

## Managing Academic Careers and Caretaking in STEM

National Academies Science, Engineering & Medicine Lisa Wolf-Wendel, University of Kansas March, 2023

#### Outcomes

- Terminology and Conceptual Lenses
- Differences that matter
- Focus on issues facing academics who are caregivers
  - All faculty
  - In STEM
  - International faculty
  - Non tenure track faculty
  - COVID contexts
- Discussion of systemic fixes



- Avoid use the term "balance"
- Use "integration" or "management"
- Avoid work/family use work/life
- Use caregiver not parent
- Much of the work is focused on women as they are more likely primary caregivers
  - Men also face problematic norms
- Focus on structures not on individual change
  - Focus should be on changing norms and policies (not people)

## Frames of reference

- Gendered academy
- Ideal worker norms
- Greedy nature of caregiving
- Entrenched gender roles
- Socialization and role models
- Life course perspective

- Neoliberal university structures
- Academic culture of doing more with less
- Crisis orientation/precarity
- Historically exclusive

# Work-**life** integration: Diverse circumstances and considerations

- Dual career
- Parenthood
  - -Single parenthood
  - -Blended
  - -Same sex
  - -Adoption

- Family care
  - -Elders
  - -Children
  - -Grandparent
  - -Spouse/partner
- Health and wellness

### The difference that difference makes...

- Race/ethnicity
- National Origin
- Sexual orientation
- Gender identity
- Family Formation
- Socioeconomic status
- Intersectionality

# **Work**-life integration: Diverse circumstances and considerations

- Institutional Type Differences
  - 2 year vs 4 year
  - Teaching vs Research Focus
- Field Differences
  - Humanities
  - Social Science
  - Professional
  - STEM
    - Lab Based
    - Field Based
- Tenure track position
  - Varying ranks

- Instructor/Lecturer (NTT)
  - Full time
  - Part time
    - Retired
    - Working full time in other field
    - Piecing together part time gigs
    - Aspiring to be full time
- Post Doc
- Graduate Student
- Administrative Role

#### The TT Academic Career Lifecycle for Caregivers

- Graduate School women earn 50% of doctorates in STEM
- Post Doc
- Early Career
  - Biological and tenure clocks tick simultaneously women represent 25% of tenured faculty in STEM
  - Diapers, daycare, breast feeding , maternity leaves
  - Joys of academic motherhood
  - No time
  - Perspective and Buffering
  - Need mentoring and support
- Mid Career
  - Car pools, activities, schedules
  - Lots of service and teaching care work
  - Hesitancy to "go up" women represent 20% of full professors in STEM
  - Feel Stuck dual career couple concerns
  - In need of mentoring and support
- Late Career
  - In need of mentoring and support

### **Caregivers in STEM**

- Gender & Racial inequality
- Not all STEM is the same
- Managing labs
- Field Work
- Grant funding
- Identity as a scientist
- Options beyond academe
- STEM Women perceived need to work harder
- Collaboration (+/-)

### **Care Related Needs of International Faculty**

- Foreign Born faculty make up 20% of STEM faculty
  - 1/3 of all new hires
  - Surpass number of US female hires and US URM hires
- COACHE survey from 2012-2018 (n=67,000 faculty from 164 universities)\*
  - 88% US citizens
  - International faculty more likely to be married with children (55% compared to 48%)
  - 10% caregiver for an adult
  - International faculty less satisfied with measures related to work-life
  - International faculty less satisfied overall, but more productive
  - International faculty less mobile and less likely to hold leadership positions
  - Recent concerns about targeting of international scholars (FBI and racism) -- #invisibleasians
- Work Life Concerns
  - STEM women more likely to be in dual career academic couples affects on mobility and likelihood of TT job
  - International women likely to have traditional gender role orientations
  - Two patterns
    - Have mother (or MIL) live nearby to assist with childcare (til relative needs care themselves)
    - Live far away from family and lack support
    - \* Thanks to Amanda Kulp at UNF for running these data

#### Care Related Needs of Non-Tenure Track (NTT) Faculty

- Contingent Faculty "fast food workers of the academy"
  - Part time adjuncts (retired, industry, "freeway" or "internet" fliers)
  - Full time NTT research scientist (soft money) or teaching faculty (precarious short-term contracts)
  - Majority of faculty positions (2/3 of all faculty positions)
  - Women and URM more likely to be contingent: The Glass Wall
    - Women opt for NTT positions for family reasons
  - Paid less, work more, status is marginalized, work is precarious, disenfranchised lots of flexibility
  - Cut off from TT career ladder lack of opportunities for advancement
- Work Life Concerns
  - Adjunct faculty have no work life recognition though many "choose" position to allow them to care for family – you don't teach, you don't get paid
  - Full time NTT faculty getting more recognition now (slowly)
  - Dissatisfied with mismatch between aspirations and reality
  - Very little support for caregiving responsibilities
  - Vampirism

#### **COVID-19 Contexts**

#### Work Contexts

- University shifts in institutional priorities
- Disrupted research productivity for faculty
- Working from home
- Financial difficulties in higher education

#### **Personal Contexts**

- Closures or hybrid childcare centers and schools
- Working from home
- Increased stress, anxiety, and depression for caregivers
- Disrupted personal support structures
- Safety concerns in interacting with senior family members
- Especially difficult for International and NTT faculty

Permeable boundaries with public and private spheres

Gendered differences in distribution of additional labor

#### In sum....

- Family life and academic careers are life-long propositions
- Progress is more than just "leaning in"
- Friction between structure and agency
- It's not just about women, but gendered
  - New generation of men do participate more in work life than other generations
- Gender norms entrenched in and outside of work
- Higher the rank the fewer women (women also less likely at prestigious institutions)
- Tenure process—based on the male clock
- NTT structures are inequitable and exploitative
- Women more likely to get stuck in the middle—Associate Professor/Associate Dean
- Cumulative disadvantage

### **Policies and Strategies**

- Recognize gendered nature of the academy
- Change requires structural and cultural changes
- Continued need for work-life policies and resources
- Expand focus of policy mentoring from mothers of infants to caregivers across the career & lifespan
- Recognize that work/life is not only a "women's" problem need for gender equity in solutions
- Communication regarding policies must normalize, streamline, encourage use & assess them
- Professional development for chairs, deans, reviewers, panelists, award committees
- Tenure clock extension, with compensation boost given after delay
- Formal recognition of impact on caregiving on productivity COVID statement and plan
- Recognize the current impact (document past) and longer-term impact
- Differential load policies
- Differential paths to promotion a "balanced case"
- Center experiences of most vulnerable faculty on campus
- National associations, funding agencies, and institutions should support & legitimize NTT faculty
- Create structures that support all faculty and resist perpetuating ideal worker norms

#### **Selected References**

- Check, E.A. & Blair-Loy, M. (2019). The changing career trajectories of new parents in STEM. Proceedings of the National Academy of Sciences USA, 116, 4182-4187.
- Finley, A. (2009). Women as contingent faculty: The glass wall. On Campus with Women, 37(3).
- Fletcher, M. Lam, M. Cid, C. & Mourad, T. (2019). Contingent faculty in ecology and STEM: An uneven landscape of challenges for higher education. Ecosphere, 10(12), 1-16.
- Graves, K. (2020). The Exploitation and Marginalization of Contingent and Adjunct Labor. *Volume 7, Fall 2020*, 47.
- Kezar, A. & Acuna A.L. (2020). Gender inequality and the new faculty majority. The Wily Handbook of Gender Equity in Higher Education, 105-124.
- Kim, D. Wolf-Wendel, L. & Twombly, S.B. (2013). The role of citizenship status in intent to lave for pre-tenure faculty. Journal of Diversity in Higher Education, 6(4), 245
- Mollet, A. L., & Wolf-Wendel, L. E. (2022). "I don't know how they think this is possible": Work-life of academic parents during the COVID-19 pandemic. *New Directions for Higher Education*, 2022(199), 57-72.
- Ranganathan, M. Lalk, E., Freese, L.M., Fleilich, M.A., Wilcots, J., Duffy, M.L., & Shivamoggi, R. (2021). Trends in the representation of women among US geoscience faculty from 1999 to 2020: the long road towards gender parity. AGU Advances, 2(3).
- Schwartz, A. (2006). Work-family balance and academic advancement in medical schools. Academic Psychiatry, 30(3), 226-24.
- Ward, K., & Wolf-Wendel, L. (2012). Academic motherhood: How faculty manage work and family. Rutgers University Press.
- Woitowich, N. C., Jain, S., Arora, V. M., & Joffe, H. (2021). COVID-19 threatens progress toward gender equity within academic medicine. Academic Medicine, 96(6), 813.
- Wolf-Wendel, L. E., Twombly, S., & Rice, S. (2000). Dual-career couples: Keeping them together. *The Journal of Higher Education*, 71(3), 291-321.

For More Information contact:

Lisa Wolf-Wendel

Iwolf@ku.edu