LAUREN A. MECKEL

Postdoctoral Fellow

Center for Functional Anatomy and Evolution Johns Hopkins School of Medicine <u>Lmeckel2@jh.edu</u> 832-515-3925

EDUCATION

PhD, Anatomy

University of Otago, New Zealand

Advisor: Dr. Jonny Geber and Prof. Hallie Buckley

Structural Violence in Éire: The Bone Histology of Victims from the Great Famine

(Kilkenny, Ireland 1845-1852)

August 2021

MA, Anthropology

Texas State University – San Marcos Committee Chair: Dr. Daniel J. Wescott

The Utility of Dental Cementum Increment Analysis for Estimating Season of Death in Naturally

Decomposed Skeletons

August 2016

BS, Criminal Justice

Texas State University – San Marcos Magna Cum Laude May 2011

AWARDS AND GRANTS

- Elizabeth Jean Trotter Grant, (\$2,000)
- Fulbright Study/Research Award Semi-Finalist, 2019
- University of Otago Division of Health Sciences Travel Grant (\$2,000)
- Royal Irish Academy Archaeology Research Grant, 2018 (\$2,260)
- University of Otago Graduate Scholarship, 2017 (\$110,000)
- Awarded Outstanding Graduate Student in Anthropology at Texas State, 2016
- Forensic Science Foundation Student Travel Grant, 2016 (\$1,500)
- Forensic Science Foundation Student Scholarship Award, 2016 (\$100)
- Texas State University Thesis Research Fellowship, 2016 (\$842)
- Graduate College Travel Fund, 2016 (\$800)
- Grady Early Fellowship, 2015 (\$2,212)
- Texas State Graduate Collage Scholarship, 2015 (\$1,000)

RESEARCH AND LABORATORY EMPLOYMENT

2021 - Present

Postdoctoral Fellow. *Center for Functional Anatomy and Evolution at Johns Hopkins School of Medicine*

2020 - 2021

Histology Specialist. Texas State University

2017 - 2019

Anatomy Lab Demonstrator. University of Otago, New Zealand

2017

Program Coordinator. Texas State University

2016 - 2017

Forensic Anthropologist. Equipo Argentino de Antropología Forense (Argentine Forensic Anthropology Team, EAAF)

2013-2016

Research Assistant. Texas State University

TEACHING EXPERIENCE

2021

The Johns Hopkins School of Medicine

Scientific Foundations of Medicine - Human Anatomy Lab (medical students)

2018-2019

Department of Anatomy, University of Otago, New Zealand

Biological Anthropology Demonstrator - 3rd level (undergraduate)

Biological Anthropology Demonstrator - 2nd level (undergraduate)

2013-2018

Forensic Anthropology Center at Texas State University

Human Remains Recovery Course for High School Students

Identifying Human vs Non-human Bone

Human Remains Recovery

Texas Engineering Extension Service Skeletal Death Investigation

Forensic Anthropology Field Methods

K9 Human Remains Detection

Two-Day Human Remains Recovery

PROFESSIONAL PRESENTATIONS

- **Meckel LA**, Buckley H, Geber J. (2021). Incorporating histological methods with stable isotopes and paleopathology to examine the effects of starvation in Kilkenny, Ireland during the Great Famine (1845-52). *Proceedings of the North American Paleopathology Association* 47th Annual Meeting.
- **Meckel LA**, Buckley H, Geber J. (2019). Incorporating Histological Methods to Examine the Response to Famine in Mid-19th Century Ireland. *Proceedings of the American Association of Physical Anthropologists* 88th Annual Meeting, Cleveland, OH.
- **Meckel LA,** Buckley HR, Geber J. (2018). Bone Histology of the Great Famine. *Proceedings of the 22nd European Meeting of the Paleopathology Association*, Zagreb, Croatia.

- Meckel LA, Wescott DJ. (2017) The Utility of Dental Cementum Increment Analysis for Estimating Season of Death in Naturally Decomposed Skeletons. *Proceedings of the American* Association of Physical Anthropologists 86th Annual Meeting, New Orleans, LA. "Back to the Root" Invited Poster Symposium.
- Goots A, Meckel LA, Gleiber D, Ayala Bas A. (2017) Skeletal Stress Markers in Undocumented Border Crossers: A Comparative Approach. *Proceedings of the American Association of Physical Anthropologists* 86th Annual Meeting, New Orleans, LA.
- Siegert CC, Koenig CW, Castaneda AM, Black SL, Hamilton MD, Meckel LA, Gleiber DS, and Mavroudas SR. (2017) Horse Trail Shelter (41VV166): Understanding Subsistence and Lifeways in the Lower Pecos Canyonlands of Texas during the Late Prehistoric using a Novel SfM Approach to Osteological Data Collection. *Proceedings of the American Association of Physical Anthropologists* 86th Annual Meeting, New Orleans, LA.
- Gleiber D, Meckel LA, Siegert C, McDaneld C, Pyle J, Wescott DJ. (2017) A New Method (ADS) for Quantifying Decomposition. *Proceedings of the American Academy of Forensic Sciences*. American Academy of Forensic Sciences, 69th Annual Meeting, New Orleans, LA.
- Bytheway JA, Miller N, Steadman D, Sauerwein K, Wescott DJ, Meckel LA, Clemmons CMJ, Gleiber DS, McDaneld CP. (2017) Validation of TBS/ADD Equation at 100, 300, 500, and 1000 ADD on 30 Human Subjects with Known PMI from Three Human Decomposition Facilities. *Proceedings of the American Academy of Forensic Sciences* American Academy of Forensic Sciences, 69th Annual Meeting, New Orleans, LA.
- Meckel LA, Mavroudas S, Dominguez V, Spradley K. (2016) Bone Histology Sampling Sites for the Identification of Undocumented Border Crossers along the United States/Mexico Border.
 Proceedings of the American Academy of Forensic Sciences 22:154. American Academy of Forensic Sciences, 68th Annual Meeting, Las Vegas, NV.
- Wescott D, Meckel LA, McDaneld C, Hamilton M, Mavroudas S, Spradley K. (2016) White-Tailed Deer as a Taphonomic Agent: Photographic Documentation of White-Tailed Deer Gnawing on Human Bone. *Proceedings of the American Academy of Forensic Sciences* 22:109. American Academy of Forensic Sciences, 68th Annual Meeting, Las Vegas, NV.
- Meckel LA, Mavroudas S, Dominguez V, Spradley K. (2015) Bone Histology Sampling Sites for the Identification of Undocumented Border Crossers along the United States/Mexico Border. International Graduate Research Conference, Texas State University, San Marcos, TX.

PROFESSIONAL WORKS

- Meckel LA, McDaneld C, Wescott D. (2017) White-Tailed Deer as a Taphonomic Agent: Photographic Documentation of White-Tailed Deer Gnawing on Human Bone. Journal of Forensic Sciences. doi: 10.1111/1556-4029.13514
- Bytheway J, Wescott DJ, Steadman DW, Miller N, Sauerwein K, Clemmons CMJ, Gleiber DS, McDaneld CP, Meckel LA (2018) Validation of the Total Body Score/Accumulated Degree Day Model at Three Human Decomposition Facilities. Journal of Forensic Anthropology.
- In Progress: **Meckel LA**, Geber J, Beaumont J. (2021) Incorporating Histological Methods to Examine the Impact of Pellagra in Mid-19th Century Ireland. To be submitted to the American Journal of Physical Anthropologists.

SERVICE AND INVITED LECTURES

2021

Lecturer. University of Edinburgh, Scotland. 2020-2021

Speaker. Lone Star College Academy for Lifelong Learning. 2021.

2017-2018

Speaker. International Science Festival: Two Minute Talks. Dunedin, New Zealand.

Guest. Community Radio Kilkenny, Kilkenny City, Ireland.

Speaker. National Heritage Week, Kilkenny City, Ireland.

Anatomy Lab Safety Video. University of Otago, Department of Anatomy.

Assistant. Army CID Death Scene Training. San Marcos, Texas.

Educator. Central Texas Girl Scouts. Austin, Texas.

2016

Equipment Trainer. Bone Histology Equipment for the National Museum of Health and Medicine. Silver Spring, MD.

"Be a Bobcat" Anthropology representative for the Office of University Marketing at Texas State University.

Speaker. Forensic Anthropology Lecture- Canyon High School Forensic Science class.

Anthropology Graduate Student Representative. Texas State University Graduate and Professional School Fair.

Speaker. Forensic Anthropology Lecture- Seguin High School Anatomy class.

Forensic Anthropology Representative. San Marcos High School STEM Fair.

Graduate Student Representative. Department of Anthropology B-roll shoot for Texas State University Board of Regents for the purpose of obtaining a PhD program in Anthropology.

2015

Speaker. Forensic Anthropology Lecture- Thinkery 21 Museum's Adults Only Science Series. Austin, TX. Guest Lecturer. Religion and Film Philosophy, Texas State University

Speaker. Forensic Anthropology Lecture- Round Rock Police Department Citizen's Academy. Round Rock, TX.

2014

Speaker and Tour Guide. Visiting Researchers from the Department of History at Texas State University. Speaker. Texas State University Criminal Justice Honors Society.

Speaker. Cedar Ridge High School, Forensic Science classes.

2011-2012

Speaker. Crime Scene Specialist Speaker. 2011-2012. Austin area high schools

Instructor. Crime Scene Analysis 2011-2012. Austin area high school forensic science

TECHNICAL CASE REPORTS

- **Meckel LA.** 2020- On going. Histological Analysis of ribs for age-at-death estimation of unknown migrants. Reports submitted to Dr. Kathryn Spradley, Texas State University, San Marcos, TX
- Meckel LA. 2019. Histological Analysis of bone for human vs. non-human analysis from Xo'Janqo, Uzbekistan. Report submitted to Dr. Rebecca Kinaston, University of Otago, New Zealand.

- Wescott DJ, Meckel LA. 2017. Examination of photos and documents. Report submitted to George Papmilhail, Northridge, West, Australia.
- Wescott DJ, **Meckel LA**, Garza S, Helgeson K. 2017. Analysis of burned remains. Report submitted to Ranger Reid Rackley, Rio Grande City, TX.
- **Meckel LA.** 2017. Histological DCI Analysis of 41VV166- Horse Trail canine for age-at-death and season-at-death estimation. Report submitted to Courtney C. Siegert, Texas State University
- Meckel LA, Mavroudas S. 2016. Histological Analysis of bone for human vs non-human determination. Report submitted to Dr. Eric Bartelink, Chico State University. Chico, CA.
- Meckel LA, Mavroudas S. 2016. Histological analysis of bone for human vs non-human determination. Report submitted to Environmental Services, Inc. Waco, TX.
- **Meckel LA.** 2016. Histological analysis of bone from a human remains scatter for human vs non-human analysis. Report submitted to Texas Rangers, Marion, TX.
- Wescott DJ, Ayala Bas A, Gleiber D, Goots A, McDaneld C, Meckel L, Pyle J, Siegert C. 2015.
 Analysis of remains. Report submitted to Gary Williams and family, Sayre, OK.
- Wescott DJ, Gleiber D, McDaneld C, Meckel L, Siegert C. 2015. Anthropological analysis of Corey Wood's skeletal remains. Report submitted to Darci Halloway and family, Lufkin, TX.

FORENSIC AND ARCHAEOLOGICAL FIELD Experience

- Otago Historic Cemeteries Early Settlers Excavation. April 2018. Androssan Street Cemetery,
 Lawrence, New Zealand. Primary Investigators: Hallie Buckley and Peter Petchey
- Oakwood Cemetery Excavation. Summer 2020. Austin, Texas. Supervisor: Brittany McClain
- Operation Identification and South Texas Human Rights Center search for unidentified migrants.
 January 2017. Rio Grande City Cemetery, Rio Grande City, Texas. Primary Investigators: Kate
 Spradley and Timothy Gocha
- Forensic Anthropology Field Methods Course. May 2015. Texas State University- San Marcos.
 Instructors: Michelle Hamilton and Kate Spradley
- Slavia Foundation Mortuary Archaeological Field School Program. Summer 2014. Adam Mickieweicz University, Drawsko, Poland. Program Director: Marek Polcyn. Osteology Lab Director: Marissa Wojcinski
- Human Remains Recovery Course. March 2013. Texas State University- San Marcos. Instructors:
 Daniel J. Wescott and Sophia Mavroudas
- Questionable Death Scene Training Course. Dec 2012. Public Agency Training Course, Brownsville, TX.

PROFESSIONAL MEMBERSHIPS

- North American Paleopathology Association, Current Student Member
- American Association of Physical Anthropologists, Current Student Member
- American Academy of Forensic Sciences, Current Trainee Member
- Phi Kappa Phi Honors Society, Current Member
- Forensic Anthropology Society, 2013-2016
- Texas State University Undergraduate Dean's List, 2011-2014
- Texas State University Honors Program, 2010-2011
- Alpha Chi Criminal Justice Honors Society, 2009-2011

REFERENCES

Dr. Adam Sylvester
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Department of Anthropology
Texas State University- San Marcos
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