Timothy P. Gocha

EDUCATION

- 2014 Ph.D. in Anthropology, Graduate Minor in Anatomy The Ohio State University
 - O Dissertation entitled: Mapping Spatial Patterns in Cortical Remodeling from the Femoral Midshaft using Geographic Information Systems Software: Implications for Age Estimation from Adult Human Skeletal Remains
 - o Committee: Dr. Paul Sciulli (co-advisor), Dr. Sam Stout (co-advisor), Dr. Debbie Guatelli-Steinberg, Dr. Amanda Agnew
- 2008 M.Sc. in Human Osteology and Paleopathology, with Distinction University of Bradford, UK
 - O Dissertation entitled: Tooth Cementum Annulations for Estimation of Age at Death in Cremated Remains
 - o Advisor: Dr. Holger Schutkowski
- 2006 B.A. in Anthropology, *Magna Cum Laude* with Honors The Ohio State University

ACADEMIC APPOINTMENTS

- Assistant Professor Department of Anthropology, University of Nevada, Las Vegas Aug. 2017 – Present
- Postdoctoral Research Fellow Forensic Anthropology Center, Texas State University
 Mar. 2016 July 2017
 - <u>Responsibilities</u>: Assist in managing and coordinating Operation Identification, which aims to facilitate the identification and repatriation of unidentified human remains found along or in close proximity to the Texas/Mexico border through outreach to the local communities, scientific analysis, and collaboration with governmental and nongovernmental organizations
- Consulting Research Associate The Ohio State University Skeletal Biology Research Lab Mar. 2016 Feb. 2017
 - Responsibilities: Consult on hard tissue histology projects in skeletal biology and biomechanics, with the goal to discover relationships between biological systems and injuries.

- **Postdoctoral Researcher & Lab Manager** The Ohio State University Skeletal Biology Research Lab, Division of Anatomy Jan. 2015 Mar. 2016
 - <u>Responsibilities</u>: Manage and coordinate ongoing undergraduate and graduate student research operations in hard tissue histology. Lead projects in skeletal biology and biomechanics, with the goal to discover relationships between biological systems and injuries. Independently plan and conduct advanced and complex research experiments; collect, analyze, evaluate, and interpret data in the laboratory setting; compile and summarize data for publications and presentations; write and prepare manuscripts, abstracts, and research reports for publication and presentation; assist with grant application preparation with the goal of obtaining extramural support.

PUBLICATIONS & CHAPTERS IN EDITED VOLUMES

- **T.P. Gocha**, M.K. Spradley, R.M. Strand *In Press* Bodies in Limbo: Issues in Identification and Repatriation of Migrant Remains in South Texas. In *Sociopolitics of Migrant Death and Repatriation: Perspectives from Forensic Science*. Eds. K.E. Latham and A.J. O'Daniel
- **T.P. Gocha**, A.G. Robling, S.D. Stout *In Press* Histomorphometry of Human Cortical Bone: Applications to Age Estimation. In *Biological Anthropology of the Human Skeleton*, 3rd edn. Eds. M.A. Katzenberg and A.L. Grauer. New York: John Wiley & Sons
- 2016 J.T. Hefner, B.F. Spatola, N.V. Passalacqua, **T.P. Gocha** Beyond Taphonomy: Exploring Craniometric Variation Among Anatomical Material. *Journal of Forensic Sciences* 61: 1440-1449.
- 2016 S.D. Stout, **T.P. Gocha**, M.E. Cole, A.M. Agnew Bone Histology. In *Oxford Bibliographies in Anthropology*. Ed. John L. Jackson, Jr. New York: Oxford University Press. Published online 28 September 2016; doi: 10.1093/obo/9780199766567-0148.
- 2016 **T.P. Gocha** and A.M. Agnew Spatial Variation in Osteon Population Density at the Human Femoral Midshaft: Histomorphometric Adaptations to Habitual Load Environment. *Journal of Anatomy* 228: 733-745.
- 2015 **T.P. Gocha**, M.E.Ingvoldstad, A. Kolatorowicz, M-T.J.Cosgriff-Hernandez, P.W. Sciulli. Testing the Applicability of Six Macroscopic Skeletal Aging Techniques on a Modern Southeast Asian Sample. *Forensic Science International* 249: 318.e1-318.e7.

- 2013 **T.P. Gocha**, G. Vercellotti, L.E. McCormick, T.L. Van Deest. Formulae for estimating skeletal height in modern Southeast Asians. *Journal of Forensic Sciences* 58(5): 1279-1283.
- 2013 **T.P. Gocha** and H.Schutkowski. Tooth Cementum Annulation for Estimation of Age at Death in Thermally Altered Remains. *Journal of Forensic Sciences* 58(S1): S151-155.
- 2012 D.C. Rose, A.M. Agnew, **T.P. Gocha**, S.D. Stout, and J.S. Field. The use of Geographical Information Systems Software for the Spatial Analysis of Bone Microstructure. *American Journal of Physical Anthropology* 148: 648-654.

ACADEMIC POSTERS AND PRESENTATIONS

- **T.P. Gocha**, M.K. Spradley, R.M. Strand (2017) Bodies in Limbo: Issues in Identification and Repatriation of Migrant Remains in South Texas. *Podium presentation at the 37th Annual Mountain, Desert, and Coastal Forensic Anthropologists Conference (Boulder City, NV)*
- **T.P. Gocha**, M.M. Murach, A.M. Agnew (2017) Cortical Thickness as a Supplement to Osteon Population Density to Estimate Age at Death. *Poster presentation to be given at the 86th Annual Meeting of the American Association of Physical Anthropologists (New Orleans, LA)*
- C.P. McDaneld, **T.P. Gocha**, C.C. Siegert, R.M. Strand, L.E. Baker, M.K. Spradley (2017) Understanding the Degree of Craniometric Variation in South Texas Migrants. *Poster presentation to be given at the 86th Annual Meeting of the American Association of Physical Anthropologists (New Orleans, LA)*
- A.M. Agnew, E. Misicka, M.M. Murach, V.M. Dominguez, **T.P. Gocha** (2017) Fracture resistance in the Human Rib: Contributions of Cross-Sectional Geometry. *Poster presentation to be given at the 86th Annual Meeting of the American Association of Physical Anthropologists (New Orleans, LA)*
- M.E. Ingvoldstad, **T.P. Gocha**, C.M. Crowder, V.M. Dominguez (2017) Examining the Effect of ROI Size on the Ability to Accurately Estimate Age at Death from Osteon Population Density. *Podium presentation to be given at the 69th Annual Scientific Meeting of the American Academy of Forensic Sciences (New Orleans, LA)*
- **T.P. Gocha**, M.K. Spradley, R.M. Strand, B.E. Anderson, A. Lusiardo (2017) The role of the Anthropologist in the Identification and Repatriation of Deceased Migrants along the US-Mexico Border. *Podium presentation to be given at the 69th Annual Scientific Meeting of the American Academy of Forensic Sciences (New Orleans, LA)*

- C.M. Kovic, M. Doretti, M.K. Spradley, E. Canales, M. Miranker, R. Daniell, R.M. Strand, T.P. Gocha, R.C. Reineke, C. Halstead (2017) The Forensic Border Coalition (FBC): Collaborations in Forensic Sciences, Human Rights, and Public Policy. Podium presentation to be given at the 69th Annual Scientific Meeting of the American Academy of Forensic Sciences (New Orleans, LA)
- M.K. Spradley, M. Doretti, C.M. Kovic, E. Canales, M. Miranker, R. Daniell, **T.P. Gocha**, R.M. Strand, A. Giordano (2017). Searching for the Unidentified in South Texas: The Forensic Border Coalition (FBC) Cemetery Survey Project. *Podium presentation to be given at the 69th Annual Scientific Meeting of the American Academy of Forensic Sciences (New Orleans, LA)*
- C.C. Siegert, **T.P. Gocha**, M.K. Spradley, C.P. McDaneld (2016) Operation Identification: An Effort Towards Identifying Migrant Remains in South Texas. *Poster presented at the 10th Annual Meeting of the Texas Association of Biological Anthropologists (Austin,TX)*
- **T.P. Gocha** (2016) The Hot Air Balloon Crash in Lockhart, TX: Anthropological Contributions to Odonatological Identification. *Podium presentation at the 6th Annual Meeting of the Forests, Lakes, and Grasslands (FLAG) Forensic Anthropologists (Higgins Lake, MI)*
- **T.P. Gocha**, D.L. Messer (2016) The Bodies in Innis Park: Archaeological Recovery and Skeletal Trauma Analysis. *Podium presentation at the 6th Annual Meeting of the Forests, Lakes, and Grasslands (FLAG) Forensic Anthropologists (Higgins Lake, MI)*
- D.L. Messer, **T.P. Gocha** (2016) Bagged & Scattered: Interpreting the Depositional History of Human Skeletal Remains. *Podium presentation at the 6th Annual Meeting of the Forests, Lakes, and Grasslands (FLAG) Forensic Anthropologists (Higgins Lake, MI)*
- **T.P. Gocha,** V.M. Dominguez, A.M. Agnew (2016) Spatial Patterning (or lack thereof) in Osteon Population Density in the Human Rib. *Poster presented at the 85th Annual Meeting of the American Association of Physical Anthropologists (Atlanta, GA)*
- A.R. Dzubak, **T.P. Gocha**, A. Kolatorowicz (2016) Observer error in digitizing endobasicranial coordinate landmarks. *Poster presented at the 85th Annual Meeting of the American Association of Physical Anthropologists (Atlanta, GA)*
- V.M. Dominguez, **T.P. Gocha**, A.M. Agnew (2016) Diffuse endosteal bone formation resulting from metastatic breast cancer: a histological case study. *Poster at the 43rd Annual Paleopathology Association Meeting (Atlanta, GA)*
- **T.P. Gocha,** S.D. Stout, A.M. Agnew (2016) Examining the Accuracy of Age Estimates from New Histological Sampling Strategies at the Femoral Midshaft. *Podium presentation given at the 68th Annual Scientific Meeting of the American Academy of Forensic Sciences (Las Vegas, NV)*

- **T.P. Gocha** (2015) Histology for Accurately Estimating Age at Death in Adult Human Skeletal Remains. Podium presentation at the 5th Annual Meeting of the Forests, Lakes, and Grasslands (FLAG) Forensic Anthropologists (Higgins Lake, MI)
- **T.P. Gocha** and A.M. Agnew (2015) Osteon Population Density is Highest in the Anterolateral Femur of Humans: An Adaptation to Loading? *Poster presented at the 45th International Sun Valley Workshop on Musculoskeletal Biology (Sun Valley, ID)*
- **T.P. Gocha** and A.M. Agnew (2015) Regional Variation in Osteon Size at the Femoral Midshaft. Poster presented at the 84th Annual Meeting of the American Association of Physical Anthropologists (St. Louis, MO)
- **T.P. Gocha** and J.R. Goliath (2014) Differential Decomposition of Human Remains in Central Ohio: A Case Study. Podium presentation at the 21st Annual Meeting of the Midwest Bioarchaeology and Forensic Anthropology Association (Allendale, MI)
- **T.P. Gocha** and A.M. Agnew (2014) Regional Variation in Osteon Population Density at the Femoral Midshaft Implications for the Asymptote. *Poster presented at the 83rd Annual Meeting of the American Association of Physical Anthropologists (Calgary, CA)*
- **T.P. Gocha** and A.M. Agnew (2014) Mapping Spatial Patterns in Cortical Bone Histology from the Femoral Midshaft using Geographic Information Systems Software. *Poster presented at the 66th Annual Meeting of the American Academy of Forensic Sciences (Seattle, WA)*
- **T.P. Gocha**, M.E. Ingvoldstad, M-T.J. Cosgriff-Hernandez, A. Kolatorowicz, P. Sciulli (2013) Testing the applicability of Macroscopic Skeletal Aging Techniques on a Modern Southeast Asian Sample. *Podium presentation at the 20th Annual Meeting of the Midwest Bioarchaeology & Forensic Anthropology Association (Columbus, OH)*
- **T.P.** Gocha, V.M. Dominguez, A.M. Agnew (2013) Human v. Non-human: An Anthropologist's Cross to Bear. Poster presented at the 20th Annual Meeting of the Midwest Bioarchaeology & Forensic Anthropology Association (Columbus, OH)
- M.E. Ingvoldstad, **T.P. Gocha**, M.C. Stewart and J.R. Goliath (2012) A Method for Standardization of Anatomical Axes and ROIs in Femoral Thin Sections of Unknown Orientations. *Poster presented at the 64th Annual Meeting of the American Academy of Forensic Sciences (Atlanta, GA)*
- D. Rose, **T.P. Gocha**, A.M. Agnew and S.D. Stout (2011) Defining patterns in human bone microstructure through the application of geographic information system (GIS) software. *Poster Presented at the 80th Annual Meeting of the American Association of Physical Anthropologists (Minneapolis, MN)*
- **T.P. Gocha** (2009) The Rings of Fire Tooth Cementum Annulation for Estimation of Age at Death in Cremated Remains. Podium Presentation at the 16th Annual Meeting of the Midwest Bioarchaeology & Forensic Anthropology Association (Indianapolis, IN)

• **T.P. Gocha** and H. Schutkowski (2009) The Rings of Fire – Tooth Cementum Annulation for Estimation of Age at Death in Cremated Remains. *Poster Presented at the 78th Annual Meeting of the American Association of Physical Anthropologists (Chicago, IL)*

FIELD EXPERIENCE AND FORENSIC CASE REPORTS

- Forensic Anthropology Center at Texas State/Operation Identification skeletal analyses of presumed migrants recovered near the U.S./Mexico border (biological profile and trauma analyses) of 50+ individuals (April 2016-July 2017)
- Forensic Anthropology Center at Texas State/Operation Identification search and recovery of human skeletal remains of suspected migrants in Brooks County, TX in conjunction with the Brooks County Sheriff's Office (November 2016)
- Forensic Anthropology Center at Texas State/Operation Identification search for human skeletal remains of suspected migrants in Brooks County, TX in conjunction with the Brooks County Sheriff's Office (September 2016)
- Forensic Anthropology Center at Texas State search for human skeletal remains in Austin, TX in conjunction with the Travis County Sheriff's Office (July 2016)
- Forensic Anthropology Case Team search, recovery, and analysis of human skeletal remains (biological profile and trauma analyses) for the Franklin County Coroner's Office and Columbus Police Department (December 2015)
- Forensic Anthropology Case Team laboratory analysis of human skeletal remains (determination of medicolegal significance) for the Delaware County (OH) Coroner's Office (July 2015)
- Forensic Anthropology Case Team search and recovery in Franklin County, OH in conjunction with the Columbus Police Department (April 2015)
- Forensic Anthropology Case Team search and recovery in Delaware County, OH in conjunction with the Delaware Police Department (April 2015)
- Forensic Anthropology Case Team search and recovery, trauma analysis on human skeletal remains for the Lorain Police Department and Lorain County Coroner (April 2015)
- Forensic Anthropology Case Team search and recovery, laboratory analysis, and report on human skeletal remains (biological profile constructed) for the Franklin County Coroner's Office (December 2014)
- Forensic Anthropology Case Team laboratory analysis and report on human skeletal remains (biological profile constructed) for the Franklin County Coroner's Office (October 2014)
- Forensic Anthropology Case Team laboratory analysis and report on human skeletal remains (biological profile constructed) for the Franklin County Coroner's Office (September 2014)

- Forensic Anthropology Case Team laboratory analysis and report on human skeletal remains (biological profile constructed and trauma interpretation) for the Franklin County Coroner's Office (May 2014). Required expert court testimony January 2016.
- Forensic Anthropology Case Team laboratory analysis and report on human skeletal remains (biological profile constructed) for the Franklin County Coroner's Office (March 2014)
- Forensic Anthropology Case Team search and recovery in Columbus, OH in conjunction with the Columbus Police Department, under the direction of Dr. Julie R. Angel (December 2013)
- Forensic Anthropology Case Team laboratory analysis and report on human skeletal remains (biological profile constructed) for the Franklin County Coroner's Office (July 2013)
- Forensic Anthropology Case Team laboratory analysis and report on unknown skeletal remains (human v. non-human) for the Franklin Country Coroner's Office (April 2013)
- Forensic Anthropology Case Team recovery, laboratory analysis, and report on human skeletal remains (biological profile constructed) for Franklin County Coroner's Office (April 2013)
- Forensic Anthropology Case Team search for War of 1812 burials in Putnam County, OH in conjunction with the Ohio War of 1812 Bicentennial Commission (September 2012)
- Forensic Anthropology Case Team search and recovery, laboratory analysis, and report on human skeletal remains (biological profile constructed) in Clark County, OH for the Clark County Sheriff's Department (April 2012)
- Joint POW/MIA Accounting Command search and recovery (CIL 2010-196) in Yen Bai Province, Socialist Republic of Vietnam, under the direction of Ms. Carrie A. Brown (October-November 2010)
- Joint POW/MIA Account Command recovery (CIL 2010-160C) in Manoa, HI in conjunction with the Honolulu Police Department, under the direction of Mr. Brad Sturm (September 2010)
- Forensic Anthropology Case Team search and recovery in Franklin County, OH in conjunction with the Westerville Police Department, under the direction of Dr. Julie R. Angel (April-May 2010)
- Forensic Anthropology Case Team examination of skeletal remains (determination of medicolegal significance) for the Marion County Coroner's office (October 2009)
- Forensic Anthropology Case Team search and recovery in Allen County, OH in conjunction with the Lima Police Department, under the direction of Dr. Sam Stout (June 2006)
- Forensic Anthropology Case Team search and recovery in Belmont County, OH in conjunction with the Belmont County Sheriff's Department, under the direction of Dr. Sam Stout (September 2006)

• Osteological and Archaeological Field Assistant, aiding in the recovery of Paleo-Indian skeletal remains and artifacts in Circleville, OH, under the direction of Dr. Paul W. Sciulli (June 2006-2014)

COMPETITIVE FELLOWSHIPS, AWARDS, AND GRANTS

- American Academy of Forensic Sciences Humanitarian and Human Rights Resource Center Grant (2017) "Operation Identification: Exhuming the Unidentified" with Dr. Kate Spradley (Co-PI), \$19,512.
- Outstanding Ph.D. Dissertation Award (2015) Awarded by The Ohio State University Department of Anthropology for the 2014-2015 academic year.
- American Academy of Forensic Sciences Student Affiliate Scholarship (2014) Granted by the Forensic Sciences Foundation, Inc. for the accepted abstract entitled "Mapping Spatial Patterns in Cortical Bone Histology from the Femoral Midshaft Using Geographic Information Systems Software." Covered meeting registration fees for 2014 AAFS annual meeting.
- **Visiting Scientist in Forensic Anthropology** (May 2013) Offered by the Forensic Anthropology Unit at the New York City Office of Chief Medical Examiner. Hands-on training and experience in forensic operations in an urban medico-legal setting.
- American Academy of Forensic Sciences Student Affiliate Scholarship (2013) Granted by the Forensic Sciences Foundation, Inc. for the submitted abstract entitled "A Test of Six Skeletal Aging Methods on a Modern Southeast Asian Sample." Covered meeting registration fees for 2013 AAFS annual meeting.
- Career Development Grant (Summer 2012) Awarded by Council of Graduate Students at The Ohio State University for travel to the Field School in Medieval Archaeology and Bioarchaeology in Badia Pozzeveri, Italy, \$250.
- Larsen Research and Travel Award Recipient (2011-2012) Awarded by the Graduate Studies Committee for the Department of Anthropology at Ohio State. \$1000, declined.
- **Daniel T. Hughes Memorial Fund Recipient** (2010-2011) Travel award through the Ohio State University Department of Anthropology. Used for travel to the 80th annual meeting of the American Association of Physical Anthropologists, \$300
- Forensic Science Academy Fellowship (August-December 2010) Appointment at the Joint POW/MIA Accounting Command's Central Identification Laboratory. Intensive training in forensically related anthropological techniques used in identifying remains of U.S. Soldiers recovered from past military conflicts.

INVITED LECTURES

- "Operation Identification: A Holistic Anthropological Approach to the Humanitarian Crisis on the U.S.-Mexico Border" given to Applied Anthropology at University of Texas, San Antonio (Dr. Jill Fleuriet, instructor, Spring 2017).
- "Taphonomy in the Midwest: Case Studies from Ohio" given to the students of the Forensic Taphonomy short course offered by the Forensic Anthropology Center at Texas State University (Summer 2016).
- "Forensic Anthropology: Methods and Theory" given to the Friends of Student Anatomists group at The Ohio State University (Spring 2016).
- "Age Estimation in Forensic Anthropology" given to Anthropology 5644, Forensic Anthropology (Dr. Sam Stout, instructor; Spring 2016)
- "Forensic Archaeology: Methods and Theory" given to Anthropology 3305, Introduction to Forensic Anthropology (Dr. Sam Stout, instructor; Autumn 2014)
- "Forensic Osteology, The Biological Profile, Taphonomy, and Postmortem Interval" given to the Ohio Peace Officer Training Academy's Forensic Aspects of Death course (Summer 2014, Summer 2015)
- "Tooth Cementum Annulations for Estimation of Age-at-Death in Human Skeletal Remains: Concepts and Advances" given to Anthropology 5609, Dental Anthropology (Dr. Debbie Guatelli-Steinberg, instructor; Spring 2013).
- "The Dentition: Development, Histomorphology, and use in Bioarchaeology and Forensic Anthropology" given to Anthropology 5608, Human Skeletal Biology (Dr. Sam Stout, instructor; Autumn 2012)

VOLUNTEER ACTIVITIES

- Forensic Anthropology Case Team The Ohio State University (Team Member 2006-2010; Team Leader 2010-2015; Co-Director 2015-2016)
- Graduate Student Panel Member Committee on Academic Misconduct at The Ohio State University (2010-2012)
- Graduate Student Representative Student Advisory Board to the Dean of the College of Arts and Sciences (2011-2012)
- Treasurer Graduate Student Anthropology Association (2009-2011)
- Anthropology Delegate Council of Graduate Students (2010-2011)
- Executive Committee Member, Public Relations Committee Chair Council of Graduate Students (2009-2010)

• Master's Course Representative for all Archaeology Master's students to the Staff Student Liaison Committee – University of Bradford (2007-2008)

PROFESSIONAL AFFILIATIONS

- American Academy of Forensic Sciences, Member
- American Anthropological Association, Professional Member
- American Association of Physical Anthropologist, Member
- British Association for Biological Anthropology and Osteoarchaeology, Member
- Dental Anthropology Association, Member
- National Speleological Society, Member
- Society of Forensic Anthropologists, Member

PROFESSIONAL REFERENCES

Available upon request.