

TEXAS TECH UNIVERSITY HEALTH SCIENCES CENTER Senate Resolution 25.1

(Stating the sentiments of the TTUHSC Student Senate regarding a desire to begin the process of applying for the Ruth L. Kirschstein NRSA Institutional Research Training Grant)

WHEREAS, By virtue of their training, experiences, and responsibilities as clinicians, physician-scientists are uniquely positioned to identify research priorities and pursue breakthroughs less obvious to investigators who are further removed from patient care¹; and,

WHEREAS, Physician-scientists are well prepared to detect new threats to human health; develop new therapies, lead cross-disciplinary teams, and influence policy decisions, including drug approvals²; and,

WHEREAS, Studies demonstrate that M.D./Ph.D. graduates are more likely to remain in academic medicine, lead clinical trials, secure research funding, and pioneer innovations in drug development, biotechnology, and personalized medicine compared to their M.D. or Ph.D. only colleagues, further exhibiting their critical role in bridging scientific discovery and patient care³; and.

WHEREAS, TTUHSC's goal of "educating students to become collaborative healthcare professionals, providing excellent patient care, and advancing knowledge through innovative research" is exemplified by the MD-PhD program, which serves as a foundational pillar in training the next generation of interdisciplinary physician-scientists⁴; and,

WHEREAS, The M.D./Ph.D. program represents a significant financial commitment by TTUHSC, including tuition, stipends, and research support, therefore securing the Ruth L. Kirschstein NRSA Institutional Research Training Grant (T32), TTUHSC could redirect institutional funds toward expanding student support services, enhancing research infrastructure, and developing new clinical training programs; and,

WHEREAS, This reallocation of resources would strengthen the institution's overall academic and research capacity while ensuring the long-term sustainability of the M.D./Ph.D. program without compromising its quality or scope; and,

- 1. NIAID Prioritizes a Robust Population of Physician-Scientists | NIAID: National Institute of Allergy and Infectious Diseases.
- 2.

- 4. Fact Books. https
- 5. 6. Our Commitment to Closing the Cancer Gap. Pulse | Texas Tech University https://pulse.ttuhsc.edu/issue/winter-2024/our-commitment-to-closing-the-cancer-gap/ (2024). Behind the sharp decline in physician-scientists-and how to address it. MDLinx
- /behind-the-sharp decline-in-physician-scientists-and-how-to address-it/3C5nafnaOoYOKiIWFvhSMr
- 7. National MD-PhD Program Outcomes Study. AAMC https://www.aamc.org/data-reports/workforce/report/national-md-phd-program-outcomes-study.

https://www.niaid.nih.gov/grants-contracts/robust-population-physician-scientists (2022). Physician-Scientists. AAMC https://www.aamc.org/what-we-do/mission-areas/medical-research/physician-scientist. Brass, L. F. & Akabas, M. H. The national MD-PhD program outcomes study: Relationships between medical specialty, training duration, research effort, and career paths. JCI 3. Insight 4, (2019).

WHEREAS, TTUHSC's pursuit of becoming a National Cancer Institute (NCI)-Designated Comprehensive Cancer Center can be strengthened by securing the Ruth L. Kirschstein NRSA Institutional Research Training Grant (T32)⁵; and,

WHEREAS, Achieving NCI designation requires a robust foundation in basic cancer research, including cancer biology, immunology, and molecular genetics, alongside a clear mechanism for translating these discoveries into clinical trials and therapeutic applications; and,

WHEREAS, A significant proportion of M.D./Ph.D. graduates specialize in fields such as hematology, oncology, radiation oncology, and nuclear medicine, presenting TTUHSC with a strategic opportunity to expand its M.D./Ph.D. program through the T32 grant, thereby increasing the number of physician-scientists in these critical fields and enhancing the institution's prospects of attaining NCI Comprehensive Cancer Center status; and,

WHEREAS. The number of actively practicing physicians in the United States holding both an M.D. and a Ph.D. has steadily declined over the years to fewer than 2%, leading to significant challenges in advancing medicine, clinical research, and healthcare innovation, particularly in the unique region we work in dealing with both metropolitan and rural areas, alongside other states such as New Mexico, and Oklahoma and their respective patients⁶; and,

WHEREAS, Despite the increasing demand for physician-scientists, the number of graduates remains insufficient to meet the needs of the current and future workforce, as exhibited via the 2023 data showing nationally only 707 M.D./Ph.D. matriculants with an average attrition rate of 3.1% over the past 20 years, insufficient to sustain the physician-scientist workforce, creating a critical gap in clinical research and innovation⁷; and therefore,

BE IT RESOLVED, that the Student Senate of Texas Tech University Health Sciences Center calls for the institution to pursue the Ruth L. Kirschstein NRSA Institutional Research Training Grant (T32) as a strategic priority. This grant is critical to establishing TTUHSC as a nationally competitive leader in physician-scientist training, bridging financial gaps, expanding student resources, and positioning the institution to achieve National Cancer Institute (NCI)-Designated Comprehensive Cancer Center status. By beginning now, TTUHSC will secure its role as a pivotal innovator in healthcare research and delivery, particularly in addressing the unique needs of diverse and underserved populations across Texas and surrounding states; and therefore,

BE IT FURTHER RESOLVED, that this resolution be spread upon the Journal and that copies be sent to Lori-Rice Spearman, Ph.D., President of Texas Tech University Health Sciences Center; Darrin D'Agostino, D.O., MPH, MBA., Provost and Chief Academic Officer; Jody C. Randall, Ed.D., Vice President & Chief Experience Officer; Brandt Schneider, Ph.D., Dean of the Graduate School of Biomedical Science; John C. DeToledo, M.D., Dean of the School of

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https://www.niaid.nih.gov/grants-contracts/robust-population-physician-scientists (2022). Physician-Scientists. AAMC https://www.aamc.org/what-we-do/mission-areas/medical-research/physician-scientist. Brass, L. F, & Akabas, M. H. The national MD-PhD program outcomes study: Relationships between medical specialty, training duration, research effort, and career paths. JCI 3. Insight 4, (2019).

^{4.} Fact Books. https

^{5.} 6. Our Commitment to Closing the Cancer Gap. Pulse | Texas Tech University https://pulse.ttuhsc.edu/issue/winter-2024/our-commitment-to-closing-the-cancer-gap/ (2024). Behind the sharp decline in physician-scientists-and how to address it. MDLinx

[/]behind-the-sharp decline-in-physician-scientists-and-how-to -address-it/3C5nafnaOoYOKiIWFvhSMr

^{7.} National MD-PhD Program Outcomes Study. AAMC https://www.aamc.org/data-reports/workforce/report/national-md-phd-program-outcomes-study.

Medicine; Michael P. Blanton, Ph.D., M.D./Ph.D. Program Director; C. Patrick Reynolds, M.D., Ph.D., Cancer Center Director; Keri Shiplet, M.S., Director of Student Life; Marianna Souriall, Editor-in-Chief of The Daily Toreador, and to the students of Texas Tech University Health Sciences Center.

Author(s): Schackmuth, Bennett Tonk, Sahil McGowan, James **Burns Esther** Chaturvedi Dhwaani Hayek Alexander Gonzales Karmilena Shaw Ashley Pilcher Megan **Rizvi-Stewart Stephanie** Colon Nannette Le Vickie Li Matt

TEXAS TECH UNIVERSITY HEALTH SCIENCES CENTER Passed the Senate, 21 January 2024

Jesse Burnett President, Student Government Association

CC: Journal

NIAID Prioritizes a Robust Population of Physician-Scientists | NIAID: National Institute of Allergy and Infectious Diseases. 1.

^{2.} 3.

https://www.niaid.nih.gov/grants-contracts/robust-population-physician-scientists (2022). Physician-Scientists. AAMC https://www.aamc.org/what-we-do/mission-areas/medical-research/physician-scientist. Brass, L. F, & Akabas, M. H. The national MD-PhD program outcomes study: Relationships between medical specialty, training duration, research effort, and career paths. JCI Insight 4, (2019).

^{4.} Fact Books. https

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