



NATIONAL  
ACADEMIES

*Sciences  
Engineering  
Medicine*

EMPOWERING SENIOR  
HIGHER EDUCATION  
LEADERS IN  
DEVELOPING AN  
EQUITABLE RESEARCH  
ECOSYSTEM: A  
WORKSHOP

SHERILYNN BLACK, PHD

CO-CHAIR, NATIONAL  
ACADEMIES ROUNDTABLE  
ON MENTORSHIP,  
PROFESSIONAL  
DEVELOPMENT AND WELL-  
BEING

# THANK YOU!

## Roundtable Workshop #2 Committee

- Anita Corbett (co-chair)
- Hiro Okahana (co-chair)
- Jeremy Waisome
- Melissa Burt
- Cynthia Fuhrmann
- Amanda Shaver
- Eve Higginbotham

Team at the Washington Duke Inn

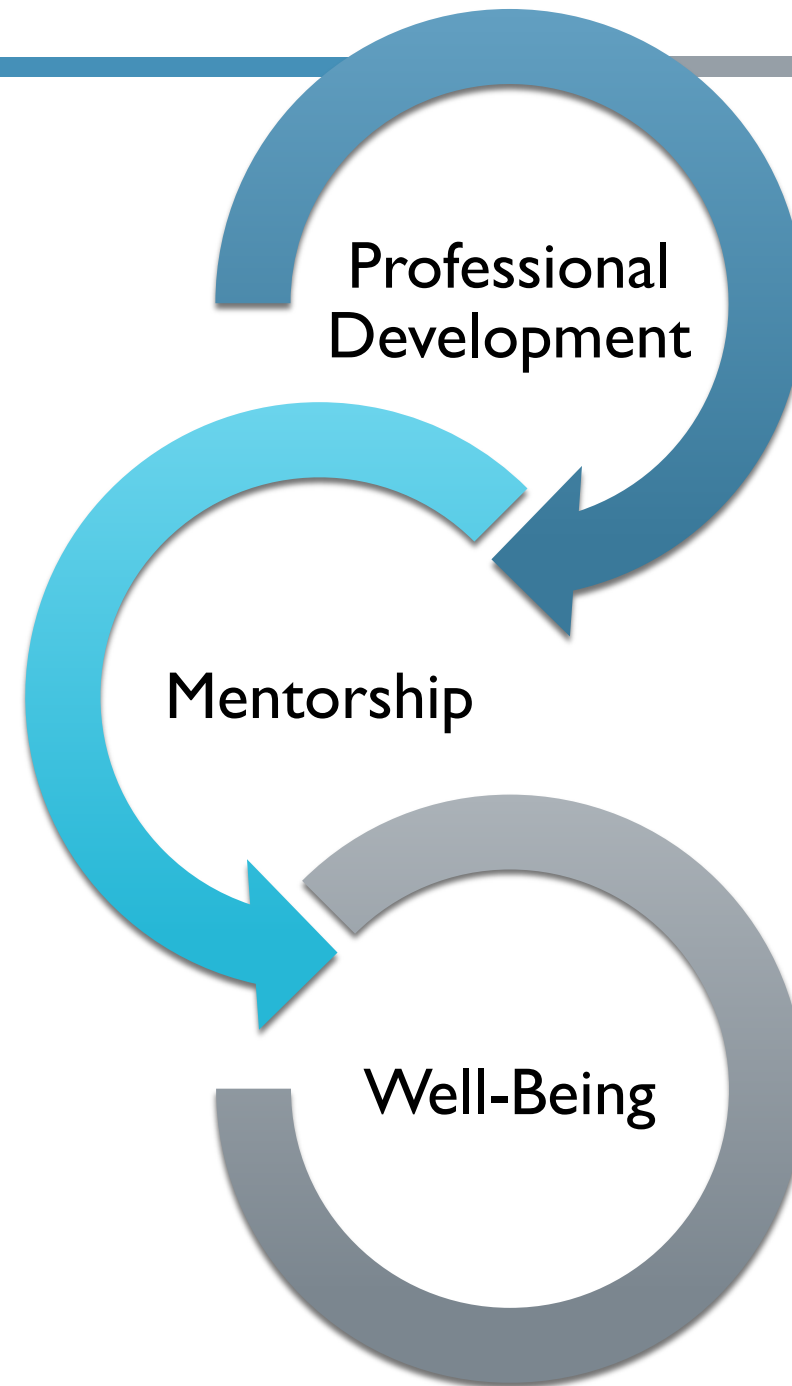
## NASEM – Board on Higher Education and Workforce

- Melissa E. Wynn
- Andrea Dalagan
- Justin Wang
- Maria Lund Dahlberg

## Duke - Office for Faculty Advancement

- Shana Lassiter
- Maggie Elliott

- Roundtable Purpose: To examine the intersection of three fundamental components of holistic training environments, and their broader impacts on approaches and experiences in the academy
- Evolution in focus and scope as context around the academy changes
- Approaches to engage three core components may shift, but priorities remain the same



Postdoctoral researchers using Individual Development Plans report improved relationships with mentors, confidence to compete training, and increased engagement with career development resources (Vanderford et al, 2018)

Professional Development

Mentorship

EQUITY

>20 states are currently engaged in legislation to restrict or remove policies and initiatives related to equity (AP, 2024)

Increased science identity, self-efficacy and community/cohort membership increases student persistence towards STEM career (Syed et al, 2019)

Faculty with assigned mentors reported significantly higher levels of job satisfaction, regardless of faculty rank or track (Chung et al, 2010)

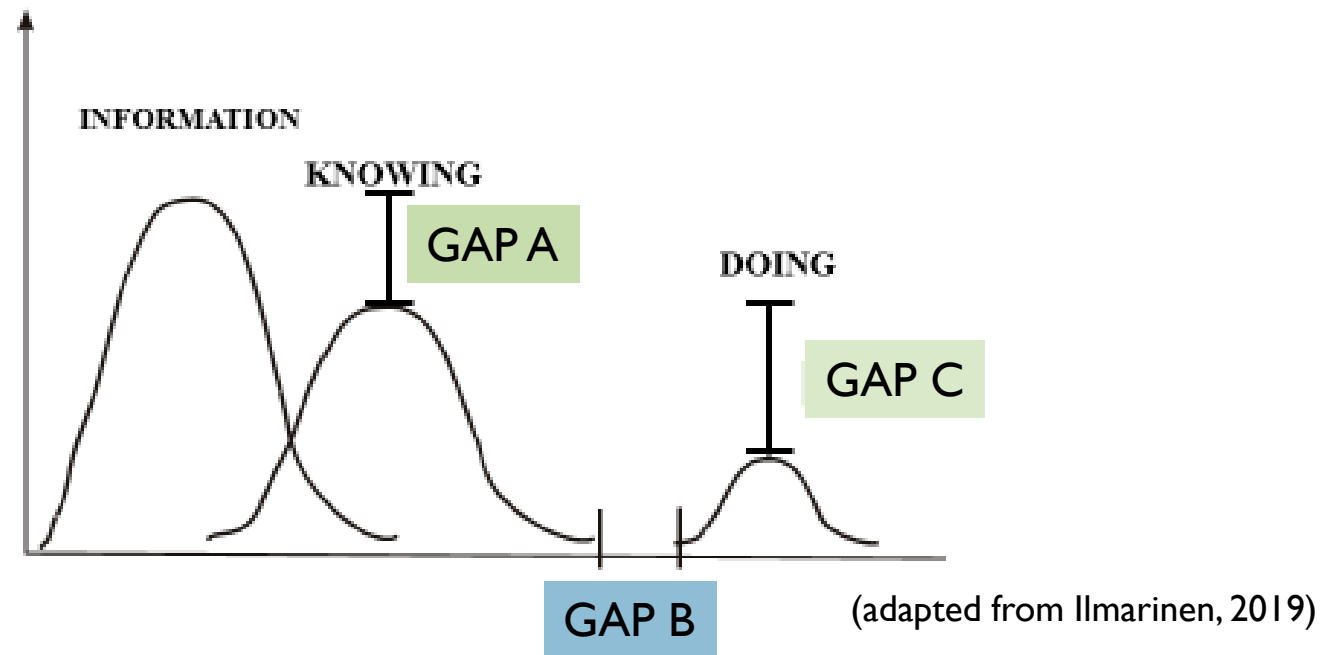
A sense of belonging (across identities) leads to higher levels of engagement, job satisfaction, reduced stress (Darling-Hammond, et al, 2017; Hamou, 2018)

Well-Being

# A REVIEW OF ROUNTABLE WORKSHOP I

- Fall 2023: Knowing-Doing Gap theoretical framework (Pfeffer and Sutton, 2000)
- Professor Jeffrey Pfeffer: identify the gap between knowledge and action, and examine barriers that prevent us from acting when we 'know' what to do

## Knowing-Doing-Gaps



GAP A- subset of available information informs our individual level of 'knowing'  
GAP C- subset of what we 'know' ends up driving our 'doing'

**GAP B- a chasm created by contextual variables that prevents the translation of knowledge into effective action**

## NEXT STEP: A FOCUS ON LEADERS

- Applied K-D Gap framework to the academic ecosystem
- >400 virtual participants identified gaps in their local environments preventing holistic integration of mentorship, well-being and professional development
- The top identified ‘gap’ that surfaced repeatedly throughout the discussion: **leaders at all levels**

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Proceedings of a Workshop—in Brief

### Mentorship, Well-being, and Professional Development in STEMM—Addressing the “Knowing-Doing Gap”

Proceedings of a Workshop—in Brief

#### INTRODUCTION Background

Despite the significant contributions of graduate students and postdoctoral scholars to scientific research, the environments in which they work and learn often offer inconsistent mentorship and professional development opportunities and only intermittently address their mental, financial, and social well-being.

The Roundtable on Mentorship, Well-being, and Professional Development<sup>1</sup> was created to explore ongoing improvements and innovations in effective mentorship and professional development. In particular,

Doing Gap,”<sup>2</sup> took an integrated approach to examining mentorship, well-being, and professional development and the challenge of translating existing theory (“knowing”) into effective interventions (“doing”). The workshop was held both online and in person at the National Academy of Sciences Building in Washington, D.C., on November 1 and 2, 2023.

#### Welcome and Roundtable Goals

In the workshop’s opening remarks, **Sherilynn Black** (Duke University), co-chair of the Roundtable, noted that many of the attendees had already been involved in several initiatives focused on the three areas covered by

# LEADERS ARE KEY IN ADVANCING SYSTEMIC CHANGE

Leaders have the agency, power, positionality and responsibility to move systems

Portfolios include oversight of resource allocation, admissions/hiring decisions, setting priorities for academic mission, etc.

Leaders are key in determining the culture and climate that impact the lived experiences of the individuals in the system

## BARRIERS CAN RESTRICT LEADERS' ABILITY TO ENACT CHANGE

Structural and policy limitations

Resource limitations

Low morale and frustration

Topic fatigue and backlash

Limited engagement and buy-in

External/societal context

Limited time to think with intention, learn from peers



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## DRAW FROM YOUR AGENCY: EVERYONE IS A LEADER IN THEIR OWN SPHERE

- Effective leaders must understand the context of their local environments (the ‘why’)
- Leaders are guided by an intersection of personal and institutional values
- Changing systems requires innovation and strategic thinking— academics are already rewarded for this approach!
- Personal contextual affordances (Lent et al, 1994) inform the way individuals experience circumstances and perceive information, which influences motivation and engagement
- Intentional, constructive collaborations across levels and roles can impact and evolve systems (Astin and Astin, 1993 and 1994—Social Change Model of Leadership Development)

## AS YOU MOVE THROUGH THE DAY...



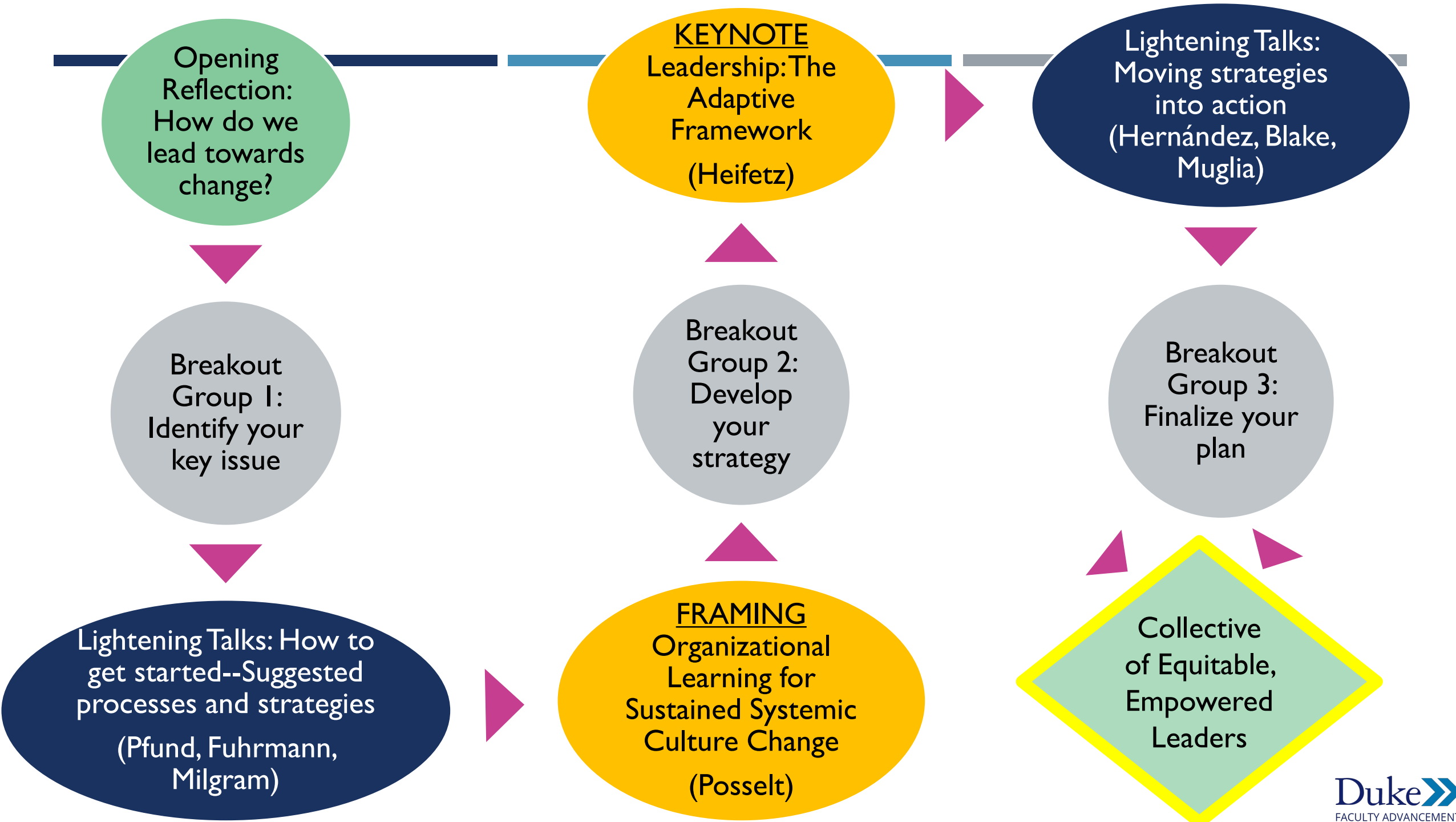
**Action Plans:** You have been placed in breakout groups according to your role and area of interest to encourage generative ideas



**Curated Resources:** Each speaker has selected at least two key resources to support your ability to develop and enact your action plan



**Hybrid Experience:** Speakers and senior leaders on-site will interact with participants in the hybrid audience throughout the day



# BREAKOUT 1: IDENTIFYING AND ADDRESSING CHALLENGES AND BARRIERS

Building on your pre-work reflections,

- *What topic will you focus on as you work through your action plan? Why did you select this topic?*
- *What are the specific ways that addressing this topic will advance the mission of your organization?*
- *What are the SMART goals that you need to successfully address this topic? (SMART= Specific, Measurable, Achievable, Relevant, Time-bound)*
- *What are the barriers that could prevent you from achieving your goals? Do you have ideas or strategies that will help to overcome those barriers?*