Grounding Pediatrician-Scientist Development in Professional Identity Formation: Early Outcomes of the Pediatrician-Scientist Training & Development Program

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Disclosure

I do not have an affiliation (financial or otherwise) with a pharmaceutical, medical device, or communications organization.
Outline

• Developing a curriculum for a physician-scientist residency track

• Building a community for residents interested in a career as a physician-scientist

• Integrate curricular components into a model of dual physician-scientist identity formation
Value of Physician-Scientist Career Pathway

- Providing “bench to bedside” care

- Innovative therapies and solutions to childhood diseases

- Extramural funding to institution

FASEB Workforce Report, 2014; Wyngaarden, 1979
“Leaky Pipeline” of Physician-Scientists

Wyngaarden, 1979; Journal of Clinical Investigation, 2015

Pediatrics
“Leaky Pipeline” of Physician-Scientists

- Long “anecdotal” career path
- Uncertainty in funding
- Changing workforce
- Increasing student debt burden

Cornfield, D J. Peds, 2014, FASEB Workforce Report
Supporting Physician-Scientist Training During Residency

• Department of Pediatrics Residency Program - Pediatrician-Scientist Training & Development Program

• 2015

• Dedicated Slots 3/year

• American Board of Pediatrics- Integrated Research Pathway- 2 + 1 training
What Types of Scholarly Research Are Supported in the PSTDP?

Pediatric Scientists carry out scholarly research to advance child health across a broad range of disciplines

(basic science, health services research, behavioral science, global health)
Program Goal

The goal of the PSTDP is to deconvolute the pathway to becoming an independent and successful Pediatrician-Scientist.
Core Components of Structured PSTDP Curriculum

Fostering Dual Clinician-Scientist Identity

Professional Identity Formation and the Clinician-Scientist: A Paradigm for a Clinical Career Combining Two Distinct Disciplines

Norman D. Rosenblum, MD, Manon Kluijtmans, PhD, and Olle ten Cate, PhD

Academic Medicine, Vol. 91, No. 12 / December 2016
Program Elements Commonly Found in Clinician-Scientist Training and Career Development Programs

- Unique integration of clinical medicine and research and the clinician-scientist role
- Maintenance or restoration of clinical skills during research-intensive periods
- Structured research experience
  - Problem solving and critical analysis
  - Professional skills (non-research-specific)
- Management skills
  - Team-based research and collaboration
- Role modeling
- Mentorship
  - Interdisciplinary and transdisciplinary research
  - Community (network) of health researchers

PSTDP Fosters Professional Identity Formation of Pediatrician-Scientists

Provisional Self Creation: Domain Synergy of Pediatrician and Scientist

Experiential Workshops and Networking Seminars: Career Development

Residency | Fellowship | Faculty
Using a Case Report Writing Activity to Foster “Bench to Bedside” Inquiry

- Activity: Case Report Writing
- Clinical: Early Specialty Elective
- Pairing Clinical & Scientific Interest
- Mentor: Pre-fellowship Attending
- Skills: Two Week Writing Seminar

Pediatrics
Supporting Physician-Scientist Training During Residency

Strengthening the Pipeline for Clinician-Scientists: The Pediatrician-Scientist Training and Development Program at Texas Children's Hospital

Audrea M. Burns, PhD, Jake A. Kushner, MD, Mark A. Ward, MD, Teri L. Turner, MD, MPH, MEd, Mark W. Kline, MD, and Jordan S. Orange, MD, PhD

Implementation of a Novel Curriculum and Fostering Professional Identity Formation of Pediatrician-Scientists

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Burns, A, J Peds 2016; Burns, A, J Peds 2019
International Conference on Residency Education 2019
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Questions?