**An Overview of NIH-TAC Trial Progress**

A Unique NIH funded Multi-level Cluster-Randomized Intervention Trial to Enhance Institutional Culture and Women’s Success in Academic Medicine

### Overview

A cluster-randomized trial of an intervention to enhance the institutional culture, increase academic productivity, and improve job satisfaction for women faculty.

#### Specific Aims

Test effect to which the multi-level interventions improve:

1. Perceived supportiveness of work environment
   - Measure pre/post
2. Outcomes for junior women faculty
   - Increase in # publications and grants
   - Increase in job satisfaction
3. Department/division performance
   - Task force recommendations & implementation

#### Methods

Cluster-randomized intervention trial
- Intervention unit: SOM departments/divisions
  - 27 departments/divisions: randomized 1:3 to intervention, 14 to control
  - 134 women faculty consented: 62 in intervention, 72 in control
- Multi-level interventions
  - **LEVEL 1: Junior women faculty**
    - Total Leadership Program, Manuscript Writing Group, and other concentrated professional development
  - **LEVEL 2: Senior-level/midwomen faculty and administrators**
    - Task Force (TF) Initiative: recommendations and implementation to improve environment to better support women faculty
  - **LEVEL 3: Senior Leaders**
    - Department Chairs
      - Enlist support for each intervention
    - Oversee implementation of TF recommendations

### Progress to Date

- **Junior Women Faculty**
  - Completed 5-month long Total Leadership Program
    - Although it was time intensive, the course did an excellent job of helping me to clarify my goals across all areas of my job.
  - Completed 8-session Manuscript Writing Course
    - Absolutely the best training I have taken in time management, developing practical ways to increase productivity, and de-mystifying the publishing process.
- **Task Force Initiative**
  - Each of 13 TFs made recommendations for institutional change with metrics for evaluation
    - Local, dept specific
    - Larger institutional
  - 43 total TF meetings with outside facilitator
  - Highlights of TF initiatives in 4 departments:
    - Total Leadership Program, Manuscript Writing Group, and other concentrated professional development
    - Off-site technology for radiology reading
    - Enhanced mentoring programs
- **Senior Leaders**
  - Ongoing feedback and oversight of interventions with PIs, Dean, and dept chairs

### Preliminary Analysis: A

**Culture Conducive to Women's Academic Success (CCWAS) Measure**

- A measure of work culture was developed:
  - Shared beliefs and expectations that impact ability of women faculty to be successful
- Instrument development involved:
  - Review of literature and existing questionnaires
  - Focus groups with junior faculty at another institution
  - In-depth discussions with experts in the field
  - Formal pilot test with 56 junior women faculty at over 10 academic health centers
- Final version: 46 items reflecting four dimensions:
  - Freedom from gender bias
  - Support for work-life balance
  - Equal access to opportunities
  - Support of dept chair

### Preliminary Analysis: B

**Impact of Longer Work Hours and Supportive Work Environments on Work-Family Conflict**

- Longer work hours were associated with greater work-family conflict
- Less supportive culture was associated with greater work-family conflict
- There was a statistically significant interaction between long work hours, culture supportiveness, and work-family conflict
- Women in the most supportive culture (Q4) were less likely to experience work-family conflict regardless of number of hours worked per week
- Women in the least supportive culture (Q1) experienced high levels of work-family conflict regardless of number of hours worked per week

### Preliminary Analysis: C

**Factors Associated with Frequent Thoughts of Quitting**

After adjusting for track, number of children at home, and hours worked per week, women faculty who reported:

- Increased stress were 3.5 times more likely to have frequent thoughts of quitting
- Not belonging in their dept were 4 times more likely to have frequent thoughts of quitting
- Higher levels of work-family conflict were 2 times more likely to have frequent thoughts of quitting

### Summary

Overall goal to create an environment where women can succeed fully in their careers, maximizing their contributions to academic medicine and improving workplace for all faculty

- First randomized trial to test effectiveness of a multi-level, school-wide intervention
  - 4 year, 1.3 million dollar NIH award (R01-NS069793)
  - Builds on 14 years of FOCUS program initiatives supported by Dean's commitment and resources
- Preliminary results
  - Development of validated new culture measure
  - High levels of stress and lack of belonging are associated with thoughts of quitting
  - Supportive work culture mitigates negative impact of long hours on work/family conflict