

Finding the Great Balance: Family and Science



Snake
processing
station

Nora @ 3 months

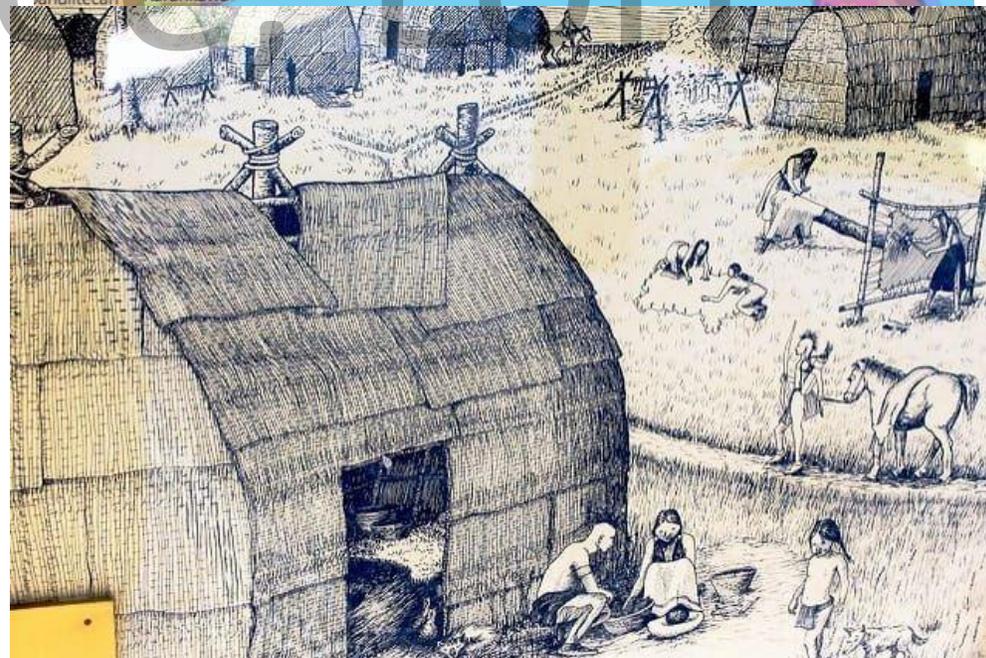
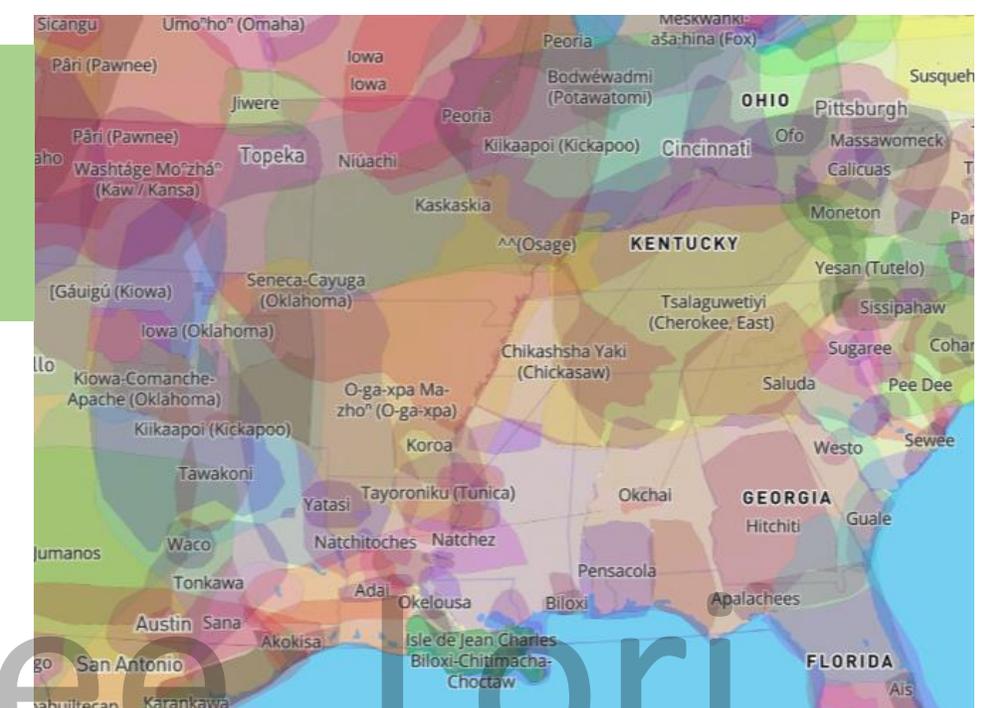
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Land Acknowledgement

I live and work on the ancestral land of the Osage Nation.

Do more:

- K-12 Resources
 - <https://www.osageculture.com/culture/education/k-12-lessons>
- Osage Nation Foundation
 - <https://www.osagefoundation.org>
- To find whose ancestral land you live/work on:
 - <https://native-land.ca/>



The Osage Nation—Osage State Historical Site

What is “family”?

- There is no one definition of “family”
- While my perspective is from someone who has birthed two children and shares the bulk of caretaking duties with a partner, my experiences are not the only ones associated with issues of balancing family.
- Who?
 - People who give birth to children
 - Primary caretakers



Why do we care about this issue?

- Having a child is a choice
 - Different DEI issues
- 90% of people in U.S. have/adopt at least 1 child in their life
- This is an issue that disproportionately affects groups who are traditionally underrepresented in academia, science, and herpetology/ichthyology

CAREER FEATURE | 20 July 2021

The parenting penalties faced by scientist mothers

Starting a family at a key career stage comes at a cost to birthing parents – and many end up leaving the profession as a result.



Why today's long STEM postdoc positions are effectively anti-mother

Published: December 14, 2015 5:54am EST

The 'baby penalty' often sidelines female scientists



By Alan Yu · April 28, 2017

Getting a Job: Is There a Motherhood Penalty?¹

Shelley J. Correll, Stephen Benard, and In Paik

Some stats

- 43% STEM mothers leave after birth of first child (23% fathers)¹
- A mother with a child under six is 21% less likely to obtain a tenure track position than a woman without children²
- 16% less likely than a father with a child under 6²
- Mother with child under 6 is 27% less likely to get tenure than a similar man²

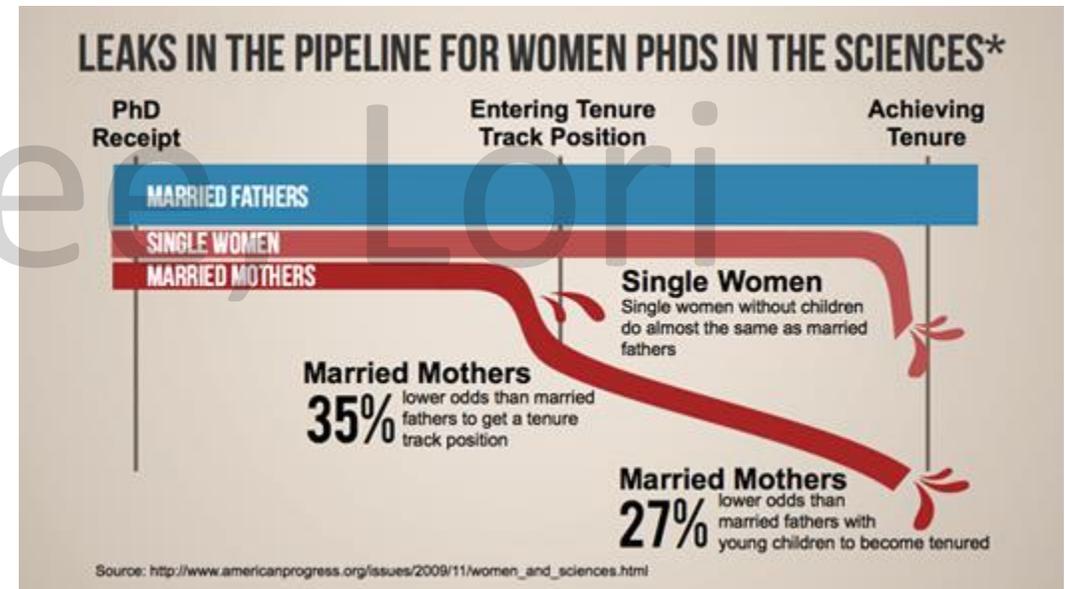
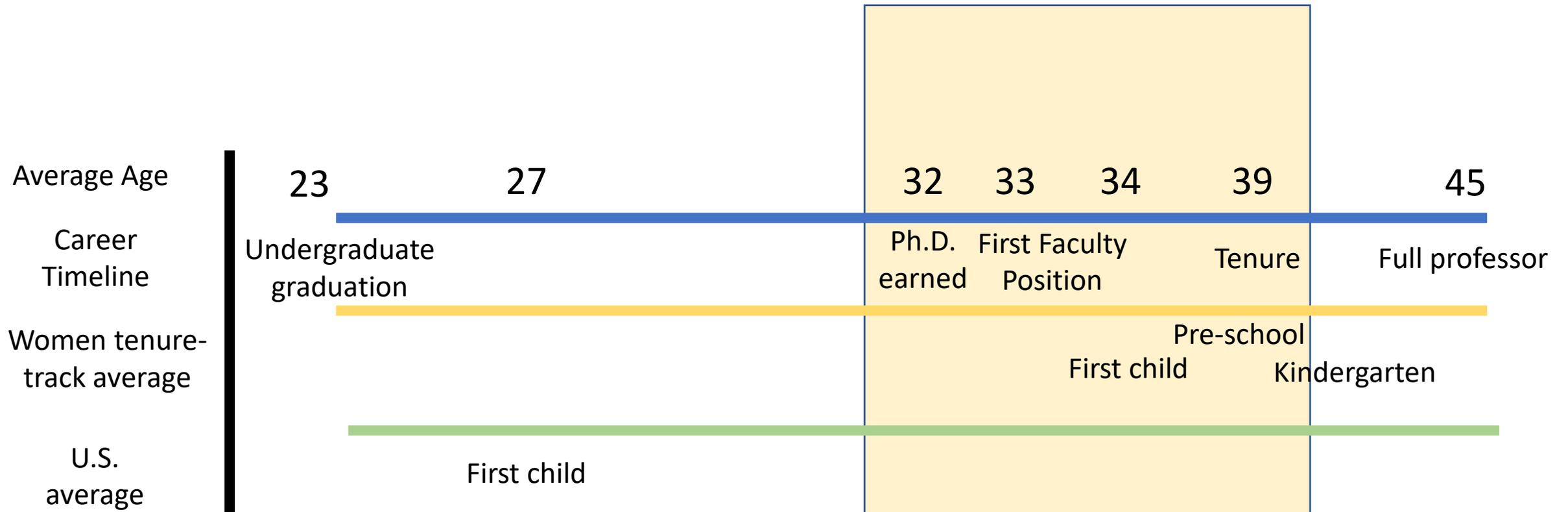


Figure from Tools for Change

(1 = Mason et al., 2013) (2 = Cech and Blair-Loy, 2019)

What is the extent of this problem?



Neuman-Lee, Lori

Pregnancy

- Lack of health care/continuous health care
- Expectations to perform at same level when pregnant as pre-pregnancy
 - Even in a healthy pregnancy
 - In a pregnancy with complications, this is even more challenging



Nora was born three days later (2 ½ weeks early)!

Shout out to Jolly Ranchers—they abated nausea for 8 months for both pregnancies!



Childbirth and immediate aftermath

- Unsurprisingly, health care and challenges with societal/institutional support
- Fewer than 40% of higher education institutions have paid parental leave (in U.S.)
 - Family Medical Leave Act guarantees 6 weeks of unpaid leave
- Average cost of a vaginal, uncomplicated birth in US is \$13,000.
 - With decent insurance, cost is about \$6,500 out-of-pocket.



Nora
Born May 2016



Wes
Born July 2020

Young Children

- Surprise that this issues continues after the baby is placed in childcare
- Pumping breastmilk or paying for formula
- Day care is **EXPENSIVE** (more than \$10,000 per kid per year)
- Sickness
 - Kids in daycare are expected to be sick a lot
 - 6-8 upper respiratory viral illnesses/year



Pumping multiple times a day at work to feed Wes



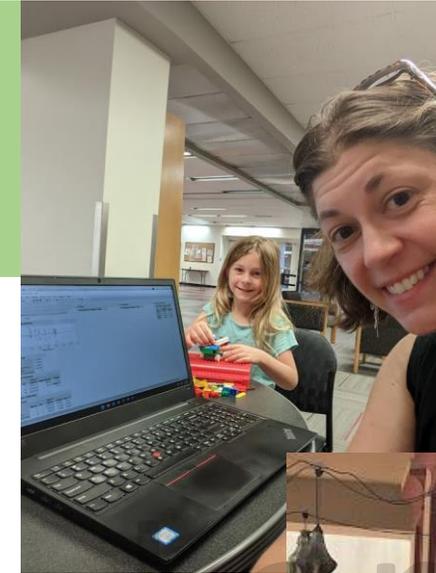
Nora (3 mo) hanging out in her car seat in a ditch while I bleed snakes



Fell asleep at the dinner table after spending the night in the hospital with a sick Nora (2.5 years)

School-age children

- Summer =
 - No childcare
 - No money (9-month contract)
 - Only (best) time to do intensive research
- Cost
 - Day camps run from about \$200-\$500 per week
- 2022 Summer Logistics for Nora (abbreviated)
 - 4 different week-long 9-12 am camps at the university
 - 1 week at the Memphis Zoo for Zoo Camp
 - Patchwork of playdates
 - Grandparents flew in for two weeks



Working at the library after morning summer camp!



Meeting with a student virtually while at the Memphis Zoo (picture by Sheila Poo)

Is it worth it?



I am a better scientist and, more importantly, a better human because I had kids.

Supporting: Mentors

- Mentors
 - Having a strong network of mentors is important
- As a mentor, it is important to listen and have frank discussions about expectations and limitations
- Forming connections with people who have gone through what you are going through is critical



MS advisor Dr. Steve Mullin with his family



PhD advisor Dr. Susannah French with her first child doing field work in the Galapagos Islands



PhD unofficial co-advisor Dr. Butch Brodie, Jr. with Nora



Dr. Marty Crump and Judy Brodie holding Nora



Undergrad advisor Dr. Fred Janzen with the original TREE crew (see Fred's talk at 11am)

Supporting: Colleagues

- Combating biases
- Maintaining collaborations
- Invitations for service
 - *Keep in mind that women disproportionately perform service activities



Awesome collaborator (and friend) Dr. Sheila Poo finding salamanders with us!

Supporting: Institutional

- Stopping the tenure clock
 - Year extensions are often looked at unfavorably in tenure decisions
 - Parental leave benefits men more than women
 - Creates a salary penalty
- Early career grants often overlap with the most time-intensive periods of childbearing/caring
- Solutions
 - Better way of evaluating tenure requirements
 - Flexible funds and spending times for primary caregivers
 - Course release



Image from: Higher Ed Jobs
<https://www.higheredjobs.com/Articles/articleDisplay.cfm?ID=2238>

Supporting: You

Be the best YOU you can be.

Neuman-Lee Lori



Wes meets a mud snake

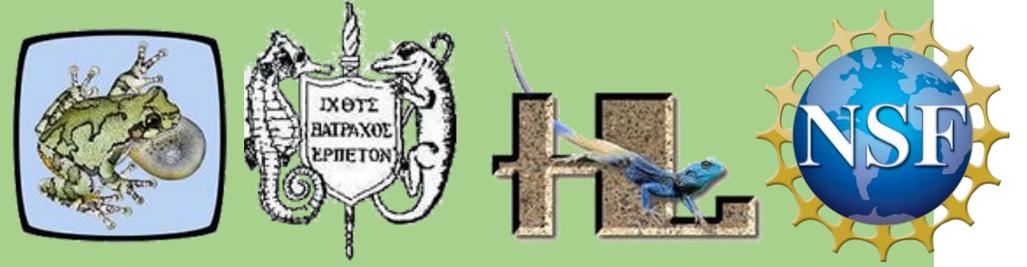


Nora comes to class



Sampling snakes in hail 7 months pregnant

Acknowledgements



- DEI Symposium co-organizers
 - Itzue Caviedes-Solis
 - Rob Denton
 - Jennifer Dietloff
 - Jessica Tingle
- JMIH societies
 - Herpetologists' League
 - Society for the Study of Reptiles and Amphibians
 - American Society for Ichthyologists and Herpetologists
- National Science Foundation
- Arkansas State University
- The people who have been my personal role models as scientist mother, including:
 - Dr. Anne Bronikowski
 - Dr. Susannah French
 - Dr. Marty Crump
 - Dr. Jenn Deitloff
- My friends
- Colleagues
- My students

Contact me!
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I'll totally be your mentor!!!



Sources and resources