Alexandra R. Klales, PhD, D-ABFA (#123)

Forensic Anthropologist & Associate Professor Forensic Anthropology Program & Sociology/Anthropology Dept. Washburn University

1700 SW College Ave HC214 / Topeka, KS 66621

Phone: (785) 670-1611 / Email: <u>Alexandra.Klales@washburn.edu</u>

CURRENT EMPLOYMENT

- 2020- **Associate Professor**, Department of Sociology and Anthropology, Washburn University (Assistant Professor 2016-2020)
- 2017- **Director**, Washburn University Forensic Anthropology Recovery Unit and Laboratory, Topeka, KS

CURRENT AFFILIATIONS

- 2020- Editor, *Forensic Anthropology* Journal, University of Florida Press (Associate Editor 2018-2020)
- 2019- Diplomate of the American Board of Forensic Anthropology, Board-Certification #123
- 2019- Forensic Anthropologist, Kansas City Regional Mortuary Operational Response Group
- 2019- Member, American Academy of Forensic Sciences (Anthropology Section)
- 2017- Forensic Anthropology Consultant, Shawnee County Medical Examiner's Office, Topeka, KS
- 2017- Forensic Anthropology Consultant, Kansas Bureau of Investigations, Kansas
- 2017- Volunteer Member (Forensic Anthropologist), Missouri Disaster Response System (MoDRS)

EDUCATION

2010-2014	Ph.D. in Anthropology University of Manitoba, Winnipeg, MB; GPA 4.17
	Advisors: Dr. Robert Hoppa & Dr. Jonathan Elias
	Dissertation Title: Computed Tomography Analysis and Reconstruction of Ancient
	Egyptians Originating from the Akhmim Region of Egypt: A Biocultural Perspective
	(Defended August 18, 2014)
2007-2009	M.S. in Anthropology w/ concentration in Biological & Forensic Anthropology
	Mercyhurst College, Erie, PA; GPA 3.816; Sister Eustace Taylor Graduate Award
	Advisor: Dr. Stephen Ousley
	Thesis Title: Sexing of the Human Innominate Using Non-Metric Traits and Statistical
	Analyses (Defended May 13, 2009)
2002-2006	B.A. in Anthropology
	University of Pittsburgh, Pittsburgh, PA; GPA 3.767
	Graduation: April 2006 with Summa Cum Laude Honors
	Fall 2002 – Spring 2003; Fall 2004 – Spring 2006
2003-2004	Biological Anthropology Student
	University of Tennessee, Knoxville, TN; GPA 3.76
	Fall 2003 – Spring 2004

RESEARCH INTERESTS

Human Skeletal Biology, Forensic Anthropology, Sexual Dimorphism, Mass Fatalities and Fatal Fire Recoveries, Sharp Force Trauma

FEDERALLY FUNDED GRANTS

- 2016-2020 **Development of modern subadult standards: improved age and sex estimation in U.S. forensic practice.** Funding agency: National Institute of Justice (2015-DN-BX-K009). Funds awarded (09/17/2015): **\$510,409**. Principal Investigator: Kyra Stull; Co-Principal Investigators: Heather M. Garvin and **Alexandra R. Klales**
- 2016-2018 An interactive morphological database for estimating sex in modern adults. Funding agency: National Institute of Justice (2015-DN-BX-K014). Funds awarded (09/16/2015): \$126,871. Principal Investigator: Alexandra R. Klales
- 2008- 2010 Research Fellow, Department of Applied Forensic Sciences, Mercyhurst College, Erie, PA.
 - Enhancing Scene Processing Protocols to Improve Victim Identification and Field Detection of Human Remains in Mass Fatality Scenes. Principal Investigator: Dennis C. Dirkmaat, PhD, DABFA. Funded by US National Institute of Justice (NIJ). Reference Grant Number: 2008-DN-BX-K133. Awarded on September 16, 2008.
 - Recovery and Interpretation of Burned Human Remains. Principal Investigators: Steven A. Symes, PhD, DABFA., Dennis C. Dirkmaat, PhD, DABFA, and Stephen D. Ousley, PhD. Funded by US National Institute of Justice (NIJ). Reference Grant Number: 2008-DN-BX-K131. Awarded on September 16, 2008.

PREVIOUS EMPLOYMENT

- 2015-2016 *Assistant Research Professor,* Department of Applied Forensic Sciences, Mercyhurst University, Erie, PA.
- 2014-2015 *Postdoctoral Fellow, Lab Supervisor, Adjunct Faculty*, Department of Applied Forensic Sciences, Mercyhurst University, Erie, PA.
- 2014 Adjunct Faculty, Department of Anthropology, Gettysburg College, Gettysburg, PA.
- 2013-2014 *Visiting Assistant Instructor* (Spring 2013), *Adjunct Faculty* (Fall 2013/Spring 2014) Department of Anthropology, Dickinson College, Carlisle, PA.
- 2012 *Adjunct Faculty*, Department of Anthropology, University of Winnipeg, Winnipeg, MB, Canada.
- 2011-2012 *Field Osteologist / Instructor*, Slavia Foundation Mortuary Archaeology Field School Program, Adam Mickiewicz University, Drawsko, Poland.
- 2011-2012 *Instructor*, University of Manitoba, Winnipeg, MB, Canada.
- 2007-2009 *Graduate Assistant*, Department of Applied Forensic Science, Mercyhurst College, Erie, PA.

Duties include forensic casework (see below) and assisting in two NIJ-Funded research projects (see above). Additionally, assisted and taught lab classes and field exercises at the 2008, 2009, 2010 Mercyhurst Forensic Anthropology Short courses: (1) *Death Scene Archaeology: Field Methods in the Location, Recovery, and Interpretation of Human*

Remains from Outdoor Contexts, (2) Human Identification: Laboratory Methods in the Identification of Human Skeletal Remains, (3) Traumatized Bone: Bone Trauma and Pseudo-Trauma in Suspected Violent Deaths, Documentation and Recovery, (4) Post-Bomb Blast Recovery: Documentation and Recovery of Human and Physical Evidence at the Terrorism Crime Scene.

FORENSIC ANTHROPOLOGICAL CASEWORK & TRAINING

2016- Forensic Anthropological Casework at Washburn University, including regular consultation for the Shawnee County Coroner's Office, Kansas Bureau of Investigations, Frontier Forensics Midwest, LLC, and Director of the Washburn University Forensic Anthropology Recovery Unit (WU-FARU)

2021: 16 as of 03.28.21

- **2020:** 76 total cases (50 human, 26 non-human), 33 forensic significance, 20 case reviews for outside agencies, 4 trauma only, 2 recovery only (1 surface scatter/1 water), 8 lab analyses only, 2 searches, 1 donation, 2 recovery with lab analyses
- 2019: 31 total cases (25 human, 6 non-human), 6 forensic significance, 9 case reviews for outside agencies, 4 trauma only (2 dismemberments), 2 recoveries (surface scatters), 8 lab analyses, 2 burn (lab only)
- 2018: 19 total cases (12 human, 7 non-human), 8 forensic significance, 6 case reviews for outside agencies, 2 trauma, 1 recovery (surface scatter), 1 lab analysis (water/submerged), 1 burn (lab only)
- **2017:** 14 total cases (10 human, 4 non-human), 6 forensic significance, 2 case reviews for outside agencies, 1 trauma, 3 recoveries (surface scatter, burial, water), 2 lab analysis
- **2016:** 6 total cases (4 human, 2 non-human), 2 forensic significance, 3 lab analyses, 1 recovery (burial)
- 2007-2010 Forensic Anthropological Casework at Mercyhurst University (participation in
- 2014-2016 > 150 cases). Includes: conducting searches for human remains, evaluation of forensic significance, the forensic archaeological recovery of human remains (surface scatters, clandestine burials, fatal fire scenes, plane crashes, mass fatalities), and laboratory analysis (biological profile, trauma, taphonomic analyses). Began serving as faculty lead and report author in 2014.

Forensic Anthropology Short Courses Provided (ABMDI & MO POST Certified for Continuing Education)

2021	Identifying Human vs. Non-Human Bone (Jun 14-online)
	Human Skeletal Biology: Estimating the Biological Profile (Jul 5-17-online)
	Human Osteology (Jun 21-25)
2020	Identifying Human vs. Non-Human Bone (Jan 17, Aug 3-online)
	Human Skeletal Biology: Estimating the Biological Profile (June 22-26-online)
2019	Identifying Human vs. Non-Human Bone (Aug 2)
	Fragmentary Human Osteology (June 24-28)

Forensic Archaeology: Recovery of Human Remains at Outdoor Scenes (June 17-21) *Fatal Fire Recoveries* (June 10-14)

Selected Invited Lectures/ Forensic Anthropology Training Provided

2019x2 Modern Forensic Anthropology. Frontier Forensic Midwest, LLC training. Topeka, KS and Kansas City, KS. October 3-4. 2019 Modern Forensic Anthropology. 2019 Coroner's Conference: Death the Sequel, Kansas Department of Health and Environment Office of Vital Records, Wichita, KS. July 17. 2019 Human Fragmentary Osteology and Sex Estimation. Core Principles and Practices in Forensic Anthropology: All-Star Tour, Vol 1, Mercyhurst University, June 3-14. 2019 Forensic Anthropology's Role in Death Investigations. KDIAI Spring Educational Conference, Junction City, KS. April 9. 2017x2 Modern Forensic Anthropology. Lecture presented at the 2nd Annual Meeting of the Kansas Coroners. August 23 (Topeka, KS) and October 4 (Colby, KS). Forensic Anthropology Today. Lecture presented at the 2017 Kansas Bureau of 2017 Investigations In-Service Event, Topeka, KS. April 5. 2017 Improving Evidence and Victim Recovery Protocols for Mass Fatalities and Fatal Fires. Lecture presented to the FBI Evidence Response Team Quarterly Training, Kansas City, MO. March 24th. Role of a Forensic Anthropologist and Overview of Forensic Archaeology. Lecture 2016 presented at the Schuylkill County Coroner's 5th Forensic Symposium, New Philadelphia, PA. April 30. 2015 Forensic Archaeology. Week-long presentations and field training provided for the Committee on Missing Persons, Nicosia, Cyprus. November 22-28. 2012 Forensic Anthropology: Current State of the Field and Personal Experiences in Forensic Casework. Lecture presented to both sessions of the Slavia Foundation Mortuary Archaeology Field School Program Human Osteology Course (Instructor: A. Scott), Adam Mickiewicz University, Drawsko, Poland. July 5 & August 2. 2010 Practical Fatal Fire Scene Documentation and Recovery. Instruction and presentation presented to participants, Pennsylvania Association of Arson Investigators: East Zone Training, Annual Spring Program, Conshohocken, PA. March 26-28. 2009 Post Blast Scene Recovery Protocols and Mass Disaster Recovery Training Exercise. Total Station and GPS demonstration and instruction for class participants, Tripwire Operations Group, Williamsport, PA. September 18-20.

Invited Community Engagement Talks

- 2021The Skeleton Speaks: Forensic Anthropology Gives Light to Solving a Crime. Johnson
County Park and Recreation District's 50 Plus. Online via Zoom. September 16.
- 2020 *Forensic Anthropology in Medico-Legal Contexts*. Johnson County Science Café. January 13.
- 2019 *Forensic Anthropology in Medico-Legal Contexts*. Topeka Science Café. September 10.
- 2018 *Role of Forensic Anthropologists.* Topeka Police Department Citizen's Academy Ambassadors. April 17.

TEACHING,* MENTORSHIP, and PROFESSIONAL DEVELOPMENT

*full teaching dossier available upon request

Department of Sociology and Anthropology, Washburn University, Topeka, KS. Biological Anthropology (online & F2F); Introduction to Forensic Science (online & F2F); Forensic Anthropology (online & F2F); Human Osteology (online & F2F); Lab Methods in
Forensic Anthropology (F2F & hybrid); Field Methods in Forensic Anthropology (online &
F2F); Forensic Anthropology Field School; Forensic Anthropology in Pop Culture (online)
Department of Applied Forensic Sciences, Mercyhurst University, Erie, PA.
Special Topics in Physical Anthropology: Paleopathology; Human Skeletal Profile & Lab;
Human Skeletal Profile: Age; Zooarchaeology & Lab; Human Osteology & Lab; Forensic Anthropology
Department of Anthropology, Gettysburg College, Gettysburg, PA.
Introduction to Archaeology and Physical Anthropology
Department of Anthropology, Dickinson College, Carlisle, PA.
Introduction to Biological Anthropology and Lab
Department of Anthropology, University of Winnipeg, Winnipeg, MB.
Introduction to Biological Anthropology & Archaeology
Department of Anthropology, University of Manitoba, Winnipeg, MB.
Human Origins & Antiquity; Forensic Anthropology
Department of Applied Forensic Sciences, Mercyhurst College, Erie, PA.
Co-taught Special Topics in Physical Anthropology: Paleopathology and Environmental
Evidence and associated lab
Teaching Assistant, Department of Applied Forensic Sciences, Mercyhurst College, Erie,
PA.
Fragmentary Human Osteology, Human Osteology I, Human Skeletal Profile,
Modification of the Human Skeleton, Introduction to Forensic Anthropology,
Environmental Evidence, Special Topics: Paleopathology, Forensic Archaeology, Basics of
Forensic Anthropology.

Selected Invited Lectures

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2019	Forensic Anthropology Casework. Lecture presented to <i>Criminal Forensics</i> (Instructor: B. Vincent) at MidAmerica Nazarene University, Olathe, KS. March 5.
2010	
2018	Baldwin City Excavations. Lecture presented to HI300 Life and Death on the Kansas
	Homestead class at Washburn University. November 5.
2018	Forensic Anthropology Casework. Lecture presented to Forensic Anthropology (Instructor:
	S. Mandel) class at the University of Kansas, Lawrence, KS. October 1.
2011	Forensic Anthropological Casework. Lecture presented to Introduction to Forensic
	Anthropology (Instructor: A. Blackburn) course, University of Winnipeg, Winnipeg, MB.
	March 17.
2010	Introduction to Forensic Anthropology and Fatal Fire Recovery and Skeletal Biology Lab.
	Lecturer and lab instructor at Upward Bound Math and Science Residential Summer
	Program, Indiana University of Pennsylvania, Indiana, PA. July 19.
2010	
2010	Practical Fatal Fire Scene Documentation and Recovery. Instruction and presentation
	presented to participants, Pennsylvania Association of Arson Investigators: East Zone
	Training, Annual Spring Program, Conshohocken, PA. March 26-28.

- Fragmentary Osteology Lab. Lecture and lab presented to Introduction to Archaeology (Instructor: A. Quinn) course. Mercyhurst Archaeological Institute, Mercyhurst College, Erie, PA. December 9 & 11.
 The Allegheny County Medical Examiner's Office. Lecture presented to Introduction to
 - Human Biology (Instructor: M. Judd) course, University of Pittsburgh, Pittsburgh, PA. April 17.

Graduate Student Theses/Dissertations Supervised:

- 2021- Liebenberg L. *South African cranial variation: A combined metric-macromorphoscopic method for ancestry estimation.* [Doctoral Dissertation] University of Pretoria. External Committee Advisor.
- 2020- Henley RLV. A multidisciplinary approach to investigate the manifestation of manifestation of Diffuse Idiopathic Skeletal Hyperostosis (DISH) in modern South African samples. [Doctoral Dissertation] University of Pretoria. External Committee Advisor.
- 2019- Chaney R. *An Examination of the subpubic region, greater sciatic notch, and obturator foramen variation in Thai individuals using Elliptic Fourier Analysis* [Master's Thesis] Boston University. External Committee Advisor.
- 2018- Cole S. *Improving sex estimation standards for subadults* [Doctoral Dissertation] University of Nevada, Reno. External Committee Advisor.
- 2018-2019 Johnson A. *Morphological skeletal traits for sex estimations.* [Master's Thesis] Emporia. External Committee Advisor.
- 2015-2018 Chapman D. *Trabecular density and osteoporosis*. [Master's Thesis] Mercyhurst University. Primary Advisor.
- 2015-2017 Cole S. *Asymmetry in discrete cranial and pelvic traits*. [Master's Thesis] Mercyhurst University. Primary Advisor.
- 2015-2016 Carlson-Geer, S. *An endocranial interlandmark distance derived method for skeletal sex assessment.* [Master's Thesis] Mercyhurst University. Committee Member.
- 2015 Boeyer, M. *Age estimation and secular change in knee development: A radiographic approach.* [Master's Thesis] Mercyhurst University. Committee Member.
- 2015 Sanders, K. *Population dynamics of ancient Egypt and the neighboring world.* [Master's Thesis] Mercyhurst University. Committee Member.
- 2014-2016 Carpenter, K. *Age estimation using the development of the foot and ankle.* [Master's Thesis] Mercyhurst University. Committee Member.
- 2014-2016 Griffin, J. *Metric method for adult age estimation using vertebral osteophytosis.* [Master's Thesis] Mercyhurst University. Committee Member.
- 2014-2016 Cline, K. *A geometric morphometric analysis of greater sciatic shape as an indicator for sex.* [Master's Thesis] Mercyhurst University. Committee Member.
- 2014-2016 Call S. *Phenice Then and Now: A Test of the Klales et al. Revised Method and the Implications of Asymmetry*. [Master's Thesis] University of Alaska, Fairbanks. Committee Member.
- 2014-2015 Siegel, N. *The use of the endocranial base in the estimation of ancestry*. [Master's Thesis] Mercyhurst University. Committee Member.
- 2014-2015 Baumgarten, S. *Sex estimation utilizing new measurements of the innominate.* [Master's Thesis] Mercyhurst University. Committee Member.
- 2014-2015 Chapin M. *Estimation of maximum long bone lengths from fragmentary material.* [Master's Thesis] Mercyhurst University. Committee Member.
- 2014-2015 Lesciotto K. A *geometric morphometric analysis of prognathism and the gnathic index.* [Master's Thesis] Mercyhurst University. Committee Member.

2014-2015 Best, K. *The relationship between human cranial and pelvic sexual dimorphism*. [Master's Thesis] Mercyhurst University. Committee Member.

Professional Development:

2021	A Virtual Conversation on Race and Ancestry in Forensic Anthropology hosted by the Society of Forensic Anthropologists. Workshop participant. Online. February 17.
2021	<i>Utilizing Best Practice in Forensic Education and Remote Learning</i> . Workshop participant at the 73 rd Annual Meeting of the American Academy of Forensic Science. Online. February 15.
2021	Science Education Workshop Series hosted by the American Academy of Forensic Sciences, Anthropology Section, Ad Hoc Committee on Outreach, Engagement, Retention, and Recruitment and the Society for Canadian Women in Science and Technology. Workshop participant in 3 events. Online. January 15, 22, 29.
2020-2021	<i>Certificate of Inclusive Teaching and Learning.</i> Washburn Center for Teaching Excellence and Learning, Washburn University. AY2020-2021.
2020	<i>First Generation Course Redesign</i> : AN116 Biological Anthropology. Washburn CTEL and Title III Strengthening Institutions Grant. Summer semester.
2017	Quality Online Course Initiative and Teaching Matters: Creative Course Condensation. Washburn CTEL course. Spring semester.
2016-2017	Certificate of Teaching and Learning. Washburn Center for Teaching Excellence and Learning, Washburn University. AY2016-2017.
2012	<i>Teaching Biological Anthropology in the 21st century</i> . Workshop participant at the 81 st Annual Meeting of the American Association of Physical Anthropologists. Portland, OR. April 11-14.
2010-2012	<i>Certification in Higher Education Teaching Program,</i> University of Manitoba, University Teaching Services, Winnipeg, MB. Program Graduation: October 29, 2012
	Semester Coursework: The Teacher in You: Helping Student's Learn (Winter Term 2012) Workshops: Making Effective Presentations for Classes and Conferences, Effective First Year Teaching Practices, Philosophy of Teaching, Ethics, Copyrights, Evidence of Good Teaching, Creating a Teaching Dossier, How to Write Successful Grant Proposals, Developing Engaging Assignments Part I & II.

PUBLICATIONS

*indicates a student

Book

2020 **Klales AR** (ed). Sex Estimation of the Human Skeleton: History, Methods, and Emerging Techniques. Cambridge, MA: Academic Press. Published May 31.

Peer Reviewed Articles:

- *Submitted* Passalacqua NV, S Mullholland, M Pilloud, **AR Klales**. The Impact of Forensic Anthropology in Undergraduate Anthropology Programs. *American Anthropologist*. Research Article.
- *In press* **Klales AR.** Current State of Sex Estimation in Forensic Anthropology. *Forensic Anthropology.* Invited Review Article.

In press	Greathouse H*, EN Chapman, AB Maxwell, AR Klales . Identifying Handsaw Tooth Shape based on the Micro- and Macroscopic Analysis of the Kerf Floor Contour. <i>Forensic Anthropology</i> . Research Article.
In press	Long HA*, AR Klales . Application of the Optimized Summed Scored Attributes Method to Sex Estimation. <i>Forensic Anthropology.</i> Technical Note.
2021	Klales AR , HM Garvin, T Gocha, K Lesciotto, M Walls [*] . Examining the Reliability and Validity of Popular Morphological Sex Estimation Methods. <i>Forensic Anthropology Anthropology</i> 3(3):139-150. Research Article.
2021	Corron LK, MK Stock, SJ Cole*, CN Hulse*, HM Garvin, AR Klales , KE Stull. Testing for Repeatability and Reproducibility in Ordinal Skeletal and Dental Subadult Age Indicators across Imaging Modalities. <i>Forensic Science International</i> 320 (2021):110687. http://dx.doi.org/10.1016/j.forsciint.2021.110687. Research Article.
2021	Klales AR. A Review of Garvin and Langley's (2019) Case Studies in Forensic Anthropology: Bonified Skeletons. <i>Forensic Anthropology</i> 3(3):173-174. Invited Book Review.
2020	Stull K, EJ Bartelink, AR Klales , GE Berg, MW Kenyhercz, EN L'Abbé, MC Go, K McCormick, C Mariscal. A Response to "Moving Beyond a Lost Cause: Forensic Anthropology and Ancestry Estimates in the United States." <i>Journal of Forensic Sciences</i> 66(1):417-420. Letter to the Editor.
2020	Stock MK, HM Garvin, LK Corron, CN Hulse [*] , LE Cirillo [*] , AR Klales , KL Colman, KE Stull. The Importance of Processing Procedures and Threshold Values in CT Scan Segmentation of Skeletal Elements: An Example Using the Immature Os Coxa. <i>Forensic Science International</i> 309: 10232. doi: 10.1016/j.forsciint.2020.110232. Technical Note.
2019	Klales AR , SD Ousley, JM Vollner. Response to Multivariate Ordinal Probit Analysis in the Skeletal Assessment of Sex (Konigsberg and Frankenberg). <i>American Journal of Physical Anthropology</i> 169(2):388-389. Letter to the Editor.
2017	Garvin HM, AR Klales . A Validation Study of the Langley et al. (2017) Decision Tree Model for Sex Estimation. <i>Journal of Forensic Sciences</i> 63(4):1243-1251. Technical Note.
2017	Kenyhercz MW, AR Klales , KE Stull, KA McCormick, SJ Cole*. Worldwide Population Variation in Pelvic Sexual Dimorphism: A Validation and Recalibration of the Klales et al. Method. <i>Forensic Science International</i> 277:259.e1-25.e8. Research Article.
2017	Klales AR , SJ Cole [*] . Improving Nonmetric Sex Classification for Hispanic Individuals. <i>Journal of Forensic Sciences</i> 62(4):975-980. Technical Note.
2017	Klales AR , T Burns*. Adapting and Applying Adult Pelvis Morphological Sex Estimation Techniques to Sub-Adults. <i>Journal of Forensic Sciences</i> 62(3):747-752. Technical Note.
2017	Gómez- Valdés JA, Garmenda AM, Barzola LG, Sánchez-Mejorada G, Karam C, Baraybar JP, Klales AR. Recalibration of the Klales' Method of Sexing the Human Innominate for use in Mexican Population. <i>American Journal of Physical Anthropology</i> 162(2):600-604. Technical Note.
2017	Kenyhercz MW, AR Klales , C Rainwater, SM Fredette*. The Optimized Summed Score Attributes Method for Classification of U.S. Blacks and Whites: a Validation Study. <i>Journal</i> <i>of Forensic Sciences</i> 62(1):174–180. Research Article.
2016	Stock MK*, KE Stull, HM Garvin, AR Klales . Development of Modern Human Subadult Age

	and Sex Estimation Standards using Micro-slice Computed Tomography Images from Medical Examiner's Offices. <i>SPIE Optics & Photonics 2016 Proceedings</i> 9967. DOI: 10.1117/12.2237180. Research Article.
2016	Klales AR. Secular Change in Morphological Pelvic Traits used for Sex Estimation. <i>Journal of Forensic Sciences</i> 61(2):295-301. Research Article.
2014	Klales AR, MW Kenyhercz. Morphological Assessment of Ancestry using Cranial Macromorphoscopics. <i>Journal of Forensic Sciences</i> 60:13-20. Research Article.
2014	Elias JP, C Lupton, AR Klales . Assessment of Arm Arrangements of Egyptian Mummies in Light of Recent CT Studies. <i>Yearbook of Mummy Studies</i> 2:49-62. Research Article.
2014	Kenyhercz MW, AR Klales , WE Kenyhercz. Molar Size and Shape in the Estimation of Biological Affinity: Comparison of Relative Cusp Location Using Geometric Morphometrics and Interlandmark Distances. <i>American Journal of Physical Anthropology</i> 153:269-279. Research Article.
2012	Klales AR , SD Ousley, JM Vollner. A Revised Method of Sexing the Human Innominate Using Phenice's Nonmetric Traits and Statistical Methods. <i>American Journal of Physical Anthropology</i> 149:104-114. Research Article.

Book Chapters:

2020	Klales AR. Introduction to Sex Estimation and this Volume. In <i>Sex Estimation in the Human Skeleton: History, Methods, and Emerging Techniques</i> , eds. AR Klales. Academic Press.
2020	Klales AR , HA Long*, C Willsey*. A History of Sex Estimation in Human Skeletal Remains. In <i>Sex Estimation in the Human Skeleton: History, Methods, and Emerging Techniques</i> , eds. AR Klales. Academic Press.
2020	Klales AR. Practitioner Preferences for Sex Estimation from Human Skeletal Remains. In <i>Sex Estimation in the Human Skeleton: History, Methods, and Emerging Techniques,</i> eds. AR Klales. Academic Press.
2020	Klales AR. Pelvis Morphology. In Sex Estimation in the Human Skeleton: History, Methods, and Emerging Techniques, eds. AR Klales. Academic Press.
2020	Klales AR , SD Ousley, NV Passalacqua. Statistical and Machine Learning Approaches to Sex Estimation. In <i>Sex Estimation in the Human Skeleton: History, Methods, and Emerging Techniques,</i> eds. AR Klales. Academic Press.
2020	Klales AR. MORPHOPASSE: Morphological and Pelvis Sex Estimation Program. In <i>Sex Estimation in the Human Skeleton: History, Methods, and Emerging Techniques</i> , eds. AR Klales. Academic Press.
2020	Garvin HM, AR Klales . Adult Sex Estimation and the Global Standardization. In <i>Forensic Science and Humanitarian Action: Interacting with the Dead and the Living</i> , eds. R Parra, SC Zapico, D Ubelaker, Smithsonian, AAFS. New York: John Wiley & Sons.
2019	Klales AR. A Unique Case of Skeletal Trauma Involving Scissors. In <i>Case Studies in Forensic Anthropology: Bonified Skeletons</i> , eds. H Garvin and N Langley. CRC/Routledge.
2018	Garvin HM, AR Klales , SM Furnier. Emerging Technologies in Forensic Anthropology: The Potential Utility and Current Limitations of 3D Technologies. <i>Emerging Technologies in Forensic Science</i> , ed. R. Johnson. Burlington, VT: Ashgate.

- 2014 **Klales AR**. The World Congress on Mummy Studies. In *Mummies around the World: An Encyclopedia of Mummies in History, Religion, and Popular Culture*, ed. M Cardin. Santa Barbara, CA: ABO-CLIO.
- 2013 Paolello JM, **AR Klales**. Contemporary Cultural Alterations to Bone. In *Manual of Forensic Taphonomy*, eds. J Pokines and SA Symes. New York: Taylor & Francis, LLC.
- 2012 Dirkmaat DC, GO Olson, **AR Klales**, S Getz. The Role of Forensic Anthropology in the Recovery and Interpretation of the Fatal Fire Victim. In *Companion to Forensic Anthropology*, ed. DC Dirkmaat. New York: John Wiley & Sons.

Computer Programs

- 2018- Klales AR, Cole SJ. MorphoPASSE: the Morphological Pelvis and Skull Sex Estimation Database Manual. Version .09. Topeka, KS: Washburn, University. Version 1 released 9/2020
- 2018- Klales AR. MorphoPASSE: the Morphological Pelvis and Skull Sex Estimation Database. Version 1.0. Topeka, KS: Washburn, University. Updated biannually.

Published Final Grant Reports:

- 2020 Stull KE, Garvin HM, **Klales AR.** *Development of Modern Subadult Standards: Improved Age and Sex Estimation in U.S. Forensic Practice.* National Institute of Justice 2015-DN-BX-K409.
- 2018 **Klales AR**. *An interactive morphological database for estimating sex in modern adults*. National Institute of Justice 2015-DN-BX-K014.

Published Site Reports:

2009 Quinn A, D Pedler, A Byrnes, JE Thomas, **AR Klales**. *Phase I Archaeological Investigation of the Route 6 Subdivision Study Area, Pittsfield Township, Warren County Pennsylvania*. Prepared for D & D Land Development Company, Pittsfield, PA 16340. Erie, PA: Mercyhurst Archaeological Institute, pgs 76.

PRESENTATIONS, SYMPOSIA, and WORKSHOPS

*indicates student

- 2021 Deem E*, Passalacqua NV, Messer D, Zejdlik K, **Klales AR**. A Review of the Anatomical Terminology Variation for the Bony Pelvis. Accepted for presentation at the 2021 Meeting of Experimental Biology, April 27-30.
- 2021 **Klales AR,** Cathcart S*, Maxwell AB. *WU-FARU's Positively Identified Forensic Anthropology Cases: Examining our Methods.* Oral presentation at the annual meeting of the SouthEast BioAnth Interest Group, March 27.
- 2021 Maxwell AM, **Klales AR**, Moeder B*. *Variation in bone shrinkage due to thermal exposure: A patellar case study.* Poster presentation at the 73rd Meeting of the American Academy of Forensic Sciences, February 15-19. Also presented at the 7th Meeting of the Mid-Atlantic Bioanthropology Interest Group, October 10, 2020 by B Moeder*.

2021	Klales AR , Maxwell AM. <i>Utility of the Sacrum for Sex Estimation</i> . Poster presentation at the 73 rd Meeting of the American Academy of Forensic Sciences, February 15-19.
2020	Passalacqua NV, Mullholland S, Pilloud M, Klales AR . <i>The Impact of Forensic Anthropology</i> <i>in Undergraduate Anthropology Programs</i> . Accepted (conference canceled due to Covid- 19) for presentation at the 89 th Meeting of the American Association of Physical Anthropologists, Los Angeles, CA, April 15-18.
2020	Klales AR , Maxwell AM, Chapman EN. <i>Differentiating Handsaw Tooth Shape Based on the Analysis of Kerf Floor Contour</i> . Oral presentation at the 72 nd Meeting of the American Academy of Forensic Sciences, Anaheim, CA, February 17-22.
2020	Stull KE, Garvin HM, Klales AR , Corron L, Price M. <i>KidStats: Improving the Subadult Biological Profile</i> . Presented Workshop at the 72 nd Meeting of the American Academy of Forensic Sciences, Anaheim, CA, February 17-22.
2020	Garvin HM, Stull KE, Corron L, Klales AR . <i>Discussing Landmark Placement, Protocol Development, Reliability of Indicators.</i> Oral presentation in <i>KidStats: Improving the Subadult Biological Profile</i> Workshop at the 72 nd Meeting of the American Academy of Forensic Sciences, Anaheim, CA, February 17-22.
2020	Corron L, Klales AR , Garvin HM. <i>3D Printed Subadult Material</i> . Hands-on demonstration in <i>KidStats: Improving the Subadult Biological Profile</i> Workshop at the 72 nd Meeting of the American Academy of Forensic Sciences, Anaheim, CA, February 17-22.
2019	Klales AR. Forensic Anthropology and Fatal Fire Recoveries all-day Workshop at the 48 th Annual Meeting of the Midwestern Associate of Forensic Scientists, Louisville, KY, October 18.
2019	Stock MK, Corron LK, Cirillo LE*, Garvin HM, Hulse CN*, Cole SE*, Stull KE, Klales AR . <i>Quantifying Error in Virtual Data Collection: the Impact of MSCT Scan Segmentation</i> <i>Protocol and Inter-observer Error in 3-D Landmark Placement on the Human Subadult</i> <i>Pelvis</i> . Poster presentation at the 88 th Meeting of the American Association of Physical Anthropologists, Cleveland, OH, March 27-30.
2019	Klales AR , Long H*. <i>Secular Change in Morphological Traits of the Skull and Pelvis</i> . Poster presentation at the 88 th Meeting of the American Association of Physical Anthropologists, Cleveland, OH, March 27-30.
2019	Klales AR , Cole SJ*, Stull KE, Garvin HM, Go MC, Menéndez Garmendia A, Walls M*, Sánchez-Mejorada G. <i>Worldwide Population Variation in Skull Sexual Dimorphism</i> . Poster presented at the 71 st Meeting of the American Academy of Forensic Sciences, Baltimore, MD, February 18-23.
2019	Mizell S*, Long H*, Klales AR . <i>Application of the Optimized Summed Scored Attribute</i> <i>Method to Sex Estimation in White and Blacks</i> . Poster presented at the 71 st Meeting of the American Academy of Forensic Sciences, Baltimore, MD, February 18-23.
2019	Athey S*, Walls MM*, Klales AR , Garvin HM. <i>A Comparative Analysis of Stature Estimation Methods for Application in Forensic Anthropology</i> . Poster presented at the 71 st Meeting of the American Academy of Forensic Sciences, Baltimore, MD, February 18-23.
2019	Villegas-Camposeco B, Walls MM*, Menéndez Garmendia A, Sánchez-Mejorada G, Klales AR, Gómez-Valdés JA. A Validation of the Hefner & Ousley (2014) Decision Tree Model for

	<i>Ancestry in a Mexican Population.</i> Poster presented at the 71 st Meeting of the American Academy of Forensic Sciences, Baltimore, MD, February 18-23.
2018	Klales AR , Cole SJ*. <i>Introducing MorphoPASSE: the Morphological Pelvis and Skull Sex Estimation Database.</i> Poster presented at the 87 th Meeting of the American Association of Physical Anthropologists, Austin, TX. April 11-14.
2018	Klales AR , Cole SJ*. <i>Introducing MorphoPASSE: the Morphological Pelvis and Skull Sex</i> <i>Estimation Database.</i> Podium presented at the 70 th Meeting of the American Academy of Forensic Sciences, Seattle, WA. February 19-24.
2018	Dunn R*, Perez D*, Klales AR , Dirkmaat D. <i>Differential Recovery Rates of Skeletonized Human Remains.</i> Poster presented at the 70 th Meeting of the American Academy of Forensic Sciences, Seattle, WA. February 19-24.
2018	Garvin HM, Klales AR . A Validation Study of the Langley et al. (2017) Decision Tree Model for Sex Estimation. Podium presentation at the 70 th Meeting of the American Academy of Forensic Sciences, Seattle, WA. February 19-24.
2018	Walls M*, Klales AR , Lesciotto K*, Gocha TP, Garvin HM. <i>Reliability and Validity of the Walker (2008) and Klales et al. (2012) Methods</i> . Poster presentation at the 70 th Meeting of the American Academy of Forensic Sciences, Seattle, WA. February 19-24.
2017	Klales AR . <i>Introducing MorphoPASSE: the Morphological Pelvis and Skull Sex Estimation Database.</i> Podium presentation at the 45 th Meeting of the Canadian Association for Physical Anthropology, Edmonton, AB. October 25-28.
2017	Cole SJ*, Klales AR . Reevaluating Morphological Sex Estimation Methods for the Creation of a Free User Database. Podium presented at the 5 th Annual Western Bioarchaeology Group Conference Meeting, Reno, NV. October 7.
2017	Cole SJ*, Klales AR . Reevaluating Morphological Sex Estimation Methods for the Creation of a Free User Database. Presented at Graduate Student Association Graduate Poster Symposium, Reno, NV. November 1.
2017	Klales AR , Cole SJ*. <i>Reevaluating Morphological Sex Estimation Methods for the Creation of a Free User Database</i> . Poster presentation at the 86 th Meeting of the American Association of Physical Anthropologists, New Orleans, LA. April 19-22.
2017	Klales AR , Cole SJ*. <i>Improving Nonmetric Sex Classification for Hispanic Individuals</i> . Poster presentation to the 69 th Meeting of the American Academy of Forensic Sciences, New Orleans, LA. February 13-18.
2017	Cole SJ*, Cabo LL, Klales AR . <i>The Effects of Cranial and Pelvic Asymmetry on Accurate Sex Classification</i> . Poster presentation to the 69 th Meeting of the American Academy of Forensic Sciences, New Orleans, LA. February 13-18.
2017	Andras NL*, Klales AR . <i>The use of the Palate for Ancestry and Sex Estimation</i> . Poster presentation to the 69 th Meeting of the American Academy of Forensic Sciences, New Orleans, LA. February 13-18.
2017	Walls M*, Klales AR. <i>Testing the reliability of morphological sex estimation methods used in forensic anthropology</i> . Presented at the Kansas Undergraduate Research Day at the Capitol, Topeka, KS. February 15.
2016	Stock MK, Stull KE, Garvin HM, Klales AR. Development of Modern Human Subadult Age

	and Sex Estimation Standards using Micro-slice Computed Tomography Images from Medical Examiner's Offices. Podium presentation at SPIE Optics and Photonics Conference, San Diego, CA. August 28-September 1.
2016	Klales AR , Kenyhercz MW, Stull KE, McCormick KA, Call SJ*. <i>Worldwide Population</i> <i>variation in pelvic sexual dimorphism</i> . Poster presentation at the invited symposia entitled <i>Forensic Applications of Skeletal Biology and Variation</i> at the 85 th Meeting of the American Association of Physical Anthropologists, Atlanta, GA. April 12-16.
2016	Klales AR, Dirkmaat DC, Cabo-Pérez LL. <i>New Forensic Archaeological Recovery Protocols for Fatal Vehicle Fires</i> . Podium presentation at the 68 th Meeting of the American Academy of Forensic Sciences, Las Vegas, NV. February 22-27.
2016	Klales AR, Lesciotto K*. <i>The "Science of Science:" Examining Bias in Forensic Anthropology</i> . Podium presentation at the 68 th Meeting of the American Academy of Forensic Sciences, Las Vegas, NV. February 22-27.
2015	Klales AR , Elias JP, Hoppa RD. <i>Craniometric Variation in Ancient Egypt and Influences from the East</i> . Poster presentation at the 84 th Meeting of the American Association of Physical Anthropologists, St. Louis, MO. March 25-29.
2015	Klales AR , Fredette SM*, Cline KM*, Dirkmaat DC. <i>Twenty-Eight Years of Forensic</i> Anthropological Casework in the Northeastern United States: Trends, Patterns, and Lessons Learned. Podium presentation at the 67 th Meeting of the American Academy of Forensic Sciences, Orlando, FL. February 16-21.
2015	Klales AR , Burns T*. <i>The Application of the Sub-Pubic Concavity/Contour for Sexing Sub-adult Human Innominates</i> . Poster presentation at the 67 th Meeting of the American Academy of Forensic Sciences, Orlando, FL. February 16-21.
2015	Kenyhercz MK, Klales AR , Rainwater CW, Fredette SM*. <i>The Optimized Summed Scored Attributes Method for the Classification of American Blacks and Whites: a Validation Study.</i> Poster presentation at the 67 th Meeting of the American Academy of Forensic Sciences, Orlando, FL. February 16-21.
2014	Klales AR , Elias JP. <i>"A Disjointed Muddle of Bones?" Deliberate Disseveration in Egyptian Mummification</i> . Podium presentation at the 1 st Meeting of the Mid-Atlantic Bioanthropology Interest Group, Richmond, VA. October 25.
2014	Klales AR. Secular Change in Morphological Pelvic Traits used for Sex Estimation. Poster presentation at the 66 th Meeting of the American Academy of Forensic Sciences, Seattle, WA. February 17-22.
2013	Klales AR , Elias JP. <i>"A Disjointed Muddle of Bones?" Deliberate Disseveration in Egyptian Mummification</i> . Podium presentation at the 41 st Meeting of the Canadian Association for Physical Anthropology, Scarborough, ON. October 17-20.
2013	Klales AR. <i>Current Practices in Physical Anthropology for Sex Estimation in Unidentified,</i> <i>Adult Individuals.</i> Poster presentation at the 82 nd Meeting of the American Association of Physical Anthropologists, Knoxville, TN. April 9-13.
2013	Klales AR. <i>Current Practices in Forensic Anthropology for Sex Estimation in Unidentified,</i> <i>Adult Individuals.</i> Podium presentation at the 65 th Meeting of the American Academy of Forensic Sciences, Washington, DC. February 18-23.

2013	Kenyhercz MW, Klales AR , Kenyhercz WE. <i>Molar Size and Shape in the Estimation of</i> <i>Biological Affinity: A Comparison of Relative Cusp Location Using Geometric</i> <i>Morphometrics and Inter-landmark Distances.</i> Podium presentation at the 65 th Meeting of the American Academy of Forensic Sciences, Washington, DC. February 18-23.
2012	Klales AR , Kenyhercz MW, Kenyhercz WE. <i>Examining Population Affinity using Occlusal Polygons of the Molars.</i> Poster presented at the 40 th Meeting of the Canadian Association for Physical Anthropology, Victoria, BC. November 7-10.
2012	Hoppa RD, Klales AR , Lindstone L, Scott AB, Lynnerup N. <i>Sex Determination using 3D Coordinate Landmark Data of the Skull: A Test using a CT Sample.</i> Poster presentation at the 81 st Meeting of the American Association of Physical Anthropologists, Portland, OR. April 11-14.
2012	Klales AR. Secular Change in the Human Innominate: from the 19 th to the 20 th Century. Poster presentation as part of the invited symposia entitled <i>Examining the Big Picture:</i> <i>Working Towards a Holistic Understanding of Secular Change in Modern Populations</i> at the 81 st Meeting of the American Association of Physical Anthropologists, Portland, OR. April 11-14.
2012	Klales AR , Kenyhercz MW. <i>Non-metric Assessment of Ancestry through Cranial Macromorphoscopics: A Validation of the Hefner Method</i> . Podium presentation at the 64 th Meeting of the American Academy of Forensic Sciences, Atlanta, GA. February 20-25.
2012	Kenyhercz MW, Klales AR , Fredette SM, Dirkmaat DC. <i>Metric and Non-metric Assessment of Sex: Accuracy, Correlation and Corroboration.</i> Poster presentation at the 64 th Meeting of the American Academy of Forensic Sciences, Atlanta, GA. February 20-25.
2012	Klales AR , Kenyhercz MW. <i>Assessment of Ancestry through Cranial Macromorphoscopic Traits</i> . Podium presentation at the University of Manitoba, Department of Anthropology Colloquium Series. February 10.
2011	Klales AR , Lynnerup N, Hoppa RD. <i>Geometric Morphometric Analysis of Sex Determination from Cranial Landmark Data Using Computed Tomography.</i> Poster presentation at the 39 th Meeting of the Canadian Association for Physical Anthropology, Montréal, QC. October 26-29.
2011	Klales AR . The Application of Forensic Archaeology to Mass Disasters: The Recovery of Continental/Colgan Air Flight 3407. Podium presentation at the Manitoba Anthropology Student Conference, Winnipeg, MB. April 29-May 01.
2011	Dirkmaat DC, Cabo-Pérez LL, Klales AR [*] , Chapman EN, Nesbitt AM. <i>New Forensic Archaeological Recovery Protocols for Fatal Fire Scenes</i> . Podium presentation at the 63 nd Meeting of the American Academy of Forensic Sciences, Chicago, IL. February 21-26. ([*] Presenter)
2011	Dirkmaat DC, Cabo-Pérez LL, Kenyhercz MW, Nesbitt AM, Klales AR , Chapman EN. <i>Improving Evidence and Victim Recovery Protocols at the Mass Fatality Incident</i> . Podium presentation at the 63 nd Meeting of the American Academy of Forensic Sciences, Chicago, IL. February 21-26.
2010	Klales AR , Marjenin AE, Nesbitt AM, Valdes ÁV, Cabo-Pérez LL. <i>Bio-archeological Analysis</i> of a Faunal Assemblage from the Castro de Chao Samartín, Austurias, Spain. Poster presentation at the 79 th Meeting of the American Association of Physical Anthropologists,

Albuquerque, NM. April 14-17.

- 2010 Vollner JM, **Klales AR**, Ousley SD. *Geometric Morphometric Analysis of the Human Innominate for Sex Estimation*. Poster presentation at the 79th Meeting of the American Association of Physical Anthropologists, Albuquerque, NM. April 14-17.
- 2010 **Klales AR**, Ousley SD. *The Utility of Cohen's Kappa for Testing Observer Error in Discrete Data and Alternatives*. Poster presentation at the 62nd Meeting of the American Academy of Forensic Sciences, Seattle, WA. February 22-27.
- 2010 Paolello JM, **Klales AR***. *Contextual Information: Artifactual, Ritual, and Trophy*. Podium presentation in *Workshop: Taphonomy of Bone Destruction: Information Lost, Information Gained* at the 62nd Meeting of the American Academy of Forensic Sciences, Seattle, WA. February 22-27. (*Co-presenter)
- 2009 **Klales AR**. Introduction to Forensic Case Work at the Department of Applied Forensic Sciences, Mercyhurst College: A Review of the Past Five Years. Podium presentation at the 25th Meeting of the North East Forensic Anthropology Association, Erie, PA. October 31.
- 2009 Vollner JM, **Klales AR**, Ousley SD. *Sexing of the Human Innominate Using Non-Metric Traits and Statistical Analysis*. Poster presentation at the 78th Meeting of the American Association of Physical Anthropologists, Chicago, IL. March 31-April 4.
- 2009 **Klales AR**, Vollner JM, Ousley SD. *A New Metric Procedure for the Estimation of Sex and Ancestry from the Human Innominate*. Poster presentation at the 61st Meeting of the American Academy of Forensic Science, Denver, CO. February 16-20.
- 2008 Klales AR. Taphonomic Influences Affecting Skulls Found in a Modern Forensic Setting: Trophy, Anatomical and Cultural Uses. Podium presentation at the 36th Annual Meeting of the Canadian Association for Physical Anthropology, Hamilton, ON. November 5-8.
- 2008 **Klales AR**, Symes SA, Nesbitt AM, Vollner JM, Mitchell DC, DelAlamo AS, Daly ES. *Taphonomy Workshop*. Podium presented at the Annual Mountain, Swamp and Beach Regional Forensic Association Meeting, Evansville, IN. August 30.

RELEVANT EXPERIENCES

Experience:

2018 Visiting Scientist in Forensic Anthropology, New York City Office of the Chief Medical Examiner. May 1-31. 2012-Associate of the Akhmim Mummy Studies Consortium located in Carlisle, PA and directed by Dr. Jonathan Elias. 2009 Archaeological excavation and lab analysis at the Chao Samartín Hillfort Bronze Age site located at Granadas de Salime, in the Principality of Asturias (Northern Spain). August 17-September 3. 2009 Responsible for the recovery of human remains for Continental/Colgan Air Flight #3407 crash as a member of the Forensic Anthropology Recovery Team, Mercyhurst College and of the Specialized Medical Assistance Response Team, Buffalo, NY. February 12-17. 2007 Research assistant for study on skeletal growth profile of Luis Lopez collection in Lisbon, Portugal, and a comparative population growth study among contemporaneous

	collections around the world. Funded by the Honors College of the University of Pittsburgh, Pittsburgh, PA. Supervisors: Katherine MacCord, Jeffery H. Schwartz, PhD, Anthropology.	
2005	Research on Monongahelan Native American burials. Conducted a basic anthropological assessment of each burial, including an inventory of remains, assessment of age, sex, stature, metric and nonmetric variation, and pathology. "Assessment of Monongahelan Burial 62 and Burial 101." Supervisor: Jeffery H. Schwartz, PhD, Anthropology.	
Reviewer		
2019	Reviewer, <i>Forensic Anthropology: Current Methods and</i> Practice (Christensen et al. 2019) for Elsevier. Also reviewed book proposal in 2017.	
2018	Reviewer, creative commons <i>Explorations: An Open Invitation to Biological Anthropology</i> textbook chapter for Society for Anthropology in Community Colleges.	
2016	Reviewer, Book Proposal for <i>Ethics and Professionalism in Forensic Anthropology</i> (Passalacqua and Pilloud 2018) for Elsevier/Academic Press.	
2016	Reviewer, Book Proposal for A <i>Laboratory Manual for Forensic Anthropology</i> (Christens et al. 2018) for Elsevier/Academic Press.	
2015-	Ad hoc Reviewer, American Journal of Physical Anthropology, HOMO, International Journal of Osteoarchaeology, Forensic Anthropology, Plains Archaeology, Journal of Comparative Human Biology, Human Biology, Journal of Forensic Sciences, Australian Journal of Forensic Sciences	
Organizer		
2019	Organizer of <i>Forensic Anthropology and Fatal Fire Recoveries</i> all-day Workshop at the 48 th Annual Meeting of the Midwestern Associate of Forensic Scientists, Louisville, KY, October 18.	
2019	Co-organizer of Oral <i>KidStats: Improving the Subadult Biological Profile</i> Workshop at the 72 nd Meeting of the American Academy of Forensic Sciences, Anaheim, CA, February 17-22.	
2016	Co-organizer of the symposium <i>Forensic Applications of Human Skeletal Biology and Variation</i> at the 85 th annual meeting of the American Association of Physical Anthropologists, Atlanta, GA. April 12-16.	
2009	Organizer of the 25 th annual meeting of the North East Forensic Anthropology Association held at the Mercyhurst Archaeological Institute, Department of Applied Forensic Sciences, Mercyhurst College, Erie, PA. October 30-November 1.	
2008	Co-Organizer of the symposium "Taphonomic Influences Affecting Skulls Found in a Modern Forensic Setting," at the 36 th annual meeting of the Canadian Association for Physical Anthropology, Hamilton, ON. November 5-8.	

UNIVERSITY SERVICE (Wasburn Only)

University

2020-	Faculty Senator and on	Faculty Affairs Faculty	Senate Subcommittee (SU20-)

- 2020 Covid-19 AY20-21 Planning Committee: Internship, Field Practicum, etc. Group (SU20)
- 2017-2019 Interdisciplinary Studies Committee
- 2017-2018 Faculty Co-Advisor, Forensic Sciences Club
- 2016-2020 Liaison between WU Forensic Anthropology Program and the Kansas Bureau of Investigations

College

- 2017-2020 College Faculty Council
- 2017-2020 College Faculty Council Resources Sub-Committee

Department

Department	
2021	Chair, Third Year Review Department Committee for Miller
2021	Member, Third Year Review Committee for Ibanez
2021	Facilitator CAS Faculty Success Group (Topic: 4 year plan & major's map/Spring)
2020-2021	Chair, BS Program Revision Committee (FA20-SP21)
2020-	Teaching Evaluator: Ibanez (FA20), Miller (SP21), Maxwell (SP21)
2020	Member CAS Success Group (Topic: Navigate/Spring and Antiracism Curricula and
	Pedagogy/Fall)
2019-2020	WU Hostile Terrain 2020 Committee Member
2019	Service Subcommittee member, SOAN Tenure/Promotion Document Revisions
2018	Search Committee Member, lecturer in biocultural anthropology position (Fall)
2017-2019	Administrator, Washburn Sociology and Anthropology Facebook page
2017-	Administrator, Washburn University Forensic Anthropology Recovery Unit Facebook page
2017-	Program Assessment Liaison, B.S. Anthropology (Forensics Concentration)
2017	Member CAS Faculty Success Group (Topic: General Education Rubrics/Spring)
2017-2018	Search Chair, Tenure-track cultural anthropology position search
2016-2017	Committee Chair, B.S. Anthropology (Forensics Concentration) program revisions
2016-2019	Faculty Advisor, Sociology and Anthropology Club (AY2016-2017, AY2018-2019)
2017-	Curriculum Revisions, B.S. Anthropology (Forensics Concentration)

VOLUNTEER WORK & INTERNSHIPS

2020	Exam Validation Committee DAL Volunteer, American Board of Forensic Anthropology
	Examination Committee for national board certification
2016-	Pro bono Forensic Casework
2016	Volunteer, Women in Science Day. Washburn University. October.
2014	Volunteer, Northwest Tri-County Intermediate Unit's GO College Program. Mercyhurst
	University, Erie, PA, Department of Applied Forensic Sciences.
	Main Duties: Introduce local high school students to zooarchaeology and human osteology
	with hands-on lab instruction.
2012	Volunteer, Verna J. Kirkness Science Education Program. University of Manitoba,
	Winnipeg, MB, Department of Anthropology.
	Main Duties: Introduce high school students from First Nation, Metis and Inuit
	communities to the field of forensic anthropology with presentation of real cases and
	hands-on lab instruction.
2009-2010	Volunteer, Upward Bound Math and Science Residential Summer Program. Indiana
	University of Pennsylvania, Indiana, PA.

Main Duties: Laboratory exercise development and presentation to introduce middle and high school students to the fields of forensic and biological anthropology.

- 2009, 2015 **Volunteer, Camp Cadet of Somerset County, PA**. Pennsylvania State Police, Boswell, PA. Main Duties: Laboratory exercise instruction of simulated crime scene to introduce middle and high school students to the fields of criminalistics and forensic anthropology.
- 2006 Volunteer, Bones: An Exhibit Inside You. Academy of Natural Sciences, Philadelphia, PA. Main Duties: Instructing the public about all aspects of bone biology, including: structure, composition, nutrition, cultural uses, and medical aspects.
- Internship as a Forensic Investigator. Office of the Chief Medical Examiner, Allegheny County, Pittsburgh, PA.
 Main Duties: Performed all tasks of the office, under the supervision of staffed forensic

investigators, including: death calls, collection of the deceased and associated evidence, case investigation and documentation.

MERITS, AWARDS, and SCHOLARSHIPS

2020	Washburn Women's Venture Partnership Grant (\$4050, subadult osteology collection)		
2017	Washburn Women's Venture Partnership Grant (\$4800, adult osteology collection)		
2017	Washburn C-TEL Curriculum Development Grant (\$1,692 skeletal fragment collection)		
2017	Washburn Kathleen Brown Fund (\$200, ACB badges for student access to KBI)		
2014	Forensic Science Foundation Student Travel Grant (\$1500)		
2012	University of Manitoba Anthropology Students' Association, Conference		
	Scholarship Award (\$125)		
2012-2013	University of Manitoba Faculty of Arts, Graduate Student Conference Travel Award (\$135)		
2012-2013	Forensic Sciences Foundation Student Affiliate Scholarship (\$125)		
2011-2013	University of Manitoba Graduate Student Association, Graduate Student Conference Travel Award (\$350)		
2011	William S. Pollitzer Essay Competition Travel Award presented by the American		
	Association of Physical Anthropologists (\$500)		
2010-2014	University of Manitoba Graduate Fellowship (\$64,000 total / 4yrs)		
2010-2014	Manitoba Graduate Scholarship (\$30,000 total / 4yrs)		
2010	University of Manitoba International Graduate Student Entrance Scholarship (\$4,000)		
2009	Diversity Grant for Biological Anthropology presented by Mercyhurst College (\$700)		
2009	Sister Eustace Taylor Award in Anthropology presented by Mercyhurst College		
2007-2009	Mercyhurst University Graduate Assistantship (\$7,500 per year + tuition)		
2007	Representative of the United States in the International Scholar Laureate Program		
	Delegation on Anthropology & Archaeology in China		
2005-2006	Dean's Honor List Summa Cum Laude (Spring 2005, Fall 2005, Spring 2006)		
	4.0 Honor (Spring 2005, Spring 2006)		
2002-2005	Dean's Honor List Cum Laude (Fall 2002, Spring 2004)		
Dean's Honor	List Magna Cum Laude (Fall 2003, Spring 2004, Summer 2005)		

MEMBERSHIPS

Member, American Academy of Forensic Sciences (Student 2008-2014, Associate Member 2015-2018,

Member 2019-)

Member, American Association of Physical Anthropologists (Student 2008-2014; Member 2015-) Student Member, North East Forensic Anthropology Association (2009-2014) Specialized Medical Assistance Response Team, Erie County Department of Health (2009) Student Member, Canadian Association for Physical Anthropology (2007-2008, 2010-2014) Golden Key International Honor Society (2002-2006) National Society of Collegiate Scholars (2002-2006) Phi Sigma Theta National Honor Society (2002-2006) Sigma Alpha Lambda National Leadership and Honors Organization (2002-2006)

RELEVANT SKLLS

Language Spanish: reading, basic conversational level. Software/Technology

> Microsoft Office Suite, Database Software, R Statistical Package, FORDISC 3.0, Adobe Photoshop and InDesign CS3&5, CoreIDRAW, GGobi, ESRI ArcGIS 9 & 10 (limited), 3Skull, Trimble R8 (TerraSync and Survey Pro GPS software), IBM SPSS, Nikon Total Station (Evidence Recorder 5 software), Microscribe Digitizer, Nikon D700 Digital Camera (and other digital photography), Hydra Series II Data Logger and Thermocouple Wire Technology, Faxitron Xray, Inkscape, Materalise MIMICS Medical Imaging Software, Vitrea Medical Imaging Software, NextEngine 3D Laser Scanner.

REFERENCES

1) Dr. Dennis Dirkmaat, D-ABFA

Director Forensic Anthropology 501 East 38th Street, Zurn 119A Erie, PA 16546 Telephone: (814) 824-2105 Email: ddirkmaat@mercyhurst.edu

2) Dr. Mary Sundal

Chair, Soc/Anthro Department Washburn University Henderson 218 Topeka, KS 66621 Telephone: (785) 670-1608 E-mail: mary.sundal@washburn.edu

3) Dr. Robert Hoppa

Associate Dean for Research Department of Anthropology University of Manitoba 432 Fletcher Argue Building Winnipeg, MB R3T 5V5 Telephone: (204) 474- 9912 E-mail: hoppard@cc.umanitoba.ca