**Lynn Erin Copes**

Curriculum Vitae

1 December 2020

**Present Position and Address**

*2013 - present*

Assistant professor

Department of Medical Sciences

Frank H. Netter MD School of Medicine

Quinnipiac University

275 Mt. Carmel Ave., NH-MED

Hamden, CT 06518

Email: lynn.copes@quinnipiac.edu

Office Phone: (203) 582-4504

**Education**

*May 2012*

PhD, Anthropology, Arizona State University. Committee chair: William Kimbel.

*December 2006*

MA, Anthropology, Arizona State University.

*May 2005*

BA, *magna cum laude*, Anthropology, Columbia College, Columbia University.

**Previous Appointments**

*2012 – 2013* Lecturer, Department of Surgery, Yale School of Medicine.

*2012* Postdoctoral research scientist, Center for the Advanced Study of Hominid Paleobiology, George

Washington University. Supervisor: Robin Bernstein.

*2009* Adjunct professor at Mesa Community College, Mesa, AZ.

Teaching Associate, Arizona State University, Tempe, AZ.

*2008* Teaching Associate, University of Arizona College of Medicine, Phoenix, AZ

**Publications**

17. Tran AT, Desir AK, Okafor LC, Jafferany M, **Copes LE**. 2020. “Psychodermatology in clinical practice: An

examination of physician attitudes, beliefs, and interventions toward psychocutaneous disease.” *Dermat Therapy* 33(4).

16. Tran AT, Feinn RS, **Copes LE**. 2019. “Can Keloid Lesions be Ascribed? Examining the relationship between

keloid disorder, perceived psychosocial distress, and serum neuropeptide Y.” *Int J Keloid Res* 3(1).

15. Lewton KL, Ritzman T, **Copes LE**, Garland Jr T, Capellini TD. 2019. “Exercise-induced loading increases

ilium cortical area in a selectively bred mouse model.” *Am J Phys Anthropol.* 168(3): 543-51. DOI:

10.1002/ajpa.23770.

14. Baab KL, **Copes LE**, Ward DL, Wells N, Grine FE. 2018. “Using modern human cortical bone distribution to

test the systemic robusticity hypothesis.” *J Hum Evol*. 119: 64-82. DOI: 10/1016/j.jhevol.2018.03.003.

13. **Copes LE**, Schutz H, Dlugsoz EM, Judex S, Garland, Jr T. 2018. “Locomotor activity, growth hormones, and

systemic robusticity: an investigation of cranial vault thickness in mouse lines bred for high endurance

running.” *Am J Phys Anthropol*. 166: 442-58. DOI: 10.1002/ajpa.23446.

12. **Copes LE**. 2017. “Cranial Vault Thickness in the Genus *Homo.*” *eLS*. John Wiley & Sons, Ltd: Chichester.

DOI: 10.1002/9780470015902.a0027077

11. **Copes LE**. 2016. “Cranial Vault Thickness in Non-Human Primates: allometric and geometric analyses of the

vault and its component layers.” *J Hum Evol* 101: 90-100. DOI: 10.1016/j.jhevol.2016.09.011

10. **Copes LE***,* Terilli C,Pober BR. 2016. “Musculoskeletal Skeletal Findings in Williams Syndrome: description,

etiology, and treatment.” Invited submission to *Clinical Anatomy* special issue on the anatomy of specific chromosomal disorders. *Clin Anat*, 29: 578-589. DOI: 10.1002/ca.22865.

9. **Copes LE**, Lucas LM, Boyer D. 2016. “Collection of non-human primate computed tomographic scans housed

in MorphoSource, repository for 3D data.” *Scientific Data*. DOI: 10.1038/sdata.2016.1.

8. **Copes LE**, Lucas LM, Boyer D. 2016. “Data from ‘Collection of non-human primate computed tomographic

scans housed in MorphoSource, a repository for 3D data.’” *Dryad Digital Repository*. DOI:

10.5061/dryad.dm57j

7. **Copes LE**, Kimbel WH. 2016. “Cranial Vault Thickness in Primates: *Homo erectus* does not have uniquely

thick vault bones.”*J Hum Evol*. 90: 120-34. DOI:10.1016/j.jhevol.2015.08.008

6. Wallace IJ, Pagnotti GM, Rubin-Sigler J, Naeher M, **Copes LE**, Judex S, Rubin CT, Demes B. 2015. “Focal

enhancement of the skeleton to exercise correlates to mesenchymal stem cell responsivity rather than peak

external forces.”  *J Exp Biol.* 218(19): 3002-9. DOI: 10.1242/​jeb.118729.

5. **Copes LE**, Schutz H, Dlugsoz EM, Acosta W, Chappell MA, Garland T. 2015. Effects of voluntary exercise on

spontaneous physical activity and food consumption in mice: Results from an artificial selection experiment.” *Phys Behav*. 149: 86-94. DOI: 10.1016/j.physbeh.2015.05.025.

4. Niekrash C, **Copes LE**, Gonzalez RA. 2015. “Frank Netter’s Legacy: Interprofessional Anatomy Instruction.”

*Anatomical Sciences Education*. 8(4): 348-59. DOI: 10.1002/ase.1540.

3. Lucas PW, **Copes LE**, Constantino PJ, Vogel ER, Chalk J, Talebi M, Landis M, Wagner M. 2012. “Measuring

the toughness of primate foods and its ecological value.”  *Int J Primatol*. 33(3): 598-610. DOI: 10.1007/s10764-011-9540-9.

2. Garland T, Schutz H, Chappell MA, Keeney BK, Meek TH, **Copes LE**, Acosta W, Drenowatz C, Maciel RC,

van Dijk G, Kotz CM, Eisenmann JC. 2011. “The biological control of voluntary exercise, spontaneous physical activity and daily energy expenditure in relation to obesity: human and rodent perspectives*.” J Exp Biol*. 214: 206-229. DOI: 10.1242/jeb.048397.

1. **Copes LE**, Schwartz GT. 2010. “The scale of it all: postcanine teeth, the taxon-level effect, and the universality

 of Gould’s scaling law.” *Paleobiology* 35(2): 188-203. DOI: 10.1666/08089.1.

**Other Published Contributions (not Peer-reviewed)**

To date, I have edited 16 entries for the website Teach Me Anatomy: the peritoneum, the peritoneal cavity, the inguinal canal, the pericardium, vasculature of the heart, walking and gaits, the arches of the foot, the arteries of the upper limb, the veins of the upper limb, the brachial plexus, fascial layers of the neck, the median nerve, the radial nerve, the anterolateral abdominal wall, the fascia lata, and the vertebral column.

**Awards and Honors**

*2018* Inclusion and Diversity Counsel Recognition Award, Netter School of Medicine

Top Poster Presentation, Interprofessional Education Collaborative Spring 2018 Institute – Annual award for the top poster presentation at the institute

*2010* Donald H. Morris Award for Outstanding Doctoral Student in Physical Anthropology — Annual award given by faculty in the School of Human Evolution and Social Change.

*2009* American Association of Physical Anthropologists Juan Comas Student Prize — Annual award for one of the five top student presentations of original research at the annual meeting.

**Invited Talks**

*2018* “Starting from Scratch: integrating interprofessional anatomy learning into a new medical school.” *American Association of Clinical Anatomists* 35th Annual Meeting. July 9, 2018.

*2014* “The Mystery of the Thick-Headed Hominins: Comparative and Experimental Investigations of Cranial Robusticity.” Stony Brook University. April 1, 2014.

*2013* “The Mystery of the Thick-Headed Hominins: Comparative and Experimental Investigations of Cranial Robusticity.” Quinnipiac University, Hamden, CT. October 24, 2013.

*2012* “The Mystery of the Thick-Headed Hominins: Comparative and Experimental Investigations of Cranial Robusticity.” Yale University, New Haven, CT. September 27, 2012.

“The Mystery of the Thick-Headed Hominins: Comparative and Experimental Investigations of Cranial Robusticity.” University of Illinois, Urbana-Champaign. February 21, 2012.

**Conference Participation** (Asterisk indicates peer reviewed and published abstract)

*2021* Ward DL, Schroeder L, Roy J, Hertz M, Uhl A, Pomeroy E, Stock JT, **Copes LE**, Baab KL, Viola TB,

Silcox MT. “Global bony labyrinth shape variation with climate and subsistence strategy.” Abstract submitted to the American Association of Physical Anthropologists annual meeting (to be held virtually due to COVID-19).

*2020* Foarasi MC, DiMaio MS, Dreiling JL, **Copes LE**, Reddy NK, Mullen C, Durhan LS. “Development of

CROWN, a 360-degree, asynchronous, on-line undergraduate cancer curriculum in rapid response to the COVID-19 pandemic.” Oral presentation. 2020 International Cancer Education Conference (held virtually due to COVID-19).

*2019* Tran AT, **Copes LE.** “Can Keloid Lesions be Ascribed? Examining the relationship between keloid

disorder, perceived psychosocial distress, and serum neuropeptide Y.” Oral presentation. 3rd Annual Keloid

Symposium, Beijing, China, April 2019.

 \*Winchester JM, Ryan TM, Wisor J, **Copes LE**, Brennan TK, Wagner MJ, Boyer DM. “Appropriately managing archiving and access to culturally sensitive but scientifically valuable digital imagery.” Poster presentation. 85th Annual Meeting of the American Association of Physical Anthropologists, Cleveland, OH, March 2019.

*2018* **Copes LE**, Fremont-Smith M. “One Donor Connects Them All: An interprofessional exploration of anatomy, pathology, and one human story.” Poster presentation. Interprofessional Education Collaborative Spring Institute, Washington, DC, May 1, 2018. *Winner of the “Best Poster” prize*

*2017* Drisdelle N, Kaplita J, **Copes LE**, Phillips Ho, M. “The development of an interactive model to teach eye muscle interactions and movements to medical students.” Poster presentation. American Society for Engineering Education Northeast Section Conference, University of Massachusetts, Lowell, MA April 29, 2017.

*2016 \**LewtonKL, RitzmanTB, **CopesLE**, Garland T, Capellini T. “Effects of exercise-induced loading on internal bone morphology of the mouse ilium.” Poster presentation. 84th Annual Meeting of the American Association of Physical Anthropologists, Atlanta, GA, April 13-16, 2016.

*2015* Feldman R, **Copes LE**, Holland A, Kowalsky D, Bernard A, Simone G, McCave E. “The Human Sexuality Workshop 2015: An interprofessional event to increase student comfort with LGBT patients.” Poster presentation. Sex and Gender Medical Education Summit, Mayo Clinic, Rochester, MN, October 2015.

Branch-Ralston T, **Copes LE**, Hammond AS. “Clavicular shape is not different between human males and females.” Poster presentation. Undergraduate Research & Creative Activities Day, Stony Brook University. April 29, 2015.

*2014 \****Copes LE**. “The many layers of cranial vault thickness: cranial vault composition – but not thickness alone – may be autapomorphic in Pleistocene hominins.” Poster presentation. 83rd Annual Meeting of the American Association of Physical Anthropologists. Calgary, AB, April 9-12, 2014.

*2013 \****Copes LE**, Drought H, Patel T, Bernstein R. “Hormonal contributions to sex differences in baboon skeletal robusticity.” Oral presentation. 82nd Annual Meeting of the American Association of Physical Anthropologists. Knoxville, TN, April 10-13, 2013.

 \*Payette C, Patel T, Tommasini SM, **Copes LE**, Bernstein R. “The effects of locomotor category and sex on the ontogeny of skeletal robusticity in two strepsirrhine species.” Poster presentation. 82nd Annual Meeting of the American Association of Physical Anthropologists. Knoxville, TN, April 10-13, 2013.

*2012* \***Copes LE,** Tommasini SM, Patel T, Leigh SE, Bernstein RM. “Biological co-adaptation of morphological and composition traits in weight-bearing and non-weight bearing bones of baboons.” Poster presentation. Annual Meeting of the American Society of Bone and Mineral Research. Minneapolis, MN, October 11-16, 2012.

**\*Copes LE**, Brown MR, Dlugosz EM, Jepsen K, Judex S, Lublinsky S, Oldak A, Schutz H, Tommasini SM, Whitmore K, Garland T. “Rodents and Monkeys and Apes, Oh My: Comparative and experimental investigations of systemic skeletal robusticity in rodents and primates.” Invited contribution to “Discovering our inner animal: understanding human-ness via experimental and comparative models,” a symposium at the 81st Annual Meeting of the American Association of Physical Anthropologists. Portland, OR, April 13-16, 2012.

*2011 \****Copes LE,** Brown MR, Dlugosz EM, Judex S, Lublinsky S, Oldak A, Schutz H, Tommasini SM, Whitmore K, Garland T. “Diet and exercise affect postcranial, but not cranial, robusticity in mice.” Poster presentation. Annual Meeting of the American Society of Bone and Mineral Research. San Diego, CA, September 9-12, 2011.

**\*Copes LE**, Schutz H, Dlugosz EM, Garland T, Brown MR, Oldak A, Whitmore K (2011). “Experimental investigations of the effects of exercise, hormones, and diet on cranial vault thickness.” Oral presentation. 80th Annual Meeting of the American Association of Physical Anthropologists. Minneapolis, MN, April 13-16, 2011.

**\*Copes LE**, Schutz H, Dlugosz EM, Acosta W, Chappell, MA, Garland T. “Voluntary exercise, spontaneous physical activity, and food consumption in High Runner lines of mice.” Poster presentation. Annual Meeting of the American Physiology Society. Washington, DC, April 7-12, 2011.

 **\*Copes LE**, Brown MR, Oldak A, Whitmore K. “The effects of manipulating the frequency and magnitude of mastication on systemic skeletal robusticity in mice.” Poster presentation. 15th Annual Meeting of the American Association of Anatomists. Washington, DC, April 7-12, 2011.

**\*Copes LE**, Schutz H, Dlugosz EM, Garland T. “Voluntary exercise, spontaneous physical activity, and systemic skeletal robusticity in high endurance-running mice.” Poster presentation. 15th Annual Meeting of the American Association of Anatomists. Washington, DC, April 7-12, 2011.

*2010* \*Ritzman TR, **Copes LE**, Lewton KL. “Temporal lobe size, cranial architecture, and the origin of modern human cranial form.” Poster presentation. 79th Annual Meeting of the American Association of Physical Anthropologists. Albuquerque, NM, April 14-17, 2010.

\*Oldak A, Grimmett P, **Copes LE**, Kimbel WH. “Testing the scaling relationship of tooth size and jaw size in three hominin species: are hominins “good” primates?” Poster presentation. 79th Annual Meeting of the American Association of Physical Anthropologists. Albuquerque, NM, April 14-17, 2010.

*2009* \*Ritzman TB, **Copes LE**, Lewton KL. “Temporal lobe size, cranial architecture, and the origin of modern human cranial form.” Poster presentation. 13th Annual Meeting of the American Association of Anatomists. New Orleans, LA, April 17-20, 2009.

**\*Copes LE**. “How and why *do* humans grow thin skulls? A test of the systemic robusticity hypothesis.” Poster presentation. 78th Annual Meeting of the American Association of Physical Anthropologists. Chicago, IL, April 2-5, 2009. Winner of the Juan Comas Student Prize for best student poster.

*2008* **\*Copes LE**, Schwartz GT. “The scale of it all: postcanine teeth, the taxon-level effect, and the universality of Gould’s scaling law.” Oral presentation. 77th Annual Meeting of the American Association of Physical Anthropologists. Columbus, OH, April 9-12, 2008.

**\*Copes LE**. “How and why *do* humans grow thin skulls? A test of the systemic robusticity hypothesis.” Poster presentation. 11th Annual Meeting of the American Association of Anatomists. San Diego, CA, April 5-8, 2008.

**Copes LE**. “How and why *do* humans grow thin skulls? A test of the systemic robusticity hypothesis.” Oral presentation. 9th annual GELSS research symposium. Arizona State University, Tempe, AZ, February 2008.

*2007* \*Spencer MA, Schrein CM, **Copes LE**. “Compensatory scaling within the feeding complex of haplorrhine primates.” Poster presentation. 76th Annual Meeting of the American Association of Physical Anthropologists. Philadelphia, PA, March 28-31, 2007.

 **Copes LE**. “Tooth size scaling in Mammalia: are Gould’s hypotheses universal?” Oral presentation. 8th

annual GELSS research symposium. Arizona State University, Tempe, AZ, February 2007.

*2006* **\***Gomberg M, **Copes LE**, Mowbray K (2006) “Does osteopenia play a role in the morphology of the Eskimo femur?” Oral presentation. 75th Annual Meeting of the American Association of Physical Anthropologists. Anchorage, AK, March, 2006.

**Copes LE**. “Cancer in Ancient Nubia: searching for neoplasms in ASU’s skeletal collection.” Oral presentation. 7th annual GELSS research symposium. Arizona State University, Tempe, AZ, February 2006.

*2005* **\*Copes LE**, Potts R (2005) “Are hominin fossils and paleoenvironmental data precisely associated in the stratigraphic records of Turkana and Olduvai?” Oral presentation. 14th Annual Meeting of the Paleoanthropology Society. Milwaukee, WI, April 5-6, 2005.

*2004* **Copes LE**. “Is the paleoenvironmental evidence from the Turkana and Olduvai Basins precisely matched stratigraphically with hominid fossils?” Poster presentation. Research Training Program Presentations, Smithsonian Institution, Washington DC, August 2004.

**Copes LE**. “The stratigraphic precision of paleoenvironmental data in relation to hominid localities in the Turkana and Olduvai Basins, East Africa: How much fuzz exists?” Oral presentation. Research Training Program Presentations, Smithsonian Institution, Washington DC, August 2004.

**\*Copes LE**, Holloway RL. “The Monte Circeo brain endocast.” Oral presentation. 74th Annual Meeting of the American Association of Physical Anthropologists. Tampa, FL, April 2004.

*2003* **\*Copes LE**, Holloway RL, Mowbray K. “The geographic distribution of frontal grooves: a non-metrical cranial trait analysis.” Poster presentation. 73rd Annual Meeting of the American Association of Physical Anthropologists. Tempe, AZ, April 2003.

**Teaching and Mentoring Experience**

*February 2013 – present*

Founding faculty member at the Frank H. Netter MD School of Medicine at Quinnipiac University. Have developed the clinical anatomy curriculum for a new medical school; taught clinical anatomy to first year medical students (60 in 2013-14 and 90-100 since); taught over 80 hours/year outside of anatomy (biochemistry, neuroanatomy, behavioral and social science, nutrition, reproductive physiology, endocrinology, problem-based learning) as part of integrated Foundations of Medicine course; developed and taught (six times so far) a seminar in Evolutionary Medicine. Designed and taught (twice so far) a class called Poverty and Health, offered at a state correctional facility enrolling both incarcerated and non-incarcerated students. Also developed a stand-alone anatomy course for Anesthesia Assistant students (summers 2016-2019), a prosection-based anatomy course for DNP students (fall 2016-current), and have been a member of anatomy team teaching the Physician Assistant students (summer 2015-current). I have mentored five alumni of Netter and am working with 14 current students on their capstone research projects.

*Fall 2012*

Lecturer in first year gross anatomy, Yale University School of Medicine. Assisted in cadaver dissection labs; taught a section of the workshop, a weekly meeting of 20 students working through clinical cases; ran review sessions; proctored exams.

*Spring 2010 – Summer 2012*

Undergraduate mentoring: Three undergraduate students as lab assistants who helped with weekly procedures, including blood draws and injections and dissections. Four different undergraduates helped with measuring mouse long bones, manipulating primate and human CT scans, and running algorithms to measure CT scans. Also worked with a second-year undergraduate at George Washington University interested in endocrinology and orthopaedics. We worked on a project examining the ontogeny of postcranial robusticity in the quadrupedal *Lemur catta* and the vertical clinger and leaper *Propithecus verreauxi*, which was awarded a Lewis N. Cotlow grant for $1500.

*June 2009*

Adjunct professor at Mesa Community College, Mesa, AZ. “Bones, Stones, and Human Evolution,” the introductory physical anthropology course. 15 hours of lecture and hands-on lab instruction per week.

*Spring 2009*

Teaching Associate for “Fossil Hominins,” Arizona State University, Tempe, AZ. Duties included teaching two stand-alone 2-hour labs per week, lecturing five times in class, exam preparation, and all course grading.

*Fall 2008*

Teaching Associate for “Clinical Anatomy,” University of Arizona College of Medicine, Phoenix, AZ. This course, for first-year medical students, involved 10-20 hours of prosection of human cadavers per week, 6 hours of assisting during weekly lectures, and running several test review sessions.

*Fall 2005 —2011*

Coordinator and co-director of the Institute of Human Origin’s outreach program at Arizona State University. We gave tours of the lab to school groups, attend public science events such as Earth and Space Exploration Day and SeeASU, and take fossil casts to local classrooms and museums for workshops. On average, the outreach program reaches 200-300 students in formal settings (classrooms, field trips) and over 1000 families at public events each year.

**Capstone Mentoring at Quinnipiac University**

• *Erin White (class of 2017; medical education):* Identifying and Developing the Use of Best Practices in Anatomy Practical Assessment

• *Tyler Sherban (class of 2018; basic, clinical, and translational research)*: Total Energy Expenditure in Pregnant and Lactating Marmosets Testing the Role of Energetics in Gestational Length

• *Dirk Strasser (class of 2018; global, community, and public health)*: Changes in BMD in Pregnant Women

• *Jillian Kaplita (class of 2018; medical education)*: The Effectiveness of Functional 3D Models of the Eye and Extraoccular Muscles as a Human Anatomy Education Tool for Medical Students

**•** *Hubert Wang (class of 2019; medical education)*: Dissecting Anatomy: An Analysis of Student Attitudes and Perceptions toward Gross Anatomy Learning Methods

*• Kayla Magrath (class of 2019; medical education)*: Evaluation of Depressive Symptoms and Gendered Discrimination at the Frank H Netter School of Medicine

*• Florence Yuan (class of 2020; health communication)*: Darwin, MD: Evolutionary Medicine Videos for YouTube

• *Matt Nowland (class of 2020; basic, clinical, and translational research)*: Comparison of Female Identical Twin Division 1 Lacrosse Athletes Lower Extremity Risk Factors for ACL Injury

• *Layne Keating (class of 2021; health policy and advocacy)*: Care Utilization among Justice-Involved Men in a Specialized Primary Care Setting: The Role of Trauma in Patient Engagement

• *Lauren Okafor (class of 2021; basic, clinical, and translational research)*: The Effect of Type II Diabetes and Exposure to Nicotine on Rotator Cuff Repair Outcomes

• *Oladimeji Oluaderounmu (class of 2021; global, public, and community health)*: Assessment of the Impact of Food Insecurity of Depression in Lagos, Nigeria

• *Alison Tran (class of 2021; medical humanities)*: Can Scars be Ascribed? Examining the Relationship Between Keloidal Scar (Re)Formation, Perceived Psychosocial Distress, and Elevated Serum Neuropeptide Y

• *Chevaughn Williams (class of 2021; health policy and advocacy)*: Social Justice, Social Determinants, and Social Responsibility at Netter: How do we train our medical students to be socially conscious physicians and advocates?

• *Mary Traglia (class of 2022; global, public, and community health)*: Factors Affecting Medical Students’ Exposure to Formaldehyde in the Anatomy Lab

• *Matthew Nankin (class of 2022; basic, clinical, and translational research)*: Anatomical Predictors for Difficult Intubation Assessed in a Cadaveric Model for Evaluation of Use in Airway Training

• *Linda Kerandi (class of 2022; medical humanities)*: An exploration of the potential relationship between rising insulin costs and mental health concerns among Type I diabetes patients

• *Kaiti Duan (class of 2022; health communications)*: Mixed Reality Anatomy Modules

• *Nabiha Nuruzzaman (class of 2022; health policy and advocacy)*: Environmental Justice is Health: The Navajo Nation’s transition to sustainable energy

• *Caurice Wynter (class of 2022; medical humanities)*: Exploring the Academic Experiences of Minority Medical Students

• *Corinne Grady (class of 2023; medical humanities)*:An introduction to weight bias and the impacts of diet culture on patient behavior and primary care for medical students

• *Sophie Renaud (class of 2023; global, public, and community health)*: Pregnancy outcomes pre- and post- implementation of a preeclampsia risk assessment questionnaire at Saint Francis Hospital and Medical Center

• *Valeria Saldana (class of 2023; global, public, and community health)*: Highlighting disparities in stressors faced by medical students based on their racial identity

• *George Hernandez (class of 2023; global, public, and community health)*: Highlighting the Stressors of Underrepresented Minority Students in Medical School

• *Audrey Hla (class of 2023; global, public, and community health)*: Examining Creative Solutions to Combat the Social Determinants of Health in Primary Care Practices

• *Okensama La-Anyane (class of 2023; global, public, and community health)*: Cross-sectional survey of wound healing in skin-bleaching patients from Ghanaian providers’ perspective

• *Jannah Moses (class of 2024; medical humanities)*: Black Maternal Mortality and Bias Teaching for Medical Students

**Faculty Development**

Attendance at events hosted by the Office of Faculty Development – 2013 to present

Participation in Scholaris (Medical Education Research group) – 2015 to present

Inside Out Prison Exchange Program Training – July 2018

Thomas Jefferson Interprofessional Healthcare Education Conference – November 2016

AAMC Early Career Women Faculty Leadership Development Seminar – July 2016

Faculty Success Program, National Center for Faculty Development & Diversity – Spring 2015

AAMC annual conference – November 2013

Medical Education Research Certificate – 2013

**Service at Quinnipiac University**

CCO/IDC Inclusion, Equity, and Diversity Curricular Review Committee – 2020 to present

Faculty Senate Subcommittee on Inclusion, Equity, and Diversity (medical school representative) – 2020 to present

LCME Admissions Committee – 2020

Medical School Admissions Committee – 2015 to present

Netter Women in Medicine and Science Committee – 2015 to present; currently serving as chair

Faculty advisor to Netter Pride Alliance, Med Students for Choice, Wilderness Medicine, Netter Students for

Healthcare Advocacy, Medical Students for Human Rights, Dermatology Student Interest Group, Scrubs Addressing the Firearms Epidemic (SAFE) – various times to present

Medical Humanities Concentration Coordinator – 2016 to present

PBL Design and Review Committee – 2017 to present

Block Coordinator Y1 Musculoskeletal Block – 2017 to present

FOM Course Committee, Grading Committee – 2017 to present

Medical School Fellow Center for Interprofessional Healthcare Education – 2016 to present

Faculty Council – 2018 to present

Inclusion and Diversity Committee – 2018 to present

QU Prison Project Committee (chair of Future Planning subcommittee) – 2018 to present

Pediatrics Vertical Integration Committee – 2019 to present

Member of three search committees for staff and faculty

Strategic Plan Administrative Effectiveness Committee – 2018 to 2019

Senate Library Committee medical school representative – 2016 to 2018

LCME Educational Resources Committee – 2014

**Research Grants**

*2018* Provost Thompson’s Innovation Grant — $4500. Co-PI with Kim Hartmann, Emily McCave, and Karen

Myrick. “Interprofessional Healthcare Education Interactive Online Modules.”

*2017* Provost Thompson’s Innovation Grant — $4800. Co-PI with Kim Hartmann, Emily McCave, and Karen Myrick. “Interprofessional Healthcare Education Foundations Seminar.”

*2013* American Association of Physical Anthropologists Professional Development Grant — $5000 (PI). “Skeletal robusticity in sooty mangabeys (*Cercocebus atys*):  interactions among bone shape, density and mechanical performance.”

*2011* Wenner-Gren Foundation Post PhD Grant #8437— $25,000 (PI). “A physiological perspective on bone strength: deciphering the effects of hormones on skeletal robusticity in baboons.”

*2010* Wenner-Gren Foundation Dissertation Grant #8102 — $15,000. “Comparative and experimental investigations of cranial robusticity in Pleistocene hominins.”

*2009* National Science Foundation Dissertation Improvement Grant #0925793 — $15,000. “Comparative and experimental investigations of cranial robusticity in *Homo erectus*.”

Philanthropic Educational Organization Scholar Award — $15,000 for support of women in graduate school, used to support dissertation research.

*2007* Smithsonian 10-week Graduate Student Fellowship — $5500 stipend to pursue a research project using facilities at the Smithsonian Institution.

**Educational Grants**

*2005* National Science Foundation Graduate Research Fellowship — 3 years full tuition plus $90,000 stipend.

*2005* Institute of Human Origins graduate fellowship —3 years full tuition plus $60,000 stipend.

*2004* National Science Foundation # DBI-0243512 Research Experience for Undergraduates fellowship at the Smithsonian Institution, National Museum of Natural History, Washington DC (Research Training Program).

*2004* Beinecke Foundation Fellowship — Awarded to 18 college juniors annually for graduate study in the humanities, arts and social sciences. $32,000 stipend over 5 years.

**Research Experience**

*Statistical experience*

Phylogenetic Generalized Least Squares, Independent Contrasts, ANCOVA (nested, mixed model), Path Analysis (a subset of Structural Equation Modeling), partial correlations, discriminant function and principal components analyses, bootstrapping resampling methods. Comfortable with R, SPSS, JMP, LISREL, and have some experience with Matlab, Systat, and SAS.

*2015-present*

Quinnipiac University

Measuring bone mineral density of human finger and forearm bones, comparing two models of DXA scanners, developing a reference database for normal ontogeny of BMD in children and young adults. Measuring BMD throughout pregnancy in populations vulnerable to low bone density. Continuing to design experiments to modify cranial vault thickness in mice through environmental manipulation.

*2013-4*

Histology Laboratory, Orthopaedics Department, Yale University

Analyzed growth of fluorescently labeled mouse bones, comparing humerus, femur, and cranial vault bones in 600 specimens.

*Spring 2012*

Endocrinology Laboratory, Center for the Advanced Study of Hominid Paleobiology, George Washington University.

Postdoctoral project: sex differences in circulating hormones during juvenility related to variation in skeletal robusticity in adult baboons. ELISA analysis of leptin, osteocalcin, vascular endothelial growth factor, parathyroid hormone, adiponectin, calcitonin, sclerostin, vitamin D binding protein, and free thyroxin in baboon blood samples.

*Spring 2012*

Departments of Anthropology and Orthopaedics, Washington University, St. Louis; Department of Anthropology, University of Illinois, Urbana-Champaign

µCT scanned multiple bones from adult baboon skeletons to compare geometric shape variables with tissue density measures.

*February 2011*

National Museums of Kenya and Ethiopia

Photographed cranial vault fragments of fossil hominins (*Australopithecus afarensis*, *Paranthropus boisei*, *Homo habilis*, *Homo erectus*), measured cranial vault thickness (and relative thickness of the diploë) using ImageJ.

*November 2010*

Department of Basic Medical Sciences, University of Arizona College of Medicine

Assayed murine blood samples for IGF-1, IGFBP-3 and free thyroxine using ELISA.

*September 2010*

Center for the Advanced Study of Hominid Paleobiology, George Washington University

Tested material properties (hardness, toughness, and fracture properties ) of mouse food with Peter Lucas using Instron compression and portable wire and wedge testers

*August 2010*

Department of Biomedical Engineering, Stony Brook University

µCT scanned five bones from 200 mice using the scanner in Stefan Judex and Clint Rubin’s lab and measured cross-sectional geometric properties of the humeral and femoral shafts and calculated mean thickness of the parietal and interparietal bones.

*July 2010*

Museum of Comparative Zoology and Center for Nanoscale Systems, Harvard University

µCT scanned the skulls of 450 non-human primates from the MCZ and measured the mean thickness of each table of the vault at four locations on the skull (frontal, each parietal and occipital). Craniometric distances were calculated from 3D digitization of 50+ landmarks taken on each specimen. Postcranial bones (femur and humerus) from 50 individuals of two species were scanned in order to explore systemic robusticity across the skeleton within and between species.

*Spring 2010*

Arizona State University

Ran an experiment to manipulate the frequency and magnitude of mastication in a group of 100 mice. The mice (from both inbred and outbred strains) were provided either a soft or hard diet to manipulate the magnitude of their mastication, or kept in a cold room to increase the frequency of their mastication. Experiment lasted 12 weeks, during which time blood was drawn 5 times for hormone assay and the animals were injected 7 times with fluorescent bone labeling compounds for a histological study of skeletal ontogeny.

*Fall 2009*

University of California, Riverside

Spent four months in Riverside working in Dr. Ted Garland’s lab, running an experiment using his population of artificially selected mice. One hundred mice (half control, half selected for endurance running) were divided into two activity groups (half with access to a running wheel, half without). The experiment lasted 12 weeks, during which time blood was drawn 5 times for hormone assay and the animals were injected 7 times with fluorescent bone labeling compounds for future immunohistochemistry study of skeletal ontogeny.

*Summer 2007*

National Museum of Natural History, Washington, DC

Worked with Drs. Bruno Frohlich and David Hunt to CT scanned 800 modern human crania and developed a digital archive of CT scans, photographs, and craniometric measurements so that the data are freely available to researchers.

*January 2002 — May 2005*

American Museum of Natural History, New York

Catalogued human skeletal remains, inventoried and preserved mummified remains, investigated the geographic distribution of frontal grooves in modern human skulls and casting and molding hominid fossils under Dr. Ken Mowbray and Mr. Gary Sawyer.

*Summer 2004*

Research Training Program Intern, National Museum of Natural History, Washington, DC

Explored the correlation between paleoenvironmental data (stable isotopes, faunal remains, palynological signals) and hominin fossils in the Olduvai and Lake Turkana basins under Dr. Rick Potts

*Summer 2003*

Paid intern, American Museum of Natural History, New York

The Inuit population from Point Hope, Alaska is one of the AMNH’s largest skeletal collections. Under the supervision of Dr. Kenneth Mowbray, I collected craniometric data (65+ measurements) from all 500 individuals in the collection.

**Field Experience**

*2011* Hadar, Ethiopia — 1 month, excavation at AL 666 and AL 333 sites, survey, fossil preparation

*2004* Olorgesailie, Kenya — 1 month, mostly excavation

**Professional Society Membership**

• American Association of Physical Anthropologists, since 2001

Served on the Program Committee for the 2013 conference in Knoxville, where I also chaired a session. Served on the Program Committee for the 2014 conference in Calgary. I am also on the steering committee for the Physical Anthropology Women’s Mentoring Network.

Served as the president of the steering committee for the Physical Anthropology Women’s Mentoring Network for the 2016, 2017, and 2018 conferences

Serving on the Program Committee for the 2019 conference in Cleveland and 2020 conference in Los Angeles

• American Association of Anatomists, since 2005

 Served as a judge for the Student Prize at the New York City Regional Meeting, 11/4/16

• American Society for Bone and Mineral Research, since 2011

• American Association of Clinical Anatomists, since 2018

**References – Anthropology Research**

William Kimbel – Institute of Human Origins, Arizona State University

PO Box 872402

Tempe, AZ 85287

wkimbel.iho@asu.edu

480-727-6582

Robin Bernstein – Department of Anthropology, University of Colorado, Boulder

1350 Pleasant St.

233 UCB

Boulder, CO 80309

robin.bernstein@colorado.edu

303-735-2217

Gary Schwartz – Institute of Human Origins, Arizona State University

PO Box 872402

Tempe, AZ 85287

gary.schwartz@asu.edu

480-727-8684

**References – Gross Anatomy Teaching**

Richard Zeff –Department Chair, Department of Medical Sciences, Frank H. Netter MD School of Medicine, Quinnipiac University

275 Mt. Carmel Ave., NH-MED

Hamden, CT 06518

richard.zeff@quinnipiac.edu

203-582-7956

Maureen Helgren – Director of Anatomy

Frank H. Netter MD School of Medicine, Quinnipiac University

275 Mt. Carmel Ave., NH-MED

Hamden, CT 06518

maureen.helgren@quinnipiac.edu

203-582-8681

Larry Rizzolo – Department of Surgery, Yale School of Medicine

PO Box 208062

New Haven, CT 06520-8062

larry.rizzolo@yale.edu

203-785-6277