Established in 1962, the National Institute of General Medical Sciences (NIGMS) supports a broad spectrum of fundamental research ranging from studies of organisms, cells, genes, and molecules to whole body systems, laying the foundation that drives advances in human health. NIGMS also provides leadership in training the next generation of scientists, enhancing the diversity of the scientific workforce, and developing research capacity throughout the country.



## **NIGMS Strategic Priorities**

- Sustain a robust, broad, and diverse portfolio of investigator-initiated, fundamental research that
  drives scientific discoveries and advances our understanding of human health and disease
- Invest in the training and development of a highly skilled, creative, adaptable, and diverse biomedical research workforce
- Build biomedical research capacity and ensure access to essential tools, technologies, capabilities, and other resources needed to conduct impactful biomedical research
- Demonstrate optimal stewardship of public funds by continually evaluating, improving, and communicating the role of the Institute's scientific investments





## NIGMS 2021-2025 Strategic Plan

NIGMS recently published its 2021–2025 Strategic Plan,¹ which sets the Institute's strategic priorities over the next five years and enumerates a series of goals, objectives, and implementation strategies. The plan includes representative targets for each implementation strategy that promote both transparency and accountability, ensuring that progress is tracked and periodically reported, and that any necessary course corrections can be quickly and effectively implemented.

NIGMS by the Numbers (in FY 2021)

\*competing & non-competing research project grants

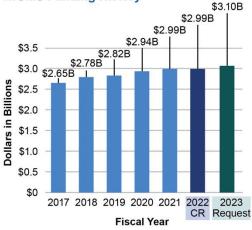
180 full-time NIGMS employees 4,470 funded principal investigators\*

**4,639** research trainees supported

109
minority-serving
institutions
supported

**92** NIGMS grantees who have won Nobel Prizes

### **NIGMS Funding History**



<sup>&</sup>lt;sup>1</sup> nigms.nih.gov/about/dima/Documents/NIGMSstrategic-plan-2021-2025.pdf

The Institutional Development Award (IDeA) program builds institutional research capacity in 24 states/territories that have historically had low NIH funding (in blue, below). 17 of the IDeA states and Puerto Rico receive more than 20 percent of their NIH funding from NIGMS (hatched, below).



IDeA states/territories with ≥20 percent of NIH funding from NIGMS

## **Recent Accomplishments**

# **Supporting the Next Generation of Researchers**

NIGMS awarded **293 early stage investigators (ESIs)** new competing R01-equivalent research project grants (RPGs) in FY 2021.



## **Building a Diverse Scientific Workforce**

NIGMS launched the Maximizing Opportunities for Scientific and Academic Independent Careers (MOSAIC) program to help promising postdoctoral researchers from diverse backgrounds transition into independent researchers.

In FY 2021, 23 NIH Institutes, Centers, and Offices collaborated to support 29 scholars (over twothirds women and over two-thirds from underrepresented backgrounds) with career development led by 3 professional society partners.



#### Adapting to the COVID-19 Pandemic

NIGMS provided additional support for trainees during the pandemic through F and K award extensions and funds to support childcare costs.

20 IDeA states and Puerto Rico were able to leverage Networks for Clinical and Translational Research (IDeA-CTR) to expand IDeA state participation and representation in clinical trials for COVID-19 therapeutics and vaccines.

## **Ongoing and Future Initiatives**

## **Maximizing Investigators' Research**

NIGMS is expanding the use of its innovative R35
Maximizing Investigators' Research Award (MIRA),
which provides researchers greater scientific flexibility
and stability while also promoting scientific productivity.

FY 2021–25 Strategic Plan Target
NIGMS aims to have MIRA grants constitute
60 percent of its R01-equivalent portfolio by 2025.

As of FY 2021, MIRA grants have grown to 41 percent of the R01-equivalent portfolio supported by NIGMS.

## **Supporting Research Excellence**

NIGMS launched the Support for Research Excellence (SuRE) program to increase diversity in the biomedical research workforce by providing research opportunities and enriching the research environment for undergraduate students at higher education institutions that both receive limited NIH research support and serve underrepresented students. The SuRE program was developed as a successor to the Support of Competitive Research (SCORE) program, incorporating the results of a comprehensive evaluation.<sup>2</sup>

#### **Tackling Sepsis**

NIGMS is expanding its portfolio of fundamental sepsis research, including support for collecting, banking, and sharing biospecimens and associated clinical data from sepsis patients.

NIGMS is also collaborating with the National Heart, Lung, and Blood Institute on a Phenotyping Consortium to understand the underlying mechanisms of critical illness syndromes (including sepsis) and recovery.

## Addressing the Health Research Needs of Tribal Communities

NIGMS conducted an evaluation of the Native American Research Centers for Health (NARCH) program to ensure that it continues to meet health research, education, and capacity building needs that American Indian/Alaska Native (Al/AN) communities have identified and prioritized. As part of this evaluation, the Institute held a formal Tribal Consultation to solicit input from Tribal leaders and Tribal organizations, and posted the results publicly.<sup>2</sup>

<sup>2</sup> nigms.nih.gov/about/dima/Pages/reports.aspx

NIGMS intends to continue its support for the NARCH program at or above current levels. Commensurate with feedback from members of Al/AN communities, NIGMS is planning enhancements to NARCH and is considering additional programs to help bridge the gaps between the expressed needs of Tribal nations and the types of support and resources that the current NARCH program can effectively provide.