salamanders (*Ambystoma texanum*). Meeting of the Indiana Academy of Science, Hanover, Indiana. October 2004.

Finkler, M. S. Effects of temperature, sex, and gravidity on the metabolism of small-mouthed salamanders, *Ambystoma texanum*. Meeting of the Society for Integrative and Comparative Biology, New Orleans, Louisiana. January 2004.

Finkler, M. S. Variation in soil water content influences the size of laboratory-reared *Chelydra serpentina* from eggs incubated in natural nest soil. Meeting of the Society for Integrative and Comparative Biology, Toronto, Ontario. January 2003.

Miller, T., and M. S. Finkler. Bacterial clearance from snapping turtle eggs during early embryonic development. Indiana University Undergraduate Research Conference, Indianapolis, Indiana. November 2002.

Mygrant, M.S., and M. S. Finkler. Dehydration tolerance in the rusty crayfish (*Orconectes rusticus*). Indiana University Undergraduate Research Conference, Indianapolis, Indiana. November 2002

Finkler, M. S. and B. T. Kressley. Post-hatching yolk consumption and stored energy reserves in hatchling snapping turtles, *Chelydra serpentina*. American Physiological Society Intersociety Meeting "The Power of Comparative Physiology: Evolution, Integration, and Application". August 2002.

Finkler, M. S. and K. A. Cullum. Interspecific and sex-related differences in metabolism and post-reproductive energy reserves in spring-breeding Ambystomid salamanders. Meeting of the Society for Integrative and Comparative Biology. January 2002.

- Finkler, M. S., A. C. Steyermark, J. W. Lang, K. Jenks and P. R. Sotherland. Geographic variation in snapping turtle egg composition across a longitudinal transect. Meeting of the Society for Integrative and Comparative Biology. January 2002.
- Kressley, B. T., and M. S. Finkler. Effects of high nest water contents on embryonic respiration and hatchling size in snapping turtles. Indiana University Undergraduate Research Conference. October 2001.
- Miller, S. A., M. S. Finkler and C. Chauret. Bacterial populations in snapping turtle eggs: influence of nesting environment and embryonic development. Indiana University Undergraduate Research Conference. October 2001.
- Finkler, M. S. and K. A. Cullum. Sex-related differences in metabolic rate and energy reserves in spring-breeding small-mouthed salamanders (*Ambystoma texanum*). Joint Meeting of the Society for the Study of Amphibians and Reptiles and the Herpetologists' League. July 2001.
- Finkler, M. S., M. T. Sugalski, and D. L. Claussen. Sex-related differences in locomotor performance and metabolism in breeding spotted salamanders (*Ambystoma maculatum*). Meeting of the Society for Integrative and Comparative Biology. January 2001.
- Christman, T. M., and M. S. Finkler. Overwintering energetics of the red-backed salamander, *Plethodon cinereus*. Meeting of the Society for Integrative and Comparative Biology. January 2001.
- Chandler, M. T., and M. S. Finkler. Effects of high nest water contents on embryonic respiration and survivorship in snapping turtles. Indiana University Undergraduate Research Conference. October 2000.
- Rousseau, J., C. Chauret and M. S. Finkler. Influence of nest moisture on bacterial diversity in snapping turtle eggs. Indiana University Undergraduate Research Conference. October 2000.
- Finkler, M. S., J. T. Bowen, T. M. Christman, and A. D. Renshaw. Long-Term Effects of Hydric Conditions During Incubation on Body Size and Triglyceride Content of Neonatal Snapping Turtles: Is Wetter Better in the Long Run? Meeting of the Society for Integrative and Comparative Biology. January 2000.
- Finkler, M. S. Influence of Water Availability During Incubation on Hatching Water Content and Desiccation Tolerance in Neonatal Snapping Turtles. Meeting of the Society for Integrative and Comparative Biology. January 1999.
- Finkler, M. S., D. L. Knickerbocker, and D. L. Claussen. Influence of Population and Hydric Conditions During Incubation on Migratory Behavior of Neonatal Snapping Turtles Following Nest Exodus. Joint Meeting of the American Society of Ichthyologists and Herpetologists, the Herpetologists League, the Society for the Study of Amphibians and Reptiles, the American Elasmobranch Society, and the Canadian Association of Herpetologists. June 1998.
- Finkler, M. S., D. L. Knickerbocker, and D. L. Claussen. Field Measures of Movement, Evaporative Water Loss, and Body Temperature in Neonatal Snapping Turtles Following Nests Exodus. Meeting of the Society for Integrative and Comparative Biology. January 1998.
- D. L. Claussen, M. S. Finkler, and M. M. Smith. Thread Trailing of Turtles: New Uses for an Old Method. Joint Meeting of the American Society of Ichthyologists and Herpetologists, the Herpetologists League, the Society for the Study of Amphibians and Reptiles, the American Elasmobranch Society, and the American Fisheries Society. June 1997.
- Finkler, M. S. and D. L. Claussen. Influence of Water Availability During Incubation on Desiccation Tolerance and Locomotor Performance in Neonatal Snapping Turtles (*Chelydra serpentina*). Joint Meeting of the American Society of Ichthyologists and Herpetologists, the Herpetologists League, the Society for the Study of Amphibians and Reptiles, the American Elasmobranch Society, and the American Fisheries Society. June 1997.
- Finkler, M. S. and D. L. Claussen. Use of the Tail in Terrestrial Locomotor Activities of Juvenile *Chelydra serpentina*. Midwest Ecology and Evolution Conference. April 1997.

Finkler, M. S. and D. L. Claussen. Variation in Maternally Derived Water in Eggs Influences Hatchling Mass and Composition in *Chelydra serpentina*. Meeting of the Society for the Study of Amphibians and Reptiles. July 1996.

Finkler, M. S. and D. L. Claussen. Effects of Body Temperature and Size on Voluntary and Forced Locomotion in *Nerodia sipedon*. Meeting of the Society for the Study of Amphibians and Reptiles. August 1995.

Finkler, M. S., J. B. Van Orman, and P. R. Sotherland. Experimental Manipulation of Egg Quality in Chickens: Influence of Egg Composition on Embryo and Hatchling Size. Meeting of the American Society of Zoologists. January 1995.

Finkler, M. S. and D. L. Claussen. Variation in the Composition of Snapping Turtle (*Chelydra serpentina*) Eggs Within and Among Clutches. Joint Meeting of the Herpetologists League and the Society for the Study of Amphibians and Reptiles. July 1994.

GRANTS AND FELLOWSHIPS:

Indiana Academy of Science Senior Research Grant: Endocrine and Mitochondrial Factors Underlying Sex-Related Differences in the Metabolism of Spring Breeding Spotted Salamanders. 2007 (\$514)

Indiana University Kokomo Grant-in-Aid of Faculty Research. Endocrine and Mitochondrial Factors Underlying Sex-Related Differences in the Metabolism of Spring Breeding Spotted Salamanders. 2006 (\$4000)

Indiana University Kokomo Grant-in-Aid of Faculty Research. Sex-related differences in the stored energy reserves of spring-breeding amphibians. 2004 (\$3,000)

Indiana University Faculty Summer Research Fellowship. Sex-related differences in the stored energy reserves of spring-breeding Ambystomid salamanders. 2004 (\$6,000)

Indiana University Kokomo Grant-in-Aid of Faculty Research. Proposal for purchase of a Qubit™ modular respirometry / data acquisition system for animal physiology research. 2003 (\$3,500)

Indiana University Faculty Summer Research Fellowship. Thermal effects on bacterial clearance from snapping turtle eggs. 2002 (\$5,000)

Indiana University Intercampus Research Fund. Effects of high nest moisture levels on embryonic survivorship and hatchling quality in common snapping turtles. 1999. (\$12,000)

Indiana University Faculty Summer Research Fellowship. Effects of high nest moisture levels on embryonic survivorship and hatchling quality in common snapping turtles. 1999 (\$5,000)

Society for the Study of Amphibians and Reptiles Grants-in-Aid of Research. Impact of egg content on post-hatching size, body composition and performance in *Chelydra serpentina*. 1995 (\$500)

Chelonian Research Foundation Linnaeus Fund. Impact of egg content on post-hatching size, body composition and performance in the common snapping turtle (*Chelydra serpentina*). 1994 (\$500)

STUDENT RESEARCH DIRECTED:

McElveen, R. Troy. 2007. Sex-related differences in tissue mitochondrial density in *Ambystoma maculatum*.

Whitehead, Melissa. 2007. Influence of sex and reproductive condition on fat and total caloric content in spotted salamanders, *Ambystoma maculatum*.

Whitehead, Melissa. 2007. Endocrine influences on sex-related differences in metabolic rate and stored energy reserves in spotted salamanders, *Ambystoma maculatum*.

Jackson, Alva. 2006. Modeling evaporative water loss in the rusty crayfish, *Orconectes rusticus*. Undergraduate Research Summer Institute Fellowship, Indiana University Kokomo.

- Gallatin, Karen. 2005-2006. *The Imprisoned Mind* (a novela). Master of Liberal Studies Capstone Project, Indiana University Kokomo.
- Gillem, Ashley. 2005. Lysozyme activity and its effect on the bacterial content of snapper turtle eggs throughout embryonic development. Undergraduate Research Summer Institute Fellowship, Indiana University Kokomo.
- Bowser, Elena. 2004-2005. Influence of prey availability on stored energy reserves of overwintering plethodontid salamanders. Independent Research, Indiana University Kokomo.
- Gillem, Ashley. 2004-2005. Sex-related differences in stored energy reserves of spring breeding amphibians. Independent Research, Indiana University Kokomo
- Gillem, Ashley. 2004. Bacterial contents of snapping turtle eggs. Undergraduate Research Summer Institute Fellowship, Indiana University Kokomo.
- Miller, Trent, and Christina Zimpleman. 2003. Bacterial clearance from turtle eggs: correlates with developmental stage. Undergraduate Research Summer Institute Fellowship, Indiana University Kokomo.
- Wrangham, Thomasina. 2003-2004. Temperature effects on active ventilation in the Madagascan hissing roach, *Gromphadorhina portentosa*. Independent Research (BIOL L490), Indiana University Kokomo.
- Miller, Trent. 2002. Influence of temperature on bacterial clearance from turtle eggs. Undergraduate Research Summer Institute Fellowship, Indiana University Kokomo.
- Mygrant, Michael. 2002. Influence of temperature and desiccation on respiration and cardiovascular physiology in the rusty crayfish (*Orconectes rusticus*). Independent Research (BIOL L490), Indiana University Kokomo.
- Kressley, Brook. 2001-2002. Yolk consumption and energy storage in hatchling snapping turtles. Independent Research (BIOL L490), Indiana University Kokomo.
- Kressley, Brook. 2001. Effects of high nest water contents on embryonic respiration and survivorship in snapping turtles. Undergraduate Summer Research Institute Fellowship, Indiana University Kokomo.
- Cullum, Kathryn. 2001. Sex-related differences in the energy reserves of spring-breeding Ambystomid salamanders. Independent Research (BIOL L490), Indiana University Kokomo.
- Miller, Stephen. 2001. Influence of nest moisture and indigenous soil bacteria on bacterial infection of snapping turtle eggs. Undergraduate Summer Research Institute Fellowship, Indiana University Kokomo [Co-directed with Christian Chauret, Indiana University Kokomo]
- Chandler, Michael. 2000. Effects of high nest water contents on embryonic respiration and survivorship in snapping turtles. Undergraduate Summer Research Institute Fellowship, Indiana University Kokomo.
- Christman, Theresa. 2000. Influence of prey availability on glycogen and triglyceride contents of overwintering red-backed salamanders (*Plethodon cinereus*). Independent Research, Indiana University Kokomo.
- Russeau, Joseph. 2000. Influence of nest moisture on bacterial diversity in snapping turtle eggs. Undergraduate Summer Research Institute Fellowship, Indiana University Kokomo [Co-directed with Christian Chauret, Indiana University Kokomo].
- Bowen, Justin, Theresa Christman and Angela Renshaw. 1999. Effects of hydric conditions during incubation on body size and triglyceride reserves of overwintering hatchling snapping turtles (*Chelydra serpentina*).
- Knickerbocker, Debra. 1997. Effect of hydric conditions during incubation of common snapping turtle eggs on hatchling evaporative water loss and microhabitat selection during a simulated nest exodus. Senior Thesis, Kalamazoo College [Co-directed with Paul Sotherland, Kalamazoo College].
- Campbell, Julie. 1996. Direct competition in captive juvenile snapping turtles (*Chelydra serpentina*). Independent Research, Miami University [Co-directed with Dennis Claussen, Miami University].

Wallace, Pierrett. 1994. Thermal effects on dive duration and heart rate during submergence in the semi-aquatic snakes *Nerodia sipedon* and *Thamnophis sirtalis*. Research Project, Miami University / Cincinnati Academy of Math and Science Young Scholar Program, Miami University.

PROFESSIONAL SOCIETY AFFILIATIONS

American Society of Ichthyologists and Herpetologists
 Indiana Academy of Sciences
 Sigma Xi
 Society for Integrative and Comparative Biology
 Society for the Study of Amphibians and Reptiles

OTHER ACADEMIC HONORS

Department of Zoology Doctoral Student Research Award. 1997-1998, Miami University.
Graduate Student Achievement Fund Award. Fall Semester 1997, Miami University.
Department of Zoology Master's Student Research Award. 1995-1996, Miami University.
National Honor Society of Phi Kappa Phi. 1995 to present, Miami University.
Bierly Landis Scholarship 1994-1995, Miami University.
Dunsmore Prize for Excellence in Religious Studies. 1991, Kalamazoo College.
Honors, Senior Individualized Project. 1991, Kalamazoo College.
Diebold Fellowship in Biology. 1990, Kalamazoo College.

TEACHING

INSTRUCTIONAL EXPERIENCE

Indiana University Kokomo (1998-2008)

PHSL-P 215 Basic Human Physiology w/ Lab
 PHSL-P 416 Comparative Animal Physiology
 BIOL-L 345 Vertebrate Biology
 BIOL-L 367 Cell Physiology
 BIOL-L 490 Independent Research
 BIOL-L 498 Internship in Professional Practice
 LBST-D503 Science Seminar
 HON-H 399 Honors Seminar

Miami University (1992-1998)

ZOO 201 Comparative Vertebrate Anatomy Laboratory
 ZOO 305 Animal Physiology Laboratory
 ZOO 453/553 Animal Physiological Ecology Laboratory
 ZOO 161 Principles of Human Physiology Laboratory
 ZOO 161 Principles of Human Physiology Lecture
 ZOO 121 Environmental Biology Lecture

Kalamazoo College (1991)

BIO 424 Physiological Ecology Laboratory

ACADEMIC PROGRAM ADMINISTRATION AND DEVELOPMENT

Director, Master of Liberal Studies Program, Indiana University Kokomo (2007-2008)

TEACHING CONFERENCES

Annual Meetings of the Indiana College Biology Teachers' Association:

Huntington College, Huntington, Indiana, March 2003
 Franklin College, Franklin, Indiana, March 2005
 Manchester College, North Manchester, Indiana, November 2005
 Indiana University Kokomo, November 2006
 Marian College, Indianapolis, Indiana, November 2007

TEACHING AWARDS

Claude Rich Excellence in Teaching Award, 2004, Indiana University Kokomo.

Trustees Teaching Award, 2004, Indiana University Kokomo.

Trustees Teaching Award, 2002, Indiana University Kokomo.

ACADEMIC ADVISING

Indiana University Kokomo Division of Allied Health Sciences (2002-2008): Academic Advisor for Pre-Radiography A.S. and Pre-Medical Imaging Technology B.S. Programs

Indiana University School of Allied Health Sciences/School of Medicine (1999-2008):
 IU Kokomo Academic Advisor for Pre-Medical Imaging Technology B.S., Pre-Nuclear Medicine B.S., Pre-Radiation Therapy B.S., and Pre-Radiography A.S. Programs.

Indiana University Kokomo School of Arts and Sciences (2004-2007). Academic Advisor for Masters of Liberal Studies Degree.

SERVICE

UNIVERSITY SERVICE

Search and Screen Committees, Assistant Professors of Biology and Physics, 2007-2008.

Graduate Council (Graduate Directors Committee), Indiana University Kokomo, Member 2008.

Faculty Senate Nomination Committee, Indiana University Kokomo, Member 2007-2008

Center for Student and Faculty Research Advisory Board, Indiana University Kokomo, Member 2007-2008.

Satisfactory Academic Progress Appeals Committee Member, Office of Scholarships and Financial Aid 2007-2008.

Honors Program Advisory Board, Indiana University Kokomo, Member 2006-2007.

Claude Rich Excellence in Teaching Award Committee, Indiana University Kokomo, Member 2004-2005.

Graduate Affairs Committee, Indiana University Kokomo, Chair 2004-2005.

Search and Screen Committee, Assistant Biology Lab Supervisor, Indiana University Kokomo, Member 2004 (search suspended).

Search and Screen Committee, Biology Laboratory Supervisor, Indiana University Kokomo, Member 2004.

Search and Screen Committee, Electronic Resources/Documents Librarian, Indiana University Kokomo, Member 2003-2004.

Search and Screen Committee, Clinical Coordinator, Radiography, Indiana University Kokomo, Member 2003-2004.

Proposal Review Committee, IUK Commitment to Excellence Program, Indiana University Kokomo, Member 2003-2004.

Admissions Committee, Radiography A.S. Program, Division of Allied Health Science, Indiana University Kokomo, Member, 2003-2004.

Master of Liberal Studies Advisory Committee, School of Arts and Sciences, Indiana University Kokomo, Member 2002-2007.

Search and Screen Committee, Dean, School of Arts and Sciences, Indiana University Kokomo, Member, 2002-2003.

Environmental Club, Indiana University Kokomo, Faculty Advisor, 2002.

Indiana University Advance College Project, Regional Faculty Liaison (Biology), 2001-2004.

Faculty Board of Review, Indiana University Kokomo, Member 2001-2002, 2003-2005.

All Campus Third Year Review Committee for Tenure-Track Faculty, Indiana University Kokomo, Member 2001-2004.

Search and Screen Committee, Director of Radiography, Indiana University Kokomo, Member 2001-2002.

Faculty Development and Grants Committee, Indiana University Kokomo, Member 1999-2001, Committee Chair 2000-2001.

Institutional Animal Care and Use Committee, Indiana University Kokomo, Member 1998-2002.

Academic Calendar Committee, Indiana University Kokomo, Member 1998-1999.

Undergraduate Advisory and Research Committee, Department of Zoology, Miami University, Member 1995-1996.

EXTERNAL PROFESSIONAL SERVICE

American Society of Ichthyologists and Herpetologists

Editorial Board, *Copeia*, , 2002 and 2005.

Society for Integrative and Comparative Biology, Division of Ecology and Evolution

Divisional Secretary, 2007-2008

Judge, Student Contributed Papers Competition, 2003, 2005 through 2007.

Indiana College Biology Teachers' Association

Steering Committee Member, 2008
 Past President, 2006-2008
 President, 2005-2006
 Host Institution Meeting Coordinator, 2006
 President Elect, 2005

Manuscript Reviewer (35 manuscripts reviewed from 2000-2008)

American Journal of Physiology - Regulatory, Integrative, and Comparative Physiology
Canadian Journal of Zoology
Chelonian Conservation and Biology
Comparative Biochemistry and Physiology
Condor
Copeia
Herpetologica
Herpetological Conservation and Biology
Journal of Experimental Biology
Journal of Experimental Zoology
Journal of Herpetology
Physiological and Biochemical Zoology
Proceedings of the Indiana Academy of Science

Ad hoc Grant Proposal Reviewer, National Science Foundation, 2003, 2004.

Textbook Reviews:

S.I. Fox, *Human Physiology* 7th ed., WCB McGraw-Hill, 1999-2000.
 L. Sherwood, *Fundamentals of Physiology* 3rd ed. Thompson Brooks Cole, 2004.
 CD. Moyes and P.M. Schulte, *Principles of Animal Physiology*, Benjamin Cummings, 2005.
 S.I. Fox, *Human Physiology* 10th ed., McGraw-Hill, 2005.
 S.I. Fox, *Laboratory Guide to Human Physiology* 11th ed., McGraw Hill, 2005.
 S.I. Fox, *Fundamentals of Human Physiology* McGraw Hill, 2007.
 Appointed to the advisory board for the final development of the textbook.

Book Proposal Reviewer

Oxford University Press, 2004.
 Indiana University Press, 2007

Associate, Indiana Department of Natural Resources Division of Fish and Wildlife Non-game Amphibian and Reptile Technical Advisory Committee, 1998-2007.

COMMUNITY SERVICE

Invited Speaker, Kirkendall Nature Center, Kokomo, IN, June 2007. Presentation: *Amphibians of North-Central Indiana*.

Presentation for the Howard Co. Partners in Education "Welcome to the Real World" Career Day for Howard Co. 7th graders at Indiana University Kokomo, March 2005.

Invited Speaker, Kirkendall Nature Center, Kokomo, IN, July 2004. Presentation: *Amphibians of North-Central Indiana*.

Judge, SEFI Indiana State Science and Engineering Fair, 2004.

Invited Speaker, Indiana University Kokomo Art Gallery, "Arts and Parks" Exhibit, February 2003. Presentation: *Rare, Threatened, and Endangered Species of North-Central Indiana*.

Invited Speaker, Wildcat Guardians, Kokomo, IN, August 2002. Presentation: *Turtles of the Wildcat*.

Judge, Howard County (IN) Science Fair. 1999, 2001, and 2003-2005.