# AMANDA (MANDY) M. AGNEW, PHD

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# **EXPERTISE**

Skeletal trauma, bone biomechanics, skeletal biology, biological anthropology, human anatomical variation, functional anatomy, human anatomy, human osteology, juvenile osteology, injury biomechanics, forensic anthropology, forensic archaeology, skeletal histomorphometry, skeletal anatomical imaging, human skeletal identification, graduate student research education and mentorship, scientific methods

h-index = 22 (Google Scholar)

# **EDUCATION**

**2006 - 2011: PhD - Biological Anthropology (Human Anatomy minor)** Dissertation: Histomorphometry of the Elderly Rib: A methodological approach with implications for biomechanics, function, and fracture risk The Ohio State University; Columbus, OH Advisor: Dr. Samuel D Stout

**2004 - 2006:** MA - Biological Anthropology Thesis: Histomorphological Aging of Subadults: A test of Streeter's method on a medieval archaeological population The Ohio State University; Columbus, OH Advisor: Dr. Samuel D Stout

**2000 - 2004: BA - Anthropology, Cum Laude (Biology minor)** The State University of New York at Potsdam; Potsdam, NY Advisor: Dr. Bethany Usher

# ACADEMIC POSITIONS

# CURRENT - The Ohio State University

**2022 - present: Professor** School of Health and Rehabilitation Sciences, College of Medicine (TIU) Department of Anthropology, College of Arts and Sciences Department of Biomedical Engineering, College of Engineering

## 2019 - present: Director of Graduate Programs

Graduate Programs (MS, PhD), School of Health and Rehabilitation Sciences, College of Medicine

## 2013 - present: Director of Skeletal Biology Research Laboratory

Injury Biomechanics Research Center, School of Health and Rehabilitation Sciences, College of Medicine

# PAST - The Ohio State University

# 2017 - 2022: Associate Professor

School of Health and Rehabilitation Sciences, College of Medicine (TIU) Department of Anthropology, College of Arts and Sciences Department of Biomedical Engineering, College of Engineering

# 2012 - 2017: Assistant Professor

School of Health and Rehabilitation Sciences, College of Medicine (TIU) Department of Anthropology, College of Arts and Sciences Department of Biomedical Engineering, College of Engineering

# 2013 - 2015: Graduate Program Chair

Graduate Programs (MS, PhD), Division of Anatomy, College of Medicine

# 2010 - 2012: Instructor

Division of Anatomy, Department of Biomedical Informatics, College of Medicine

# 2008 - 2010: Graduate Research Associate and Fellow

College of Engineering

# 2006 - 2008: Graduate Teaching Associate

Department of Anthropology, College of Arts and Sciences

# RESEARCH EXPERIENCE & FUNDING

# PRINCIPAL INVESTIGATOR

3/2024 - 3/2025: Development of cortical bone mechanics technology for enhancing the diagnosis of osteoporosis-Co-Principal Investigator

Research Grant from Ohio University and the National Institutes of Health/National Institute on Aging (NIH/NIA) Co-PI: Amanda M Agnew, Randee Hunter- The Ohio State University

• \$198,960

# 1/2024 - 12/2026: Quantitative assessment of fracture characteristics in blunt force skeletal trauma for forensic interpretations- *Co-Principal Investigator*

National Institute of Justice (NIJ) Grant - Research and Development in Forensic Sciences for Criminal Justice Purposes Co-PI: Amanda M Agnew, Angela L Harden - The Ohio State University

• \$818,054

# 10/2023 - 10/2024: Tensile and compressive material properties of human pelvic cortical bone- *Co-Principal Investigator*

Research Contract from Virginia Polytechnic Inst. / Research Consortium for Crashworthiness in Automated Driving Systems (RCCADS)

- Co-PI: Amanda M Agnew, Randee Hunter- The Ohio State University
  - \$42,391

# 7/2023 - 3/2024: Variation in volumetric bone mineral density in females assessed by QCT- *Co-Principal Investigator*

Research Contract from the Toyota Collaborative Safety Research Center

Co-PI: Amanda M Agnew, Randee Hunter- The Ohio State University

• \$97,196

6/2023 - 5/2024: Thoracic biomechanics in frontal impacts, Phase II (2023) - Principal Investigator Research Contract from National Highway Traffic Safety Administration (NHTSA) PI: Amanda M Agnew- The Ohio State University

\$491,197

6/2023 - 5/2024: Thoracic biomechanics in side impacts, Phase II (2023) - Principal Investigator Research Contract from National Highway Traffic Safety Administration (NHTSA) PI: Amanda M Agnew- The Ohio State University

\$455,834 •

6/2022 - 5/2023: Thoracic biomechanics in side impacts - Principal Investigator Research Contract from National Highway Traffic Safety Administration (NHTSA) PI: Amanda M Agnew- The Ohio State University

\$412,650

6/2022 - 5/2023: Thoracic biomechanics in frontal impacts - Principal Investigator Research Contract from National Highway Traffic Safety Administration (NHTSA) PI: Amanda M Agnew- The Ohio State University

\$294,859

10/2020 - 12/2021: Preliminary external accuracy assessment of cortical bone mechanics technology - Principal Investigator

Industry Research Contract from OsteoDx

PI: Amanda M Agnew - The Ohio State University

\$52,366 •

3/2020 - 3/2023: Quantitative imaging analysis to understand variation in skeletal injury - Co-Principal Investigator Research Cooperative Agreement from US Army Research Lab (ARL)/Department of Defense (DoD) Co-PI: Amanda M Agnew, Randee Hunter- The Ohio State University

\$554,195 •

1/2020 - 12/2023: Skeletal trauma in forensic anthropology: Improving the accuracy of trauma analysis and expert testimony - Principal Investigator

National Institute of Justice (NIJ) Grant - Research and Development in Forensic Sciences for Criminal Justice Purposes PI: Amanda M Agnew - The Ohio State University

• \$782,183

9/2019 - 11/2022: Human variability in thorax biomechanics - Principal Investigator Research Contract from National Highway Traffic Safety Administration (NHTSA)

PI: Amanda M Agnew- The Ohio State University

\$1,140,681

6/2017 - 8/2025: Tensile and compressive material properties of human ribs - Principal Investigator Research Contract from Autoliv Development AB, Autoliv Research, Sweden PI: Amanda M Agnew - The Ohio State University

\$1,797,658

7/2017 - 8/2019: Population specific thorax biomechanics - Principal Investigator Research Contract from National Highway Traffic Safety Administration (NHTSA)

- PI: Amanda M Agnew- The Ohio State University
  - \$586,512

# 11/2015 - 3/2017: Mechanical properties of the human thoracic skeleton and contributions to vulnerable occupant injury - *Principal Investigator*

Research Contract from Autoliv Development AB, Sweden

Co-PI: Amanda M Agnew, John H Bolte IV - The Ohio State University

• \$239,510

11/2015 - 3/2021: Elderly side impact - Co-Principal Investigator

Research Contract from Honda R & D America, Inc.

Co-PI: John H Bolte IV, Amanda M Agnew- The Ohio State University

• \$1,409,409

3/2015 - 3/2018: Assessment of PMHS variability used for research in UBB in the context of quantifying bone quality for scaling response and injury *- Principal Investigator* 

Research Cooperative Agreement from US Army Research Lab (ARL)/Department of Defense (DoD)

PI: Amanda M Agnew- The Ohio State University

\$2,209,904

9/2014 - 10/2017: Pediatric injury biomechanics research task 2 - *Principal Investigator* Research Contract from National Highway Traffic Safety Administration (NHTSA)

PI: Amanda M Agnew- The Ohio State University

• \$335,870

6/2014 - 6/2019: The impact and injury response of male and female PMHS, Hybrid III fiftieth and fifth percentile ATDs, and WIAMan under blast-induced accelerative loading - *Co-Principal Investigator* Research Contract from Virginia Polytechnic Inst./US Army Research Lab

Co-PI: John H Bolte IV, Amanda M Agnew- The Ohio State University

• \$1,064,888

6/2014 - 11/2014: Investigation of abdominal injury patterns, mechanisms and tolerances - *Principal Investigator* Research Contract from Virginia Polytechnic Inst./Toyota Motor Company

PI: Amanda M Agnew- The Ohio State University

• \$42,000

5/2014 - 4/2015: Quantifying CRS fit in the vehicle seat environment- focusing on incompatibilities - *Principal Investigator* 

Center for Child Injury Prevention Studies (CChIPS), National Science Foundation I/UCRC

PI: Amanda M Agnew- The Ohio State University

• \$48,000

# 6/2013 - 9/2016: Warrior Injury Assessment MANikan (WIAMan) Project- Co-Principal Investigator

Research Contract from Johns Hopkins University/ US ARMY and DoD

Co-PI: John H Bolte IV, Amanda M Agnew- The Ohio State University

• \$2,563,316

# 5/2013 - 4/2015: Anthropometry Update: Is the 6 year old ATD representative of age-matched children? - *Principal Investigator*

Center for Child Injury Prevention Studies (CChIPS), National Science Foundation I/UCRC

PI: Amanda M Agnew- The Ohio State University

• \$51,215

# 5/2012 - 4/2013: Development and validation of a biofidelic pediatric ATD lower extremity- *Principal Investigator* Center for Child Injury Prevention Studies (CChIPS), National Science Foundation I/UCRC

- PI: Amanda M Agnew- The Ohio State University
  - \$62,603

# 5/2012 - 4/2013: Quantifying CRS fit in the vehicle seat environment- *Principal Investigator*

Center for Child Injury Prevention Studies (CChIPS), National Science Foundation I/UCRC

PI: Amanda M Agnew- The Ohio State University

• \$50,000

#### 1/2012 - 12/2012: Evaluation of pre-tensioning and force limiting used in novel seatbelt restraint systems-*Principal Investigator*

Research Contract from Virginia Polytechnic Inst./TRW Automotive

- PI: Amanda M Agnew- The Ohio State University
  - \$100,000

10/2011 - 5/2012: Military biomechanics II-Generic hull testing 4.2- *Co-Principal Investigator* Research Contract from Virginia Polytechnic Inst/DoD and US ARMY

Co-PI: John H Bolte IV, Amanda M Agnew- The Ohio State University

• \$333,434

**3/2010 - 9/2014: Pediatric injury biomechanics research task 11-** *Principal Investigator* Research Contract from National Highway Traffic Safety Administration (NHTSA) PI: Amanda M Agnew- The Ohio State University

• \$556,304

1/2009 - 1/2010: The role of microfractures and cross-sectional geometry in bone fragility- *Principal Investigator* Alumni Grant for Graduate Research and Scholarship (AGGRS), The Ohio State University PI: Amanda M Agnew- The Ohio State University

2009 - 2011: Pediatric rib study (Phase I & II)- *Graduate Research Fellow* Dwight D Eisenhower Grants for Research Fellowship, Federal Highway Administration PI: Amanda M Agnew- The Ohio State University

**2004 - present: Slavia Project** - Collection Manager and Project Osteologist of the Giecz Skeletal Collection Giecz, Poland (www.slavia.org) The Slavia Foundation

## CONTRIBUTING INVESTIGATOR

6/2023 - 5/2024: Automated Vehicle Rear-Facing Safety - *Co-Investigator* Research Contract from National Highway Traffic Safety Administration (NHTSA) PI: Yun-Seok Kang - The Ohio State University

• \$429,648

10/2021 - 5/2022: Investigation of a new restraint system to reduce injury risk of reclined occupants in high-speed rear impacts - *Co-Investigator* 

Research Contract from Hyundai Mobis

PI: Yun-Seok Kang - The Ohio State University

• \$330,035

10/2021 - 12/2022: PMHS responses and injuries in a continuous rear-facing seat condition at a high-speed frontal impact - *Co-Investigator* 

Research Contract from Research Consortium for Crashworthiness in Automated Driving Systems (RCCADS) PI: Yun-Seok Kang - The Ohio State University

• \$294,565

2/2019 - 2/2024: Influence of boot and foot characteristics on blast injury prevention - *Co-Investigator* Research Cooperative Agreement from US Army Research Office (ARO)/Department of Defense (DoD) PI: John H Bolte IV- The Ohio State University

• \$623,928

7/2020 - 12/2022: Biomechanics in AV Settings Phase II - *Co-Investigator* Research Contract from National Highway Traffic Safety Administration (NHTSA)

PI: Yun-Seok Kang - The Ohio State University

• \$761,114

# 3/2018 - 6/2020: Biomechanics in AV Settings Phase I - *Co-Investigator*

Research Contract from National Highway Traffic Safety Administration (NHTSA)

PI: John H Bolte IV - The Ohio State University

• \$606,672

# 9/2014 - 8/2015: Mechanical and Compositional Analyses of Bone Tissue- *Co-Investigator*

Clinical and Translational Science (CCTS) Pilot and Collaborative Studies Program, The Ohio State University Wexner Medical Center

PI: Do-Gyoon Kim- The Ohio State University

• \$30,000

7/2013 - 6/2014: Relationship of Mineral Distribution with Mechanical Properties of Oral Bone- *Co-Investigator* BF Dewell Memorial Research Award in Biomedical Research, American Association of Orthodontists Foundation (AAOF) PI: Do-Gyoon Kim- The Ohio State University

• \$25,000

# 12/2011 - 11/2012: Bone Mineralization Based Diagnosis of Oral Complications- *Co-Investigator*

Clinical and Translational Science (CCTS) Pilot and Collaborative Studies Program, The Ohio State University Wexner Medical Center

PI: Do-Gyoon Kim- The Ohio State University

• \$30,000

9/2011 - 11/2011: Elderly Post-Mortem Human Subject Sled Testing- Co-Investigator

Research Contract from Hyundai Motor Co.

PI: John H Bolte IV- The Ohio State University

• \$224,269

# 9/2011 - 9/2012: Evaluation of Initial Stability of Trabecular Metal (TM) and Tapered Screw-Vent (TSV) Dental Implants- *Co-Investigator*

Corporate research Contract from Zimmer, Inc.

PI: Do-Gyoon Kim- The Ohio State University

\$38,000

# **10/2011 - 5/2012: Military Biomechanics II-Generic Hull Testing-** *Co-Investigator* Research Contract from Virginia Polytechnic Inst/DoD and US ARMY

PI: John H Bolte IV- The Ohio State University

• \$51,823

3/2011 - 12/2011: Pediatric Injury Biomechanics Research- *Co-Investigator* 

Research Contract from National Highway Traffic and Safety Administration (NHTSA)

PI: John H Bolte IV- The Ohio State University

• \$222,897

# 1/2010 - 4/2012: Facial Fracture Injury Risk Functions for Assessing the Performance of Improved Face and Eye Protection- *Co-Investigator*

Research Contract from Virginia Polytechnic Institute PI: John H Bolte IV- The Ohio State University • \$149,177

**2009 - 2010: Knee Airbag Injury Risk Assessment for Children-** *Co-Investigator* Center for Child Injury Prevention Studies (CChIPS), National Science Foundation I/UCRC PI: John H Bolte IV- The Ohio State University

• \$49,192

# PEER-REVIEWED JOURNAL PUBLICATIONS (79)

- 1. Brzezinski ET, Hubbe M, Hunter RL, Agnew AM. 2024. Sex differences in workload in medieval Eastern Europe: Patterns of asymmetry and biomechanical adaptation in the upper limb at Giecz, Poland. American Journal of Biological Anthropology 183(2), e24886.
- Tesny A, Fibbi C, Kang Y-S, Agnew AM, Baker GH, Zaragoza-Rivera Y, Shurtz B, Pipkorn B, Rhule H, Moorhouse K, Markusic C, Malcomb S, Bolte JH. 2023. Evaluation of 5<sup>th</sup> percentile female ATDs in near-side impact scenarios compared to elderly PMHS. International Research Council on Biomechanics of Injury (IRCOBI). IRC-23-27: 160-183.
- 3. Harden AL, Kang Y-S, Baker GH, Stull KE, Agnew AM. 2023. Exploring the effects of sex and size on dynamic tibia properties. International Research Council on Biomechanics of Injury (IRCOBI). IRC-23-53: 477-498.
- 4. Hunter RL, Haverfield Z, Kang Y-S, Agnew AM. 2023. Potential consequences of contradictions in bone mineral density assessments in injury biomechanics. International Research Council on Biomechanics of Injury (IRCOBI). IRC-23-131: 1031-1047.
- 5. Albert DL, Katzenberger MJ, Hunter RL, Agnew AM, Kemper AR. 2023. Effects of loading rate, age, and morphology on the material properties of human rib trabecular bone. Journal of Biomechanics 156, paper 111670.
- 6. Kang Y-S, Stammen J, Agnew AM, Baker G, Pradhan V, Bendig A, Hagedorn A, Moorhouse K, Bolte JH. 2023. Thoracic responses and injuries to male postmortem human subjects (PMHS) in rear-facing seat configurations in high-speed frontal impacts. Traffic Injury Prevention via Enhanced Safety of Vehicles (ESV) 24(s1): S47-S54.
- 7. Bolte JH, Fibbi C, Tesny A, Kang Y-S, **Agnew AM**, Shurtz B, Pipkorn B, Rhule H, Moorhouse K. 2023. Analysis of injury mechanism and thoracic response of elderly, small female PMHS in near-side impact scenarios. Traffic Injury Prevention via Enhanced Safety of Vehicles (ESV) 24(s1): S23-S31.
- 8. Harden A, Bolte JH, Kang Y-S, Stull K, Agnew AM. 2023. Blunt force skeletal trauma research methods: A multidisciplinary perspective. Forensic Anthropology 6(2): 79-91.
- 9. Haverfield ZA, Agnew AM, Hunter RL. 2023. Differential cortical volumetric bone mineral density within the human rib. Journal of Clinical Densitometry: Assessment & management of musculoskeletal health 26(2), paper 101358.
- 10. Kang Y-S, Bendig A, Stammen J, Hutter E, Moorhouse K, Bolte JH, **Agnew AM**. 2023. Comparison of small female PMHS thoracic responses to scaled response corridors in a frontal hub impact. Traffic Injury Prevention 24(1): 62-68.
- 11. Rampersadh C, Agnew AM, Malcolm S, Gierczycka D, Iraeus J, Cronin DS. 2022. Factors affecting the numerical response and fracture location of the GHBMC M50 rib in dynamic anterior-posterior loading. Journal of the Mechanical Behavior of Biomedical Materials 136, paper 105527.
- 12. Harden A, Kang Y-S, **Agnew AM**. 2022. Comparison of the effect of two dynamic loading rates on fracture characteristics of human ribs in bending: An experimental study. Forensic Anthropology 5(4): 292-301.

- 13. Sreedhar A, Agnew AM, Bolte JH, Murach MM, Ramachandra R, Kang Y-S. 2022. Development of a strain-based model to predict eviscerated thoracic response from dynamic individual rib tests. Journal of Biomechanical Engineering 144(10), paper BIO-21-1441.
- 14. Haverfield Z, Hunter RL, Loftis KL, Agnew AM. 2022. Skeletal site and method-dependent variability of bone mineral density in injury biomechanics research. International Research Council on Biomechanics of Injury (IRCOBI). IRC-22-49: 332-360.
- 15. Cole ME, Stout SD, Dominguez V, Agnew AM. 2022. Pore Extractor 2D: An ImageJ toolkit for quantifying cortical pore morphometry on histological bone images, with application to intraskeletal and regional patterning. American Journal of Biological Anthropology 179(3): 365-385.
- 16. Kang Y-S, Stammen J, Bendig A, **Agnew AM**, Hagedorn A, Thomas C, Ramachandra R, Kwon HJ, Moorhouse K, Bolte JH. 2022. Effects of seatback recline and belt restraint type on PMHS responses and injuries in rear-facing frontal impacts. SAE International Journal of Transportation Safety 10(2), paper 09-10-02-0012.
- 17. Albert DL, Katzenberger MJ, Agnew AM, Kemper A. 2021. A comparison of rib cortical bone compressive and tensile material properties: Trends with age, sex, and loading rate. Journal of Mechanical Behavior of Biomedical Materials 122: 104668.
- Agnew AM, Sreedhar A, Bolte JH, Kang Y-S. 2021. Exploratory comparison of human rib structural behavior in two dynamic loading scenarios. International Research Council on Biomechanics of Injury (IRCOBI). IRC-21-92: 775-786.
- 19. Kawabuchi T, Sugaya H, Takahashi Y, Agnew AM, Kang Y-S, Bolte JH. 2021. Prediction of rib fractures to elderly female occupants by means of a combination of anterior-posterior and lateral deformation of the rib cage in a near-side crash. International Research Council on Biomechanics of Injury (IRCOBI). Paper IRC-21-56: 521-531.
- Hunter RL, Haverfield Z, Agnew AM. 2021. Investigation of sex-specific effects on variation in cortical bone morphometrics of the radius. International Research Council on Biomechanics of Injury (IRCOBI). IRC-21-37: 288-307.
- 21. Harden AL, Kang Y-S, Hunter RL, Bendig A, Bolte JH, Eckstein NI, Smith AGF, Agnew AM. 2021. Preliminary sexspecific relationships between peak force and cortical bone morphometrics in human tibiae subjected to lateral loading". International Research Council on Biomechanics of Injury (IRCOBI). IRC-21-33: 232-248.
- 22. Yates K, Agnew AM, Albert DL, Kemper A, Untaroiu CD. 2021. Subject-specific rib finite element models with material data derived from coupon tests under bending loading. Journal of Mechanical Behavior of Biomedical Materials 116: 104358.
- 23. Kang Y-S, Kwon HJ, Stammen J, Moorhouse K, Agnew AM. 2021. Biomechanical response targets of adult human ribs in frontal impacts. Annals of Biomedical Engineering 49: 900-911.
- 24. Dominguez VM, Harden A, Wascher M, Agnew AM. 2020. Rib variation at multiple locations and implications for histological age estimation. Journal of Forensic Science 65 (6): 2108-2111.
- 25. Kang Y-S, Stammen J, Ramachandra R, Agnew AM, Hagedorn A, Thomas C, Kwon HJ, Moorhouse K, Bolte JH. 2020. Biomechanical responses and injury assessment of post mortem human subjects in various rear-facing seating configurations. Stapp Car Crash Journal 64: 155-212.

- 26. Tillis M, Stuckey S, Sreedhar A, Stammen J, Moorhouse K, Agnew AM, Kang Y-S. 2020. Preliminary methods for modeling stress-strain curves of human ribs from structural dynamic bending tests. International Research Council on Biomechanics of Injury (IRCOBI). IRC-20-84: 732-745.
- 27. Sreedhar A, Kang Y-S, Bolte JH, Murach MM, Stammen J, Moorhouse K, Ramachandra R, Agnew AM. 2020. A hierarchical exploration of rib strain in dynamic frontal thoracic impacts. International Research Council on Biomechanics of Injury (IRCOBI). IRC-20-85: 746-769.
- Kang Y-S, Moorhouse K, Bolte JH, Stammen J, Agnew AM. 2020. Viscoelastic structural properties of human ribs in a simulated frontal impact. International Research Council on Biomechanics of Injury (IRCOBI). IRC-20-87: 782-794.
- 29. Agnew AM, Wascher M, Sreedhar A, Bolte JH, Stammen J, Moorhouse K, Kang Y-S. 2020. Characteristics of vulnerable occupants predicted by rib structural properties. International Research Council on Biomechanics of Injury (IRCOBI). IRC-20-88: 795-810.
- 30. Holcombe S, Agnew AM, Derstine B, Wang S. 2020. Comparing FE human body model rib geometry to population data. Biomechanics and Modeling in Mechanobiology 19: 2227-2239.
- 31. Messer DM, Adler B, Brink F, Xiang H, Agnew AM. 2020. Radiographic time since injury methods for pediatric healing fractures. A systematic review. Pediatric Radiology 50: 1041-1048.
- 32. Katzenberger MJ, Albert DL, Agnew AM, Kemper A. 2020. Effects of sex, loading rate, and age on the tensile material properties of human rib cortical bone. Journal of Mechanical Behavior of Biomedical Materials 102: 103410.
- 33. Kang Y-S, Bolte JH, Stammen J, Moorhouse K, Agnew AM. 2019. A novel approach to scaling age-, sex-, and body size-dependent thoracic responses using structural properties of human ribs. Stapp Car Crash Journal 63: 307-329.
  - \*Awarded the John Paul Stapp Award for the best Stapp paper of 2019\*
- 34. Holcombe SA, Kang Y-S, Derstine BA, Wang SC, Agnew AM. 2019. Regional maps of rib cortical bone thickness and cross-sectional geometry. Journal of Anatomy 235(5): 883-891.
- 35. Iraeus J, Lundin L, Storm S, Agnew AM, Kang Y-S, Kemper A, Albert D, Holcombe S, Pipkorn B. 2019. Detailed subject-specific FE rib modeling for fracture prediction. Traffic Injury Prevention 20: S88-95.
- Harden AL, Kang Y-S, Moorhouse K, Stammen J, Agnew AM. 2019. Human rib fracture characteristics and relationships with structural properties. International Research Council on Biomechanics of Injury (IRCOBI). IRC-19-65: 465-474.
- Hunter RL, Briley K, Agnew AM. 2019. Sex differences in human tibia cortical bone morphometrics from computed tomography (CT). International Research Council on Biomechanics of Injury (IRCOBI). IRC-19-60: 436-445.
- Ramachandra R, Kang Y-S, Stammen J, Moorhouse K, Murach M, Bolte JH, Agnew AM. 2019. Evaluation of skeletal and soft tissue contributions to thoracic response of GHBMC M50-O model in dynamic frontal loading scenarios. International Research Council on Biomechanics of Injury (IRCOBI). IRC-19-49: 332-348.
- 39. Holcombe SA, Kang Y-S, Wang SC, Agnew AM. 2019. The accuracy of local rib bone geometry measurement using full body CT images. International Research Council on Biomechanics of Injury (IRCOBI). IRC-19-64: 453-464.
- 40. Larsson K-J, Pipkorn B, Iraeus J, Bolte JH, **Agnew AM**, Hu J, Reed MP, Sunnevang C. 2019. Evaluation of the benefits of parametric human body model morphing for prediction of injury to elderly occupants in side impact. International Research Council on Biomechanics of Injury (IRCOBI). IRC-19-33: 150-174.

- 41. Harden A, Kang Y-S, Agnew AM. 2019. Rib fractures: Validation of an inter-disciplinary classification system. Forensic Anthropology. 2(3): 158-167.
- 42. Dominguez VM, Agnew AM. 2019. Microdamage as a bone quality component: Practical guidelines for the twodimensional analysis of linear microcracks in human cortical bone. Journal of Bone and Mineral Research Plus 3(6): e10203.
- 43. Sugaya H, Takahashi Y, Ayyagari M, Gomez J, Whitcomb B, Markusic C, Ramachandra R, Kang Y-S, Agnew AM, Bolte JH. 2019. Identification of accident representative scenario for elderly female occupants in side impact. International Journal of Automotive Engineering 10(2): 150-155.
- 44. Dominguez VM, Agnew AM. 2019. The use of overlays and a semi-automated method for measuring cortical area in histological analysis. American Journal of Physical Anthropology 168(2): 378-382.
- 45. Agnew AM, Murach MM, Dominguez VM, Sreedhar A, Misicka E, Harden A, Bolte JH, Stammen J, Moorhouse K, Kang Y-S. 2018. Sources of variability in structural bending response of pediatric and adult human ribs in dynamic frontal impacts. Stapp Car Crash Journal 62: 119-192.
   \*Awarded the John Paul Stapp Award for the best Stapp paper of 2018\*
- 46. Murach MM, Kang Y-S, Bolte JH, Moorhouse K, Stammen J, Stark D, Ramachandra R, Agnew AM. 2018. Quantification of skeletal and soft tissue contributions to thoracic response in a dynamic frontal loading scenario. Stapp Car Crash Journal 62: 193-269.
- 47. Albert D, Kang YS, Agnew AM, Kemper A. 2018. The effect of injurious whole rib loading on rib cortical bone material properties. International Research Council on Biomechanics of Injury (IRCOBI). IRC-18-96: 680-687.
- 48. Shurtz BK, Agnew AM, Kang YS, Bolte JH. 2018. Application of scaled deflection injury criteria to two small, fragile females in side impact motor vehicle crashes. SAE International. Paper No. 2018-01-0542.
- 49. Bing J, Agnew AM, Bolte JH. 2018. Compatibility of booster seats and vehicles in the US market. Traffic Injury Prevention. 19(4): 385-390.
- 50. Justus HM, Agnew AM. 2017. Preliminary osteological investigation of early medieval site Gz10 in Giecz, Poland. Studia Lednicka, XVI: 61-67.
- 51. Shurtz BK, Agnew AM, Kang YS, Bolte JH. 2017. Effect of chestbands on the global and local response of the human thorax to frontal impact. Annals of Biomedical Engineering. 45(11): 2663-2672.
- 52. Agnew AM, Murach MM, Misicka E, Moorhouse K, Bolte JH, Kang YS. 2017. The effect of body size on adult human rib structural properties. International Research Council on Biomechanics of Injury (IRCOBI). IRC-17-105: 728-736.
- 53. Albert D, Agnew AM, Kang YS, Kemper A. 2017. A comparison of rib structural and material properties from whole bone bending and coupon tension tests. International Research Council on Biomechanics of Injury (IRCOBI). IRC-17-71: 567-576.
- 54. Kang YS, Agnew AM, Icke K, Bolte JH. 2017. Elderly PMHS thoracic responses and injuries in frontal impacts. International Research Council on Biomechanics of Injury (IRCOBI). IRC-17-69: 539-557.
- 55. Kim DG, Jeong YH, Chien HH, Agnew AM, Lee JW, Wen HB. 2017. Immediate mechanical stability of threaded and porous implant systems. Clinical Biomechanics 48: 110-117.
- 56. Murach MM, Kang YS, Goldman SD, Schafman MA, Schlecht SH, Moorhouse K, Bolte JH, Agnew AM. 2017. Rib geometry explains variation in dynamic structural response: Potential implications for frontal impact fracture risk. Annals of Biomedical Engineering 45(9): 2159-2173.
- 57. Agnew AM, Dominguez VM, Sciulli P, Stout SD. 2017. Variability of *in vivo* linear microcrack accumulation in the cortex of elderly human ribs. Bone Reports 6: 60-63.
- 58. Hunter RL, Agnew AM. 2016. Intra-skeletal variation in human cortical osteocyte lacunar density: implications for bone quality assessment. Bone Reports 5: 252-261.

- 59. Schafman M, Kang YS, Moorhouse K, White S, Bolte JH, Agnew AM. 2016. Age and sex alone are insufficient to predict human rib structural response to dynamic A-P loading. Journal of Biomechanics 49(14): 3516-3522.
- 60. Stout SD, Gocha TP, Cole BM, Agnew AM. 2016. Bone histology. Oxford Bibliographies in Anthropology.
- 61. Butz J, Brick D, Rinehart-Thompson L, Brodnik M, Agnew AM, Patterson ES. 2016. Differences in coder and physician perspectives on the use of ICD-10-CM/PCS: A survey study. Journal of Health Policy and Technology 30(5): 251-259.
- 62. Gocha TP, Agnew AM. 2016. Spatial variation in osteon population density at the human femoral midshaft: Histomorphometric adaptations to habitual load environment. Journal of Anatomy 228: 733-745.
- 63. Kim DG, Kwon HJ, Jeong YH, Chien HH, Crance S, Agnew AM, Battula S, Lee JW, Wen HB. 2016. Associations of resonance frequency analysis with dynamic mechanical analysis of dental implant systems. Clinical Implant Dentistry and Related Research 18(2): 332-341.
- 64. Dominguez V, Agnew AM. 2016. Examination of factors potentially influencing osteon size in the human rib. Anatomical Record 299(3): 313-324.
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- 80. Gocha TP, Agnew AM. 2014. Mapping spatial patterns in cortical bone histology from the femoral midshaft using Geographic Information Systems software. Proceedings of the 66<sup>th</sup> annual American Academy of Forensic Sciences meeting; 401.

- 81. Jeong, YH, Kim MK, Han SY, Agnew AM, Kim DG. 2014. Regional variation of mechanical properties in human mandibular subchondral bone tissue. Transactions of the Orthopaedic Research Society (ORS) 39; 1134.
- Agnew AM, Justus HM. 2013. Developmental dysplasia of the hip in a child from Medieval Poland. Paleopathology Newsletter Supplement, Scientific Program of the 40<sup>th</sup> annual Paleopathology Association meeting; 25. (Editor-reviewed)
- 83. Hunter RL, Agnew AM. 2013. Vertebral morphometric evaluation of stress in modern pediatric patients. American Journal of Physical Anthropology 150:155.
- 84. Agnew AM, Stout SD, Sciulli PW. 2013. Microfractures in elderly ribs: contributions to bone quality. American Journal of Physical Anthropology 150:64.
- 85. Justus HM, Agnew AM. 2012. Two possible cases of Leprosy in Medieval Poland. Paleopathology Newsletter, Proceedings of the 19<sup>th</sup> European meeting of the Paleopathology Association; Lille, France. (Editor-reviewed)
- 86. Agnew AM, Stout SD. 2012. The 'adjusted parabolic index': a revised approach to evaluating osteoporosis in human ribs. American Journal of Physical Anthropology 147: 80.
- 87. Agnew AM, Sun F. 2011. Bone quality in the elderly: the role of microfractures. Clinical Anatomy 24: 1016.
- 88. Boucher L, Agnew AM, Monat H, Bolte JH. 2011. Case study: gross anatomic dissection and CT scan of a 94 year-old female achondroplastic dwarf. Clinical Anatomy 24: 1018.
- 89. Hunter R, Goliath J, Agnew AM. 2011. Challenging anatomists to an anthropological perspective: an example of the skeletal system. Clinical Anatomy 24: 1026-1027.
- 90. Guth, JJ, Agnew AM. 2011. Comparative foot and ankle anthropometry from the US, Japan, and Australia. Clinical Anatomy 24: 1024-1025.
- 91. Scofield M, Agnew AM, Bolte JH. 2011. Postmortem studies of high-energy lateral impacts to the zygomatic bone. Proceedings of the 6<sup>th</sup> Annual Injury Biomechanics Symposium; Columbus OH.
- 92. Hunter R, Agnew AM. 2011. A differential diagnosis of Diffuse Idiopathic Skeletal Hyperostosis (DISH) in a *Gorilla gorilla skeleton*. American Journal of Physical Anthropology 52: 172.
- 93. Rose D, Gocha T, Agnew AM, Stout SD. 2011. Defining patterns in human bone microstructure through the application of geographic information system (GIS) software. American Journal of Physical Anthropology 52: 256-257.
- 94. Justus HM, Agnew AM. 2011. Complete sagittal cleft vertebra in an early medieval Polish population. Paleopathology Newsletter Supplement, Scientific Program of the 38<sup>th</sup> annual Paleopathology Association meeting. (Editor-reviewed)
- 95. Agnew AM, Moorhouse K, Donnelly BR, Bolte JH. 2010. Determining the relationship between material properties and microstructure of human pediatric ribs. Annals of Advances in Automotive Medicine 54.
- 96. Agnew AM, Justus HM. 2010. Osteochondritis dissecans as evidence of a labor intensive adolescence? Paleopathology Newsletter Supplement, Scientific Program of the 37<sup>th</sup> annual Paleopathology Association meeting. (Editor-reviewed)
- 97. Agnew AM, Betsinger TK, Justus HM. 2010. A comparison of traumatic injury patterns between a rural and an urban population from medieval Poland. American Journal of Physical Anthropology 50:52.
- 98. Agnew AM, Moorhouse K, Donnelly BR, Bolte JH. 2009. The relationship between microstructure and material properties of pediatric ribs. Proceedings of the 5<sup>th</sup> Annual Injury Biomechanics Symposium; Columbus OH.
- 99. Agnew AM, Justus HM. 2009. Patterns of violent and non-violent trauma in a medieval population from Giecz, Poland. American Journal of Physical Anthropology 48:75.

- 100. Agnew AM, Justus HM, Ortner DJ, Ragsdale BD, Stout SD. 2009. Case study: A medieval Polish skeletal exhibiting an unusual pattern of cranial and post-cranial lesions. Paleopathology Newsletter Supplement, Scientific Program of the 36th annual Paleopathology Association meeting: 28-29. (Editor-reviewed)
- 101. Justus HM, Agnew AM. 2009. Limited perimortem evidence of interpersonal violence in early medieval Poland. Paleopathology Newsletter Supplement, Scientific Program of the 36<sup>th</sup> annual Paleopathology Association meeting: 39. (Editor-reviewed)
- 102. Brickley M, Kozlowski T, Steckel RH, Larsen CS, Walker PL, Blondiaux J, Grupe G, Jankauskas R, Maat G, McGlynn G, Papathanasiou A, Roberts C, Teschler-Nicola M, Wittwer-Backofen U, Agnew A, et al. 2009. Socio-culturally mediated disease: rickets and scurvy. American Journal of Physical Anthropology 48: 97.
- 103. Jankauskas R, Roberts C, Steckel RH, Larsen CS, Walker PL, Blondiaux J, Grupe G, Maat G, McGlynn G, Papathanasiou A, Teschler-Nicola M, Wittwer-Backofen U, **Agnew A**, Assis S, Bereczki Z, et al. 2009. Contextual dimensions of European health and lifestyle: the archaeological and historical record. American Journal of Physical Anthropology 48: 157.
- 104. Larsen CS, Walker PL, Steckel RH, Sciulli P, Klaus H, Blondiaux J, Grupe G, Jankauskas R, Maat G, McGlynn G, Papathanasiou A, Roberts C, Teschler-Nicola M, Wittwer-Backofen U, **Agnew A**, et al. 2009. History of degenerative joint disease in Europe: inferences about lifestyle and activity. American Journal of Physical Anthropology 48: 172.
- 105. Maat G, Steckel RH, Larsen CS, Walker PL, Blondiaux J, Grupe G, Jankauskas R, McGlynn G, Papathanasiou A, Roberts C, Teschler-Nicola M, Wittwer-Backofen U, Agnew A, Assis S, Bereczki Z, et al. 2009. Body size and activity inference: femur length and midshaft index. American Journal of Physical Anthropology 48: 179-180.
- 106. Marques C, Blondiaux J, Steckel RH, Larsen CS, Walker PL, Grupe G, Jankauskas R, Maat G, McGlynn G, Papathanasiou A, Roberts C, Teschler-Nicola M, Wittwer-Backofen U, **Agnew A**, Assis S, et al. 2009. Periosteal appositions: a non-specific index of the history of health in Europe. American Journal of Physical Anthropology 48: 183-184.
- 107. Papathanasiou A, Walker PL, Steckel RH, Larsen CS, Blondiaux J, Grupe G, Jankauskas R, Maat G, McGlynn G, Roberts C, Teschler-Nicola M, Wittwer-Backofen U, **Agnew A**, Assis S, Bereczki Z, et al. 2009. The history of anemia and related nutritional deficiencies in Europe: evidence from cribra orbitalia and porotic hyperostosis. American Journal of Physical Anthropology 48: 205-206.
- 108. Roberts C, Betsinger T, Steckel RH, Larsen CS, Walker PL, Blondiaux J, Grupe G, Maat G, McGlynn G, Papathanasiou A, Teschler-Nicola M, Wittwer-Backofen U, **Agnew A**, Assis S, Bereczki Z, et al. 2009. The history of European infectious diseases: skeletal evidence of tuberculosis, leprosy, and treponematosis. American Journal of Physical Anthropology 48: 222-223.
- 109. Steckel RH, Kjellstrom A, Rose J, Larsen CS, Walker PL, Blondiaux J, Grupe G, Jankauskas R, Maat G, McGlynn G, Papathanasiou A, Roberts C, Teschler-Nicola M, Wittwer-Backofen U, Agnew A, et al. 2009. Summary measurement of health and wellbeing: the health index. American Journal of Physical Anthropology 48: 247.
- 110. Teschler-Nicola M, Marcsik A, Steckel RH, Larsen CS, Walker PL, Blondiaux J, Grupe G, Jankauskas R, Maat G, McGlynn G, Papathanasiou A, Roberts C, Wittwer-Backofen U, **Agnew A**, Assis S, et al. 2009. The history of growth disruption in European children: evidence from hypoplastic teeth. American Journal of Physical Anthropology 48: 254.
- 111. Walker PL, Steckel RH, Larsen CS, Blondiaux J, Grupe G, Jankauskas R, Maat G, McGlynn G, Papathanasiou A, Roberts C, Teschler-Nicola M, Wittwer-Backofen U, **Agnew A**, Assis S, Bereczki Z, et al. 2009. Historical patterns of traumatic injury and violence in Europe. American Journal of Physical Anthropology 48: 265.
- 112. Wittwer-Backofen U, Coppa A, Larsen CS, Steckel RH, Walker PL, Blondiaux J, Grupe G, Jankauskas R, Maat G, McGlynn G, Papathanasiou A, Roberts C, Teschler-Nicola M, , **Agnew A**, Assis S, et al. 2009. The history of European oral health: evidence from dental caries, dental abscesses, and antemortem tooth loss. American Journal of Physical Anthropology 48: 275.

- 113. Justus HM, Agnew AM. 2008. Two possible cases of amputation in early medieval Eastern Europe. Paleopathology Newsletter, Proceedings of the 17<sup>th</sup> European meeting of the Paleopathology Association; Copenhagen, Denmark. (Editor-reviewed)
- 114. Agnew AM, Justus HM, Stout SD. 2008. Evidence of scurvy in medieval Eastern Europe- A possible case from Giecz, Poland. Paleopathology Newsletter Supplement, Scientific Program of the 35<sup>th</sup> annual Paleopathology Association meeting; Columbus, OH. (Editor-reviewed)
- 115. Justus HM, Agnew AM, Stout SD. 2008. Differential diagnosis for an unidentified orbitofrontal defect in an early medieval (XI-XII) cemetery in Giecz, Poland. Paleopathology Newsletter Supplement, Scientific Program of the 35<sup>th</sup> annual Paleopathology Association meeting; Columbus, OH. (Editor-reviewed)
- 116. Reitsema LJ, Crews DE, Justus HM, Agnew AM. 2008. Stable carbon and nitrogen analysis of diet from the medieval cemetery at Giecz, Poland. American Journal of Physical Anthropology 46:179.
- 117. Agnew AM, Streeter M, Stout SD. 2007. Histomorphological aging of subadults: A test of Streeter's method on a medieval archaeological population. American Journal of Physical Anthropology 44:61.
- 118. Hughes GM, Justus HM, Agnew AM. 2006. Cranial non-metric variation within a medieval cemetery in Giecz, Poland. American Journal of Physical Anthropology 42: 106.
- 119. Justus HM, Agnew AM. 2005. Preliminary examination of skeletal remains excavated between 1999 and 2004 at Gz 4, an early medieval cemetery site in Giecz, Poland. American Journal of Physical Anthropology 40: 125.

# PRESENTATIONS

LOCAL (19)

- 1. Agnew AM. 2022. Thoracic injury biomechanics. Presentation at School of Health and Rehabilitations Sciences Grand Rounds; Columbus, OH, United States. (Invited)
- 2. Agnew AM. 2018. The importance of tissue testing for vehicle safety. Presentation at Lifeline of Ohio to Lifeline of Ohio Medical Advisory Board; Columbus, OH, United States. (Invited)
- 3. Agnew AM. 2017. The importance of pediatric tissue testing in injury biomechanics. Presentation at Lifeline of Ohio; Columbus, OH, United States. (Invited)
- 4. Agnew AM. 2016. Skeletal response to dynamic impact: A case study in biomechanics. Presentation at School of Health and Rehabilitations Sciences Grand Rounds; Columbus, OH, United States. (Invited)
- 5. Agnew AM. 2014. Rib biomechanics. Presentation at Injury Biomechanics Research Center bi-annual research meeting; Columbus, OH, United States.
- 6. Agnew AM. 2015. Rib biomechanics update: Anatomy and dissection. Presentation to 'Lifeline of Ohio' staff; Columbus, OH, United States. (Invited)
- 7. Agnew AM. 2014. Rib biomechanics. Presentation at Injury Biomechanics Research Center bi-annual research meeting; Columbus, OH, United States.
- 8. Agnew AM. 2014. Pediatric thorax injury biomechanics. Presentation to 'Lifeline of Ohio' staff; Columbus, OH, United States. (Invited)
- 9. Agnew AM. 2013. Biomechanics of the human rib. Orthodontics Research Seminar, The Ohio State University College of Dentistry; Columbus, OH, United States. (Invited)
- 10. Agnew AM. 2013. Pediatric and elderly rib biomechanics. Presentation at Injury Biomechanics Research Center bi-annual research meeting; Columbus, OH, United States.
- 11. Agnew AM. 2012. Dynamic testing of pediatric and elderly ribs. Quarterly meeting presentation for NHTSA funded research at The Ohio State University; Columbus, OH, United States.

- 12. Agnew AM. 2012. Microstructure and biomechanics of the human rib. Skeletal Biology Seminar Series, The Ohio State University; Columbus, OH, United States. (Invited)
- 13. Agnew AM. 2010. Mechanical properties of pediatric and elderly ribs. Quarterly meeting presentation for NHTSA funded research at the Center for Automotive Research (CAR); Columbus, OH, United States.
- 14. Agnew AM. 2010. On the significance of pediatric tissue testing in Injury Biomechanics. Presentation to 'Lifeline of Ohio' staff; Columbus, OH, United States. (Invited)
- 15. Agnew AM. 2010. Mechanical properties of pediatric ribs. Quarterly meeting presentation for NHTSA funded research at the Center for Automotive Research (CAR); Columbus, OH, United States.
- 16. Agnew AM. 2009. Mechanical properties of pediatric ribs. Quarterly meeting presentation for NHTSA funded research at the Center for Automotive Research (CAR); Columbus, OH, United States.
- 17. Agnew AM. 2009. The relationship between microstructure and material properties of pediatric ribs. Department of Biomedical Informatics Research-in-Progress Seminar, The Ohio State University; Columbus, OH, United States. (Invited)
- 18. Agnew A. 2009. The relationship between microstructure and material properties of pediatric ribs. Podium and poster presentation at the 5<sup>th</sup> Annual Injury Biomechanics Symposium; Columbus OH, United States.
- 19. Agnew AM. 2009. The biomechanics of human pediatric ribs. Quarterly meeting presentation for NHTSA funded research at the Center for Automotive Research (CAR); Columbus, OH, United States.

#### NATIONAL (9)

- 1. Agnew AM. 2022. Thoracic biomechanics. International Center for Automotive Medicine, University of Michigan, Ann Arbor, MI. (Invited)
- 2. Agnew AM. 2018. Skeletal response to dynamic impact: Applied skeletal biology. Department of Biology Colloquium Series, University of Akron; Akron, OH, United States. (Invited)
- 3. Agnew AM. 2016. Skeletal response to dynamic impact: Thoracic injury biomechanics. Department of Anthropology Seminar Series, Pennsylvania State University; State College, PA, United States. (Invited)
- 4. Agnew AM. 2014. Homework to roadwork. Panel discussion at the Transportation Research Board Annual Meeting; District of Columbia, United States. (Invited)
- 5. Agnew AM. 2013. Current injury biomechanics research. Orthopaedics Research Lab Seminar, University of Michigan; Ann Arbor, MI, United States. (Invited)
- 6. Agnew AM. 2013. Human gross anatomy in engineering. Injury Biomechanics Symposium. Columbus, Ohio, United States. (Invited)
- 7. Agnew AM. 2013. Whole-body injury scaling using ribs. Presentation at WIAMan BioPT update. Aberdeen Proving Grounds, Aberdeen, Maryland, United States.
- 8. Agnew AM. 2012. Development and validation of a biofidelic pediatric ATD lower extremity- interim report. Presentation at National Science Foundation CChIPS Industrial Advisory Board Meeting; Columbus, OH, United States.
- 9. Agnew AM. 2012. American Association of Anatomists Career Workshop. Panel discussion at the 81<sup>st</sup> annual American Association of Physical Anthropologists (AAPA) meeting; Portland, OR, United States. (Invited)

#### **INTERNATIONAL (9)**

- 1. Agnew AM, Arbogast K, Sunnevang C, Jermakian J, Tylko S. 2024. Rear seat safety. Expert panelist and podium presentation at the Automotive Safety Council annual meeting, Bonita Springs, FL, United States. (Invited)
- 2. Agnew AM, Bolte JH. 2023. Vulnerability in motor vehicle crashes. Presented at the Automotive Safety Council (ASC) annual meeting, Orlando, FL, United States. (Invited)

- 3. Agnew AM, Bolte JH, Kang Y-S. 2022. Redefining thoracic vulnerability. Presented at the Insurance Institute for Highway Safety (IIHS) Seminar: Equity in Crash Safety, Ruckersville, VA, United States. (Invited)
- 4. Agnew AM, Bolte JH, Kang Y-S. 2022. Biological contributors to variability in human thoracic injury. Invited keynote lecture in 'High-Rate Injury Biomechanics' session. 9<sup>th</sup> World Congress of Biomechanics, Taipei, Taiwan. (Invited)
- 5. Agnew AM. 2021. Characterization of thoracic injury risk and outcomes. International Center for Automotive Medicine, University of Michigan; Ann Arbor, MI, United States. (Invited)
- 6. Agnew AM. 2021. Life and Death in Medieval Poland. Polish Studies Initiative Lecture Series, Center for Slavic and East European Studies The Ohio State University. Virtual podium presentation with participants from the United States, Canada, and Poland. (Invited)
- 7. Agnew AM. 2019. Biological factors influencing rib fracture in dynamic loading events. International Center for Automotive Medicine, Case Review Series, University of Michigan; Ann Arbor, MI, United States. (Invited)
- 8. Agnew AM. 2015. Skeletal response to dynamic loading: Case studies in injury biomechanics. Bone and Joint Initiative Seminar Series. Western University; London, Canada. (Invited)
- 9. Agnew AM, Justus HM. 2013. Life and Death in Medieval Poland. Presented at Gród piastowski w Gieczu geneza, funkcja, kontekst, Rezerwat Archeologiczny w Gieczu, Giecz, Poland. (Invited)

# TEACHING EXPERIENCE

#### Introduction to Forensic Science 3211 - Course Director, Instructor

The Ohio State University, Department of Anthropology; Columbus, OH

• 3 semester credits

#### Skeletal Biology 5608 - Course Director, Instructor

The Ohio State University, School of Health and Rehabilitation Sciences/Department of Anthropology; Columbus, OH

• 3 semester credits

## Advanced Structure and Function of the Human Body 7410- Course Director, Instructor

The Ohio State University, School of Health and Rehabilitation Sciences; Columbus, OH

• 5 semester credits

#### Research in Biomedical Engineering 8999- Course Director, Instructor

The Ohio State University Department of Biomedical Engineering; Columbus, OH

• 1-3 semester credits

#### Gross Anatomy for Graduate Engineers 6220- Instructor

- The Ohio State University, Division of Anatomy; Columbus, OH
  - 5 semester credits

#### Graduate Human Gross Anatomy 6900- Course Director, Instructor

- The Ohio State University, Division of Anatomy; Columbus, OH
  - 8 semester credits

## Research in Health and Rehabilitation Sciences 8999- Course Director, Instructor

- The Ohio State University, School of Health and Rehabilitation Sciences; Columbus, OH
  - 1-3 semester credits

# Research in Anatomy 8999- Course Director, Instructor

## The Ohio State University, Division of Anatomy; Columbus, OH

• 1-3 semester credits

#### Gross Anatomy for Medical Students- Musculoskeletal Block Lead Instructor

- The Ohio State University, College of Medicine; Columbus, OH
  - 3 semester credits

#### Research Seminar in Anatomy 7891- Course Director, Instructor

- The Ohio State University, Division of Anatomy; Columbus, OH
  - 1 semester credit

#### Advanced Regional Anatomical Dissection- Course Director, Instructor

- The Ohio State University, Division of Anatomy; Columbus, OH
  - 2-5 semester credits

# Advanced Musculoskeletal Anatomy for PT/OT Students 6000- Course Director, Instructor

- The Ohio State University, Division of Anatomy; Columbus, OH
  - 5 semester credits

#### Gross Anatomy for Dental Students 602/603- *Gross Anatomy Course Coordinator, Instructor* The Ohio State University, Division of Anatomy; Columbus, OH

• 7 quarter credits

#### Gross Anatomy for Graduate Engineers 720- Instructor

The Ohio State University, Division of Anatomy; Columbus, OH

• 6 quarter credits

#### Gross Anatomy for Undergraduate Engineers 220- Instructor

The Ohio State University, Division of Anatomy; Columbus, OH

• 2 quarter credits

#### Med I Gross Human Anatomy 712- Lab Instructor

The Ohio State University, College of Medicine/Division of Anatomy; Columbus, OH

12 guarter credits

# Introduction to Physical Anthropology- 200- Instructor, Graduate Teaching Associate

The Ohio State University, Department of Anthropology; Columbus, OH

• 5 quarter credits

#### Introduction to Cultural Anthropology 202 - Instructor, Graduate Teaching Associate

The Ohio State University, Department of Anthropology; Marion and Columbus, OH

• 5 quarter credits

Human Osteoarchaeology in the Field and Lab - *Instructor and Site Osteoarchaeologist* Field School in Mortuary Archaeology; The Slavia Project; Giecz, Poland (<u>www.slavia.org</u>) The Ohio State University, Department of Anthropology; Columbus, OH

• ~1000 contact hours/summer, 4.5 credits

# **CONTINUING-EDUCATION TEACHING**

# 2013 - 2014: Gross Anatomy Short-Course- Instructor

Injury Biomechanics Symposium The Ohio State University, Columbus, OH

## 2011 - present, annually: Forensic Archaeology & Anthropology

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#### Forensic Aspects of Death- Course Coordinator

Office of the Ohio Attorney General, Bureau of Criminal Investigation Ohio Peace Officer Training Academy; London, OH

# ADVISING & MENTORSHIP

### VISTING SCHOLARS

2017 - 2018: Nawaporn Techataweewan, MD/PhD- Supervisor Injury Biomechanics Research Center (IBRC), The Ohio State University, Columbus, OH, USA

#### POST-DOCTORAL RESEARCHERS (4)

2021- 2023: Mary Beth Cole, PhD in Biological Anthropology - Supervisor Injury Biomechanics Research Center (IBRC), The Ohio State University, Columbus, OH, USA

2018: Victoria Dominguez, PhD in Anatomy - Supervisor Injury Biomechanics Research Center (IBRC), The Ohio State University, Columbus, OH, USA

2014 - 2016: **Timothy Gocha, PhD in Biological Anthropology** - *Supervisor* Injury Biomechanics Research Center (IBRC), The Ohio State University, Columbus, OH, USA

2013 - 2016: Hyunjung Kwon, PhD in Biomedical Engineering - Supervisor Injury Biomechanics Research Center (IBRC), The Ohio State University, Columbus, OH, USA

#### DOCTORAL STUDENTS (7 as advisor\*)

2024: Karen Cooke - External examiner Anthropology, The Australian National University, Canberra, Australia

\*2023 - present: Lauren Hayden - Doctoral co-advisor Anthropology, The Ohio State University, Columbus, OH, USA

\*2021 - present: **Christopher Goden** - *Doctoral co-advisor & GRA supervisor* Health and Rehabilitation Sciences, The Ohio State University, Columbus, OH, USA

\*2021 - present: Zachary Haverfield - Doctoral advisor & GRA supervisor Health and Rehabilitation Sciences, The Ohio State University, Columbus, OH, USA

2021-present: **Rosalie Connell** - *Doctoral committee member* Biomedical Engineering, The Ohio State University, Columbus, OH, USA

\*2020 - present: Emma Brzezinski - Doctoral advisor Anthropology, The Ohio State University, Columbus, OH, USA

2020 - 2023: Justin Goldstein - Doctoral committee member Applied Anthropology, Texas State University, San Marcos, TX, USA

2019 - 2022: Malorie Albee - Doctoral committee member Anthropology, The Ohio State University, Columbus, OH, USA

2019 - present: **Evonne Turner-Byfield** - *Doctoral committee member* Anthropology, The Ohio State University, Columbus, OH, USA

2018 - 2019: Rosie Pitfield - Doctoral committee member

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Human Skeletal Biology, University of Kent, Canterbury, UK

\*2016 - 2021: Angela Harden - Doctoral advisor & GRA supervisor Anatomy, The Ohio State University, Columbus, OH, USA

2016 - 2018: **Devon Albert** - *Doctoral committee member* Biomedical Engineering, Virginia Polytechnic Institute, Blacksburg, VA, USA

2015 - 2020: **Tiffany Marulli** - *Doctoral committee member* Anatomy, The Ohio State University, Columbus, OH, USA

2015 - 2017: Lauren Eichaker - Doctoral committee member Biomedical Engineering, The Ohio State University, Columbus, OH, USA

2015 - 2017: Benjamin Shurtz - Doctoral committee member Mechanical and Aerospace Engineering, The Ohio State University, Columbus, OH, USA

2015 - 2016: Zachariah Hubbell - Doctoral committee member Anthropology, The Ohio State University, Columbus, OH, USA

2014 - 2018: Julie Bing (Mansfield) - Doctoral committee member Biomedical Engineering, The Ohio State University, Columbus, OH, USA

2014 - 2019: Mary Beth Cole - Doctoral committee member Anthropology, The Ohio State University, Columbus, OH, USA

2014 - 2016: **Amy Amabile** - *Doctoral committee member* Anatomy, The Ohio State University, Columbus, OH, USA

\*2013 - 2019: **Diana Messer** - *Doctoral advisor* Anatomy, The Ohio State University, Columbus, OH, USA

\*2012 - 2018: Victoria Dominguez - Doctoral advisor & GRA supervisor Anatomy, The Ohio State University, Columbus, OH, USA

2012 - 2015: Scott Crawford - Doctoral committee member Biomedical Engineering, The Ohio State University, Columbus, OH, USA

2012 - 2014: **Timothy Gocha** - *Doctoral committee member & GRA supervisor* Anthropology, The Ohio State University, Columbus, OH, USA

2011 - 2015: Randee Hunter - Doctoral committee member Anthropology, The Ohio State University, Columbus, OH, USA

2011 - 2014: Laura Boucher - Doctoral committee member Anatomy, The Ohio State University, Columbus, OH, USA

MASTER'S STUDENTS (12 as thesis advisor\*)

\*2023 - present: Daniel Meringolo - Master's co-advisor & GRA supervisor (thesis) Biomedical Engineering, The Ohio State University, Columbus, OH, USA

\*2023 - present: **Ryan Lang** - *Master's co-advisor & GRA supervisor (thesis)* Biomedical Engineering, The Ohio State University, Columbus, OH, USA

\*2022- present: **Rose Schaffer** - *Master's co-advisor & GRA supervisor(thesis)* Biomedical Engineering, The Ohio State University, Columbus, OH, USA

\*2021 - 2022: Kelila Thomsen - *Master's advisor (thesis)* Slavic & East European Studies, The Ohio State University, Columbus, OH, USA

2021 - 2022: Hannah Nowinski - Master's committee member (thesis) Biomedical Engineering and Mechanics, Virginia Polytechnic Institute, Blacksburg, VA, USA

\*2019 - 2021: Molly Tillis - Master's co-advisor & GRA supervisor (thesis) Biomedical Engineering, The Ohio State University, Columbus, OH, USA

\*2019 - 2021: Akshara Sreedhar - Masters's co-advisor & GRA supervisor (thesis) Mechanical Engineering, The Ohio State University, Columbus, OH, USA

2019 - 2021: Zachary Haverfield - Master's committee member (thesis) Health and Rehabilitation Sciences, The Ohio State University, Columbus, OH, USA

\*2018 - 2020: Emma Brzezinski - Master's co-advisor Anthropology, The Ohio State University, Columbus, OH, USA

2018 - 2019: Michael Katzenberger - Master's committee member (thesis) Biomedical Engineering and Mechanics, Virginia Polytechnic Institute, Blacksburg, VA, USA

2017 - 2018: Brianna Marselle - Master's advisor (non-thesis) Biomedical Engineering, The Ohio State University, Columbus, OH, USA

2017 - 2018: Elizabeth Appleton - Master's committee member (thesis) Medical Dietetics, The Ohio State University, Columbus, OH, USA

\*2015 - 2017: Michelle Murach - Master's advisor & GRA supervisor (thesis) Biomedical Engineering, The Ohio State University, Columbus, OH, USA

2015 - 2017: Alaine Whetli - Master's committee member (thesis) Mechanical Engineering, The Ohio State University, Columbus, OH, USA 2015 - 2017: Stephanie Johnston - Master's committee member (thesis) Biomedical Engineering, The Ohio State University, Columbus, OH, USA

\*2015 - 2017: Nicole Crowe - Master's advisor (thesis) Anatomy, The Ohio State University, Columbus, OH, USA

2015 - 2017: Allison Yard - Master's advisor & GRA supervisor (non-thesis) Biomedical Engineering, The Ohio State University, Columbus, OH, USA

2014 - 2016: Alyssa Greenwell - Master's advisor (non-thesis) Anatomy, The Ohio State University, Columbus, OH, USA

2014 - 2016: Julie Doll - Master's advisor (non-thesis) Anatomy, The Ohio State University, Columbus, OH, USA

2014 - 2016: Yeonsu Ryu - Master's committee member (thesis) Biomedical Engineering, The Ohio State University, Columbus, OH, USA

2013 - 2015: Jenna Butz - Master's committee member (thesis) Health and Rehabilitation Sciences, The Ohio State University, Columbus, OH, USA

\*2013 - 2015: Michelle Schafman - Research advisor (thesis) Mechanical and Aerospace Engineering, The Ohio State University, Columbus, OH, USA

\*2013 - 2015: **Meghan Flannery** - *Master's advisor (thesis)* Anatomy, The Ohio State University, Columbus, OH, USA

2013 - 2014: **Rachel Wise** - *Master's committee member (non-thesis)* Anatomy, The Ohio State University, Columbus, OH, USA

2013 - 2014: **Obed Paundralingga** - *Master's advisor (non-thesis)* Anatomy, The Ohio State University, Columbus, OH, USA

2013 - 2014: Leah Hunter - Master's advisor (non-thesis) Anatomy, The Ohio State University, Columbus, OH, USA

2013 - 2014: **Rishav Aggarwal** - *Master's committee member (non-thesis)* Anatomy, The Ohio State University, Columbus, OH, USA

2013 - 2014: Claudia Foulk - Master's committee member (non-thesis) Anatomy, The Ohio State University, Columbus, OH, USA

2013: Erica Villa - Master's advisor (non-thesis) Anatomy, The Ohio State University, Columbus, OH, USA

2012 - 2014: **Sarah Caupp** - *Master's committee member (thesis)* Anatomy, The Ohio State University, Columbus, OH, USA

2012 - 2014: Mary Beth Cole - Master's committee member (thesis) Anthropology, The Ohio State University, Columbus, OH, USA

\*2012 - 2013: Jennifer Jing - Master's advisor (thesis) Anatomy, The Ohio State University, Columbus, OH, USA

2011 - 2012: Lyndsy Wolff - Master's advisor (non-thesis) Anatomy, The Ohio State University, Columbus, OH, USA UNDERGRADUATE HONORS/RESEARCH STUDENTS

2020 - 2022: Carla Goldsmith - Research advisor & supervisor Biomedical Sciences, The Ohio State University, Columbus, OH, USA

2018 - 2021: Nicole Fye - Research advisor & supervisor Microbiology and Forensics, The Ohio State University, Columbus, OH, USA

2018 - 2020: **Regan Di Iorio** - *Research advisor & supervisor* Biomedical Engineering, The Ohio State University, Columbus, OH, USA

2018 - 2020: Rachel McNulty - Research advisor & supervisor Biology and Forensics, The Ohio State University, Columbus, OH, USA

2017 - 2019: Scott Stuckey - Research advisor & supervisor Biomedical Engineering, The Ohio State University, Columbus, OH, USA

2016 - 2019: Katie Lane - Research co-advisor & supervisor Biomedical Sciences, The Ohio State University, Columbus, OH, USA

2016 - 2018: Akshara Sreedhar - Research advisor & supervisor

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Materials Science and Engineering, The Ohio State University, Columbus, OH, USA

2015 - 2017: Elina Misicka - Research advisor & supervisor Biomedical Sciences, The Ohio State University, Columbus, OH, USA

2015 - 2016: Katie Stemmer - Honors committee member (thesis) Biomedical Engineering, The Ohio State University, Columbus, OH, USA

2014 - 2016: Samuel Goldman - Research advisor Biomedical Engineering, The Ohio State University, Columbus, OH, USA

2013 - 2015: Michelle Murach - Research advisor Biomedical Engineering, The Ohio State University, Columbus, OH, USA

2013 - 2014: Yeonsu Ryu - Honors committee member (thesis) Biomedical Engineering, The Ohio State University, Columbus, OH, USA

2013: Matt Reynolds - Research advisor Biomedical Engineering, The Ohio State University, Columbus, OH, USA

2011 - 2013: Amie Draper - Honors thesis advisor (thesis) Biomedical Sciences, The Ohio State University, Columbus, OH, USA

2011 - 2012: Chris Dooley - Honors committee member (thesis) Mechanical Engineering, The Ohio State University, Columbus, OH, USA

2009 - 2011: Anthony Vergis - Research advisor & Honors committee member (thesis) Physics, The Ohio State University, Columbus, OH, USA

2009 - 2010: David Cagle - Honors committee member (thesis) Mechanical Engineering, The Ohio State University, Columbus, OH, USA

# HONORS AND AWARDS

**2022:** John Paul Stapp Award for the best scientific paper of 2019 For manuscript Kang et al, 2019: A novel approach to scaling age-, sex-, and body size-dependent thoracic responses using structural properties of human ribs. Stapp Car Crash Journal 63: 307-329.

**2021: Excellence in Undergraduate Research Mentoring Award** Undergraduate Research and Creative Inquiry Office, The Ohio State University, Columbus, OH

**2020: Outstanding Senior Investigator Award for Research** School of Health and Rehabilitations Sciences, The Ohio State University, Columbus, OH

**2019: John Paul Stapp Award for the best scientific paper of 2018** For manuscript Agnew et al, 2018: "Sources of variability in structural bending response of pediatric and adult human ribs in dynamic frontal impacts", Stapp Car Crash Journal 62: 119-192.

**2017: Distinguished Undergraduate Research Mentor -** *Nominee* Undergraduate Research Office, The Ohio State University, Columbus, OH

**2014: Distinguished Undergraduate Research Mentor -** *Nominee* Undergraduate Research Office, The Ohio State University, Columbus, OH

# SERVICE ACTIVITIES

JOURNAL REVIEWS

Frontiers in Biomechanics - Editorial Review Board & Manuscript reviewer International Research Council of Biomechanics of Injury (IRCOBI) - Associate Editor & Manuscript reviewer Journal of Biomechanical Engineering - Manuscript reviewer Journal of Biomechanics - Manuscript reviewer American Journal of Biological Anthropology - Manuscript reviewer Scientific Reports (Nature) - Manuscript reviewer PLoS ONE - Manuscript reviewer Journal of the Mechanical Behavior of Biomedical Materials - Manuscript Reviewer Traffic Injury Prevention - Manuscript Reviewer Journal of Anatomy - Manuscript Reviewer Journal of Morphology - Manuscript reviewer Journal of Forensic Sciences - Manuscript reviewer International Journal of Osteoarchaeology - Manuscript reviewer International Journal of Paleopathology - Manuscript reviewer Micron - Manuscript reviewer Journal of Orthopaedic Trauma - Manuscript reviewer Clinical Case Reports - Manuscript reviewer Journal of Theoretical and Applied Mechanics - Manuscript reviewer Advances in Mechanical Engineering - Manuscript reviewer International Journal for Numerical Methods in Biomedical Engineering - Manuscript reviewer

## UNIT/SCHOOL/COLLEGE

**2019 - present: Graduate Studies -** *Director* Health and Rehabilitation Sciences Graduate Programs (MS, PhD, MRT, MDN, OTD, DPT, MAT), The Ohio State University

**2019: Search Committee for Occupational Therapy Faculty-** *Member* School of Health and Rehabilitation Sciences, The Ohio State University

**2018 - 2022: Faculty Council-** *Elected HRS Representative* College of Medicine, The Ohio State University

2018 - 2019: Student Services Committee- *Member* 

School of Health and Rehabilitation Sciences, The Ohio State University

**2018: Search Committee for Occupational Therapy Director-** *Member* School of Health and Rehabilitation Sciences, The Ohio State University

2015 - 2018: Graduate Studies Committee- *Member* Health & Rehabilitation Graduate Program, The Ohio State University

**2015: Search Committee for Occupational Therapy Director-** *Member* School of Health and Rehabilitation Sciences, The Ohio State University

2013 - 2015: Graduate Studies Committee- *Chair* Anatomy Graduate Program (MS and PhD), The Ohio State University

**2012 - 2015: Honors and Research Committee-** *Member* School of Health and Rehabilitation Sciences, The Ohio State University

2012 - 2016: Body Donation Program Advisory Committee- *Member* Division of Anatomy, The Ohio State University

**2011 - 2016: Graduate Studies Committee-** *Member* Anatomy Graduate Program, The Ohio State University

#### NATIONAL/INTERNATIONAL

**2023: National Science Centre (NSC) of Poland-** *OPUS-25 Grant Review* Section: HS- Arts, Humanities, and Social Sciences / HS3 - Study of the human past

2021: Natural Sciences and Engineering Research Council of Canada (NSERC)- *Discovery Grant Review* Section: Biological Systems and Functions

2021: Smart-RCS External Advisory Board. Consortium partners emotion3D (Vienna, Austria), Veoneer (Stockholm, Sweden), and AVL Global (Graz, Austria). <u>https://smart-rcs.eu</u>

**2020:** Natural Sciences and Engineering Research Council of Canada (NSERC)- *Discovery Grant Review* Section: Biological Systems and Functions

2020: National Science Foundation (NSF) Graduate Research Fellowship (GRF) - Panelist/Proposal Reviewer Section: Anthropology and Archaeology

2020 - present: Advisory Council of Directors and Associate Editor - *Elected member (5 year term)* International Research Council on Biomechanics of Injury (IRCOBI)

2019: Austrian Academy of Sciences, Doctoral Fellowship Program - Panelist/Proposal Reviewer European Union

**2019 - 2021: Scientific Program Committee-** *Invited* American Academy of Forensic Sciences (AAFS), Anthropology Section

**2018 - 2020: Scientific Program Committee-** *Elected member (3 year term)* American Association of Physical Anthropologists (AAPA)

**2017 - 2019: Scientific Review Committee-** *Elected member* International Research Council on Biomechanics of Injury (IRCOBI)

2017 - National Science Foundation (NSF) Doctoral Dissertation Research Improvement Grant (BA-DDRIG)- Grant reviewer Section: Biological Anthropology Program

Section: Biological Anthropology Program

**2016 - 2022: Board of Directors-** *Elected member (2<sup>nd</sup> 3 year term)* Association for the Advancement of Automotive Medicine (AAAM)

2016 - present: Center of Emphasis, Center for Injury Research and Prevention- *Invited Associate Fellow* The Children's Hospital of Philadelphia

2015 - 2019: Scientific Program Committee- *Elected member* 

Association for the Advancement of Automotive Medicine (AAAM) **2017 - 2019: Educational Program Sub-Committee-** *Chair* Association for the Advancement of Automotive Medicine (AAAM)

2015: National Science Foundation (NSF) Graduate Research Fellowship (GRF) - Panelist/Proposal Reviewer Section: Biomedical Engineering

2014: Army Research Lab Core Broad Agency Announcement for Basic and Applied Scientific Research- *Proposal Reviewer* 

**2014: Homework to Roadwork-** *Invited panelist* Transportation Research Board Annual Meeting, Washington DC

# 2013-2017: WIAMan Scaling working group- *Invited member*

Department of Defense, US Army Research Laboratory, Aberdeen Proving Grounds, MD

**2013: Skeletal Biology and Forensic Anthropology:** - *Invited Poster Session Chair* American Association of Physical Anthropologists 82<sup>nd</sup> Annual Meeting, Knoxville, TN

**2012 - 2015: Membership and Credentials Committee-** *Elected member* Association for the Advancement of Automotive Medicine (AAAM)

STUDENT AFFAIRS

2016, March: College of Engineering Undergraduate Research Forum- *Poster Judge* Biomedical Engineering, The Ohio State University

2015, Sept: Association for the Advancement of Automotive Medicine Student Mentoring Event- *Invited Professional/Academic Mentor* AAAM annual meeting, Philadelphia, PA

**2015, April: Undergraduate Honors Thesis Committee Member-** *HRS Research Committee Representative* Santino Cua- School of Health and Rehabilitation Sciences, The Ohio State University Jessica Stewart- School of Health and Rehabilitation Sciences, The Ohio State University Evan Sommer- School of Health and Rehabilitation Sciences, The Ohio State University

**2015, April: American Association of Physical Anthropologists (AAPA)-** *American Association of Anatomists Anatomy student award Judge* 84<sup>th</sup> annual AAPA meeting, St. Louis, MI

2014, Sept: Association for the Advancement of Automotive Medicine Student Mentoring Event- *Invited Professional/Academic Mentor* AAAM annual meeting, Munich, Germany

**2014, April: Undergraduate Honors Thesis Committee Member-***HRS Research Committee Representative* Tyler Siekmann- Department of Biomedical Sciences, The Ohio State University Mark Rudolph- Department of Biomedical Sciences, The Ohio State University

**2013, April: American Association of Physical Anthropologists (AAPA)-** *American Association of Anatomists Anatomy student award Judge* 82<sup>nd</sup> annual AAPA meeting, Knoxville, TN

**2013, April: Undergraduate Honors Thesis Committee Member-** *HRS Research Committee Representative* Chelsie O'Neill- School of Health and Rehabilitation Sciences, The Ohio State University Nick Denton- Department of Biomedical Sciences, The Ohio State University

2013: Edward Hayes Forum for Graduate Research- *Abstract Judge* Ohio Union. The Ohio State University

**2012: Doctoral Committee Member-** *Graduate Faculty Representative* Sharon Schreiber- Department of Biomedical Engineering, The Ohio State University

**2012: American Association of Anatomists (AAA), Anatomy Career Workshop-** *Invited panelist* 81<sup>st</sup> annual American Association of Physical Anthropology (AAPA) meeting, Portland, OR

2012: American Association of Physical Anthropologists (AAPA)- *American Association of Anatomists Anatomy student award Judge* 

Updated 8 February 2024

81<sup>st</sup> annual AAPA meeting, Portland, OR

**2012: Edward Hayes Forum for Graduate Research-** *Presentation Judge* Ohio Union, The Ohio State University

**2011 - present: Forensic Anthropology Case Team (FACT)-** *Co-Director & Team Leader* Graduate student group in the Department of Anthropology, The Ohio State University

# OTHER PROFESSIONAL EXPERIENCE

## 2020 - present: Certified Abbreviated Injury Scale Specialist (CAISS)

https://www.aaam.org/abbreviated-injury-scale-ais/

#### 2008 - present: Kenyon International Emergency Services- *Team Member*

(www.kenyoninternational.com)

• Mortuary Technician and Forensic Anthropologist

## 2008, March-April: Giza Plateau Mapping Project (GPMP)- Osteoarchaeologist

Giza, Egypt (www.aeraweb.org/gpmp\_home.asp)

PI: Mark Lehner- Ancient Egypt Research Associates (AERA)

• Excavated and analyzed human skeletal remains from the Giza Plateau

#### 2006 - present: Forensic Anthropology Consultations - Forensic Anthropology Expert

- Specializations in human skeletal anatomy, skeletal trauma, juvenile osteology, skeletal histomorphometry, human remains excavation
- Collaboration and consultation with US Dept of Homeland Security, FBI, BCI, and various police departments, medical examiner's and coroner's offices, crime labs, and K-9 search and recovery units throughout the state of Ohio in the recovery and analysis of human skeletal remains in the medico-legal context
- 50+ forensic case contributions
- 1000+ skeletal assessments completed

# **2005, June: Disaster Mortuary Operational Response Team (DMORT) training workshop-***Trainee* Columbus, OH

• Training for the identification and reassembly of human remains in mass disaster events

# PROFESSIONAL MEMBERSHIPS & SERVICE

American Society for Bone and Mineral Research (ASBMR) (2012-present)

#### Association for the Advancement of Automotive Medicine (AAAM) (2009-present)

- Board of Directors (2016-2022)
  - Scientific Program Committee (2015-2019)
    - Educational Program Subcommittee Chair (2017-2019)
- Membership and Credentials Committee (2012-2015)

#### Paleopathology Association (PPA) (2007-present)

## American Academy of Forensic Sciences (AAFS) - Regular member, Anthropology section (2005-present)

• Scientific Program Committee (2019-2021)

## American Association of Biological Anthropologists (AABA) (2004-present)

• Scientific Program Committee (2018-2020)