

# STUDENT AND FACULTY OUTCOMES OF THE FIRST THREE YEARS OF THE DUKE MASTER OF BIOMEDICAL SCIENCES PROGRAM

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## BACKGROUND

- Pathways to health professions careers are increasingly competitive with a widening scope of competencies ~ 15% of medical students report enrolling in a post-baccalaureate program prior to medical school.<sup>1</sup>
- Few systematic outcomes reported<sup>2-5</sup>
- Students tend to be older, minority<sup>6</sup> not children of health clinicians<sup>7</sup>, more likely to enter primary care and serve the underserved.<sup>8-11</sup>
- We designed an interprofessional special master's program within the School of Medicine to address the existing gap in Duke's participation in the health professions, biomedical sciences, and health-related workforce pipeline:
- We aimed to 1) prepare students to be highly competitive candidates for health professions schools, biomedical careers, and other health-related professions; 2) increase integration of biomedical content & professional formation through experiential learning; 3) promote efforts to create and sustain workforce diversity; and 4) enhance educational innovation.

## OBJECTIVE

Our objective is to report the outcomes of the MBS's first 3 cohorts, with special emphasis on enrollment to health professions and other graduate and professional schools.

## METHODS\*

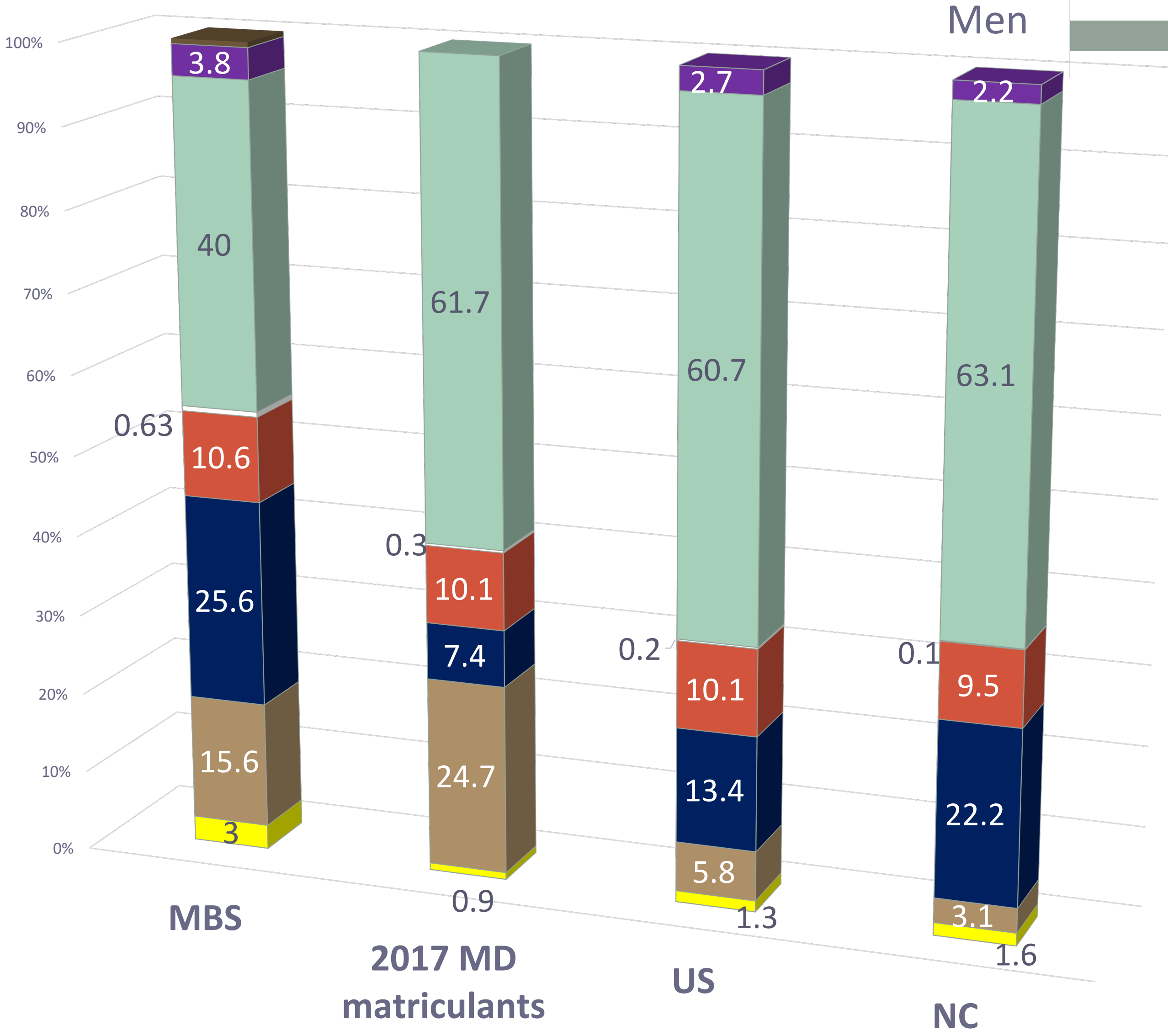
July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
HumanStructure		Cellular Science				Organ Systems				
Essentials of Health Practice and Professional Development (HPPD)										
EMT Course		EMT Clinicals								
	Health Systems									
		Medical Statistics								
				Evidence Based Practice/ Scholars' Project						
						Selectives				

- 11-month: 38 credits representing ~75% Duke's 1<sup>st</sup> year MD curriculum
- Faculty: PhD, MD, DPT, PA, DNP, PharmD, and Nutrition, representing 2 School of Medicine basic science and 8 clinical science departments, the School of Nursing, Evolutionary Anthropology in Arts and Sciences, and POP in Med Ed
- Student success tracked through postgraduate surveys and personal contacts
- Faculty experience tracked through surveys and informal communication

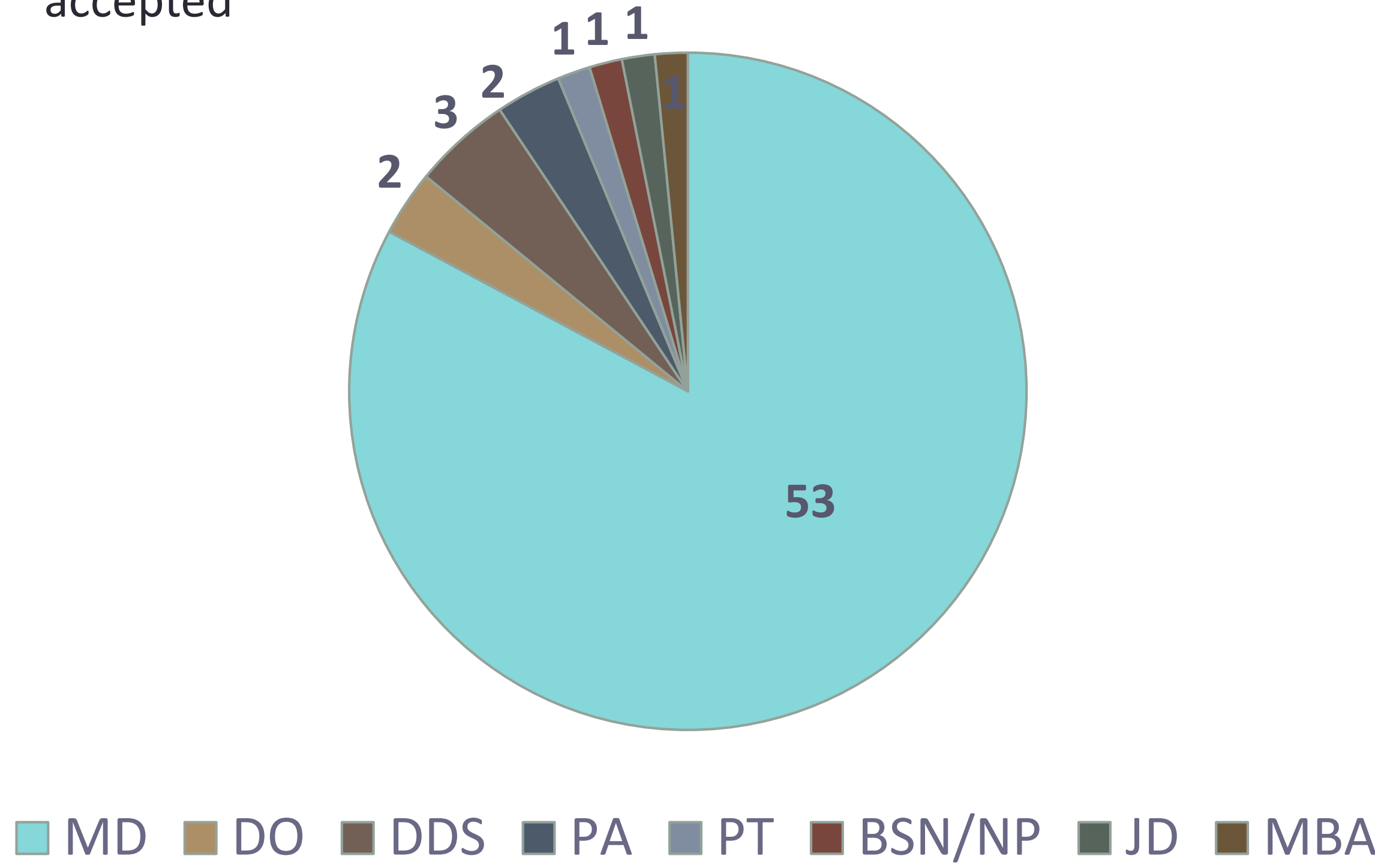
\* This study was reviewed and exempted by the Duke SoM Institutional Review Board.

## OUTCOMES

- 160 matriculants; 157 graduates; ~ 98% "on time"
- 91 colleges/universities represented
- 39% report "disadvantage"; 38% "first gens"



- 90.1% of those who applied to Health Profession/Other School were accepted



- average MCAT of those who took the MCAT pre/post MBS ↑
- Nearly all graduates not in school are employed; > ¾ through connections established specifically for MBS.
- Faculty report opportunities for interprofessional collaboration, educational innovations, and scholarship.



## SIGNIFICANCE

- The Duke MBS program has provided a diverse group of students with tools and guidance necessary to successfully matriculate to health professions schools.
- Graduates have found gap year employment through the Duke Office of Clinical Research, Duke Employee and Occupational Health, and Duke Primary Care (among other regional and national employers).
- Faculty have collaborated across disciplines, producing educational innovation with enhanced professional resiliency.
- Duke MBS illustrates the value for learners and faculty in integrating biomedical science and professional development in an interdisciplinary and interprofessional educational setting.

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