

# A Matrix Mentoring Model to Support Career Development of Clinical and Translational Scientists

Jan Abramson, MS, Carrie L. Byington, MD, Heather Keenan, MD, PhD, John D. Phillips, PhD, Rebecca Childs, Erin Wachs, Mary Anne Berzins, Maria C. Torres, Vivian Lee, MD, PhD, MBA, Edward B. Clark, MD

## The Challenge

Attrition of physician scientists is costly for the national research enterprise.

## The Program

- Health Sciences-wide
  - 2007 – Pediatrics (PCAT)
  - 2013 – School of Medicine (VPCAT)
  - 2014 – All Health Sciences (VPCAT)
  - (Colleges of Health, Nursing & Pharmacy Schools of Dentistry & Medicine)
- Competitive Application
- Two year program
- Structured Curriculum
  - Self-Awareness
  - Leadership
  - Collaboration & Communication
  - Negotiation
  - Skills Development
- Matrix Mentoring Model
  - Self as Center
  - Senior
  - Scientific
  - Peer
  - Staff
- Grant & Proposal Support
  - NIH-funded CTSA Support
  - Statistical Support
  - Edit/Review

I think you should know how important it is to put the group of VPCAT scholars in the same room from time to time. Since last week, someone I met has helped me navigate a major research road block, and I'm using a bunch of organization suggestions from one of the other scholars!  
~ current VPCAT Scholar

## The Scholars

- ✓ Assistant Professor level
- ✓ Clinical and/or translational focus
- ✓ Support of chair
- ✓ Minimum of ~30% time for research and scholarship
- ✓ Identified scientific mentor and research focus
- ✓ Potential for success

## The Matrix Mentoring Model



## The “S” Mentors

### Senior Mentors

- Senior-level faculty and/or leaders
- Participate in quarterly mentoring training
- Successful research and academic career
- Minimum of ~10% time for mentoring

### Scientific Mentors

- Aligned research interests
- Established relationship
- History of funding
- Commitment to research

### Staff Mentors

- Research development professionals
- Attend structured curriculum sessions
- Complete awareness training
- Utilize a ‘train the trainer’ model to develop other grants & contracts professional staff

Thanks, Carrie, and congratulations, VPCAT Scholar, for a terrific year of accomplishments! I look forward to your ongoing success in building a terrific research career and am glad to know the important role VPCAT is playing in helping you do so.  
~ Department Chair

## The Innovation

A culture that leverages resources and partnerships across the university to address many of the barriers physician-scientists encounter.

## The Outcomes

### Program Graduates

- 95% received extramural awards
- 207 Awards
- \$29.3 million in direct costs
- 98% remain in academic medicine
- 94% at University of Utah
- 50% have been promoted
- 20% granted tenure

Increased inclusion of women and under-represented minorities as funded principal investigators.

### Current Cohorts

- ~71 applications
- ~33 Awards
- ~\$4.3 million in direct costs



## The Take Away

This model can be translated to other academic health centers to support and sustain the biomedical workforce.