

# Katharine MN Lee

## Curriculum Vitae

University of Illinois at Urbana-Champaign  
109 Davenport Hall, 607 S Mathews Ave, Urbana, IL 61801

kmLee6@illinois.edu

### Education

**2013-present University of Illinois at Urbana-Champaign (UIUC).** Urbana, IL

*PhD Candidate - Biological Anthropology*

*Graduate Minor in Gender & Women's Studies, Graduate Certificate in Science Communication*  
Department of Anthropology

**2007 Texas A&M-Texarkana.** Texarkana, TX

*Master of Science in Business Administration*

Army Materiel Command Fellows Program

**2006 Tulane University.** New Orleans, LA

*Bachelor of Science in Engineering, field of Biomedical Engineering*

Thesis title: *3-D Image Reconstruction of Human Brain Geometry from the Visible Human Project*

Thesis advisors: J.K. Francis Suh, PhD, and Richard Hart, PhD

### Professional and Research Employment

**University of Illinois Urbana-Champaign,** Urbana, Illinois; Aug 2013 – present

*Fellow - National Science Foundation Graduate Research Fellowship Program* Jun 2014 – present

Studying activity patterns and estrogen effects on bone health in young women

*Graduate Research Assistant* Jan 2017 – May 2017

Appointed as Research Assistant to Dr. Kathryn Clancy for Polish luteal reproductive function project, funded by NSF 1-200250-241004-241167

*Graduate Teaching Assistant* Aug 2013 – May 2014, Aug 2016 – Dec 2016, Aug 2018 – Dec 2018, Aug 2019 – current

**Dog Genetics, LLC,** San Antonio, TX; Feb 2011 – Oct 2013

*Research Coordinator* at TSA Canine Breeding & Development Center, Lackland AFB

**US Army: Army Materiel Command, Natick Soldier Research, Development, & Engineering Center,** Natick, MA; Sep 2007 – Jun 2010

*Fellow/Biomedical Engineer, Biophysics & Biomedical Modeling Division at US Army Research Institute of Environmental Medicine (USARIEM)* Mar 2009 – Jun 2010

*Fellow/Biomedical Engineer, Center for Military Biomechanics Research;* Sep 2007 – Feb 2009

**US Army: Army Materiel Command, ALLC,** Red River Army Depot, TX 2006 – 2007

*Fellow*

**Ochsner Clinic Foundation**, New Orleans, LA 2005 – 2006  
*Assistant Program Coordinator for Clinical Research*, Department of Endocrinology

**Vanderbilt University**, Nashville, TN; 2003 – 2004  
*Summer Research Assistant/Technical Intern*, Energy Balance Laboratory

## External grants, fellowships, and honors

**2017 Wenner-Gren Foundation for Anthropological Research** Dissertation Fieldwork Grant \$20,000  
**2017 American Association of Physical Anthropologists** First runner-up as Graduate Student Liaison to AAPA Executive Committee  
**2017 National Science Foundation** Doctoral Dissertation Improvement Grant \$31,720  
**2015 American Philosophical Society** The Lewis and Clark Fund for Exploration and Field Research \$4500  
**2014 National Science Foundation Graduate Research Fellowship Program** (NSF GRFP)

## Internal grants, fellowships, and honors

**2019 Special Recognition in Graduate Student Leadership** Graduate College at the University of Illinois at Urbana-Champaign  
**2018 UIUC Social and Behavioral Sciences Research Initiative** Small Grants Program. Title: Life history & hormones: mechanisms linking childhood experiences to women's health. Awarded to Dr. Kathryn BH Clancy as PI. \$10,000  
**2015, 2017 UIUC Graduate College** Dissertation Travel Grant (2015: \$4,807.50, declined; 2017: \$4996)  
**2015 Beckman Institute at UIUC** Cognitive Science/Artificial Intelligence Award \$2000  
**2015, 2016, 2017, 2018 UIUC Department of Anthropology** Graduate Student Conference Travel award \$250 (2015, 2016, 2017, 2018)  
**2014, 2015, 2018 UIUC Department of Anthropology** Graduate Student Summer Research Assistance Award (2014: \$2760; 2015: \$2300; 2018: \$2000)

## Teaching Experience

**2019 Fall** ANTH 246 - Forensic Science (online). Teaching Assistant  
**2018 Fall** ANTH 246 - Forensic Science (online). Teaching Assistant  
**2016 Fall** ANTH 103 - Anthropology in a Changing World. Teaching Assistant.  
**2014 Spring** ANTH 101 - Introduction to Anthropology. Teaching Assistant.  
**2013 Fall** ANTH 143 - Biology of Human Behavior. Teaching Assistant.

## Undergraduate Projects Supervised

**2019-2020** H. Ban. Undergraduate Honors Thesis. title tbd.  
**2018-2019** K. Allen. Undergraduate Honors Thesis: "A Comparison of Methods for Determining Time of Ovulation"  
**2018** J. Kanthak, University of Illinois Undergraduate Researchers Initiative. Researcher Initiative Symposium poster: "Female Reproductive Hormonal Variation"  
**2017** O. Shukla, University of Illinois Undergraduate Researchers Initiative. Researcher Initiative Symposium poster titled: "Inflammation and Bone Modeling in Healthy Adults"

## Publications

- 2019** (*revised and resubmitted*) Rogers, Mary P; **Lee, Katharine MN**; Galbarczyk, Andrzej; Klimek, Magdalena; Klein, Laura; Zabłocka-Słowińska, Katarzyna; Jasienska, Grazyna; Clancy, Kathryn. “Declining ages at menarche in an agrarian rural region of Poland.” *Am J Hum Biol*.
- 2019** (*revised and resubmitted*) Richey, Christina Rae; **Lee, Katharine MN**; Rodgers, Erica; Clancy, Kathryn BH. “Gender and sexual minorities in astronomy and planetary science face increased risks of harassment and assault.” *Bulletin of the American Astronomical Society*.
- 2019** Rodrigues, Michelle A; Sanford, Summer R; Rogers, Mary P; **Lee, Katharine MN**; Wilson, Meredith A; Amos, Jennifer; Hunter, Carla D; Clancy, Kathryn BH. “From maternal tending to adolescent befriending: the adolescent transition of social support.” *Am J Primatol*. doi:10.1002/ajp.23050
- 2019** **Lee, Katharine MN**; Rogers, Mary P; Galbarczyk, Andrzej; Jasienska, Grazyna; Clancy, Kathryn BH. “Physical activity in women of reproductive age in a transitioning rural Polish population”. *Am J Hum Biol*. 31(3):e23231.doi: 10.1002/ajhb.23231
- 2017** Clancy, Kathryn BH; **Lee, Katharine MN**; Rodgers, Erica; Richey, Christina Rae. “Double jeopardy in astronomy and planetary science: women of color face greater risks of gendered and racial harassment”. *J. Geophys. Res. Planets*, 122, doi:10.1002/2017JE005256.  
Featured in: [Physics Today](#), [American Scientist](#), [Eos Vox](#)
- 2009** Routh, R Hank; **Lee, Katharine M**; Burshell, Alan L; and Nauman, Eric A. “The effects of anti-resorptive therapies and estrogen withdrawal in adult scoliosis measured by sub-segmental vertebral BMD analysis”. *Bone*. Vol 45, Issue 2. pp 193-199.

## Published Abstracts

- 2019** **Lee, Katharine MN**; Rogers, , Mary; Galbarczyk, Andzrej; Jasienska, Grazyna; Polk, John; Clancy, Kathryn. “Estrogen, energy, and skeletal biology: life history approaches to understanding skeletal phenotype in living women of reproductive age.” *Am J Phys Anthropol*. vol 168. no S68, pg 140.
- 2019** Rogers, Mary; **Lee, Katharine MN**; Galbarczyk, Andzrej; Jasienska, Grazyna; Ripan S Malhi; Clancy, Kathryn BH. “The relationship between stress, gene methylation, and reproductive function.” *Am J Phys Anthropol*. vol 168. no S68, pg 206-207.
- 2018** **Lee, Katharine**; Rogers, Mary; Galbarczyk, Andzrej; Jasienska, Grazyna; Polk, John; Clancy, Kathryn. “Lifestyle factors influencing frame size, grip strength, and bone density in two related populations.” *Am J Phys Anthropol*, vol 165, no S66, p 155.
- 2018** Rogers, Mary; **Lee, Katharine MN**; Galbarczyk, Andzrej; Jasienska, Grazyna; Ripan S Malhi; Clancy, Kathryn BH. “Childhood energetic and psychosocial stressors affect adult reproductive function.” *Am J Phys Anthropol*, vol 165, no S66, p 229.
- 2018** Rodgers, Erica; Clancy, Kathryn BH; Richey, Christina; **Lee, Katharine MN** “An inclusive workplace for all scientists.” *AGU Fall Meeting Abstracts*. [URL](#)
- 2017** **Lee, Katharine**; Rogers, Mary; Galbarczyk, Andzrej; Jasienska, Grazyna; Polk, John; Clancy, Kathryn. “Bone maintenance in young healthy women: Relationships between markers of bone turnover, reproductive status, and energetics.” *American Journal of Human Biology*, 29 (2).
- 2017** Rogers, Mary; **Lee, Katharine**; Galbarczyk, Andzrej; Jasienska, Grazyna; Malhi, Ripan; Clancy, Kathryn. “Investigating combined effects of childhood environment and age at menarche on adult reproductive hormones.” *American Journal of Human Biology*, 29 (2).
- 2016** **Lee, Katharine**; Rogers, Mary; Galbarczyk, Andzrej; Jasienska, Grazyna; Polk, John; Clancy, Kathryn. “Physical activity and anthropometry effects on bone turnover biomarkers in rural Polish women.” *Am J Phys Anthropol*, vol 159, no. S62, p 205.
- 2016** Rogers, Mary; **Lee, Katharine**; Galbarczyk, Andzrej; Jasienska, Grazyna; Malhi, Ripan; Clancy, Kathryn. “Investigating variation in age at menarche: relationships between gene methylation and reproductive traits in rural Polish women.” *Am J Phys Anthropol* 159, p 271.
- 2016** Clancy, Kathryn; Rogers, Mary; **Lee, Katharine**; Galbarczyk, Andzrej; Jasienska, Grazyna. “Environmental factors associated with luteal phase endometrial thickness in a sample of rural Polish women.” *Am J Phys Anthropol* 159, p 117.

- 2015 Lee, Katharine M;** Rogers, Mary P; Galbarczyk, Andzrej; Jasienska, Grazyna; Clancy, Kathryn B; Polk, John D. 2015. "Physical activity levels in women of reproductive age in rural Poland," *Am J Phys Anthropol*, vol. 156, no. S60.
- 2015 Rogers, Mary P; Lee, Katharine M;** Galbarczyk, Andzrej; Jasienska, Grazyna; Malhi, Ripan; Clancy, Kathryn B. 2015. "CYP19A1 methylation: life history factors' effects on the genome." *Am J Phys Anthropol*, vol. 156, no. S60.

## Technical Reports and White Papers

- 2014 Sinn, David L; Fratkin, Jamie L; Bensky, Miles; McGarrity, Monica E; Lee, Katharine M;** and Gosling, Samuel D. Tasks 1.5, 1.6, and 1.7 Combined Report – Task analyses to define characteristics of successfully deployed detector dogs. US Department of Homeland Security, Contract HSHQDC-10-C-00085: "Improving the Effectiveness of Detector-Dog Selection and Training through Measurement of Behavior and Temperament".
- 2013 Sinn, David L; McGarrity, Monica E; Lee, Katharine M;** DeBono, Stephen, Fratkin, Jamie L; Bensky, Miles, Banks, Sean; and Gosling, Samuel D. Task 4.6 Report – REDCap database development and handbook. US Department of Homeland Security, Contract HSHQDC-10-C-00085: "Improving the Effectiveness of Detector-Dog Selection and Training through Measurement of Behavior and Temperament".
- 2012 Hare, Elizabeth and Lee, Katharine.** "Genetic Linkage Analysis (Task 3) of Detector Canines in the TSA Canine Breeding and Development Center Population." Produced under DHS Contract HSHQDC-10-C-00185.
- 2010 Lee, Katharine.** "Effects of increased helmet weight on the ground soldier." Internal white paper prepared for helmet and helmet-borne equipment development team.

## Invited Panels, Presentations, and Guest Lectures

- 2019** "Participating in an inclusive, productive lab." Sep 13, 2019. Panel at 21st Century Scientists Inclusive Lab Leader - Grad workshop, invited by Dr. Kathryn Clancy.
- 2019** "Menstruation, models, and metaphors". Apr 11, 2019. Guest lecture for Anth 379 *Medical Anthropology*, invited by Emma Verstraete.
- 2019** "Menstruation: evolutionary and medical perspectives." Feb 20, 2019. Guest lecture for Anth 249 *Evolution and Human Disease*, invited by Dr. Mary Rogers.
- 2018** "Hesitant Data Science Session II: Data/Programming." Sep 27, 2018, organized by Illinois Data Science Initiative at the University of Illinois at Urbana-Champaign and hosted by the National Center for Supercomputing Applications for 2nd annual Data Science Day at UIUC.
- 2018** "Life history tradeoffs affecting bone maintenance and development in premenopausal Polish and Polish-American women." May 2, 2018, Guest lecture for Anth 102 *Human Origins and Culture*, invited by Alexandra Zachwieja.
- 2018** "Life history tradeoffs affecting bone maintenance and development in premenopausal Polish and Polish-American women." Apr 26, 2018, Department of Anthropology Colloquium talk, hosted by the Department of Anthropology, University of Illinois at Urbana-Champaign.
- 2018** "Beyond #MeToo in Tech and Academic Workplaces." Apr 4, 2018, organized by Women@NCSA and hosted by the National Center for Supercomputing Applications.
- 2016** "Gender and Health." Oct 5, 2016. Guest lecture for Anth 103 *Anthropology in a Changing World*, invited by Dr. Krystal Smalls.

## Other Posters and Presentations

- 2019** Participant in Department of Gender and Women's Studies Symposium, titled "Solidarities of Difference." Sept 20, 2019.
- 2018 Lee, Katharine MN.** "Crippling Menstruation: Reframing Menstrual Research using Critical Disability Studies and Crip Theory." 46th annual meeting of The Canadian Association for Physical Anthropology-L'Association Canadienne D'Anthropologie Physique. Oct/Nov 2018.
- 2018 Lee, Katharine MN,** Rogers, Mary P; Galbarczyk, Andrzej; Jasienska, Grazyna; Polk, John D; Clancy, Kathryn BH. "Physical activity in women of reproductive age in a transitioning rural Polish population." Poster presented at Wisconsin Symposium on Feminist Biology. October 5, 2018.
- 2017 Lee, Katharine MN;** Rogers, Mary P; Galbarczyk, Andrzej; Jasienska, Grazyna; Polk, John D; Clancy, Kathryn BH. "Bone maintenance as a result of reproductive and energetic status: a life history perspective." 4th Conference of the Polish Society for Human and Evolution Studies (Polskie Towarzystwo Nauk o Człowieku i Ewolucji). Krakow, Poland. September 2017.
- 2016 Lee, Katharine;** Rogers, Mary; Galbarczyk, Andrzej; Jasienska, Grazyna; Polk, John; Clancy, Kathryn. "Habitual physical activity: considering health behavior from a broader perspective (poster presentation)" Annual meeting of International Society for Evolution, Medicine, and Public Health. Durham, North Carolina. June 2016.
- 2016 Lee, Katharine MN.** "Bone health: Reproduction and physical activity." UIUC Department of Anthropology annual research symposium. March 5, 2016.
- 2013 Lee, Katharine M;** Thomas, Scott; and Hare, Elizabeth. "Evaluation of developmental weight gain and factors in early rearing on hip health as evaluated by PennHIP". Poster presentation at the 2013 International Working Dogs Conference.
- 2010 Lee, Katharine M;** Buller, Mark J; Tharion, William J; Pisani, Justin; Gordon, S Robert; and Beidleman, Beth A. "Utility of simple algorithms in heart rate signal quality assessments". Poster Presentation at the 2010 Annual Fall Meeting of the Biomedical Engineering Society.
- 2009** Coyne, Megan E; Hasselquist, Leif; Schiffman, Jeffrey M; Gregorczyk, Karen N; **Nobes, Katharine M;** Adams, Albert; Bensen, Carolyn K. "Oxygen consumption output increases during steady-state submaximal prolonged heavy load carriage". *Medicine & Science in Sports & Exercise*. Vol 42, Issue 5. P 102. May 2009. Poster presented by M. Coyne at the American College of Sports Medicine annual conference.
- 2007** Gordon, Theresa; **Nobes, Katharine;** Nauman, Eric A; and Burshell, Alan L. "Biomechanics of Scoliosis and Its Effects on Postmenopausal Women." Platform presentation, presented by T. Gordon at the 2007 Annual Fall Meeting of the Biomedical Engineering Society.

## Published Software

- 2018 Lee, Katharine MN.** R Code in support of publication. <https://doi.org/10.5281/zenodo.1308115>

## Language Competence

Intermediate German  
Beginning/Intermediate Polish

## Technical and Research Skills

Computing: R, MATLAB, LaTeX, Markdown, Git, Jekyll, Hugo  
Data planning and data management  
Anthropometry (height, weight, circumferences, body segment measures)  
ELISA hormone analysis methods

Design, implementation, and promotion of academic and research-related organizational strategies  
Experience with clinical and university IRB processes for human subjects research  
Experience with IACUC process for canine research

## Service

**Manuscript review:** American Journal of Human Biology

**The Carpentries** 2019-current

*Certified Software & Data Carpentry Instructor*, The Carpentries teach foundational coding and data science skills to researchers worldwide.

**21st Century Scientist Working Group** UIUC; 2014-current

*Founding Member* Group of faculty, staff, and students at the University of Illinois interested in public engagement in science and making science more inclusive.

**Graduate representative to Department of Anthropology Faculty Meetings** UIUC; 2016-2018

**Association of Biological Anthropologists at UIUC** UIUC; 2013-current

*Treasurer 2013-2016, President 2017-2018*

**Field work, Science, and Sexual Assault: Academic field site safety should not be an afterthought**

UIUC; Oct 30, 2014 – *Organized panel* to discuss field site safety and university policies. Panel included Kathryn Clancy and representatives from UIUC Women’s Resource Center and the UIUC Office of Diversity, Equity, and Access.

**Anthropology Undergraduate Research Capstone Conference** UIUC *Invited Judge, Spring 2014*

## Community outreach talks and presentations

**Science Café** Sponsored by the UIUC Institute of Genomic Biology and Beckman Institute December 5, 2018. Title: “Peak Bone Mass: What does it mean? Why do we care?””

## Professional Society Memberships

American Anthropological Association (2016-current)

American Association of Physical Anthropologists (2014-current)

American Association for Anatomy (2019-current)

American Society for Bone and Mineral Research (2014-current)

Human Biology Association (2014-current)

IEEE Engineering in Medicine and Biology Society (2006-current)

IEEE Women in Engineering (2008-current)

Biomedical Engineering Society (2004-2010)