

## **CURRICULUM VITAE**

Scott A. Reese  
Assistant Professor of Biology  
June 10, 2009

### **GENERAL INFORMATION**

Kennesaw State University  
1000 Chastain Rd.  
Building 12, Rm 323  
770-423-6168  
sreese3@kennesaw.edu

### **EDUCATION**

- 1998-2002                      Ph.D., University of Alabama, Tuscaloosa, AL, Biology
- 1994-1998                      Bachelor of Science, University of Wisconsin-Superior, Superior, WI,  
Biology

### **PROFESSIONAL EXPERIENCE**

- 2004-present                      Assistant Professor of Biology, Kennesaw State University. Responsible for teaching courses in degree specialization, conducting organismal and education research, advising students, maintaining an academic setting.
- 2002-2004                      Post-doctoral fellow, Brown University. Responsible for coordinating and conducting organismal research and occasional teaching in medical school courses. Supervised and coordinated undergraduate and graduate researchers in lab.
- 1998-2002                      Graduate Teaching Assistant, University of Alabama. Responsible for teaching assigned courses in the biology degree program

### **MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS**

Society for Integrative and Comparative Biology  
American Association of University Professors  
Coalition on the Public Understanding of Science

### **HONORS, AWARDS, AND FELLOWSHIPS**

Distinguished Teaching Award, 2007, College of Science and Mathematics, Kennesaw State University-*Teaching*

Graduate Council Dissertation Fellow, 2002, University of Alabama-*Scholarship of Research*

Dean's Merit Scholar, 1998-2001, College of Science and Mathematics, Kennesaw State University-*Teaching & Scholarship of Research*

Inge & Illouise Hill Research Fellowship, 1998 & 2001, Dept. of Biological Sciences, University of Alabama-*Scholarship of Research*

## TEACHING, SUPERVISION, & MENTORING

### COURSES TAUGHT AT KENNESAW STATE UNIVERSITY

1. BIOL 4490, Arguments for Design, taught 2 times
2. BIOL 4490, Marine Biology in Belize, taught 2 times
3. BIOL 4431, Human Physiology, taught 5 times
4. BIOL 3350, Comparative Vertebrate Anatomy, taught 4 times
5. BIOL 2221, Human Anatomy and Physiology I, taught 6 times
6. BIOL 2221L, Human Anatomy and Physiology I Lab, taught 8 semesters (multiple sections/semester)

### STUDENT SUPERVISION AT KSU

#### **Honors Students:**

1. Alan Abel Herrera; Summer, 2009.
2. Chris Smith; Summer, 2009
4. Ramone Alarcon; Fall, 2008-Spring, 2009
3. Patrick Black; Summer and Fall, 2007-Spring, 2008.
4. Yu Park; Summer, 2007

#### **Directed Study-Science Research:**

1. Patrick Black; Summer and Fall, 2007-Spring, 2008.
2. Elizabeth Adair; Fall, 2007-Spring, 2008.
3. Ryan Hanson; Summer 2007
4. Daniel Kupsky; Summer and Spring, 2007
5. Brett Pinckard; Fall and Summer, 2006
6. Kylene Haskins; Fall, 2005-Spring 2006

### STUDENT ADVISING (other than student supervision) at KSU

1. Undergraduate students (Pre-medical, Pre-pharmacy, Pre-vet, Graduate school track), ~50 per year.
2. Honor's student advisor, ~4 per year.
3. Faculty advisor to the KSU Pre-Veterinary club, 2008-present.
4. Faculty advisor to the Student Coalition for Inquiry, 2009-present.

## SCHOLARSHIP OF TEACHING; RESEARCH AND CREATIVE ACTIVITY; PROFESSIONAL SERVICE; AND/OR ADMINISTRATION & LEADERSHIP

### PUBLICATIONS

#### **Refereed Journal Articles:**

Jackson DC, Taylor SE, Vivian SA, Villarnovo D, Gall JM, **Reese SA**. Comparative shell buffering properties correlate with anoxia tolerance in freshwater turtles. American

- Journal of Physiology-Regulatory, Integrative and Comparative Physiology 2007. 292: R1008-R1015.
- Minton RL, **Reese SA**, Swanger K, Perez KE, Hayes D M. Changes in shell morphology in *Elimia comalensis* (Gastropoda: Pleuroceridae) from the Edwards Plateau, Texas, USA. Southwestern Naturalist 2006. 51(4):475-481.
- Warren DE, **Reese SA**, Jackson DC. The Factors that Limit Survival of Red-Eared Slider Turtles, *Trachemys scripta*, during Long-Term Anoxic Submergence at 3°C. Physiological and Biochemical Zoology 2006. 79(4):736-744.
- Jackson DC, Rauer EM, Feldman RA, **Reese SA**. Avenues of extrapulmonary oxygen uptake in western painted turtles (*Chrysemys picta bellii*) at 10 °C. Comparative Biochemistry and Physiology A 2004. 139:221-227.
- Reese SA**, Ultsch GR, Jackson DC. Lactate accumulation, glycogen depletion, and shell composition of hatchling turtles during simulated aquatic hibernation. Journal of Experimental Biology 2004. 207:2889-2895.
- Reese SA**, Stewart ER, Crocker CE, Jackson DC, Ultsch GR. Geographic variation of the physiological response to overwintering in the painted turtle (*Chrysemys picta*). Physiological and Biochemical Zoology 2004. 77(4):619-630.
- Ultsch GR, **Reese SA**, Stewart ER. The physiology of hibernation in *Rana pipiens*: metabolic rate, critical oxygen tension, and the effects of hypoxia on several plasma variables. Journal of Experimental Zoology Part A, Comparative Experimental Biology 2004. 301(2):169-76
- Stewart ER, **Reese SA**, Ultsch GR. The physiology of hibernation in Canadian leopard frogs (*Rana pipiens*) and bullfrogs (*R. catesbeiana*). Physiological and Biochemical Zoology 2004. 77:65-73.
- Reese SA**, Jackson DC, Ultsch GR. Hibernation in freshwater turtles: softshell turtles (*Apalone spinifera*) are the most intolerant of anoxia among northern species. Journal of Comparative Physiology B 2003. 173: 263-268.
- Reese SA**, Jackson DC, Ultsch GR. The physiology of overwintering in a turtle that occupies multiple habitats, the common snapping turtle (*Chelydra serpentina*). Physiological and Biochemical Zoology 2002. 75(5): 432-438.
- Reese SA**, Crocker CE, Carwile ME, Jackson DC, Ultsch GR. The physiology of hibernation in common map turtles (*Graptemys geographica*). Comparative Biochemistry and Physiology A 2001. 130: 331-340.
- Reese SA**, Crocker CE, Jackson DC, Ultsch GR. The physiology of hibernation among painted turtles: the midland painted turtle (*Chrysemys picta marginata*). Respiration Physiology 2000. 124: 43-50.
- Ultsch GR, **Reese SA**, Nie M, Crim JD, Smith WH, LeBerte CM. Influences of temperature and oxygen upon habitat selection by bullfrog tadpoles and three species of freshwater fishes in two Alabama strip mine ponds. Hydrobiologia 1999. 416: 149-162.

#### **Refereed Chapters in Books:**

- Ultsch GR, **Reese SA**. Ecology and physiology of overwintering. In: Steyermark AC, Finkler MS, Brooks RJ, editors. Biology of the snapping turtle (*Chelydra serpentina*). Baltimore: The Johns Hopkins University Press; 2008. p 91-99.

#### **PRESENTATIONS**

#### **Refereed Conference Presentations:**

- Hatchling shell content and growth in an anoxia-intolerant species of turtle, Red-eared slider turtles (*Trachemys scripta*) **Reese SA**, Black P, Adair E, Koether M. Society for integrative and Comparative Biology<sup>‡</sup>. Boston, Massachusetts. 2009-poster.
- Risk and reward in undergraduate research in the southeast: A survey of institutional support at southeastern institutions. Ensign WE, Matson R, **Reese SA**. Symposium on Research at Undergraduate Institutions: Pitfalls and Possibilities; Association of Southeastern Biologists<sup>€</sup>. Spartanburg, South Carolina. 2008-invited talk.
- Integrating biology experimental activity modules with introductory physics. **Reese SA**, Krivosheev T, Burnett S, Pratte J. Course Curriculum and Laboratory Improvement (CCLI) PI Conference<sup>‡</sup>. Washington D.C. 2008-poster.
- Extrapulmonary O<sub>2</sub> uptake in the soft-shell turtle, *Apalone spinifera*. Kupsy DF, Pinckard B, **Reese SA**. Society for Integrative and Comparative Biology<sup>‡</sup>. San Antonio, Texas. 2008-poster.
- Integrating biology experimental activity modules into introductory physics (IBEAM). **Reese SA**, Krivosheev T, Burnett S, Pratte J. Society for Integrative and Comparative Biology<sup>‡</sup>. San Antonio, Texas. 2008-talk.
- Integrating biology experimental activity modules into introductory physics (IBEAM). Krivosheev T, Burnett S, **Reese SA**, Pratte J. American Association of Physics Teachers<sup>‡</sup>. Baltimore, Maryland. 2008-poster.
- Distributional patterns of freshwater phenotypes: a case study in *Lithasia*. Norwood AP, Minton RL, **Reese SA**, Snell JT, Hayes DM. Freshwater Mollusk Conservation Society<sup>‡</sup>. Little Rock, Arkansas 2007-poster.
- Mechanical characteristics of bone change little during anoxic submergence at 3 °C in red-eared slider turtles, *Trachemys scripta*. **Reese SA**, Moore D, Ultsch GR, Warren DE, Jackson DC. Society for Integrative and Comparative Biology<sup>‡</sup>. Orlando, Florida. 2006-talk.
- Acid-base and respiratory physiology of three species of turtles (*Trachemys scripta*, *Terrapene carolina*, and *Apalone spinifera*) and one species of tortoise (*Gopherus polyphemus*) in anoxia at 20 °C. **Reese SA**, Jackson DC, Crocker CE, Ultsch GR. Society for Integrative and Comparative Biology<sup>‡</sup>. New Orleans, Louisiana. 2004-talk.
- Lactate accumulation and glycogen depletion in hatchling turtles (*Chrysemys picta bellii*, *Chelydra serpentina*, and *Graptemys geographica*) submerged at 3 °C. **Reese SA**, Jackson DC, Ultsch GR. Society for Integrative and Comparative Biology<sup>‡</sup>. Toronto, Canada. 2003-talk.
- The physiology of overwintering in the common snapping turtle (*Chelydra serpentina*) and the softshell turtle (*Apalone spinifera*). **Reese SA**, Jackson DC, Ultsch GR. American Physiological Society<sup>‡</sup>. San Diego, California. 2002-poster.
- Geographic variation in overwintering of *Chrysemys picta*. **Reese SA**, Crocker CE, Jackson DC, Ultsch GR. Society for Integrative and Comparative Biology<sup>‡</sup>. Anaheim, California. 2002-talk
- The physiology of hibernation in common map turtles, *Graptemys geographica*. **Reese SA**, Crocker CE, Carwile ME, Jackson DC, Ultsch GR. Society for Integrative and Comparative Biology<sup>‡</sup>. Chicago, Illinois. 2001-poster.

#### **Non-Refereed Conference Presentations:**

- Integrating biology experimental activity modules with introductory physics. **Reese SA**, Krivosheev T, Burnett S, Pratte J. National Symposium for Scientists and Engineers: Changing the course of Science Education. San Diego, California. 2008-invited poster.
- The physiology of overwintering in frogs and turtles. **Reese SA**. Symposium honoring Donald Jackson, Brown University. 2007-invited talk.

- Integrating biology experimental activity modules with introductory physics. **Reese SA**, Krivosheev T, Burnett S, Pratte J. New Mexico Nanoscience Education Initiative Workshop, New Mexico State University. 2007-invited talk.
- The physiology of overwintering in North-American freshwater turtles. **Reese SA**. Department of Ecology and Evolutionary Biology, Brown University. 2002-invited talk.
- The physiology of overwintering in turtles. Ultsch GR, **Reese SA**. Southeastern Herpetology Conference<sup>€</sup>. Jacksonville, Florida. 2000-invited talk

‡ Indicates international conference

† Indicates national conference

€ Indicates regional conference

## **GRANTS AND CONTRACTS**

### **Funded Projects as PI:**

Integrating Biology and Introductory Physics Modules (IBEAM). **Reese SA**, Krivosheev T, Burnett S, Pratte J. National Science Foundation-Course, Curriculum, and Laboratory Improvement. \$84,810.00. May, 2006-May, 2009.

### **Proposals Submitted but not Funded as PI:**

Vertebrate Anatomy Multimedia Project: Integrating Resources for Evolution (VAMPIRE). **Reese SA**, Laposata M, Burnett S. National Science Foundation-Course, Curriculum, and Laboratory Improvement Program. \$149,983.00. 2007-2009.

### **Proposals Submitted but not Funded as CoPI:**

MRI: Acquisition of a PerkinElmer Optima 5300DV Inductively Coupled Plasma-Optical Emission Spectrometer (ICP-OES). Dockery C, Albrecht E, Koether M, Msimanga H, **Reese SA**, Shaw J, Williams D. National Science Foundation – Major Research Instrumentation Fund. \$97,740.73. 2008-2011

## **PROFESSIONAL SERVICE**

### **KENNESAW STATE UNIVERSITY**

#### **University:**

- Honor's Council, 2008-present, member. Responsible for evaluating honor student portfolios and capstone projects and for helping to maintain high quality honor's degrees at KSU.
- Quality Matters Online Course Development Program, 2007-present, reviewer. Responsible for using the Quality Matters course evaluation rubric to ensure the high quality of our online educational offerings. Review between 3 and 8 courses a year for appropriate instructional material to maintain the educational standards at KSU in an online environment.
- Intellectual Diversity Taskforce, 2008, member. Responsible for creating and directing the evaluation of 'intellectual diversity' on campus and the feelings of students about such for use by the president when discussing with the BOR and the Chancellor.

**College:**

Science and Society Seminar Series, 2007-2008, chair/developer. Responsible for creating and organizing support for a lecture series that promotes the interaction of science with the community at large. Obtained financial support from the college and coordinated 4 large lectures on the College of Science and Mathematics campus relating topics of intersection between science and society. Ran advertising and marketing campaign to ensure 100-200 person attendance at each event.

Coalition on the Public Understanding of Science (COPUS), 2007-present, college representative. Responsible for coordinating our college programs with this national organization promoting the understanding of science to the US population.

**Department or Program:**

Biology and Physics Strategic Planning, 2005-2007 & 2009-present, member. Responsible for advising chair about filling faculty positions, determining foci of department, and helping to update Departmental T&P guidelines (specifically reworked the research section of the currently accepted guidelines)

Course, Curriculum, and Laboratory Improvement Committee, 2007-2009, member. Responsible for evaluating new course proposals having to do with the MAT programs in the college as well as evaluating special topics courses. I was particularly interested in trying to promote the use of well-constructed learning outcomes in all course proposals and worked closely with faculty instructors on this particular topic, providing instruction when appropriate.

Introductory Biology Course Improvement Taskforce, 2007-2008, co-mediator. Responsible for bringing together selected faculty instructors of BIOL 2107 and 2108 to evaluate the present nature of the introductory courses and coordinate a process to improve them. Taught faculty about the use of learning outcomes in organizing and improving instructional delivery. Coordinated the construction of a sweeping set of learning outcomes covering the 1<sup>st</sup> year biology courses that will guide the implementation of improved instruction.

Faculty Search Committees, 2004-2006, member. Responsible for evaluating applicants to faculty positions for Anatomy and Physiology and for Physics positions available in the department. Helped coordinate on-campus interviews and seminars. The searches resulted in the hiring of 3 new A&P faculty and 2 new physics faculty.

Educational Technology Service, 2005-present, advocate and trainer. Responsible for updating educational technology used in science classes and training faculty on the use of technology in teaching. Obtained and trained faculty on a new computer aided data acquisition system in physiology-related courses. Mentored faculty through the WebCT Vista transition. Trained faculty on the use of technology to make grading and teaching easier and more effective.

**THE PROFESSION****Service to Journal:**

Journal of Zoology, 2002-present, reviewer. I am a peer-reviewer for papers in my area of specialty (comparative physiology); I have reviewed 2-3 papers for this journal since arriving at KSU.

Canadian Journal of Zoology, 2003- present, reviewer. I am a peer-reviewer for papers in my area of specialty (comparative physiology); I have reviewed 2-3 papers for this journal since arriving at KSU.

Physiological and Biochemical Zoology, 2004-present, reviewer. I am a peer-reviewer for papers in my area of specialty (comparative physiology); I have reviewed 1-2 papers for this journal since arriving at KSU.

Marine Biology, 2006, reviewer. I am a peer-reviewer for papers in my area of specialty (comparative physiology); I have reviewed 1 paper for this journal since arriving at KSU.

### **Service to Professional Association:**

Society for Integrative and Comparative Biology (SICB), 2006-2009, judge. Responsible for evaluating 4-8 papers at each annual meeting and helping to make a determination for the Robert C. Twerlliger Best Paper in the Division of Comparative Physiology and Biochemistry.

American Association of University Professors (AAUP), 2007-present, campus executive committee member. Responsible for directing and supporting the role of shared governance at KSU.

American Association for the Advancement of Science & National Science Foundation, 2009, participant. Invited workshop on changing the course of biology education in the United States: Vision and change in undergraduate biology education. Washington D.C.

## **THE COMMUNITY**

### **Professionally-Related Service to the Community:**

PAGE Georgia Academic Decathlon, 2008, evolution expert. Responsible for giving lectures to high school students and coaches and for helping to prepare decathletes for the evolution superquiz at this year's competition where Georgia students did very well.

Science Bowl, 2005-present, moderator/reader. Responsible for moderating individual quiz-style competitions among high school teams for the yearly, regional Georgia Science Bowl competition.

Dominion Christian High School, 2006-present, evolution expert. Guest scientist at the high school's Creation Apologetics course each semester. I try to explain evolutionary science, so that the skeptical student body can feel less threatened and I try to convey the non-confrontation that should exist between science and religion.

Petit Environmental Preserve, 2006-2008, biology education expert. Worked with the preserve to promote environmental education among younger people in Bartow County. The last 2 years it included an environmental education fair where I have set up an animal exhibit to teach kids respect for nature.

Cobb County Teach In-Service, 2007, science presenter. Worked with Cobb county middle and high school teachers to provide relevant instruction on science that they could use to better the K-12 education in local Georgia Schools. Developed and delivered a science education workshop.

Georgia Department of Education, 2007-2008, faculty expert and chair. Responsible for coordinating and writing academic standards for Georgia's new high school science course in zoology. Organized faculty and state teachers and wrote learning outcomes that address the key features of an excellent high school course in zoology.

