

BURROUGHS
WELLCOME
FUND 

Physician Scientist Institutional Award

Texas A&M University

Stanford University

UCLA

University of Chicago

UT Southwestern

Vanderbilt University

Duke University

Washington University

University of Pittsburg

Cornell University

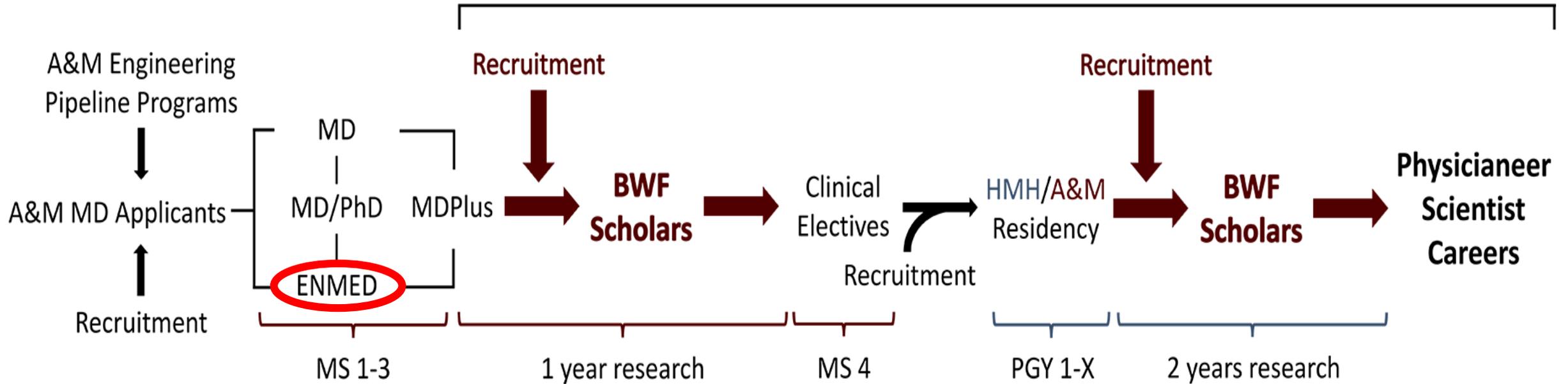
Texas A&M Academy of Physician Scientists

- Partnership: Texas A&M University College of Medicine and College of Engineering, Houston Methodist Hospital and Research Institute, and Texas Medical Center
- Burroughs Wellcome Fund Physician Scientist Institutional Award: \$2.5 M: 1 of only 10 institutions nationally; focus on training physician engineers
- Scholar Awards: 5 students annually for 1 year of mentored research and 5 residents/fellows annually for 2 yrs of mentored research, plus
 - Courses & Workshops: Responsible Conduct of Research; Statistics; Experimental Design; Transparency/Rigor/Reproducibility; Informatics & Data Analysis
 - Practical Experiences: IRB; IACUC
 - Communication: Manuscript & Grant Skills; Mock Study Sections
 - Engines of Ingenuity Retreat
 - Regulatory: FDA, IP; Biodesign
 - Team Mentoring
 - Concierge Navigators
 - Research Meetings & Travel
 - Career Advising
 - Budget & Lab Management
 - Entrepreneurism



OVERVIEW

ACADEMY OF PHYSICIAN SCIENTISTS PHYSICIANEER PIPELINE



Texas A&M Academy of Physician Scientists

- BWF PSIA: \$2.5M/5 yrs
- Partnership: Texas A&M University College of Medicine and College of Engineering, Houston Methodist Hospital and Research Institute, and Texas Medical Center
- 5 Medical Student Scholars annually @ \$32K each
- 5 Resident Scholars annually for 2 yrs @ \$64K each
- Travel Awards: \$20K/yr
- Mentors: Research, Clinical, Career, Management, Peer, & Self

ACADEMY KEY ELEMENTS

- Focus on training physician engineers
- Collaboration of Texas A&M, Houston Methodist, & Texas Medical Center
- Five one-year medical student BWF Scholars annually
- Five two-year resident BWF Scholars annually
- Robust career enrichment programs
- Strong and diverse medicine engineering-related research programs
- Unique physician enrichment resources
- Career support programs
- Networking across BWF PSIA programs

CAREER ENRICHMENT RESOURCES

- Courses & Workshops: Responsible Conduct of Research; Statistics; Experimental Design; Transparency/Rigor/Reproducibility; Informatics & Data Analysis
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MEDICINE ENGINEERING-RELATED RESEARCH PROGRAMS

- Big Data & Artificial Intelligence
- Cancer
- Clinical Translation & Trials
- Digital Medicine
- Heart & Vascular
- Imaging & Radiology
- Immunobiology & Inflammation
- Infectious Disease & Pathology
- Medical Devices & Technology
- Molecular Medicine & Clinical Care
- Nanomedicine
- Neurosciences
- Orthopedics & Sports Medicine
- Outcomes & Quality
- Precision Medicine & Genomics
- Regenerative Medicine
- Systems Medicine & Bioinformatics
- Transplantation

CAREER SUPPORT PROGRAMS

- Mentoring Matrix
 - Engineering Mentor
 - Medicine Mentor
 - Career Mentor
 - Business Staff Mentor
 - Peer Mentor
 - Self Mentor
- Community of Physician Scientists
- Diversity Recruitment Program
- Engines of Ingenuity Retreat
- Faculty Recruitment Program
- Institutional Commitments

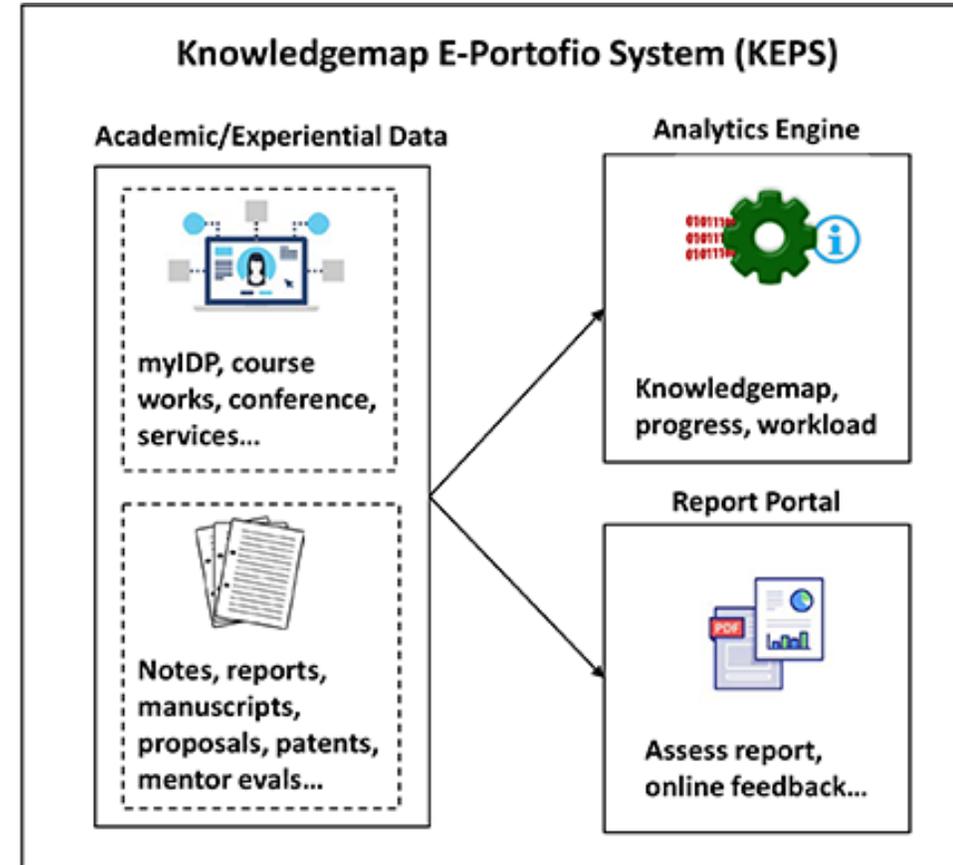
MULTI-INSTITUTIONAL PHYSICIAN/ENGINEER RESOURCES

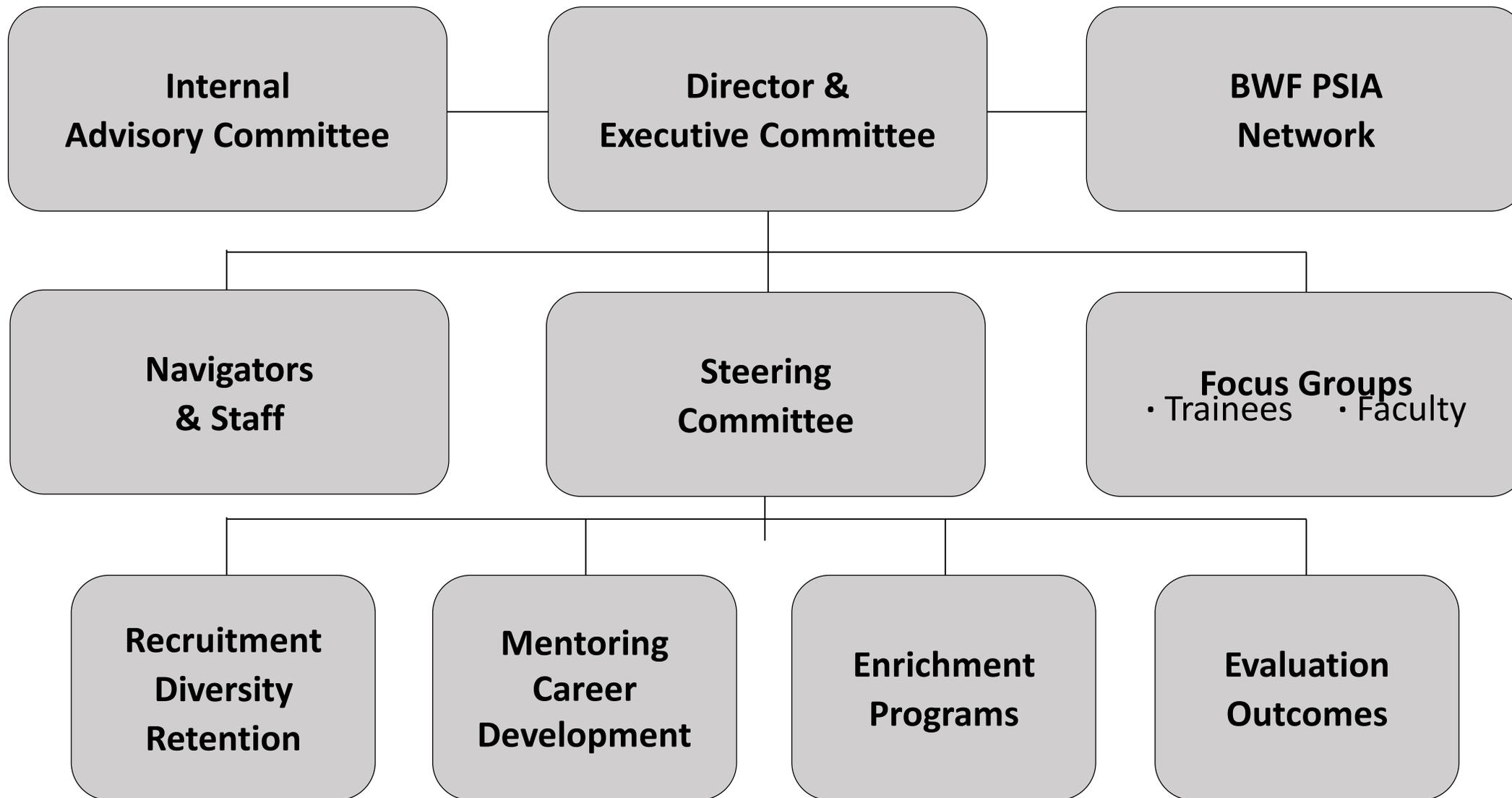
- GMP facilities and cyclotron
- Translational Imaging Center (7T MRI, PET, preclinical/clinical research)
- Institute for Technology Innovation & Education
- Pumps & Pipes (industry/medical cardiovascular technology collaborative)
- Institute of Biosciences & Technology
- TMC Innovation Institute for industry collaboration
- TMCx Accelerator for digital health devices
- TMC Biodesign Fellowship (1 year) for commercialization
- J Labs for medical device innovation
- AT&T Foundry for digital and health technologies
- ABB Robotics for healthcare solutions

ASSESSMENT & OUTCOMES

Knowledgemap E-Portfolio System (KEPS) will track progress, measure outcomes, provide feedback for continuous improvement, and enable adaptability to other institutions.

- Academic Outcomes
- Career Pathways
- Entrepreneurial Outcomes
- Patents/Commercialization
- Institutional Funding
- External Funding





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