

JOHN MARLOW STARBUCK, Ph.D

Curriculum Vitae
jstarbuc@iupui.edu
August 8, 2012

EDUCATION

- 2012 **PhD, Anthropology**, The Pennsylvania State University, University Park, PA
Dissertation Advisor: Joan T. Richtsmeier, PhD, Professor, Department of Anthropology, The Pennsylvania State University. Dissertation Title: *Down Syndrome (Trisomy 21): Developmental Implications from Morphometric Investigations of the Effects of Gene-Dosage Imbalance upon Craniofacial Phenotypes in Humans and the Ts1Yey Down Syndrome Mouse Model*
- 2009 **M.A., Anthropology**, The Pennsylvania State University, University Park, PA.
Advisor: Joan T. Richtsmeier, PhD, Professor, Department of Anthropology, The Pennsylvania State University
- 2005 **B.A., Anthropology**, Indiana University, Indianapolis, IN. Advisor: Richard E. Ward, PhD, Director of the IUPUI Center for Research and Learning, Department of Anthropology, Indiana University-Purdue University Indianapolis

ACADEMIC APPOINTMENTS

- 2012-present **Post-Doctoral Researcher**, Department of Orthodontics and Oral Facial Genetics, Indiana University School of Dentistry, Indiana University-Purdue University Indianapolis (IUPUI), Indianapolis, IN.
Supervisor: Katherine Kula, MS, DMD, MS, Program Director and Chair
- 2011-2012 **Laboratory Research Assistant**, Image Analysis and Morphometrics Laboratory, Department of Anthropology, The Pennsylvania State University
- 2008-2011 **National Science Foundation (NSF) Graduate Research Fellow and Laboratory Research Assistant**, Image Analysis and Morphometrics Laboratory, Department of Anthropology, The Pennsylvania State University
- 2006-2008 **Graduate Research and Teaching Assistant**, Image Analysis and Morphometrics Laboratory, Department of Anthropology, The Pennsylvania State University
- 2005 **Teaching Assistant**, Department of Anthropology, Indiana University-Purdue University Indianapolis

AREAS OF INTEREST

Human evolution and speciation, evolutionary developmental biology, genotype-phenotype correlations, osteology and forensic anthropology, facial reconstruction, human development, craniofacial morphology and dysmorphology, craniofacial growth

and development, biological form and form change, sexual dimorphism, skeletal morphology, facial evolution and recognition, facial expression and non-verbal communication, fluctuating asymmetry and developmental stability, morphological integration, developmental plasticity and canalization, animal models for human development, computer imaging and image analysis, quantitative morphology and geometric morphometrics

PEER-REVIEWED PUBLICATIONS

- **J. Starbuck**, R. Reeves, J. Richtsmeier. Morphological Integration of Soft-Tissue Facial Morphology in Down Syndrome and Siblings. *American Journal of Physical Anthropology*, 146: 560-568
- **J. Starbuck**. 2011. On the Antiquity of Trisomy 21: Moving Towards a Quantitative Diagnosis of Down Syndrome in Historic Material Culture. *Journal of Contemporary Anthropology*, 2(1):61-89
- **J. Starbuck**, R. Ward. 2007. The Affect of Tissue Depth Variation on Craniofacial Reconstructions. *Forensic Science International*, 172(2-3):130-136

MANUSCRIPTS IN PREPARATION

- **J. Starbuck**, R. Reeves, T. Cole III, J. Richtsmeier. Facial Developmental Instability in Down Syndrome. (manuscript in preparation)
- **J. Starbuck**, R. Reeves, J. Richtsmeier. Craniofacial Phenotypes in a Genetically Complete Segmentally Trisomic Mouse Model for Down Syndrome. (manuscript in preparation)
- **J. Starbuck**, R. Reeves, J. Richtsmeier. The Effect of Trisomy 21 on Facial Morphology: A Comparison of Morphological Integration in Age-matched Down Syndrome Sibling Pairs and Unaffected Sibling Pairs. (manuscript in preparation)
- **J. Starbuck**, R. Reeves, J. Richtsmeier. The relationship between triplicated gene content and craniofacial morphology in four different Down syndrome mouse models. (manuscript in preparation)

RESEARCH EXPERIENCE

- **Laboratory Research Assistant**, Image Analysis and Morphometrics Laboratory, Facial landmarking and image analysis to quantitatively compare facial morphology in aneuploid and sibling samples, **2007-2012**. Supervisor: Joan T. Richtsmeier, PhD, The Pennsylvania State University.
- **Summer Research Intern**, Ronald E. McNair Post-Baccalaureate Achievement Program, History of 3D facial reconstruction and the affect of tissue depth variation on facial reconstructions, **2004-2005**. Advisor: Richard Ward, PhD, Indiana University-Purdue University Indianapolis.

GRANTS

Research:

- Dissertation Support Grant for dissertation writing teaching release during Spring 2012, Research and Graduate Studies Office, The Pennsylvania State University, \$4000.00

- Dissertation Support Grant for dissertation writing teaching release during Fall 2011, Research and Graduate Studies Office, The Pennsylvania State University, \$4000.00
- **National Science Foundation Doctoral Dissertation Improvement Grant**, The Pennsylvania State University, *Understanding Gene Dosage Imbalance and Biological Mechanisms Responsible for Craniofacial Variability and Variation*, 2011, \$10,340.00
- Dissertation Enhancement Fellowship, endowed by alumna Hellene S. Runtagh, Research and Graduate Studies Office, The Pennsylvania State University, 2010, \$3000.00
- Schultz Family Graduate Fellowship for Dissertation Support, endowed by alumna Ms. Catherine Shultz Rein, Research and Graduate Studies Office, The Pennsylvania State University, 2010, \$2000.00
- Research Project Grant, Undergraduate Research Opportunity Program, *The Affect of Tissue Depth on Craniofacial Reconstructions*, Indiana University-Purdue University Indianapolis, 2004, \$2500.00

Travel:

- American Association of Physical Anthropologists Conference Travel Grant, Research and Graduate Studies Office, The Pennsylvania State University, 2012, \$500.00
- American Association of Physical Anthropologists Conference Travel Grant, Office of Graduate Educational Equity Programs, The Pennsylvania State University, 2012, \$200.00
- American Association of Physical Anthropologists Conference Travel Grant, University Park Allocation Committee, The Pennsylvania State University, 2012, \$797.00
- American Association of Physical Anthropologists Conference Travel Grant, Research and Graduate Studies Office, The Pennsylvania State University, 2011, \$460.00
- American Association of Physical Anthropologists Conference Travel Grant, Office of Graduate Educational Equity Programs, The Pennsylvania State University, 2011, \$400.00
- William S. Pollitzer Student Travel Award to attend the American Association of Physical Anthropologists conference in Minneapolis, MN, 2011, \$500.00.
- Summer Institute of Statistical Genetics travel and expenses scholarship, University of Washington, Seattle, WA, 2010, \$300
- Paul T. Baker Research Travel Fund in Human Biology and Anthropology Award to attend the 15th Annual Summer Institute of Statistical Genetics at the University of Washington, Seattle, WA, The Pennsylvania State University, 2010, \$1109.00
- Travel Grant to attend the 15th Annual Summer Institute of Statistical Genetics Travel Grant at the University of Washington, Seattle, WA, Research and Graduate Studies Office, The Pennsylvania State University, 2010, \$1150.00
- Travel Grant to attend the 15th Annual Summer Institute of Statistical Genetics at the University of Washington, Seattle, WA, Office of Graduate Educational Equity Programs, The Pennsylvania State University, 2010, \$400.00
- American Association of Physical Anthropologists Conference Travel Grant, Research and Graduate Studies Office, The Pennsylvania State University, 2009, \$400.00
- American Association of Physical Anthropologists Conference Travel Grant, Office

of Graduate Educational Equity Programs, The Pennsylvania State University, 2009, \$400.00

- American Association of Physical Anthropologists Conference Travel Grant, Research and Graduate Studies Office, The Pennsylvania State University, 2008, \$250.00
- American Society of Craniofacial Genetics Conference Travel Grant, Research and Graduate Studies Office, The Pennsylvania State University, 2008, \$680.00
- American Association of Physical Anthropologists Conference Travel Grant, Undergraduate Research Opportunity Program, Indiana University-Purdue University Indianapolis, 2005, \$1000.00

TEACHING EXPERIENCE

- **Introduction to Biological Anthropology**, The Pennsylvania State University, Section Instructor and Teaching Assistant, 2007
- **Introduction to North American Archaeology**, The Pennsylvania State University, Teaching Assistant, 2006
- **Archeology Laboratory**, The Pennsylvania State University, Teaching Assistant, 2006
- **Human Origins and Pre-History**, IUPUI, Teaching Assistant, 2005
- **Laboratory in Biological Anthropology**, IUPUI, Teaching Assistant, 2005
- **Human Osteology**, IUPUI, Teaching Assistant, 2005

COURSES PREPARED TO TEACH

- Introduction to Biological Anthropology (Intro Undergraduate Level)
- Introduction to Cultural Anthropology (Intro Undergraduate Level)
- Introduction to Archaeology (Intro Undergraduate Level)
- Human Osteology (Mid-Upper Undergraduate Level)
- Forensic Anthropology (Mid-Upper Undergraduate Level)
- Human Growth and Development (Mid-Upper Undergraduate Level)
- Human Variation and Evolution (Mid-Upper Undergraduate Level)
- Human Nature (Mid-Upper Undergraduate Level)
- Laboratory in Biological Anthropology (Mid-Upper Undergraduate Level)
- Human Embryology and Developmental Biology (Mid-Upper Undergraduate Level)

SCHOLARSHIPS, ASSISTANTSHIPS, AND FELLOWSHIPS

Scholarships:

- Matson-Benson Award, Department of Anthropology, The Pennsylvania State University, helped renovate the Matson Museum, 2010, \$700,
- Summer Tuition Assistance Program (STAP) Scholarship, The Graduate School, The Pennsylvania State University, 2010, \$1235
- Summer Institute of Statistical Genetics tuition scholarship for 3 modules, University of Washington, Seattle, WA, 2010, \$1200
- Summer Tuition Assistance Program Scholarship (STAP), The Graduate School, The Pennsylvania State University, paid summer tuition for “Gross Anatomy of the Head and Face” course, 2007, \$3700

- Gear-Up Summer Scholarship, Indiana University-Purdue University Indianapolis, 2005, \$1500
- School of Liberal Arts Dean's Scholarship, Indiana University-Purdue University Indianapolis, 2004-2005, \$2000
- Robert E. Cavanaugh Scholarship, Indiana University-Purdue University Indianapolis, 2004-2005, \$1000
- Andrew S. Cebula Scholarship, Indiana University-Purdue University Indianapolis, 2004-2005, \$500
- Upward Bound Mentor Scholarship, Indiana University-Purdue University Indianapolis, 2004-2005, \$7500
- 21st Century Scholarship, Indiana University-Purdue University Indianapolis, 1997-1998, 2000-2004

Assistantships and Fellowships:

- Hill Fellowship Post-Comprehensive Examination Award, The Pennsylvania State University, to recruit individuals into dissertation research study, 2011, \$3810
- Hill Fellowship Pre-Comprehensive Examination Award, The Pennsylvania State University, attended the 15th Annual Summer Institute of Statistical Genetics at the University of Washington, Seattle, WA, 2010, \$2216,
- **National Science Foundation Graduate Research Fellowship**, The Pennsylvania State University, 2008-2011, \$30,000 per year and paid tuition
- University Assistantship, Department of Anthropology, The Pennsylvania State University, 2006-2008, \$14,500 per year and paid tuition
- Loretta Lunsford Award, Indiana University-Purdue University Indianapolis, 2005 \$3000, and departmental teaching assistantship

HONORS AND AWARDS

- **National Science Foundation Graduate Research Fellowship**, The Pennsylvania State University, 2008-2011
- Honorable Mention as National Science Foundation Graduate Research Fellowship Applicant, The Pennsylvania State University, 2007
- Transcript Notation Demonstrating Proficiency in Research Skills, Indiana University-Purdue University Indianapolis, 2005
- Anthropology Academic Achievement Award, Indiana University-Purdue University Indianapolis, 2005
- Dean's List In Recognition Of Outstanding Academic Excellence, Indiana University-Purdue University Indianapolis, 2002-2005
- Ronald E. McNair Post-Baccalaureate Achievement Award, Indiana University-Purdue University Indianapolis, 2004-2005
- Highest Honors for Academic Excellence, Indiana University-Purdue University Indianapolis, 2002-2005

INVITED LECTURES AND PRESENTATIONS

- American Association of Physical Anthropologists Conference 81st Annual meeting in Portland, OR, April 13, 2012. Developmental instability in the Down syndrome face.

- 32st Annual Pennsylvania State Graduate Exhibition in State College, PA, March 25, 2012. Facial developmental instability and trisomy 21
- 31st Annual Pennsylvania State Graduate Exhibition in State College, PA, March 27, 2011. Facial integration of soft-tissue in Down syndrome and siblings
- American Association of Physical Anthropologists Conference 80th Annual meeting in Minneapolis, MN, April 16, 2011. Morphological integration of the face in Down syndrome individuals and siblings. *Amer J Phys Anthropol* Suppl 50: 283
- 29th Annual Pennsylvania State Graduate Exhibition in State College, PA, March 29, 2009. Integration and Down Syndrome Facial Morphology.
- American Association of Physical Anthropologists Conference 78th Annual meeting in Chicago, IL, April 3, 2009. Morphological Integration of the Down Syndrome Face. *Amer J Phys Anthropol* Suppl 48: 246
- 28th Annual Pennsylvania State Graduate Exhibition in State College, PA, March 30, 2008. Quantitative Comparison of Midface Morphology in Down Syndrome Individuals and Non-Trisomic Siblings.
- American Association of Physical Anthropologists Conference 77th Annual meeting in Columbus, OH, April 11, 2008. Quantitative Comparison of Midface Morphology in Down Syndrome Individuals and Unaffected Siblings. *Amer J Phys Anthropol* Suppl 46:200
- American Society of Craniofacial Genetics 31st Annual Meeting in Philadelphia, PA, November 11, 2008. Midface Morphology in Down Syndrome.
- 10th Annual Indiana University Undergraduate Research Conference at Indiana University-Purdue University Indianapolis, Indianapolis, IN, February 11, 2005. The Affect of Tissue Depth Variation on Facial Reconstruction.
- Indiana University-Purdue University Indianapolis Anthropology Club, Indianapolis, IN, February 15, 2005. How Does Tissue Depth Variation Affect the Outcome of Forensic Craniofacial Reconstructions?
- American Association of Physical Anthropologists Conference 74th Annual meeting Milwaukee, WI, April 7, 2005. The Affect of Tissue Depth Variation on Craniofacial Reconstructions. *Amer J Phys Anthropol* Suppl 40: 197
- National Conference for Undergraduate Research 19th Annual Meeting in Lexington, VA, April 21, 2005. The Effect of using Emaciated, Normal, and Obese Tissue Depths when Creating Forensic Facial Reconstructions.
- 19th annual Summer Research Opportunities Program Committee on Institutional Cooperation Conference at the University of Wisconsin-Madison, Madison, WI, July 16, 2005. The Affect of Tissue Depth Variation on Three Craniofacial Reconstructions.
- Summer Undergraduate Research Presentations at Indiana University-Purdue University Indianapolis, Indianapolis, IN, July 28, 2005. The Effect of Tissue Depth Variation on Forensic Reconstructions of Facial Form.
- 14th Annual National Ronald E. McNair Research Conference & Graduate School Fair at the Lake Lawn Resort in Delevan, WI, November 5, 2005. The Effect of Altering Tissue Depths when Producing Forensic Craniofacial Reconstructions.
- 11th Annual Indiana University Undergraduate Research Conference at Indiana University-Purdue University Indianapolis, Indianapolis, IN, December 2, 2005. The Effect of Altering Tissue Depths during the Creation of Three Forensic Craniofacial Reconstructions.
- 18th annual Summer Research Opportunities Program Committee on Institutional Cooperation Conference at the University of Iowa, Iowa City, IA. July 10, 2004.

History and Methods of 3-Dimensional Facial Reconstruction.

- Ronald E. McNair Post-Baccalaureate Achievement Program Presentation at Indiana University-Purdue University Indianapolis, Indianapolis, IN. July 30, 2004. History and Methodology of 3-Dimensional Forensic Facial Reconstruction.
- Undergraduate Research Opportunities Program Summer Presentation at Indiana University-Purdue University Indianapolis, Indianapolis, IN, August 3, 2004. Three-Dimensional Facial Reconstruction: History and Current Methods.

RESEARCH FEATURED

- Anthropology Ph.D student John Starbuck uses 3-D facial imaging for research, the Pennsylvania State University Liberal Arts Homepage (<http://www.la.psu.edu/news/anth-phd-student-uses-3-d-facial-imaging-for-research>), January 25 2012 - present.
- Student Research Could Change Forensics, Indiana University-Purdue University Indianapolis Sagamore Newspaper, February 23, 2005
- Hands-On Studies, Indianapolis Star Newspaper, February 10, 2005

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

- Society of Craniofacial Genetics, 2008-present
- Lambda Alpha National Honor Society for Anthropology, Indiana University-Purdue University chapter, 2006-present
- American Association of Physical Anthropologists, 2005-present

PROFESSIONAL SERVICES

- Reviewer, **Orthodontics and Craniofacial Research**, 2012-present (1 paper)
- Reviewer, **Journal of Contemporary Anthropology**, 2011-present (2 papers)
- Reviewer, **American Journal of Physical Anthropology**, 2009-present (3 papers)
- Reviewer, **Forensic Science International Journal**, 2008-present (34 papers)

COMPUTER SKILLS

- Microsoft Office (Word, Excel, PowerPoint)
- 3dMDPatient surface imaging and landmarking tool
- Avizo (formerly Amira) computed tomography imaging and landmarking tool
- MorphoJ geometric morphometric analysis tool
- EDMA and MIBOOT morphometric analysis tools

LANGUAGE SKILLS

- English (Native Language)
- Spanish (Conversational, Reading)

VOLUNTEERED SERVICES

Mentor:

- College Preparatory Initiative Program, IUPUI, 2005
- Upward Bound, IUPUI, 2004-2005
- 21st Century Scholars Program Mentor, IUPUI, 2004-2005

Archaeology Lab Volunteer, IUPUI, 2004-2005. Sorted and cleaned artifacts.

Conference/Discussion Moderator:

- Graduate Survival Skills and Ethics Workshop hosted by the PSU Office for Research Protections, October 11, 2008.
- 16th and 17th Annual PSU Ronald E. McNair Post-Baccalaureate Achievement Conference, July 18 - 20, 2008; July 17-19, 2009

Panelist:

- "Thriving and Surviving in Graduate School," IUPUI Center for Research and Learning, June 20, 2012
- "The challenges of getting into and surviving in graduate school," hosted by the PSU Professional Development Committee for the Graduate School Association and Career Services, October 21, 2010
- "Undergraduate Research and Preparing for Graduate School", 2010 Missing Pieces Series: Completing Your Undergraduate Experience sponsored by the PSU College of Education, Eberly College of Science, and the Office of Graduate Educational Equity Programs, October 21, 2010
- "Q&A on Graduate School: The Application Process, Graduate-Student Life, and Types of Degrees," PSU Anthropology Club, October 19, 2010
- "Graduate School: The First Year and Time Management," PSU McNair Scholars Program, March 26, 2007

Judge:

- Annual Undergraduate Exhibition hosted by the PSU office of undergraduate education, April 8, 2009; April 7, 2010.
- 74th annual Pennsylvania Junior Academy of Science State Meet, May 18 - 19, 2008

Volunteer:

- Public Interest Law Fund (PILF) auction, Dickenson Law School, March 24, 2010
- Steps to Safety 5K Race Attendant to benefit the Centre County Women's Resource Center, October 24, 2010
- Anthropology lab tours for Upward Bound students, PSU, July 12, 2010
- 3rd Bi-Annual Graduate Women in Science, Girl Scout Workshop: Digging through the Past, presenter and supervision for Girl Scout badge activity: What can fossils tell us?, PSU, April 11, 2010
- 46th Annual Pennsylvania Junior Science and Humanities Symposium, presenter, March 29, 2010
- 3dMD Alumni Exhibition, PSU, presenter, October 24, 2009
- Children's Day, presenter, PSU, April 9-14, 2007
- Special Olympics Pennsylvania Summer Games, State College, PA, June 4-5, 2009
- Take Our Daughters and Sons to Work Day, presenter, PSU, April 23, 2009; April 22, 2010; April 28, 2011

Developer and Coordinator:

- Bone and 3D Picture Day, data collection and educational stations, PSU, Nov 6, 2010.

FIELDWORK EXPERIENCE

Data Collection of 3D facial images 2008-2012 using the 3dMD facial imaging system. Increased sample from 60 individuals to 773 individuals by enrolling individuals from central PA and across the US. Individually in charge of all modifications and renewals to Institutional Review Board (IRB) forms, communicating with individuals in charge at each location and obtaining appropriate permission to attend various events, locating and training volunteers to help with data collection, and organizing and carrying out each data collection trip):

- 39th Annual National Down Syndrome Congress, San Antonio, TX, Aug 4-7th, 2011
- 5th International Mosaic Down syndrome Conference, Lake Buena Vista, FL, July 8th, 2011
- Bone and 3D Picture Day, University Park, PA, November 6, 2010
- Chester County Down Syndrome Interest Group, Inc. Buddy Walk, West Chester, PA, October 9-10th, 2010
- 38th Annual National Down Syndrome Congress, Lake Buena Vista, FL, July 16-18th, 2010
- Park Forest Elementary School, State College, PA, March 22, 2010.
- State College Friends School Fun Fair, State College, PA, May 1, 2010.
- Wickersham Elementary School, Lancaster, PA, April 30, 2010.
- West Side Elementary School, Johnstown, PA, April 27, 2010.
- Standing Stone Elementary School, Huntington, PA, April 26, 2010.
- Martin Luther King Elementary School, Lancaster, PA, April 15, 2010.
- Radio Park Elementary School, State College, PA, April 14, 2010.
- South Side Elementary School, Harrisburg, PA, March 10, 2010.
- E.H. Phillips Elementary School, Harrisburg, PA, March 3, 2010.
- Paxtang Elementary School, Harrisburg, PA, February 18, 2010.
- Juniata Valley Elementary School, Alexandria, PA, February 17, 2010.
- HUB-Robeson Center, The Pennsylvania State University, State College, PA, September 26, October 17, and November 7, 2009.
- 37th Annual National Down Syndrome Congress, Sacramento, CA, July 30th - August 2nd, 2009.
- Special Olympics Summer Games, The Pennsylvania State University, State College, PA, June 7th, 2008.
- **Summer Field School**, Tanzania, Africa directed by Tanya Furman, PhD, The Pennsylvania State University June 18 - July 2, 2008. Worked with groups to acquire geological samples at several Tanzanian sites.
- **Excavator**, Indiana University-Purdue University Indianapolis Archaeology Field School: Ransom Place, Indianapolis, IN, May 23 - July 1, 2005.

OTHER EXPERIENCE

- Experimental Archaeology, processed cow limb bones (metatarsus, metacarpus, and phalanges) for Joohyun (Jennie) Jin, PhD in an attempt to duplicate archaeological

breakage patterns associated with Neolithic Chinese farmers. The Pennsylvania State University. December 15-17, 2009

- Maintenance of a dermestid beetle colony (*Dermestes maculatus*) to clean skeletal specimens for the Richtsmeier Image Analysis and Morphometrics Laboratory, The Pennsylvania State University, 2008-2009
- Matson Museum desk attendant, The Pennsylvania State University, 2006-2008
- Mentor to undergraduate researchers in the Richtsmeier Image Analysis and Morphometrics Laboratory, The Pennsylvania State University, 2006-present
- Archaeology Lab Assistant to Dean Snow, PhD, The Pennsylvania State University, 2006, supervised undergraduates sorting artifacts

COLLABORATORS

- Richtsmeier Image Analysis and Morphometrics Laboratory, The Pennsylvania State University: **Joan Richtsmeier**, PhD, Professor; **Katherine Wilmore**, PhD, **Neus Martínez-Abadías**, PhD, Post-doc; **Yann Huezé**, PhD, Post-doc; **Susan Motch**, PhD, Post-doc, **Christopher Percival**, Doctoral Candidate.
- **Richard E. Ward**, PhD, Director of the IUPUI Center for Research and Learning, Indiana University-Purdue University Indianapolis.
- **Roger Reeves**, PhD, Professor, Department of Physiology and Institute for Genetic Medicine, Johns Hopkins University School of Medicine
- **Timothy Cole III**, PhD, Department of Basic Medical Science, School of Medicine, University of Missouri-Kansas City
- **Cheryl Hill**, PhD, post-doc Department of Anthropology, University of Missouri
- **Ethylin (Mimi) Jabs**, MD, Vice Chair of the Department of Genetics and Genomic Sciences and Chief of the Division of Medical Genetics and Genomics, Mount Sinai School of Medicine; **Bryn Webb**, MD, Physician in Genetics/Pediatrics Residency Program; **Qiuqi (Angela) Shan**, Doctoral Candidate
- **Stephanie Sherman**, PhD, Professor, Department of Human Genetics, Emory University
- **Katherine Kula**, MS, DMD, MS, Jarabak Endowed Professor, Program Director and Chair, Department of Orthodontics and Oral Facial Genetics, Indiana University School of Dentistry; **Ahmed Ghoneima**, PhD, Research Assistant Professor, Director of the Orthodontic Imaging Laboratory, Indiana School of Dentistry

GRADUATE ADVISOR

- **Joan T. Richtsmeier, PhD**
Professor
Department of Anthropology
The Pennsylvania State University
University Park, PA 16802
Phone: 814-863-0562
Fax: 814-863-1474
jta10@psu.edu

DISSERTATION COMMITTEE MEMBERS

- **Joan T. Richtsmeier, PhD**

Professor, Department of Anthropology, The Pennsylvania State University

- **Tim Ryan, PhD**

Assistant Professor, Department of Anthropology, The Pennsylvania State University

- **Kenneth Weiss, PhD**

Evan Pugh Professor, Department of Anthropology, The Pennsylvania State University

- **Jenea Neiderhiser, PhD**

Professor, Department of Psychology, The Pennsylvania State University