

## Curriculum Vitae

### Tonya Ann Penkrot

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#### Education

1996-2000 B. S. in Biological Sciences and Certificate Degree in German, University of Pittsburgh, Pittsburgh, PA; GPA: 3.70 of 4.00; Magna cum Laude.  
2000-present Ph. D. candidate, Functional Anatomy and Evolution Program, Johns Hopkins University School of Medicine, Baltimore, MD.

#### Academic Awards

1996-2000 University Honors College Scholarship  
1996-2000 Dean's Honor List  
1998-1999 Wilma Binder Zeder Scholarships  
1999 3rd Annual German Essay Contest First Prize  
1999 Howard Hughes Medical Institute Undergraduate Biological Sciences Education Program Summer Internship  
1999 Richard T. Hartman Scholarship  
2000 4th Annual German Essay Contest Second Prize  
2000-2005 Johns Hopkins University Graduate Student Fellowship

#### Research Interests

Functional morphology, paleoecology, and systematics of early Tertiary mammals  
Particular interest in functional morphology and paleoecology of the "Condylarthra"

#### Research Experience and Fieldwork

1998-1999 Intern, Carnegie Museum of Natural History, Pittsburgh, PA, Section of Amphibians and Reptiles under Dr. John J. Wiens.  
Recorded morphological data on preserved lizard specimens (*Sceloporus jarrovi*)  
1999 Field crew, Dr. K. Christopher Beard (Carnegie Museum of Natural History) in Washakie Basin, WY.  
Collection of vertebrate fossils, primarily Paleocene-Eocene in age  
1999 Field assistant and student at the Pymatuning Laboratory of Ecology, University of Pittsburgh, supervised by Dr. Joseph Merritt (Carnegie Museum of Natural History).  
Live trapping, handling, tagging, and tracking of small mammals  
1999-2000 Volunteer, Section of Vertebrate Paleontology, Carnegie Museum of Natural History.  
Sorted matrix from North American and Asian fossil localities  
2001-2004 Field crew, Dr. Kenneth D. Rose (Johns Hopkins University School of Medicine, Baltimore, MD), in Bighorn Basin, WY.  
Collection of fossils, primarily Wasatchian NALMA (early Eocene) in age

- 2003 Field crew, Dr. Jonathan I. Bloch (South Dakota School of Mines and Technology, Rapid City, SD), in Crazy Mountains Basin, MT.  
Collection of mammalian fossils, Torrejonian-Tiffanian NALMAs in age
- 2003-2004 Field crew, Dr. Scott L. Wing (National Museum of Natural History, Smithsonian Institution, Washington, DC), in Bighorn Basin, WY.  
Collection of vertebrate and plant fossils, Paleocene-Eocene boundary in age

### Current Projects

- 2000- Continuing project on Eocene bats using wing morphometrics to infer paleoecology, “Reevaluating the paleoecologies of the Eocene Microchiroptera”.
- 2001- Continuing project with K. D. Rose (Johns Hopkins University School of Medicine), “Species composition of *Apheliscus* from the Bighorn Basin, WY, with evidence of anagenetic evolution”.
- 2003- Collaboration with S. P. Zack, K. D. Rose (Johns Hopkins University School of Medicine), and J. I. Bloch (currently: Florida Museum of Natural History) to describe the postcrania of the early Eocene “condylarths” *Apheliscus* and *Haplomylys*.
- 2003- Paleoecological Inferences on Paleocene-Eocene Condylarths using Dental Morphometrics (Ph. D. dissertation).
- 2004- Collaboration with S. P. Zack (Johns Hopkins University School of Medicine) and S. G. Strait (Marshall University) to reexamine the postcranial functional morphology and phylogenetic affinities of the amphilemurid “insectivore” *Macrocranion*.

### Teaching Experience

- 2001, 2002 Teaching assistant, laboratory instructor and prosector, “Summer Institute in Anatomy,” Johns Hopkins University School of Medicine (for undergraduate students).
- 2001-2002 Tutor and prosector, “Human Gross Anatomy,” Johns Hopkins University School of Medicine.
- 2002-2003 Teaching assistant, laboratory instructor and prosector, “Human Gross Anatomy,” Johns Hopkins University School of Medicine.
- 2003-2005 Tutor and grader, “Human Gross Anatomy,” Johns Hopkins University School of Medicine.
- 2005-2006 Teaching assistant, laboratory instructor and prosector, “Human Gross Anatomy,” Johns Hopkins University School of Medicine.

### Publications

- 2002 Wiens, J. J., and Penkrot, T. A. Delimiting species using DNA and morphological variation and discordant species limits in spiny lizards (genus *Sceloporus*). *Systematic Biology* **51**: 69-91.
- 2002 Penkrot, T. A. Species composition of *Apheliscus* from the Bighorn Basin, WY, with evidence of anagenetic evolution. *Journal of Vertebrate Paleontology* **22** (suppl. to 3): 96A. (poster presentation)
- 2003 Penkrot, T. A., Zack, S. P., Rose, K. D., and Bloch, J. I. Postcrania of early Eocene *Apheliscus* and *Haplomylys* (Mammalia: “Condylarthra”). *Journal of Vertebrate Paleontology* **23** (suppl. to 3): 86A. (podium presentation)
- 2004 Penkrot, T. A., Zack, S. P., and Strait, S. G. New postcrania of *Macrocranion* (Eutheria: Amphilemuridae) from the early Eocene, Bighorn Basin, WY. *Journal of Vertebrate Paleontology* **24** (suppl. to 3): 101A. (podium presentation)
- 2005 Zack, S. P., Penkrot, T. A., Bloch, J. I., and Rose, K. D. Affinities of “hyopsodontids” to elephant shrews and a Holarctic origin of Afrotheria. *Nature* **434**: 497-501.
- 2005 Penkrot, T. A. Diet and ecological partitioning among the Arctocyonidae (Mammalia:

- “Condylarthra”) from the middle Paleocene through early Eocene of North America. *Journal of Vertebrate Paleontology* **25** (suppl. to 3): 100A. (podium presentation)
- 2005 Zack, S. P., Penkrot, T. A., Krause, D. W., and Maas, M. C. A new apheliscine “condylarth” mammal from the late Paleocene of Montana and Alberta and the phylogeny of “hyopsodontids.” *Acta Palaeontologica Polonica* **50** (4): 809-830.
- 2005 Penkrot, T. A., Zack, S. P., Rose, K. D., and Bloch, J. I. Postcranial morphology of *Apheliscus* and *Haplomylus* (“Condylarthra,” Apheliscidae): evidence for a Paleocene holarctic origin of Macroscelidea. (in press)

#### **Grants Awarded**

- 2002 Theodore Roosevelt Memorial Fund Grant, American Museum of Natural History
- 2004 Sigma Xi, Grants-in-Aid of Research
- 2004 Samuel P. and Doris Welles Research Fund, University of California Museum of Paleontology
- 2005 Theodore Roosevelt Memorial Fund Grant, American Museum of Natural History

#### **Professional Organizations**

- Student member, Society of Vertebrate Paleontology
- Student member, American Society of Mammalogists

#### **Graduate Advisors**

Drs. Mark F. Teaford and Kenneth D. Rose (Ph. D.)

#### **Expected Date of Ph. D. Completion**

Fall 2006