# **Curriculum Vitae**

## Elizabeth A. Quinn

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### ACADEMIC APPOINTMENT

2011-	Assistant Professor, Department of Anthropology, Washington University in St.
	Louis

Faculty Scholar, Institute for Public Health Scholar, Washington University in St. Louis

### **EDUCATION**

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June 2011	Doctor of Philosophy, Department of Anthropology, Northwestern University.
Dec 2011	Masters in Public Health, Department of Public Health, Feinberg School of Medicine at Northwestern University.
May 2003	summa cum laude, Bachelor of Science, Anthropology and Human Biology, Emory University.

## PROFESSIONAL INTERESTS

- Human milk composition: fat, sugars, protein, and total energy, fatty acid composition, hormones such as leptin, insulin, and immune factors (sIgA, lactoferrin).
- Human milk as part of human variation and adaptation
- Developmental plasticity: influences of early life nutrition and growth on milk composition and human health.
- Intergenerational signaling: associations between early life nutrition and growth and the nutrition provided via milk to offspring, postnatal growth velocity
- Human growth and development: cross cultural comparisons of human growth, understanding how hormones in milk may contribute to infant growth
- Breastfeeding: patterns of feeding (frequency, duration), social contexts of infant feeding decisions.
- Human milk as an adaptive phenotype

# **CURRENT PROJECTS & FIELDWORK**

Project Director, Studying Mothers Infants Lactation and Environments (SMILE),

This project is a comparative study of environments, maternal reproductive physiology, infant health, and milk composition in multiple populations adapted to unusual environments such as high altitude and cold.

Field work: "Milk with altitude: investigating high altitude adaptations in human milk from ethnic Tibetans living at high altitude (Nubri, Nepal) and low altitude (Kathmandu, Nepal)." Spent 2+ months in Nepal conducting field work, recruited 130 mothers into the study and collected milk, saliva, anthropometrics, and survey data. Samples are currently being analyzed in the lab for metabolic hormones and immune factors.

Researcher/Senior personnel, Cebu Longitudinal Health and Nutrition Survey, 2004-present Longitudinal birth cohort study of 3000+ mothers and infants followed since birth in 1983-4; my research emphasis is on offspring of the infants born in 1983-4, particularly breastfeeding behaviors, milk composition, and birth outcomes/reproductive investment.

Senior personnel, The 1000 Mothers Project, 2011-present. Seven site project looking at population diversity in milk composition, especially oligosaccharides, and the establishment of the infant microbiome (intestinal bacteria).

### **GRANTS & EXTERNAL FUNDING, AWARDS**

2013-14	Leakey Foundation, Milk with altitude: Investigations in milk composition among low and high altitude living Tibetans.
	\$21,050
2013-14	Wenner Gren Foundation for Anthropological Research, Milk with altitude:
	Investigations in milk composition among high altitude living Tibetans.
	\$20,000
2007-09	Dissertation Improvement Grant, National Science Foundation
	DDIG: Early life growth and nutrition and milk composition in adulthood. Co-PI.
	\$14,998
2006-09	National Science Foundation, Predoctoral Graduate Research Fellowship
	\$120,000

### **AWARDS**

Sony Award for Excellence in Teaching with Technology, 2012.

#### PEER REVIEWED PUBLICATIONS

Yoon J\*, Tooba R\*, Largado F, Borja J, **Quinn EA.** (2014) Parity and hemoglobin levels in a one year birth cohort of lactating Filipino women. American Journal of Human Biology 26(3):421-3. doi: 10.1002/ajhb.22526

**Quinn EA**. (2014) Too much of a good thing: an evolutionary argument for decreased iron fortification of infant formula in the United States. American Journal of Human Biology 26(1):10-7. doi: 10.1002/ajhb.22476

**Quinn EA.** (2013) No evidence for sex biases in milk macronutrients, energy or breastfeeding frequency in a sample of Filipino mothers. American Journal of Physical Anthropology 152(2):209-16. doi: 10.1002/ajpa.22346

Miller EM, Aiello MO, Fujita M, Hinde K, Milligan L, **Quinn EA.** (2013) Field and laboratory methods in human milk research. American Journal of Human Biology 25(1):1-11.

**Quinn EA**, Kuzawa CW. (2012) Dose response between fish consumption and human milk DHA content among Filipino mothers in Cebu City, Philippines. Acta Paediatrica 101(10): e439-45.

**Quinn EA**, Largado F, Power ML, Kuzawa CW. (2012) Maternal level predictors of breast milk macronutrient composition in Filipino mothers. American Journal of Human Biology 24(4):533-40.

Kuzawa CW and **Quinn EA**. (2009) Developmental origins of adult function and health: evolutionary hypotheses. Annual Review of Anthropology 38: 131-147.

Kuzawa CW, **Quinn EA**, Adair LS (2007) "Leptin in a lean population of Filipino adolescents", American Journal of Physical Anthropology 132(4): 642-9.

Turner BL, Edwards JL, **Quinn EA**, Kingston JD, Van Gerven DP. (2007) "Age-related variation in isotopic indicators of diet at medieval Kulubnarti, Sudanese Nubia." International Journal of Osteoarchaeology, 17(1): 1-25.

## **CONFERENCE PAPERS & PUBLISHED ABSTRACTS**

**Quinn EA** and Kuzawa CW. (2013) Maternal predictors of human milk leptin levels and associations with infant size. Amer J Hum Bio 25(2): 250.

**Quinn EA.** (2013) Associations between metabolic hormones and macronutrients in human milk. Amer J Phys Anth 150 (S56): 214.

**Quinn EA** and Kuzawa CW. (2012) Preliminary evidence for developmental programming of human milk composition. International Society for Research on Human Milk, September 2012.

**Quinn EA** and Power ML. (2012) Crawling, not age, predicts greater sIgA content of milk in Filipino women. Amer J Hum Bio 24(2): 214.

**Quinn EA.** (2011) Growth characteristics in infancy predict differences in milk composition in adulthood. Am J Phys Anth 144 (S52):245.

**Quinn EA.** (2010) Breast milk composition: maternal and infant predictors. Am J Hum Bio 22(2):268.

**Quinn EA**, CW Kuzawa. (2009) Does a woman's birth weight predict milk protein composition in adulthood? Am J Phys Anth 138 (S48): 215-6.

**Quinn EA**, CW Kuzawa. (2009) Fatty acid composition of human milk from the Philippines: sources of variation across the life span. Am J Hum Bio 21(2): 265.

**Quinn EA**, Kuzawa CW. (2008) "Are daughters' breastfeeding behaviors predicted by mother's breastfeeding behaviors?" Am J Hum Bio 20(2):230.

<sup>\*</sup>undergraduate author

**Quinn EA**, Kuzawa CW. (2007) "Human milk varies in composition across ecologic contexts: Implications for adaptation and health. Am J Hum Bio 19(2): 273.

**Quinn EA**, Kuzawa CW, McDade TW, and Adair LS. (2006) "Effects of infant feeding method at 2 and 4 months of life on male and female adolescent leptin concentrations." Am J Hum Bio 18(2): 268.

**Quinn EA**, Kuzawa CW, McDade TW, and Adair LS. (2005) "Effects of infant feeding method at two and four months of life on male and female adolescent leptin concentrations." Poster presentation at the 3rd International Congress on Developmental Origins of Health & Disease.

**Quinn EA**, McDade TW, Kuzawa CW, and Adair LS. (2005) "The weanling's dilemma: life history trade-offs and infant feeding decisions in the Philippines." 104th annual meetings of the American Anthropological Association, Washington DC November 20.

**Quinn EA**, Thompson AL, Lampl ML. (2005) "Into the Mouths of Babes: Developmental Cross Talk." American Journal of Human Biology 17(2): 253.

**Quinn EA**, Kuzawa CW, McDade TW, and Adair LS. (2005) "Effects of infant feeding method at two and four months of life on male and female adolescent leptin concentrations." Poster presentation at the 3rd International Congress on Developmental Origins of Health & Disease.

**Quinn EA** and Lampl ML. (2004) "Infant illness and the inherent risk of common events during the first year of life," podium presentation at the 10th International Congress of Auxology, Firenze Italy, July 15.

**Quinn EA**, Kingston JD, and Armelagos GA. (2004) "Developmentally Mediated Intra-Individual Variation in Inorganic Stable Isotopes from a Newborn Infant." American Journal of Physical Anthropology 123 (S38): 163.

**Quinn EA**, Kingston JD, Armelagos GA, Van Gerven D. (2003) "Age Variation in Isotopic and Histological profiles in the Kulubnarti R-Group (1000CE – 1550 CE) from Sudanese Nubia," American Journal of Physical Anthropology 120 (S36): 172.

### **COLLOBORATORS**

Marco Aiello, DePaul University
Geoff Childs, Washington University in St. Louis
Katherine Hinde, Harvard University
Christopher Kuzawa, Northwestern University
William Leonard, Northwestern University
Elizabeth Miller, University of South Florida
Office of Population Studies, University of San Carlos, Philippines
Michael Power, Smithsonian National Zoological Park

### PROFESSIONAL MEMBERSHIPS

Human Biology Association American Association of Physical Anthropologists American Anthropological Association International Society for Research on Human Milk and Lactation **SERVICE – Washington University** 

SLICTIOL	washington oniversity
2013-present	Lein Merit Scholarship Committee, Washington University in St. Louis
2013-present	Co-organizer, Anthropology Department Colloquium Series
2012-present	Organizer, Biology Anthropology Journal Club
2011-present	Academic advising, 43 advisees
2013-present	BLOC Faculty mentor, "Building BLOCs of Healthy Nutrition"
2013-present	Faculty Associate, Koenig 4
2012-13	Search committee member, Washington University in St. Louis Thesis
2013	Grant reviewer, TREC Center at Washington University in St. Louis
Advising:	2013 - Grace Chao (co-chair with Brad Stoner)
	Allison Schelble
	Jessica Voon (Dec 2012)

Jessica Yoon (Dec 2013)

2014 - Yaa Kwanza

Lab students currently enrolled in 490: Justine Anderson, Meytal Chernoff, Christian Freeman, Kassie McKinley, Jason Onugha

Reference letters for students written in 2013: 52, for 39 students

## **SERVICE - Professional**

DEITTICE	1101055101141
2014	Human Biology Association, Nominations Committee
2014-15	Chair, Local Arrangements Committee for American Association of Physical
	Anthropologists
Ongoing	Reviewer for: American Journal of Human Biology, PLoSOne, Journal of Human
	Lactation, American Journal of Physical Anthropology (in 2013, reviewed 9
	papers)

#### **OUTREACH**

I also maintain an active research blog, *biomarkersandmilk.blogspot.com*, with each post (1-2/month) averaging more than 300 post views (15,527 as of 3/2/14). The blog is focused on translating breastfeeding and human milk science for the public and increasing information access.