

Laura D. Klein

1007 W. Harrison St
Chicago, IL 60607

ldklein2@uic.edu

RESEARCH AND PROFESSIONAL INTERESTS

Lactation | Immune function | Maternal and infant health | Global and public health |
Evolutionary medicine | Informal science education and outreach

POSITIONS

2018 – Present Visiting Assistant Professor, Department of Anthropology, University
of Illinois at Chicago

EDUCATION

2018 PhD, Human Evolutionary Biology, Harvard University
2014 MA, Human Evolutionary Biology, Harvard University
2011 BS *cum laude*, Integrative Biology Honors, University of Illinois at Urbana-
Champaign

CERTIFICATIONS

2014 Certified Lactation Educator Counselor, University of California San Diego Extension

PUBLICATIONS

2018 **Klein** LD, J Huang, EA Quinn, M Martin, AA Breakey, B Scelza, C Vallengia, G Jasienska, H Kaplan, M Gurven, C Lebrilla. Variation among populations in the immune protein composition of mother's milk reflects subsistence pattern. *Evolution, Medicine, and Public Health*. *In press*.
 Klein LD, AA Breakey, SF Lipson, C Vallengia, G Jasienska, PE Ellison, K Hinde. Milk cortisol as a signal of maternal energetic condition. *In review*.
2017 **Klein** LD, AA Breakey, B Scelza, C Vallengia, G Jasienska, K Hinde. Concentrations of trace elements in breast milk: comparisons among women in Argentina, Namibia, Poland, and the United States. *PLOS ONE* 12(8): e0183367.
2013 Clancy KBH, LD **Klein**, I Nenko, A Ziomkiewicz, G Jasienska, R Bribiescas. Relationships between biomarkers of inflammation, ovarian steroids, and age at menarche in a rural Polish sample. *American Journal of Human Biology* 25: 389-398.

WORKING MANUSCRIPTS

Davis JCC, SM Totten, LD Wu, **LD Klein**, *et al*. Breast milk phenotype points to selection to protect against infant disease. *In prep*.
Klein LD, JCC Davis, S Guterrez, EA Quinn, M Martin, AA Breakey, B Scelza, C Vallengia, G Jasienska, H Kaplan, M Gurven, C Lebrilla, and K Hinde. Insights into co-evolution of

milk and microbes: subsistence strategy predicts glycan profile in breast milk among diverse human populations. *In prep.*

GRANTS

- 2015 “Impacts of maternal environment on milk immunofactors and infant immune system development.” NSF Doctoral Dissertation Research Improvement Grant (\$14,053). PI: Katherine Hinde, Ph.D. Role: Co-Principle Investigator.
- 2014 “Impacts of Maternal Disease Ecology on Milk Immunofactors and Infant Immune System Development.” Wenner-Gren Dissertation Fieldwork Grant (\$15,342). Role: Principal Investigator. Supervisor: Katherine Hinde, Ph.D.
Harvard University Frederick Sheldon Traveling Fellowship (\$24,000).
- 2013 “Maternal Environment and Milk Composition in Boston (Pilot Study).” Harvard GSAS Graduate Society Summer Pre-Dissertation Fellowship (\$3,000). Role: Principal Investigator. Supervisor: Katherine Hinde, Ph.D.
- 2012 “Maternal Environment and Milk Composition (Pilot Study at the Mogielica Human Ecology Study Site, Poland).” Harvard HEB Summer Research Funding (\$5,000). Role: Principal Investigator. Supervisor: Katherine Hinde, Ph.D.

INVITED TALKS

- 2018 Milk, Mleko, Leche: Variation in human milk across populations. University of Illinois at Urbana-Champaign, Association of Biological Anthropologists. 27 April.
- 2017 Mothers’ Milk Composition at the Mogielica Human Ecology Study Site. Yale University, Department of Anthropology. New Haven, CT. 30 January.
- 2015 Maternal Environment and the Immune Composition of Human Milk. Polish Academy of Sciences, Unit of Anthropology. Wroclaw, Poland. 25 November.

CONFERENCE PRESENTATIONS / PUBLISHED ABSTRACTS

- 2017 **Klein** LD, E Goonatileke, A Galbarczyk, A Kotlinska, C Lebrilla, G Jasienska, K Hinde. Secretory IgA and lactoferrin concentrations similar in urban and rural Polish mother’s milk. Polish Society of Human and Evolution Studies 4th Conference. Krakow, Poland. (Poster)
- Klein** LD, AA Breakey, SF Lipson, C Vallengia, G Jasienska, PE Ellison, K Hinde. Milk cortisol as a signal of maternal energetic condition. Human Biology Association, 42nd Annual Meeting, New Orleans, Louisiana. (Podium)
- Klein** LD, E Goonatileke, A Galbarczyk, A Kotlinska, C Lebrilla, G Jasienska, K Hinde. Maternal environment and the composition of breast milk immune proteins in mothers from urban and rural Poland. American Association of Physical Anthropologists, 42nd Annual Meeting, New Orleans, Louisiana. (Poster)
- 2016 **Klein** LD, AA Breakey, C Vallengia, G Jasienska, K Hinde. Concentrations of trace elements in human milk: comparisons among women in Argentina, Namibia, Poland, and the United States. International Society for Evolution, Medicine, and Public Health Meeting. Durham, North Carolina. (Poster)
- 2015 **Klein** LD, J Huang, EA Quinn, M Martin, AA Breakey, B Scelza, C Vallengia, G Jasienska,

- H Kaplan, M Gurven, C Lebrilla, K Hinde. Variation among populations in the immune protein composition of mother's milk reflects subsistence pattern. Human Biology Association, 40th Annual Meeting. St. Louis, Missouri. (Invited Poster)
- Klein** LD, J Huang, EA Quinn, M Martin, AA Breakey, B Scelza, C Valeggia, G Jasienska, H Kaplan, M Gurven, C Lebrilla, K Hinde. Variation among populations in the immune protein composition of mother's milk reflects subsistence strategy. The International Society for Evolution, Medicine, & Public Health Inaugural Meeting. Tempe, Arizona. (Flash Talk and Poster)
- 2014 **Klein** LD, J Huang, EA Quinn, M Martin, AA Breakey, B Scelza, C Valeggia, G Jasienska, H Kaplan, M Gurven, C Lebrilla, K Hinde. Variation among populations in the immune protein composition of mother's milk reflects subsistence pattern. 17th International Society for Research in Human Milk and Lactation Conference. Kiawah Island, South Carolina. (Poster)
- 2013 **Klein** LD, A Galbarczyk, M Klimek, I Nenko, G Jasienska, K Hinde. Determinants of milk volume consumed at a single morning feed by healthy, rural Polish infants. Experimental Biology Boston, MA. (Poster)
- 2012 Clancy KBH, LD **Klein**. The relationship between strenuous physical activity and C-reactive protein is cycle-dependent: results from rural Poland. *American Journal of Physical Anthropology* 54:116.
- 2011 Clancy KBH, K Tribble, LD **Klein**. Pro-and anti-inflammatory food proteins and their impact on maternal ecology. *American Journal of Physical Anthropology* 144: 109.
- 2010 **Klein** LD, TN Melber, KBH Clancy. Isolation of C-reactive protein from human urine. *American Journal of Physical Anthropology* 50: 144-145. (Poster)

CAMPUS TALKS

- 2017 Milk, Mleko, Leche: Variations in mother's milk within and across populations. Northwestern University, E2HD Lab Meeting. 11 December.
- 2016 A Tale of Two Studies: Exploring Milk Composition Across Maternal Environments. Harvard University, Department of Human Evolutionary Biology. 29 November.
- 2014 Milk, Mleko, Leche: Preliminary Results from a Study of Milk Composition. Harvard University, Department of Human Evolutionary Biology. 11 March.
- 2012 Exploring Relationships Between Diet and Immune Function. Department of Human Evolutionary Biology, Harvard University. 24 January.

TEACHING EXPERIENCE

- 2018 Evolution & Human Development, UIC (Instructor)
Introduction to Human Evolution, UIC (Instructor)
Biology of Women, UIC (Instructor)
- 2017 Biology of Women, UIC (Instructor)
Introduction to Evolutionary Medicine, Harvard Pre-College Program (Instructor)
- 2016 Introductory and Advanced Biology, The Thatcher School (Anacapa Visiting Scholar)
- 2014 Evolutionary Anatomy and Physiology, Harvard (Teaching Fellow)
Introduction to Biology, Harvard Academic Tutor Program (Tutor)

- Sex, Love, and War: The Evolution of Human Behavior, Harvard (Teaching Fellow)
 2013 Evolution of the Human Diet, Harvard (Teaching Fellow)

FELLOWSHIPS, HONORS, AWARDS

- 2017 Cora DuBois Dissertation Fellowship
 2016 Harvard Dissertation Completion Fellowship
 2015 Harvard Graduate Student Council Conference Grant
 2014 Harvard Bok Center Distinction in Teaching Award
 2013 NSF Graduate Research Fellowship Program Honorable Mention
 2011 NSF Graduate Research Fellowship Program Honorable Mention
 School of Integrative Biology Distinction Award for an Excellent Senior Thesis
 UIUC Chancellor's Scholar (Campus Honors Program) (2007-2011)
 College of Liberal Arts and Sciences James Scholar (2007-2011)

PROFESSIONAL SERVICE

- Discussant, Second City Anthropology Conference 2018. Panel: "Open Wide! Oral Indicators of Population Health."
Ad Hoc Reviewer: Biological and Trace Element Research, *Building Babies: Primate Development in Proximate and Ultimate Perspective* (Edited volume, Eds. Kate Clancy, Katherine Hinde, Julienne Rutherford)

PROFESSIONAL SOCIETIES

- International Society for Evolution, Medicine, and Public Health
 Human Biology Association
 American Association of Physical Anthropologists
 American Society of Nutrition
 International Society for Research in Human Milk and Lactation

OUTREACH

- 2016-2018 Letters to a Pre-Scientist (Scientist Pen Pal)
 2016 Lactation Research Q&A at the Nan Tolbert Nurture Center (Presenter)
 2014-2015 Hall of Human Life, Boston Museum of Science (Program Presenter)
 2014 Harvard Science in the News Spring Lecture Series (Lecturer)
 2012-2014 Hall of Human Life, Boston Museum of Science (Volunteer)
 2013 Harvard Science in the News Fall Lecture Series (Lecture Coordinator)
 Pioneer Charter School of Science 6th Annual Science Fair (Judge)
 2012 SET in the City: STEM Career Exploration for High School Girls (Volunteer)
 Emerson College Peer Review Simulation (Peer Reviewer)
 Harvard Museum of Natural History Paleoplanet Day (Volunteer)
 2011 Harvard Science in the News "Science by the Pint" (Event Coordinator/Host)