## Breakout Session Title: Opportunities to Enhance Physician-Scientist Development

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## Questions:

- 1. What are the major causes of stress / burnout amongst physician-scientists?
  - Financial uncertainty; especially for those with educational debt, those starting families, including seeking home ownership.
  - The uncertainty of the link between the success of an early research project and ultimate success as a physician-scientist was perceived as a source of early significant stress. Many paradigms may fail in research experiments and the lack of perspective to realize this as normal progress may generate early innate fears of an overall failure in the physician-scientist track.
  - Recognizing the ever-increasing age at which the average scientist receives their first R01 grant (~age 46) creates career uncertainty.
  - The personal or professional expectation of being simultaneously excellent in multiple domains including in research, clinical care, and education. Additionally, being present at home and with family is demanding and a source of concern for many.
  - Lack of flexibility in the timelines and choices of career pathways.
  - Time, especially for the procedural specialties (e.g. surgery, anesthesiology, cardiology, gastroenterology).
- 2. Where does health and resiliency come from?
  - Resiliency may come from local peers who provide perspective. Community is important.
  - Resiliency likely comes from close personal relationships of physician-scientists with those who they work with (especially mentors, and senior faculty).
  - The concept of "Wellness" has been even further challenged during the COVID pandemic.
  - Some institutions have developed wellness programs, though it is not clear how effective these have been, especially for researchers.
  - National peer opportunities may be helpful.
- 3. What have been the most significant impact on your trainees with respect to COVID?
  - Physicians in training were forced into clinical care duties that they were not well trained for and not comfortable performing (e.g. psychiatry interns managing critically ill ICU patients).
  - Laboratories and core facilities were completely shut down and mouse colonies culled requiring years of recovery of genetic models.

- Networking and collaborations established through personal interactions at national meetings were lost for at least two years (and this remains ongoing).
- Institutions have not been responsive to the impact on physician-scientist career development caused by a necessary pivot from research to clinical duties.
- Institutions (both universities and federal funding agencies) have not recognized and addressed the impact of the pandemic on all development phases of the biomedical workforce, especially the research component.
- There has been an uneven response by NIH institutes on addressing the interruption on the career development of physician-scientists (e.g. uneven policies on extending funding for K08/K23 awards).
- The pandemic resulted in some aspiring physician-scientists to leave research to solely practice clinical medicine.
- 4. What can departments and institutions do to enhance physician-scientist development (Institutional Engagement)?
  - Recognize the importance of community; eliminate silos across departments and program. Integrate vertically within the training pathways.
  - Provide targeted funding to address hidden personal hardship needs; intervene early and agnostically with hardship needs.
  - Commit to childcare support on site with extended hours.
  - Support flexibility in personal schedules for family obligations; will support diversity.
  - Extend timelines for tenure for physician-scientists with further extensions allowed for life events (the pandemic, raising children, illness, etc).
  - Provide internal awards to support research assistants to amplify the research productivity efforts of physician-scientists during the early years.
  - Ensure that non-clinical research time is truly shielded from clinical and administrative duties; provide teaching to strategically saying no. This is particularly important for UiMS who are inundated with requests for committee work.
  - Provide tangible rewards for dedicated and successful mentors (at all levels for students, residents, fellows, junior faculty).
  - Departments & institutions should have regular events (e.g., annual research celebrations) to allow physician-scientists to present and be recognized for their accomplishments.
- 5. How can personal and professional life be better balanced?
  - Be mindful of the times that meetings are held (including virtual meetings) to protect personal time.
  - In an era of rapid communication and perceived obligations to always be "engaged", be considerate of when emails and text messages are sent.
  - Must remove the 'taboo' of discussing time needed for family, child-rearing, vacationing, fishing,...etc.
  - Facilitate discussions about how to "juggle" the multiple simultaneous obligations of career (clinical, research) and personal life.