CURRICULUM VITAE

Tonya Ann Penkrot

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Education

2010 Ph. D., Center for Functional Anatomy and Evolution, Johns Hopkins University School of Medicine, Baltimore, MD.

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.

Appointments

2014-present Affiliate faculty, School of Human Evolution and Social Change (SHESC), Arizona State University.

2011-present Lecturer, School of Letters & Sciences, Arizona State University.

2009-2011 Laboratory instructor, School of Letters & Sciences, Arizona State University.

2006-2009 Postdoctoral associate, Department of Biological Sciences, Marshall University.

Postgraduate-level Teaching Experience

2005-2006 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.

2002-2003 Teaching assistant, laboratory instructor and prosector, “Human Gross Anatomy,” Johns Hopkins University School of Medicine.

2001-2002 Tutor and prosector, “Human Gross Anatomy,” Johns Hopkins University School of Medicine.

Undergraduate-level Teaching Experience

2013-present	Course director, BIO 202: Human Anatomy & Physiology II, School of Letters and Sciences, Arizona State University.
2011-present	Course director, BIO 201: Human Anatomy & Physiology I, 2-3 sections per semester plus one summer section per year, School of Letters & Sciences, Arizona State University.
2013-2014	Instructor, BIO 495: Undergraduate Research, Arizona State University.
2013-2014	Course director, BIO 494: Special Topics (Instructional Aide Training), one section, School of Letters & Sciences, Arizona State University.
2009-2013	Volunteer laboratory instructor BIO 494: Advanced Human Anatomy Practicum (cadaver dissection), assisted with student dissections, one to two sections per semester, School of Letters & Sciences, Arizona State University.
2009-2011	Laboratory instructor, BIO 201 and 202: Human Anatomy & Physiology & II, four sections per semester, School of Letters & Sciences, Arizona State University.
2007-2009	Course director, Human Anatomy, Department of Biological Sciences, Marshall University.
2001, 2002	Teaching assistant, laboratory instructor and prosector, "Summer Institute in Anatomy," Johns Hopkins University School of Medicine (for undergraduate students).

Synergistic Activities

2008	POGIL Teaching Workshop, Marshall University (March, 2008)

Service

2016	Curriculum Committee, Arizona State University, College of Integrative Sciences & Arts.
2016	Peer Evaluation Committee, Arizona State University, College of Integrative Sciences & Arts, Downtown Phoenix Campus.
2016	University Residency Appeals Committee, Arizona State University.
2014	Grade appeals committee, Arizona State University, School of Letters & Sciences, Downtown Phoenix campus.
2013, 2016	Intel ISEF 2013, category awards judge, Earth Sciences category, Phoenix Convention Center.
2011-present	Safety committee, Arizona State University, School of Letters & Sciences, Downtown Phoenix campus.
2009-present	Assisting with visiting high school groups and preparing laboratory Activities for the students, Arizona State University, School of Letters & Sciences, Downtown Phoenix campus.
2009-2013	Obama Scholars Program mentor, Arizona State University.
2007	Technical session moderator, Society of Vertebrate Paleontology 67th

annual meeting, Technical Session X (Austin, TX).

Research Interests

Functional morphology, paleoecology, and systematics of early Tertiary mammals
Particular interest in functional morphology and paleoecology of the "Condylarthra"
3D Imaging and digital morphometrics of fossil mammals; functional morphology of early Tertiary "lipotyphlan" mammals; reassociation of isolated postcranial elements to Tertiary taxa known only from dental remains

Past Collaborators

Jonathan I. Bloch, University of Florida
David W. Krause, Stony Brook University
Kenneth D. Rose, Johns Hopkins University School of Medicine
Suzanne G. Strait, Marshall University
Shawn P. Zack, University of Arizona College of Medicine-- Phoenix

Current Projects

2011- Collaboration with S. P. Zack (University of Arizona College of Medicine—Phoenix) to investigate mammalian faunal change at the boundary of the Torrejonian and Tiffanian North American Land Mammal Ages (NALMAs).

2010- Collaboration with S. G. Strait (Marshall University) and S. P. Zack (University of Arizona College of Medicine-- Phoenix) to describe the postcrania of the microsyopid plesiadapiform *Niptomomys*.

2004- Collaboration with S. G. Strait (Marshall University) and S. P. Zack (University of Arizona College of Medicine-- Phoenix) to reexamine the postcranial functional morphology and phylogenetic affinities of the amphilemurid "insectivore" *Macrocranion*.

Research Experience and Fieldwork

2011-2015 P.I., Field project in the Paleocene Fort Union Formation to investigate mammalian faunal change at the Torrejonian-Tiffanian boundary, Bighorn Basin, WY.

2006-2009 Collaboration with S. G. Strait (Marshall University) to develop the Paleoview 3D website, an online morphometric database of Paleocene and Eocene mammals.

2008 Society of Vertebrate Paleontology Field Conference to the Hanna and Carbon Basins.

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

2003 Field crew, Dr. Jonathan I. Bloch (South Dakota School of Mines and Technology, Rapid City, SD), in Crazy Mountain Basin, MT.
Collection of mammalian fossils, Torrejonian-Tiffanian NALMAs in age

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

1999-2000 Volunteer, Section of Vertebrate Paleontology, Carnegie Museum of Natural History.
Sorted matrix from North American and Asian fossil localities

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

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 jarrovii*))

Dissertation

Penkrot, T. A. 2010. Molar morphometrics and diet in North American condylarths. Ph. D. dissertation, Center for Functional Anatomy & Evolution, The Johns Hopkins University, School of Medicine, Baltimore, MD. 423 pp.

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

Invited Presentations

2006 Penkrot, T. A. Comparative paleoecologies of North American mioclaenids and "hyopsodontids" (Mammalia: "Condylarthra") using combined dental morphometric techniques. *Journal of Vertebrate Paleontology* **26** (suppl. to 3): 109A (podium presentation, 3D Imaging Symposium)

Recent Journal Reviews

Journal of Vertebrate Paleontology
Zoological Journal of the Linnean Society

Grants & Awards

2005 Theodore Roosevelt Memorial Fund Grant, American Museum of Natural History

2004 Samuel P. and Doris Welles Research Fund, University of California Museum of Paleontology

2004 Sigma Xi, Grants-in-Aid of Research

2002 Theodore Roosevelt Memorial Fund Grant, American Museum of Natural History

1999 Howard Hughes Medical Institute Undergraduate Biological Sciences Education Program Summer Internship

Professional Organizations

American Association of Anatomists, regular member (2009-present)
American Society of Mammalogists, regular member (2000-present)
Society for the Study of Mammalian Evolution, regular member (2009-present)
Society of Vertebrate Paleontology, regular member (1999-present)

Publications

2016 Penkrot, T. A., and Zack, S. P. Tarsals of Sespedectinae (?Lipotyphla) from the middle Eocene of southern California, and the affinities of Eocene "Erinaceomorphs." *Journal of Paleontology* **36(6)**: 17 pages.

2008 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. *Mammalian Evolutionary Morphology: A Tribute to Frederick S. Szalay*. E. J. Sargis and M. Dagosto. Dordrecht, Netherlands, Springer**:** 73-106.

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 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.

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.

Abstracts

2016 Penkrot, T. A. and Zack, S. P. Tarsal diversity of middle Eocene (Uintan) rodents from San Diego County, California. *Journal of Vertebrate Paleontology* **36A**: 203A

2015 Penkrot, T. A., and Zack, S. P. Small lipotyphlan tarsals from the Eocene of San Diego County, California. *Journal of Vertebrate Paleontology* **35** (abstract volume): 192.

2014 Penkrot, T. A., and Zack, S. P. Tarsals of Sespedectinae (Eulipotyphla, Erinaceomorpha) from the middle Eocene of southern California. *Journal*

of Vertebrate Paleontology **34** (abstract volume): 203.

2013 Penkrot, T. A., Zack, S. P., and Strait, S. G. The diversity of small Mammalian tarsals from Castle Gardens, earliest Eocene of Wyoming. *Journal of Vertebrate Paleontology* **33** (abstract volume): 189.

2011 Penkrot, T. A., Zack, S. P., and Strait, S. G. Tarsals of *Niptomomys* Mammalia: Microsyopidae) from the Castle Gardens locality, Wyoming (Early Eocene). *Journal of Vertebrate Paleontology* **31** (abstract volume): 172. (poster presentation)

2008 Penkrot, T. A. Dietary diversity among Paleocene and Eocene North American Condylarthra (Mammalia: Eutheria). *Journal of Vertebrate Paleontology* **28** (suppl. to 3): 126A. (podium presentation)

2007 Penkrot, T. A. North American condylarth diets across the Paleocene-Eocene boundary: paleoecological response of one archaic group of mammals to global warming. *Journal of Vertebrate Paleontology* **27** (suppl. to 3): 128A. (podium presentation)

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)

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)

2003 Penkrot, T. A., Zack, S. P., Rose, K. D., and Bloch, J. I. Postcrania of early Eocene *Apheliscus* and *Haplomylus* (Mammalia: "Condylarthra"). *Journal of Vertebrate Paleontology* **23** (suppl. to 3): 86A. (podium presentation)

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)