

Department of Anthropology  
Washington University  
1 Brookings Drive, Campus Box 1114  
St. Louis, MO 63130

## **Education**

### Washington University in St. Louis

*in progress* Ph.D. Anthropology (Advisor: Dr. Richard J. Smith)  
*Dissertation:* Landscape Genetics of Gibbons and Leaf Monkeys in China.  
2008 M.A. Anthropology

### The Pennsylvania State University, Schreyer Honors College

2005 B.A. Anthropology (Advisor: Dr. Alan Walker)  
B.A. Philosophy (Dual Degree)  
*Summa cum Laude*

## **Grants**

- 2012 *National Science Foundation* (NSF) Doctoral Dissertation Improvement Grant. Landscape Genetics of Gibbons and Leaf Monkeys in China: \$19,960
- 2011 *Leakey Foundation* General Research Grant. Landscape Genetics of Gibbons and Leaf Monkeys in China: \$13,446
- 2011 *Chinese Academy of Sciences* Kunming Institute of Zoology Key Laboratory of Genetic Resource and Evolution. Open Collaboration Grant: \$9,471 (60,000 RMB)
- 2010 *National Science Foundation* (NSF) East Asian Pacific Summer Institute (EAPSI). Primer Generation for Landscape Genetics of Gibbons and Leaf Monkeys in China: \$5,617
- 2010 *Lambda Alpha* Graduate Overseas Research Grant. Landscape Genetics of Gibbons and Leaf Monkeys in China: \$3,000
- 2010 *American Philosophical Society* Lewis and Clark Fund for Exploration and Field Research. Landscape Genetics of Gibbons and Leaf Monkeys in China: \$3,500
- 2010 *Washington University* Anthropology Department Dissertation Research Grant: \$1,333
- 2010 *Washington University* Graduate School Dissertation Research Grant: \$3,000
- 2009 *Washington University* Preliminary Dissertation Research Grant: \$4,000
- 2004 *Penn State* Schreyer Honors College International Thesis Research Grant: \$3,500

## **Peer Reviewed Publications**

Huang B, Guan ZH, Ni QY, **Orkin JD**, Fan PF, and Jiang XL. (*Accepted*). Observation of intra- and extra-group copulation and reproductive characters in free ranging groups of western black crested gibbon (*Nomascus concolor jingdongensis*). *Integrative Zoology*.

He K, Hu NQ, **Orkin JD**, Ma C, Xiao W, Fan PF, Jiang XL. (*in press*). Molecular phylogeny and divergence time of *Trachypithecus* based on multi-genes: with implication for taxonomy of *T. phayrei*. *Zoological Research*.

**Orkin JD** and Pontzer H. 2011. The narrow niche hypothesis: gray squirrels shed new light on primate origins. *Am. J. Phys. Anthropol.* 144: 617-624.

Welker KL, **Orkin JD**, Ryan TM. 2009. Analysis of intraindividual and intraspecific variation in semicircular canal dimensions using high-resolution x-ray computed tomography. *J. Anat.* 215: 444-451.

### **Published Abstracts**

**Orkin JD**, Jiang XL. 2012. Scat-detecting dogs as effective means to collect fecal samples from unhabituated primates. *Am. J. Phys. Anth. Suppl.* 147(S54): 229

**Orkin JD**, He K, Jiang XL. 2010. Genetic diversity of the black crested gibbon (*Nomascus concolor*) from the Wuliang Mountains of Yunnan, China: preliminary results. *Am. J. Phys. Anth. Suppl.* 141(S50): 218

**Orkin JD**, and Kamilar JM. 2009. Sexual selection and primate extinction risk. *Am. J. Phys. Anth. Suppl.* 135(S46):166.

**Orkin JD** and Pontzer H. 2008. Is primate-like grasping needed for fine branch feeding? Terminal branch use in eastern gray squirrels, *Sciurus carolinensis*. *Am. J. Phys. Anth. Suppl.* 135(S46):166.

**Orkin J**. Head kinematics during locomotion and the semicircular canals of free-ranging New World monkeys. 2005. *Am. J. Phys. Anth. Suppl.* 126 (S40): 161.

Walker A, Dunsworth D, Kozakowski S, Krovitz GE, **Orkin JD**, and Welker KL. 2005. Thinking outside the book: Escaping traditional representations of hominin evolution through computer animation. *Paleoanthropology Meetings Abstract*

### **Field Research Experience**

2009-2012     Collection of non-invasive fecal samples from free-ranging black crested gibbons (*Nomascus concolor*), Phayre's leaf monkeys (*Trachypithecus phayrei*), and stump-tailed macaques (*Macaca arctoides*) in Yunnan, China (Wuliangshan, Ailaoshan, and Yongde Daxueshan National Nature Reserves). In collaboration with Dr. Jiang Xuelong of the Chinese Academy of Science, Kunming Institute of Zoology

2010-2012     Detecting dog training and handling for location and identification of primate fecal samples in Yunnan, China. In collaboration with the Kunming Police Dog Training Base of the Chinese Ministry of Security

2007             Feeding ecology and positional behavior of Gray Squirrels (*Sciurus carolinensis*), St. Louis, MO. Supervised by Dr. Herman Pontzer, Washington University in St. Louis

2003-2004     Platyrrhine positional behavior and head kinematics: La Suerte Biological Field Station, Costa Rica. Supervised by Dr. Alan Walker, Penn State

2002             Archeological excavation of Annis Village Mississippian site, Morgantown, KY. Supervised by

Dr. George Milner, Penn State

### **Laboratory Genetics Research Experience**

- 2009-2013    Microsatellite genotyping, and mitochondrial sequencing of black crested gibbons (*Nomascus concolor*) and Phayre's Leaf Monkeys (*Trachypithecus phayrei*) for comparative landscape genetic analysis: Kunming Inst. of Zoology. Supervised by Dr. Richard Smith, in collaboration with Dr. Jiang Xuelong and Dr. Douglas Yu
- 2011-2012    Molecular Phylogenetics of the Phayre's leaf monkey (*Trachypithecus phayrei*). In collaboration with Dr. He Kai and Jiang Xuelong
- 2010-2011    454 genomic sequencing to develop novel microsatellite primers for black crested gibbons (*Nomascus concolor*) and Phayre's Leaf Monkeys (*Trachypithecus phayrei*): Kunming Institute of Zoology. Supervised by Dr. Jiang Xuelong and Dr. Douglas Yu
- 2009-2010    Microsatellite and mtDNA primer development and genotyping of black crested gibbons and Phayre's leaf monkeys using cross-specific amplification: Kunming Institute of Zoology. Supervised by Dr. Jiang Xuelong and Dr. Douglas Yu
- 2009            Microsatellite primer development for saddle-back tamarin (*Saguinus fuscicollis*), Research Assistant in Alan Templeton lab, Washington University

### **Other Research Experience**

- 2008, 2011    Research assistant to Dr. Erik Trinkaus, Washington University in St. Louis
- 2008            Phylogenetic comparative methods of sexual selection and primate extinction risk. Supervised by Dr. Jason Kamilar, Washington University in St. Louis
- 2002-2005    High resolution computed tomography (CT) and casting of the semicircular canal system in small mammals. Supervised by Dr. Alan Walker, Penn State
- 2002            Methods for aging human osteological remains, Research Assistant to Dr. George Milner, Penn State

### **Teaching Experience**

- Fall    2012    Gross Anatomy, Teaching Assistant, Washington University School of Medicine
- Spr.    2010    Biological Anthropology, Instructor, St. Louis University
- Spr.    2010    Introduction to Environmental Anthropology, Teaching Assistant, Washington University
- Fall    2009    Principles of Human Anatomy, Teaching Assistant, Washington University
- Spr.    2009    International Public Health, Teaching Assistant, Washington University
- Spr.    2008    Medicine in Anthropology, Teaching Assistant, Washington University
- Fall    2007    Introduction to Human Evolution, Teaching Assistant, Washington University
- 2004/5        Mammalian Anatomy, Teaching Assistant (3 Semesters), Penn State University
- Spr.    2004    Human Anatomy, Teaching Assistant, Penn State University

### **Honors & Awards**

- 2010 Fulbright Scholarship National Finalist (China)
- 2008 Sherwood L. Washburn Prize: Outstanding student presentation at the 77th Annual Meeting of The American Association of Physical Anthropologists
- 2005 Jabir Shibley Memorial Scholarship in Philosophy: Recognition as an academically superior undergraduate philosophy student by Penn State University, Department of Philosophy
- 2005 Commencement Marshall for Penn State University, Department of Anthropology
- 2004 Rhodes Scholarship Statewide Finalist (Pennsylvania)
- 2004 Marshall Fellowship Semifinalist
- 2004 Mellon Fellowship Semifinalist
- 2000-5 Dean's List for Superior Academic Achievement, Penn State University
- 2004 Penn State Schreyer Honors College Summer Research Scholarship
- 2004 Penn State Society of Distinguished Alumni Endowed Fellowship
- 2004 Penn State Undergraduate Research Exhibition Honorable Mention

### **Public Media**

- 2012 Bruce Bower. "Saving Primates with a Dog and Scat." *Science News*: 82(4). August, 25, 2012  
[http://www.sciencenews.org/view/generic/id/342813/description/The\\_Science\\_Life](http://www.sciencenews.org/view/generic/id/342813/description/The_Science_Life)
- 2012 Gerry Everding. "Scat-sniffing dog helps save endangered primates." *Washington University in St. Louis Record*. October, 17, 2012. <https://news.wustl.edu/news/Pages/24445.aspx>

### **Foreign Languages:**

- Mandarin Chinese (Conversational)
- Spanish (Elementary Proficiency)

### **Professional Societies**

- Phi Beta Kappa Honor Society
- American Association of Physical Anthropologists
- Lambda Alpha Anthropology Honor Society
- Golden Key Honour Society

### **Service**

- 2011 Reviewer for *Journal of Mammalogy*
- 2007-2008 Washington University Anthropology Department Colloquium Committee Member
- 2002-2004 Penn State Habitat for Humanity
  - Collegiate Challenge Alternative Spring Break Recruitment Director (2002-2004)
  - Collegiate Challenge Alternative Spring Break Participant (2002, 2003, 2004)
- 2004 Penn State Anatomy Children's Day Volunteer Teacher
- 2002 Penn State Anthropology Children's Day Volunteer Teacher