

## Curriculum Vitae

Missouri Cooperative Fish and Wildlife Unit  
302 Anheuser-Busch Natural Resources Building  
Columbia, MO 65211  
(573) 777-2099  
klymusk@missouri.edu

### Research Interests

---

phylogenetics, population genetics/genomics, speciation, animal behavior, sensory ecology, conservation

### Education

---

**The University of Missouri**, Columbia, MO  
Ph.D. Evolutionary Biology and Ecology  
2005-2011  
Advisor: Dr. Carl Gerhardt

**The University of Texas**, Austin, TX  
B.S. Zoology  
1996-2000

### Awards and Funding

---

2009 GAANN Fellowship-University of Missouri  
2009 Theodore Roosevelt Memorial Grant- American Natural History Museum  
2009 TWA Scholarship-University of Missouri  
2008 TWA Scholarship-University of Missouri  
2008 John Bies International Travel Scholarship-University of Missouri  
2007 Theodore Roosevelt Memorial Grant- American Natural History Museum  
2005 Life Sciences Fellowship-University of Missouri  
1999 Wood's Endowed Presidential Scholarship-University of Texas

### Publications

---

**Klymus, K. E.**, Humfeld, S. C., Marshall, V. T., Cannatella, D., and Gerhardt, H. C. 2010. Molecular patterns of differentiation in canyon treefrogs (*Hyla arenicolor*): evidence for introgressive hybridization with the Arizona treefrog (*H. wrightorum*) and correlations with advertisement call differences. **Journal of Evolutionary Biology** 23 (7): 1425-1435.

**Klymus, K. E.**, Humfeld, S. C., and Gerhardt, H. C. 2012. Geographic variation in male advertisement calls and female preference of the wide-ranging canyon treefrog, *Hyla arenicolor*. **Biological Journal of the Linnean Society**. 107(1): 219-232.

**Klymus, K. E.**, and Gerhardt, H. C. 2012. AFLPs resolve intra-specific relationship and infer genetic structure among lineages of the canyon treefrog, *Hyla arenicolor*. **Molecular Phylogenetics and Evolution**. 65(2): 654-667.

## Presentations

---

### *oral presentations*

- Klymus, K. E.**, Humfeld, S.C., and Gerhardt, H. C. “Phylogenetic and Behavioral Differentiation in the Canyon Treefrog, *Hyla arenicolor*.” 2012. World Congress of Herpetology. Vancouver, British Columbia, Canada.
- Klymus, K. E.**, Humfeld, S. C., Marshall, V. T., and Gerhardt, H. C. “Behavioral differentiation within a possible cryptic species complex, the canyon treefrog, *Hyla arenicolor*.” 2011. Animal Behavior Society; Bloomington, IN
- Klymus, K. E.**, Humfeld, S. C., Marshall, V. T., Cannatella, D., and Gerhardt, H.C. “Behavioral and molecular differentiation within a possible cryptic species complex, the canyon treefrog, *Hyla arenicolor*.” 2010. Society for Integrative and Comparative Biology; Seattle, WA
- Klymus, K. E.**, Humfeld, S. C., Marshall, V. T., Cannatella, D., and Gerhardt, H.C. “The canyon treefrog, *Hyla arenicolor*, unraveling a cryptic species.” 2009. American Society of Ichthyologists and Herpetologists; Portland, OR

### *Poster presentations*

- Klymus, K. E.**, and Gerhardt, H. C. “Using AFLPs to explore intra-specific and inter-specific divergences in the canyon treefrog, *Hyla arenicolor*, and related species.” 2011. Evolution Conference Norman, OK
- Humfeld, S.C., **Klymus, K. E.**, and Gerhardt, H. C. “Molecular and behavioral evolution in U.S. populations of *Hyla arenicolor*.” 2009. Evolution Conference Moscow, ID
- Klymus, K. E.**, and Schul, J. “Evolution of female leader preference in the Genus *Neoconocephalus* (Orthoptera: Tettigoniidae).” 2006. Midwest Ecology and Evolution Conference St. Louis, MO
- Klymus, K. E.**, and Schul, J. “Selective phonotaxis in *Neoconocephalus nebrascensis* (Orthoptera:Tettigoniidae): absence of a leader preference.” 2006. Animal Behavior Society Meeting Snowbird, UT
- Veilleux, C.C., **Klymus K.E.**, and Kirk, E.C. “A behavioral method for measuring visual acuity in non-human primates.” 2006. American Society of Primatologists. San Antonio, TX

## Invited Talks

---

- Klymus, K. E.**, “Studying behavior and communication in frogs.” *Invited speaker*. 2009. Universidad de la Sierra Juarez; Ixtlan, Oaxaca, Mexico

## Research Experience

---

- |              |   |
|--------------|---|
| 2012-Present | Post-doctoral Research, University of Missouri Cooperative Fish and Wildlife Unit, Columbia MO<br>Assessing eDNA (environmental DNA) as a tool for detection of invasive Asian Carp                                   |
| 2005-2011    | Dissertation Research, University of Missouri, Columbia, MO<br>Investigating how genetic differentiation among populations relates to male advertisement call variation and female preference within canyon treefrogs |
| 2005         | Research Assistant for Carrie Veilleux, University of Texas, Austin, TX<br>Studying visual acuity in blue-eyed black lemurs ( <i>Eulemur macaco flavifrons</i> )  |
| 2004         | Laboratory Technician for Oliver Pergams, Brookfield, Zoo, Brookfield, IL   |
| 1997-2000    | Laboratory Technician for Eric Pianka, University of Texas, Austin, TX  |

## Professional Experience

---

2012	Volunteer iguana field assistant (British Virgin Islands), Kelly Bradley, Fort Worth Zoo, Fort Worth, TX
2004-2005	Caretaker of frog colony for Mike Ryan, University of Texas, Austin, TX
2004-2005	Veterinary/Kennel Assistant, Abraham Veterinary Clinic, Austin, TX
2004	Zoo Keeper (seasonal) Children's Zoo, Brookfield Zoo, Brookfield, IL
2003	Conservation Biology Intern, Sue Margulis, Brookfield Zoo, Brookfield, IL
2003	Volunteer bat biology field assistant (Panama), Page Warren, University of Texas, Austin, TX

## Teaching

---

Teaching Assistant, University of Missouri, Columbia, MO

2012	Introductory Zoology Laboratory
2012	General Biology Laboratory (Non-majors)
2011	Herpetology
2009, 2010, 2011	General Biology Laboratory (Majors)

## Outreach and Academic Service

---

2011	Graduate Certificate in Science Outreach, University of Missouri
2008-2011	Women in Science, Instructor, Girl Scouts of America, Columbia MO
2009, 2010	Workshop Instructor for Zion Canyon Field Institute, Zion National Park, UT <ul style="list-style-type: none"> <li>• Designed and implemented a day long workshop on amphibian biology and identification of local frogs and toads</li> </ul>
2008-2009	Science and Me Series Presenter, University of Missouri <ul style="list-style-type: none"> <li>▪ Wrote and delivered a presentation on evolutionary theory to promote public understanding of science</li> </ul>
2006-2008	Conservation Biology Program Seminar Coordinator, University of Missouri <ul style="list-style-type: none"> <li>▪ Organized seminars and invited speakers</li> <li>▪ Coordinated with MU staff to set up travel/ lodging arrangements</li> <li>▪ Budgeted and requested money for series</li> </ul>
2006-2010	Co-coordinator of GSSO, Graduate Student volunteer outreach program, University of Missouri <ul style="list-style-type: none"> <li>▪ Initiated and developed new outreach program</li> <li>▪ Collaborated with University Department of Education and public schools</li> <li>▪ Recruited graduate student volunteers</li> </ul>
2006,2008,2009	Coordinator of BioBlitz-Community Natural History Event, Columbia, MO <ul style="list-style-type: none"> <li>▪ Headed committee to organize event</li> <li>▪ Delegated duties to various committee members</li> <li>▪ Managed event planning and assessed progress</li> <li>▪ Budget and funding raising coordination</li> <li>▪ Oversaw and problem-solved during the event</li> </ul>
2005-2010	Raptor Rehabilitation Project, University of Missouri
2000-2002	Environmental Awareness Volunteer, Peace Corps, Benin, West Africa, <ul style="list-style-type: none"> <li>▪ Agro-forestry Extension Agent</li> <li>▪ Environmental Educator</li> </ul>

**Outreach and Academic Service (continued)**

---

1996-2000                   ▪ Women's Equality Promoter  
Tutor/Educator, Young Scientists and Project SEEE, Austin, TX

**Professional Membership**

---

- European Society for Evolutionary Biology
- Society for the Study of Amphibians and Reptiles
- Animal Behavior Society