ADVANCING UNIVERSITIES' ORGANIZATIONAL MENTORING CLIMATE

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HEALTH SCIENCES

DISCLOSURE & ACKNOWLEDGEMENTS

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PURPOSE

- To provide an overview of recent research about organizational mentoring climate

- To discuss practical strategies for strengthening that climate

MOST CRITICAL ISSUE FOR FACULTY DEVELOPMENT AND RETENTION

Most Critical Issues (Top 3)	School of Medicine (n=319)[1]
Greater mentoring of junior faculty	37.9%
Better leadership	33.9%
Better compensation	33.5%
Better organized faculty development activities	

[1] No significant difference between physician and non-physician faculty
Sources: Faculty Exit Surveys, University of New Mexico School of Medicine 2009-2017

CULTURE VS. CLIMATE: WHAT IS ORGANIZATIONAL CULTURE?

Shared values and assumptions that explain why organizations do what they do and focus on what they focus on; exists at fundamental, perhaps preconscious level…grounded in history and tradition.

SCHNEIDER B ET AL, (2017), J. APPLIED PSYCHOLOGY, P. 478.

WHAT IS ORGANIZATIONAL CLIMATE?

Faculty's shared perceptions of and meaning attached to policies, practice, and procedures; employee's experience and behaviors supported, expected, or rewarded

- When related to the quality of the mentoring environment – the organizational mentoring climate
- Until recently, little known . . .

MEASURES DEVELOPED: *ORGANIZATIONAL MENTORING CLIMATE (OMC)*

- *(1) Organizational Mentoring Climate Importance (OMCI) Scale and (2) Organizational Mentoring Climate Availability (OMCA) Scale*
  - Sample: 355 faculty; Univ. of New Mexico and Arizona State Univ, US
  - Measures (15 items each, 5-6 items/subscale)
    - OMCI: Very important (1) to Very unimportant (5)
    - OMCA: No (-1), Don't know (0), Yes (1)
    - 3 subscales each scale: Organizational expectations, mentor-mentee relationships, resources (exploratory factor analysis)
    - Cronbach's alpha = 0.94 (OMCI), 0.87 (OMCA) (subscales 0.74-0.90)

MEASURES: *ORGANIZATIONAL MENTORING CULTURE MENTORING VALUES*

- Sample: 298 faculty; University of New Mexico and Arizona State University, U.S.

- 4 items (One factor, exploratory factor analysis)
  - *My college/school/department/division recognizes the value of mentoring of junior faculty by senior faculty*
  - *My institution pays special attention to the importance of mentoring underrepresented minority faculty*
  - *Effective mentoring is valued at my college/school/department/division*
  - *Mentor development is valued at my college/school/department/division*
  - Responses: No (-1), Don't know (0), Yes (1)

- Cronbach's alpha = 0.84 (all); 0.88 (underrepresented minority faculty)

CLIMATE COMPONENTS IMPORTANT TO FACULTY

Rated in order of importance; N=355 faculty; score < 2; Range: very important (1) to very unimportant (5)

Available mentorship training materials
A mentor training program
Leaders ensure that each senior faculty meets the requirement for mentoring junior faculty
Quality of the mentor-mentee relationship is discussed as part of the annual faculty review
A policy or guidelines that delineate criteria that can be used to evaluate mentoring success
A policy or guidelines that all faculty will have access to training in unconscious bias
Qualifications for mentors are discussed at faculty meetings/evaluations
The requirement that senior faculty will mentor junior faculty is discussed at faculty meetings/evaluations
P&T Committees evaluate the success of mentoring relationships for promotion to junior faculty
An Office of Diversity that helps to facilitate relationships between mentors and URM faculty
A committee develops criteria for evaluating mentoring relationships
A policy or guidelines about managing conflict in the mentor-mentee relationships

CLIMATE COMPONENTS: IMPORTANT BUT OFTEN UNAVAILABLE

Most available

- 40% mentor training
- 37% mentor training materials
- 29% requirement that senior faculty mentor junior faculty discussed
- 26% policy-unconscious bias training

Least available

- 4% committee for hearing and adjudicating mentor-mentee conflicts
- 3% policy for managing mentor-mentee conflict
- 2% policy or committee; criteria for evaluating mentoring success

When available, usually $\geq$ 50% somewhat/very satisfied

FACULY SUBGROUPS RATE IMPORTANCE AND AVAILABILITY DIFFERENTLY

- Faculty Subgroups
  - Mentored (yes/no), mentoring (yes/no), gender (male/female), underrepresented (yes/no), faculty track (tenured vs. others), rank (assistant professors vs. others), health sciences campus (yes/no)
- Greater *importance* of climate components
  - Women [Effect size[1] = 0.44 (CI 0.21, 0.67), p<.01]
- Greater *availability* of climate components
  - Health sciences campus [Effect size[1] = -0.97 (CI -1.17,-0.77), p<.01]
  - Being mentored [Effect size[1] = 0.58 (CI 0.32,0.83), p<.05]
- No differences for underrepresented minority faculty

[1]Effect size in standard deviation units of normalized scale where *M*=0 and *SD*=1, using generalized linear model (GLM) regression techniques for multivariable models

MENTORING AWARD: IMPORTANCE, AVAILABILITY AND MENTORING OUTCOMES

4-19% reported availability of mentoring award

% Perceived Importance
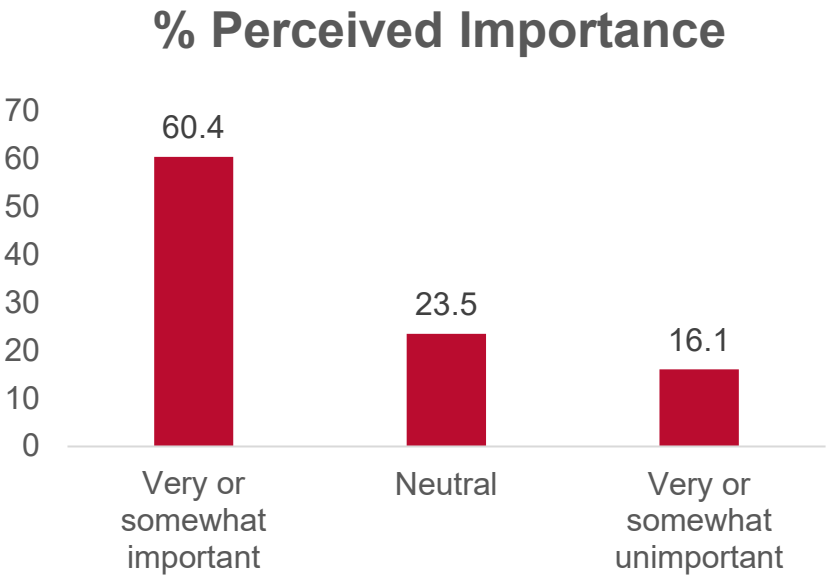
Women and Hispanic whites rated award as more important than counterparts

Award Availability vs. Mentoring Outcomes

| | AVAILABILITY OF MENTORING AWARD | | | |
| | Yes (n=20) | No (n=209) | Don't know (n=69) | |
CHARACTERISTICS	%	%	%	p
Providing Mentoring				
No	45	55	67	0.13
Yes	55	45	33	
Being Mentored				
No	70	80	64	**0.02**
Yes	30	20	36	
	Mean (SD)	Mean (SD)	Mean (SD)	p
Degree of confidence in successfully mentoring another faculty member (scale 0-100)	75.8 (18.9)	70.4 (23.5)	60.9 (28.0)	0.03

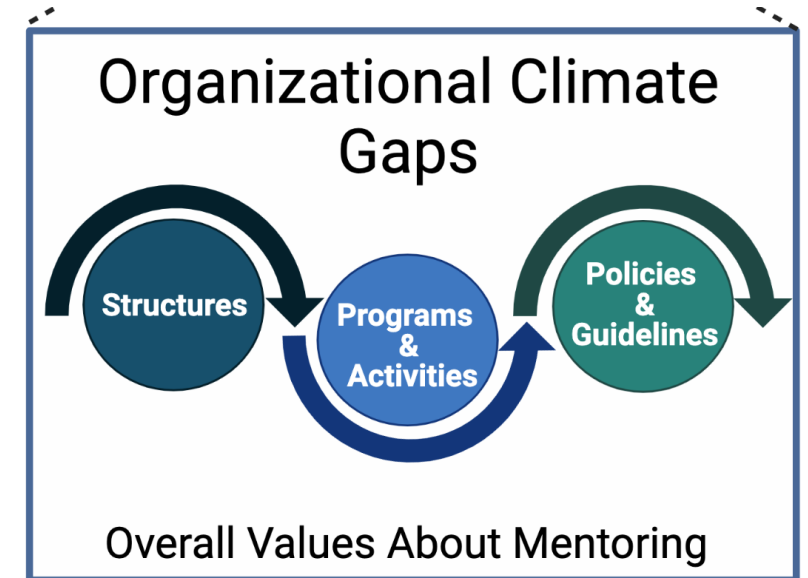# MENTORING CULTURE ASSOCIATED WITH MENTORING CLIMATE AND INVOLVEMENT

- 298 [55 underrepresented minority (URM) faculty] faculty University of New Mexico and Arizona State University

- 24% of faculty being mentored (27% for URM)

- 43% were mentoring (38% for URM)

- Stronger mentoring culture associated with availability of more climate components ($r > .40$, $p < .001$ for all and URM faculty)

- Stronger mentoring culture associated with increased odds of being mentored (OR=1.75, 95% CI 1.19, 2.61) and providing mentoring (OR=1.83, 95% CI 1.30, 2.58)
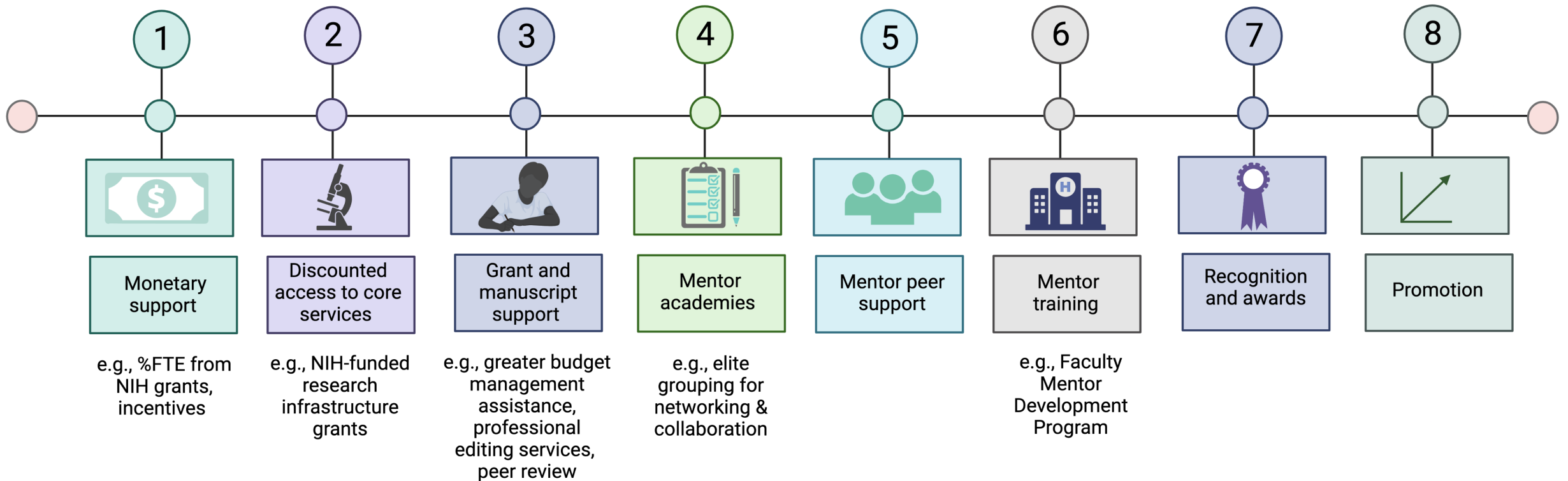
SUMMARY

1. What is important for the mentoring climate is often not available

2. The most important component of organizational mentoring climate (OMC) is a mentor development program

3. Interventions that enhance the OMC may find greater support from women faculty.

4. Mentoring climate/culture perceptions and associations similar between URM and non-URM faculty

SO WHAT TO DO…

- Identify gaps at your organization using the OMCI and OMCA scales
- Begin to implement structures, programs, and policies that support mentoring.
- If in leadership position, promote values related to mentoring to strengthen mentoring culture

Organizational Climate Gaps

Structures Programs & Activities Policies & Guidelines

Overall Values About Mentoring

STRATEGIES TO SUPPORT NEW MENTORS

1. **Monetary support** — e.g., %FTE from NIH grants, incentives

2. **Discounted access to core services** — e.g., NIH-funded research infrastructure grants

3. **Grant and manuscript support** — e.g., greater budget management assistance, professional editing services, peer review

4. **Mentor academies** — e.g., elite grouping for networking & collaboration

5. **Mentor peer support**

6. **Mentor training** — e.g., Faculty Mentor Development Program

7. **Recognition and awards**

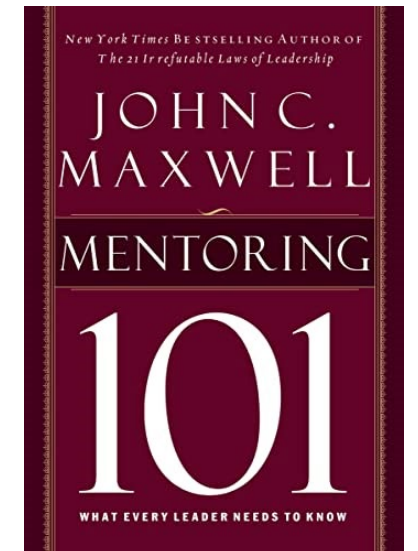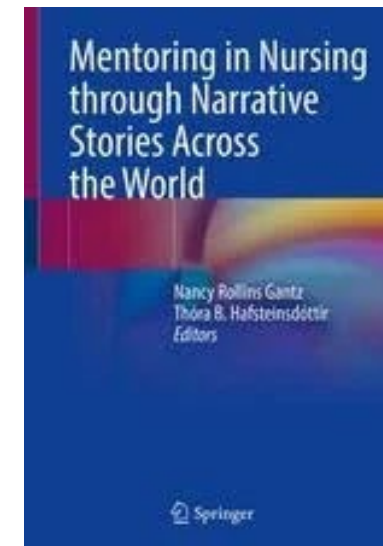8. **Promotion**

SO WHAT TO DO…continued

- Promote mentor development programs and training materials
  - For example, U.S. National Research Mentoring Network programs (nrmnet.net)
  - Our research: Knowledge and self-efficacy improved

SO WHAT TO DO… continued

- Learn about and promote developmental networks (vs. dyadic mentoring)

- Our research: female faculty with less diverse networks; more "friends" than sponsors or allies; more psychosocial support

- Possible to improve knowledge and self-efficacy related to networks

Traditional Mentoring vs Developmental Networks

Traditional Mentoring:
- ✓ One-on-one relationships
- ✓ Long-term
- ✓ Work relationship
- ✓ Participants: only mentor & mentee
- ✓ Mentoring role: mentor as expert

Developmental Networks:
- ✓ Multi-level networks*
- ✓ Short-term & long-term
- ✓ Work and non-work relationships
- ✓ Multiple Participants (developers): mentors, sponsors, friends, allies
- ✓ Mentoring role: mentor as co-learner
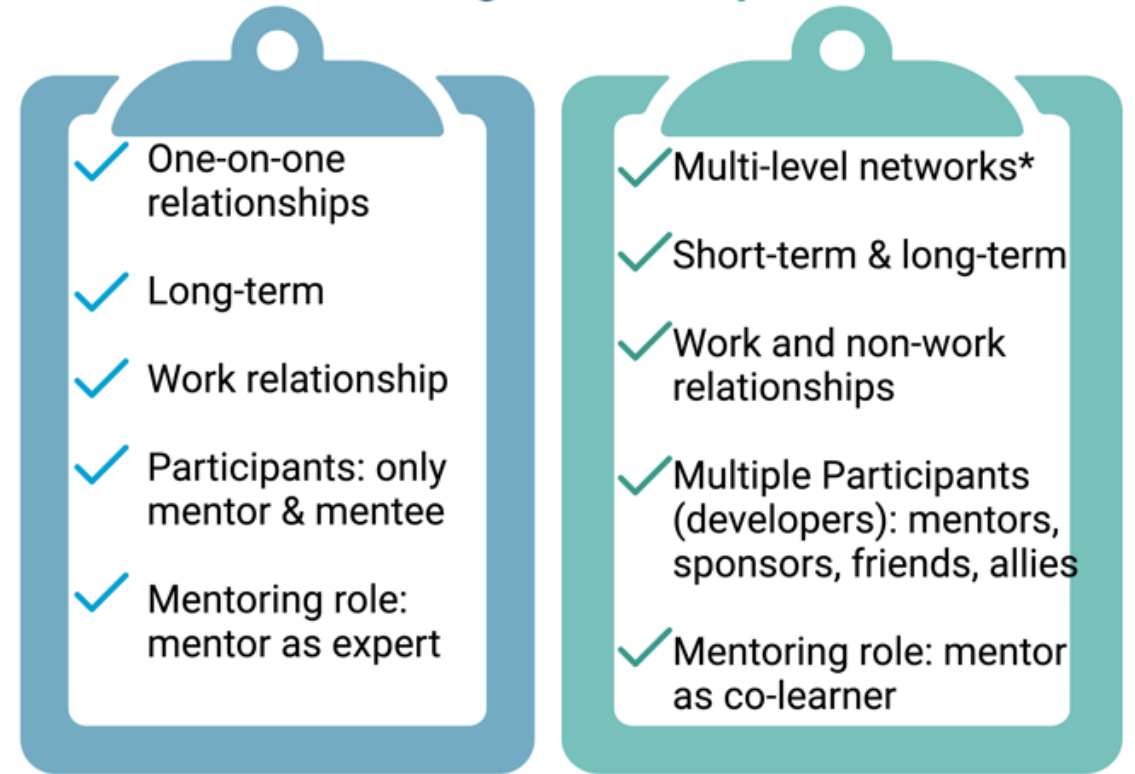
FINAL SUMMARY

- Crisis of lack of mentors in academia

- Quantitative studies of organizational mentoring climate and culture – new area of science

- Data suggests mentoring can be learned and possibly incentivized

- Mentoring climate interventions need to be implemented and evaluated -- do they change mentoring behavior and outcomes?