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MFV

RESEARCH SPECIALTIES

Human Growth and Development, Osteoimmunology, Neurobiology, Adult and Juvenile Osteology, Skeletal Biology, Bioarchaeology, and Environmental and Developmental Stress.

EDUCATION

Doctor of Philosophy | Pennsylvania State University, University Park, PA
Advisors: Dr. Joan T. Richtsmeier and Dr. Timothy Ryan
In progress
GPA: 4.0

Master of Arts in Anthropology | Pennsylvania State University, University Park, PA
Thesis: The Effect of BAF170 Cortex Overexpression on the Growth and Morphology of E15.5 and P28 Mice

Advisor: Dr. Joan T. Richtsmeier
May 2022
GPA: 4.0

Master of Arts in Anthropology | Texas State University, San Marcos, TX
Thesis: Using Fluctuating Asymmetry to Understand the Biological Implications of Social Race

Advisor: Dr. Kate Spradley
May 2020
GPA: 4.0

Bachelor of Science in Anthropology | Texas State University, San Marcos, TX

Minor: Biology
May 2015
GPA: 3.5

Associate of Arts | Northwest Vista College, San Antonio, TX

May 2012
GPA: 3.6

PUBLICATIONS | [‡]Co-authors

In prep | Wilson J[‡], Veltri M[‡], Foster F, Richtsmeier JT, Kawasaki K, & Motch-Perrine SM. The role of FGF-FGFR Signaling in Dysregulated Cranial Base Development in Syndromic Craniosynostosis.

In prep | Veltri M, Rosinger A, & Richtsmeier J. Mouse models to elucidate the pernicious effects of stress and the implications for human health disparities.

2022 | Alfsdotter C, Veltri M, Crabb C, & Wescott D. An actualistic taphonomic study of human decomposition in coffins. *Bioarchaeology International*.

REPORTS

2019 | Spradley M, Veltri M, Hamilton M, & Fancher, J. Archaeological Monitoring and Exhumations for the City of Austin's Oakwood Cemetery Chapel Resotation Project, Travis County, Texas.

Volume II: Bioarchaeology

ACADEMIC APPOINTMENTS

BIOL 476 Advanced Anatomy Teaching Assistant | Penn State University-Department of Biology | Fall 2022 and Spring 2024 to current

Teaching and instruction two lab sections of undergraduate students on human anatomy with donated cadavers. Facilitated open lab times for undergraduate students, creating and grading human anatomy exams and quizzes, teaching students about human anatomy from cadavers, dry lab materials, and cross sections.

BIOL/ANTH 460 Human Genetics Teaching Assistant | Penn State University-Department of Anthropology | Fall 2023

Assist students with questions, preparation of exams, attending the course, and holding office hours.

Graduate Research Assistant | PSU-Department of Anthropology | August 2020 to August 2022 and January 2023 to August 2023

Training and research in morphological, histological techniques, 3D imaging and data handling, and animal care and husbandry for projects coordinated within the Richtsmeier laboratory.

ANTH 3381 Human Osteology Graduate Instructional Assistant | Texas State University-Department of Anthropology | August 2019 to May 2020

Teaching and instructional assistant for the class and lab. Facilitated open lab times for undergraduate students, grading of human osteology sketch guides, teaching students about human osteology in preparation for quizzes, and assisted instructors during class times.

Graduate Research Assistant | Texas State University-Department of Anthropology | August 2018 to May 2020

Estimating the biological profile and pathologies of human remains from a historic cemetery in Austin, Texas. Analysis and curation of skeletal remains for reporting to the Texas Historical Commission and use of modern anthropological methods for estimating the biological profile.

Instructional Assistant | Texas State University-Department of Biology | August 2018 to December 2018

Instruction of one functional biology laboratory where weekly lab experiments were conducted by undergraduate students. Prepare for the week's lab, grading of lab reports, assist students with lab experiments, grading of scientific papers, and attendance of weekly lab meetings.

PROFESSIONAL EXPERIENCE

Bioarchaeology Technician | Pape-Dawson Engineers | Austin, TX | January 2017 to August 2018

Estimating the biological profile and pathologies of human remains from a historic cemetery in Waco, Texas. Analyze, curate, and photograph remains for reporting to the Texas Historical Commission, use of modern anthropological methods for estimating the biological profile, assist in survey and shovel testing for land development projects, aid in testing of archaeological sites, and curation of archaeological material for curation facilities.

Projects included:

Texas Ranger Museum Hall of Fame: Skeletal analysis including the biological profile, pathology, photographs, and skeletal data curation of 250+ human remains from an historic cemetery excavated in Waco, TX.

Comal ISD Data Recovery: Phase survey of 299 acres and phase three excavation of a burned rock midden site in New Braunfels, Texas.

Hooten Tract: Phase one survey of a three-kilometer tract of land in San Antonio, TX.

Vista Ridge Data Recovery: Phase three recovery and survey in Comal County, TX.

Alecozay Tract: Phase one survey of ~250 acres of land in San Antonio, TX.

SAWS Westlakes Water Main: Phase one survey of 24.5 acres of land in San Antonio, TX.

Westpointe Medio Sewer Extension Phase II: Phase one survey of 5 miles of wastewater line in San Antonio, TX.

SAWS Masterson Road: Phase one survey of ~3,000 m of wastewater line in San Antonio, TX.

Foster Road: Phase one survey of 2.53 km segment of Foster road in San Antonio, TX.

Martinez Creek Hike and Bike Trail: Phase one survey of 2.45 km in San Antonio, TX.

Zarzamora Creek Hike and Bike Trail: Phase one survey of 3 km in San Antonio, TX.

Kasper Tract: Phase one survey of 212 acres of land in Williamson County, TX.

Archaeologist | The University of Mississippi | Jackson, MS | June 2016 to August 2016

Provide support and excavation knowledge to the removal and relocation of 356 burials from a historic cemetery near Jackson, MS. Techniques included using archaeological excavation and exhumation of skeletal remains, using a Total Data Station for mapping processes, photogrammetry of skeletal remains, extensive note taking of remains for future laboratory analysis, comply with protocol for labeling materials removed from burials, monitoring construction equipment for changes in soil color to distinguish between possible grave shafts and undisturbed soils, and instruction of new field technicians.

Research Assistant | Grady Early Forensic Anthropology Laboratory at Texas State University Forensic Anthropology Center at Texas State (FACTS) | San Marcos, TX | January 2015 to June 2016

Operate and maintain the ProJet 660 Pro 3D Printer, scan and print osteological specimens for teaching purposes, post-processing of 3D printed models using ColorBond and StrengthMax epoxy techniques, operation of Next Engine 3D Laser Scanner, operation of the Breuckmann 3D White Light Scanner, scoring of morphological observations for the Forensic Data Bank including cranial suture closure, epiphyseal union, rib end changes, and pubic symphysis scoring, update forensic databank packets for each donation in the donated skeletal collection, itemize the Texas State Donated Skeletal Collection, systemize and arrange donation boxes and instructional tools for the lab, update and organize living and deceased donor files in Paradox.

AWARDS, HONORS & FELLOWSHIPS

Biological Anthropology Program-National Science Foundation Doctoral Dissertation
Research Improvement Grant | 2024-2025 | \$25,217

NASA Pennsylvania Space Grant Consortium | Penn State University | 2024-2025 | \$5,000

Graduate Exhibition: 3rd Place for the Video Category | Penn State University | 2024 | \$250

Hill Fellowship Award | Penn State University | 2024 | \$2,352

Liberal Arts External Funding Incentive Award | Penn State University | \$500

College of Liberal Arts RGSO | Penn State University | 2023 | \$2,000

Bunton Waller Fellowship | Penn State University | 2020-2025

National Science Foundation Graduate Research Fellows Program | 2019-2024 | \$138,000

The Graduate College Scholarship | Texas State University | 2019-2020 | \$2,000

Celebrity Classic Endowed Scholarship | Texas State University | 2019-2020 | \$4,500

FACTS Thesis Research Grant | Texas State University | April 2019 | \$1,000

Anthropology Thesis Research Grant | Texas State University | April 2019 | \$350

The Graduate College Scholarship | Texas State University | 2018-2019 | \$2,000

Sallie Beretta Outstanding Senior Woman Award | Texas State University | May 2015 | \$2,000

Dean's List | Texas State University | Spring 2014, Fall 2014, and Spring 2015

President's Honor Award | Northwest Vista College | 2009-2011

CONFERENCE PRESENTATIONS

*Presenting Author † Co-authors

Anatomy Connected 2024 | Toronto, Canada | Poster | March 2024

The Effect of Early and Late Life Chronic Social Stress on the Cellular Morphology of the Sphenoccipital Synchronosis in Female Post-natal Mice. Megan F. Veltri*, Mizuho Kawasaki, Emily L. Durham, Giulia Mazzari, Frederick Foster, Abigail P. Coupe, Melanie Haffner-Luntzer, & Stefan O. Reber.

Tomography for Scientific Advancement | Austin, TX | Poster | May 2023

Cranial Morphology of Embryonic Mice with Cortex Specific Overexpression of BAF170. Megan F. Veltri*, Emily L. Durham, Kate M. Lesciotto, Mizuho Kawasaki, Susan Motch-Perrine, Anastassia Stoykova, Tran Cong Tuoc, Kazuhiko Kawasaki, & Joan T. Richtsmeier.

Anatomy Connected 2023 | Washington, DC | Oral Presentation | March 2023

Brains, skulls, and an unexpected twist in an experimental model. Kate M. Lesciotto*, Emily L. Durham, Megan F. Veltri, Susan M. Motch Perrine, Anastassia Stoykova, Tran C. Tuoc, Mizuho Kawasaki, Kazuhiko Kawasaki, & Joan T. Richtsmeier.

Anatomy Connected | Washington, DC | Poster | April 2023

Integrating Microcomputed Tomography and Histology to Construct a 3D Model of the Lower Jaw in C57BL/6J Mice. Jordan A. Wilson*, Susan Motch-Perrine, Y. Zhang, N. Sapkota, Danny Chen, Meng Wu, Mizuho Kawasaki, Megan F. Veltri, Abigail Coupe, E.W. Jabs, Kazuhiko Kawasaki, & Joan T. Richtsmeier.

Anatomy Connected | Philadelphia, PA | Poster | April 2022

Cortex Specific Overexpression of BAF170 and Growth of the Cranial Base and Vault in Mice. Megan F. Veltri*, Emily L. Durham, Kate M. Lesciotto, Abigail Coupe, Mizuho Kawasaki, Susan Motch-Perrine, Anastassia Stoykova, Tran Cong Tuoc, Kazuhiko Kawasaki, & Joan T. Richtsmeier.

Anatomy Connected | Philadelphia, PA | Poster | April 2022

Small Brains, Small Skulls: Effect of Cortex Specific Overexpression of BAF170 on the Mouse Cranium. Abigail Coupe*, Emily L. Durham, Kate Lesciotto, Megan F. Veltri, Mizuho Kawasaki, Susan Motch-Perrine, Anastassia Stoykova, Tran Cong Tuoc, Kazuhiko Kawasaki, & Joan T. Richtsmeier.

Society for Craniofacial Genetics and Developmental Biology | Virtual | Poster | October 2021

Effect of Cortex Specific Overexpression of BAF170 on Cranial Growth. Megan F. Veltri*, Emily L. Durham, Kate M. Lesciotto, Abigail Coupe, Mizuho Kawasaki, Susan Motch-Perrine, Anastassia Stoykova, Tran Cong Tuoc, Kazuhiko Kawasaki, & Joan T. Richtsmeier.

American Academy of Forensic Sciences | Anaheim, CA | Poster | February 2020

Does Donor Skin Color Affect Total Body Scores (TBS)? Crystal L. Crabb** & Megan F. Veltri**

American Association of Biological Anthropology | Atlanta, GA | Poster | April 2016

New Methods to Measuring Diffuse Idiopathic Skeletal Hyperostosis. Jordan Lewman** & Megan F. Veltri**

American Association of Biological Anthropology | Atlanta, GA | Poster | April 2016

The Effects of Obesity and Diabetes on Diffuse Idiopathic Skeletal Hyperostosis. Jordan Lewman** & Megan F. Veltri**

LABORATORY EXPERIENCE

Histological Slide Analysis and Preparation | Richtsmeier Laboratory | May 2021 to present

Training in how to prepare, stain, and analyze histological slides using Hematoxylin and Eosin, RGB Trichrome, immunohistochemical staining, and others for paraffin sections.

Embryonic Mouse Ontogenetic Staging System (EMOSS) | Richtsmeier Laboratory | November 2020 to present

Sectioning of embryonic mouse hind limbs to quantify accurate developmental age. Duties include creating agarose gel for the embryonic sample, sectioning the hind limbs to image using a high-powered microscope, adding images into the EMOSS website to calculate embryonic age, and lastly to incorporate these values into the Richtsmeier Laboratory's mouse database.

Phosphotungstic Acid (PTA) Staining of Mouse Embryos | Richtsmeier Laboratory | January 2020 to present

Laboratory training for staining mouse embryos using PTA methods and protocols in order to visualize embryonic organ and skeletal development from micro-CT images.

Case Analysis Team (CAT) Assistant Member | FACTS | May 2019 to May 2020

Fulfills the requirements of a forensic anthropologist I by passing the basic and advanced human osteology exams and the map making exam. Duties include laying out remains for case analysis, photographing remains, and co-authoring biological profile and full case report sections under the direction of a Full member.

Human Remains Processing Technician | Osteology Research and Processing Laboratory (ORPL) | November 2015 to May 2020

Aid Dr. Kate Spradley with Operation Identification (OpID) including intake and inventory of human remains, maceration, processing of remains down to skeletal material, and curation of skeletal remains before photographing for entry into the National Missing and Unidentified Persons System.

FIELD EXPERIENCE

Team Member | Texas State University-Operation Identification | December 2019

Assist a team of five to apply archaeological methodology to the exhumation of unidentified human remains in Texas. Hand and digital mapping of possible burial sites and trenches, photography, photogrammetry, and 3D spatial plotting of buried remains.

Search and Recovery Team Assistant Member | FACTS | May 2019 to present

Fulfills the requirements of a forensic anthropologist I by passing the basic and advanced human osteology exams and the map making exam. Duties include participation in FACTS search and recovery efforts, directing trainee members in the absence of a Full member, mapping scenes, and carrying out additional responsibilities as assigned by a Full member.

OpID Exhumation Team Full Member | FACTS | May 2019 to present

Fulfills the requirements of a forensic anthropologist I by passing the basic and advanced human osteology exams and the map making exam. Additionally, members must have previous cultural resource management, archeological, or bioarchaeological field school experience. Duties include assisting the OpID team with exhumations of unidentified migrant remains in South Texas.

Team Leader | Operation Identification | January 2019

Leading a team of five to apply archaeological methodology to the exhumation of unidentified human remains in Texas. Hand and digital mapping of possible burial sites and trenches, photography and photogrammetry of buried remains.

Teaching Assistant | Field Methods in Forensic Anthropology | FACTS | May 2015

Assist Dr. Michelle Hamilton and Dr. M. Kate Spradley and students with methods of location, excavation, mapping, and exhumation techniques of human remains, systematize dig kits, inventory of remains, and assist students with questions.

Student | Field Methods in Forensic Anthropology | FACTS | May 2014

Review methods of location, excavation, mapping, and exhumation techniques of human remains using archaeological methods.

Student | 2-Day Recovery Course | FACTS | March and October 2014

Practice of locating, excavation, mapping, and exhumation techniques of human remains in a short time frame.

SERVICE & OUTREACH

Anthrofest Activity Leader | Penn State University | April 2024

Activity leader for Anthrofest, a 1-day event about anthropology with free admission for the public. Held at the Penn State Arboretum in the University Park area. Participants learned about the study and use of ceramics in anthropology, and created their own clay pots.

Anthrofest Planning Committee | Penn State University | January 2023 to present

Aid in the development, planning, and scheduling of Anthrofest, a 1-day event about anthropology with free admission for the public. Held at the Penn State Arboretum in the University Park area.

Anthropology Graduate Student Association (AGSA) | Penn State University | May 2021 to August

2022 Secretary for the anthropology graduate student association for the department of anthropology. Planning of events, writing retreats, workshops, and fundraisers.

Anthropological Research in Science Education (ARISE) Lecturer and module instructor | Penn State University | May 2022

Lecture on human health and variation for a group of undergraduate students at Penn State. Four hour lesson plan about human skeletal variation and health. Lesson plan included hands-on sex and age estimation and pathological identification from human remains.

AGSA Graduate Welfare Committee | Penn State University | May 2021 to May 2022

Mentor, guide, and plan events through the AGSA Graduate Welfare Committee.

AGSA Outreach Committee | Penn State University | July 2020 to May 2022

Organization of outreach and diversity and inclusion to participants interested in anthropology through Pennsylvania State University.

Inclusion, Diversity, and Equity in Anthropology (IDEA) Committee | Penn State University | August 2021 to 2023

Promotion of diversity and inclusion in the Department of Anthropology at Penn State. Creation of workshops, speaker series, training, teaching, and other welfare tools to support and promote diverse minds in anthropology.

Anthropological Research in Science Education (ARISE) Committee | Penn State University | August 2021 to May 2022

Fully funded summer program with a focus on teaching and training in integrative anthropology for undergraduate students from underrepresented groups. Training modules for May 2022's program include anthropological research in genetics, isotopic analysis, geographic information systems, and medical anthropology.

Graduate Undergraduate Mentorship Program | Penn State University | September 2020 to May 2022
Mentor, guide, and meet with 3 undergraduate students whose research interests are within biological anthropology. Guidance includes offering advice on research opportunities within the department of anthropology at Penn State, information about graduate school, job prospects and networking in anthropology.

Social Media Committee | Dental Anthropology Association | April 2019 to October 2020
Use of social media to engage the public and academics with dental anthropology. Responsibilities include interacting with followers via the Dental Anthropology Association's Twitter account through #ToothTuesdays, #FossilFridays, and other interesting news.

Volunteer | American Association of Physical Anthropologist Meetings | March 2019
Aid the volunteer coordinator with the set up and break down of the silent auction and live auction, assist with payment of live auction items and organization of receipts.

Volunteer | American Academy of Forensic Science Meetings | February 2019
Assist the Academy with setting up rooms for the day's events, check in guests for special lectures, and coordinate with the Volunteer Manager for the rest of the day's duties.

Volunteer | Texas Association of Biological Anthropologists Meetings | November 2018
Support Dr. Deborah Cunningham with checking in guests to the 2018 meetings hosted in San Marcos, Texas, and preparing a tourist document for guests visiting the city.

Volunteer | FACTS | August 2018 to present
Volunteer for the Willd Body Donation program at Texas State University. Responsibilities include transportation, intake, placement, documentation, photography, and blood, nail and hair samples of human remains at the Forensic Anthropology Research Facility (FARF) as part of the longitudinal decomposition study.

Volunteer for the Army Criminal Investigation Command (CID) | FACTS | March 2019
Assist the Army CID with access to research facilities including FARF, ORPL, and the Grady Early Building (GEB), aid investigators with set up of crime scenes at FARF, maintain cleanliness of work areas.

Volunteer | FACTS | August 2013 to August 2016
Assist the director and coordinator with donation organization, enter living and deceased donor information in Paradox, itemize the donated skeletal collection, photograph donated skeletal collection, disarticulation and processing of human skeletal remains, assist with donation intakes and placements, and assist with Operation Identification intakes, processing, hand washing of personal effects, and curation.

LECTURES & TEACHING

Lecturer | Human Osteology Course | New Braunfels High School | FACTS | November 2019
Lecture on the biological profile, pathology, taphonomy, and help students gain an understanding of elements of the human skeleton.

Assistant | Human versus Non-human Remains Course | FACTS | June 2019
Assist the director, Dr. Wescott, with a course on Human versus Non-human remains by collecting donation information, organizing donations used, setting up stations with human and non-human bone, and picking up lunch for attendees.

Assistant | Human Remains Recovery Course | FACTS | June 2019

Assist the grave leader, Dr. JP Fancher, with the exhumation of human remains during a one-week course for law enforcement officials. Duties included leading the group through mapping exercises, assisting with stations regarding the biological profile, photographing the group during excavation, and assisting with lunch pick up and drop off.

Lecturer | Human Osteology Course | New Braunfels High School | FACTS | February 2019

Lecture on the biological profile, pathology, taphonomy, and help students gain an understanding of elements of the human skeleton.

Assistant Lecturer | High School Osteology Workshop | FACTS | October 2018

Aid the coordinator with lecture on the biological profile, pathology, taphonomy, and help students gain an understanding of elements of the human skeleton.

INTERNSHIPS

Intern | FACTS | Fall 2014 | Advisors: Dr. Kate Spradley and Dr. Daniel Wescott

Assist with OpID including hand washing personal effects of deceased unidentified border crossers (UBCs), label and organize personal effects, photograph personal effects for addition into NamUs, measure post-crania of UBCs, and manage hand written notes for entry into NamUs, operate the ProJet 660 Pro 3D Printer including printing osteological specimens for laboratory and professional use, post-processing techniques of 3D printed parts, manage 3D Print programs, and maintain the 3D printer, assist graduate students with donation pick-ups, intake and placement procedures.

PROFESSIONAL & ACADEMIC MEMBERSHIPS

Member | American Association for Anatomy | 2021 to present

Member | Society for Craniofacial Genetics and Developmental Biology | 2021 to 2022

Member | American Association of Biological Anthropologists | 2016 to 2022

Member | American Association for the Advancement of Science | 2020 to 2021

Member | American Association of Forensic Sciences | 2020

President | Forensic Anthropology Society | Spring 2015 |

Internal Vice President | Fall 2014 | Member-Fall 2013-Spring 2014

Member | Forensic Anthropology Society | Texas State University, San Marcos, TX | 2013 to 2015

Coordinated the 2nd Annual Forensic Anthropology Conference at Texas State University, a symposium on migrant identification along the US-Mexico border, plan and update members on events including meetings, fundraisers, and game nights, delegate duties to officers and members, volunteer at events like Bobcat Build and Missing in Harris County Day, begin development of the 3rd Annual Forensic Anthropology Conference at Texas State. Contact members and officers regarding events and meetings, plan fundraising events for members and officers.

PROFESSIONAL DEVELOPMENT

Scholar | Committee on Diversity Increasing Diversity in Evolutionary Anthropological Sciences (COD-IDEAS) | American Association of Biological Anthropologists (AABA) | October 2021

Selected as a COD-IDEAS scholar and participated in a one-day workshop held by the AABA. COD-IDEAS faculty mentored students from underrepresented and minority groups on topics including applying for funding, creating academic families, navigating unfamiliar landscapes, collaboration, professional presentations, and discussion of hardships as a minority in biological anthropology.

Participant | Dental Anthropology Workshop | Dental Anthropology Association | AABA Meeting 2019

Participant in a one-day workshop held by the Dental Anthropology Association at the 2019 AABA's in Cleveland, Ohio. The workshop included information on dental age estimation and hands on experience using an array of dental age estimation methodology.

Student | Human Osteology Short Course | FACTS | August 2018

Attended a one-week intensive course on the identification of human skeletal remains under the direction of Dr. Daniel Wescott, Dr. Deborah Cunningham, and Dr. Nicholas Herrmann.

RELEVANT SKILLS

3D Edit Pro 2.0

3D Print

3D Post-Processing Techniques

3Skull

ADBOU

Advantage Database Systems

Breuckmann 3D White Light Scanner

ColorBond and StrengthMax Epoxy Methods

EMOSS

FORDISC 3.0

Euclidian Distance Matrix Analysis

ImageJ/Fiji

Meshlab

Microscribe Digitizer

Morphological Observation Scoring

NextEngine 3D Laser Scanner

Osteoware

ProJet 660 Pro 3D Printer

PTA Staining

FDB 2.0

Histological slide preparation

Immunohistochemistry

Microscopic Imaging and Analysis