

Introduction

Today, more than ever, the National Institutes of Health's (NIH) Institutes, Centers, and Offices are working together in new ways, and leveraging their unique strengths and resources. These collaborations can be formal or informal, and may involve sharing financial resources, materials, or specimens. Often, it is sharing actual scientific expertise. By maximizing resources, these trans-NIH initiatives serve to advance medical research in all disease areas and across the basic, translational, and clinical research continuum.

BRAIN Initiative

The Brain Research through Advancing Innovative Neurotechnologies (BRAIN) Initiative is part of a Presidential focus aimed at revolutionizing our understanding of the human brain. By accelerating the development and application of in-novative technologies, researchers will be able to produce a revolutionary new dynamic picture of the brain that, for the first time, shows how individual cells and complex neural circuits interact in both time and space. Long desired by researchers seeking new ways to treat, cure, and even prevent brain disorders, this picture will fill major gaps in our current knowledge and provide unprecedented opportunities for exploring exactly how the brain enables the human body to record, process, utilize, store, and retrieve vast quantities of information, all at the speed of thought.

BRAIN Initiative: Development, Optimization, and Validation of Novel Tools and Technologies for Neuroscience Research (SBIR) (R43/R44)

The purpose of this funding opportunity announcement (FOA) is to support the development of novel tools and technologies through the Small Business Innovation Research (SBIR) program to advance the field of neuroscience research including 1) tools to facilitate the detailed analysis of complex circuits and provide insights into cellular interactions that underlie brain function, 2) proof-of-concept testing and development of new technologies and novel approaches for large scale recording and manipulation of neural activity, at or near cellular resolution, at multiple spatial and/or temporal scales, in any region and throughout the entire depth of the brain, and 3) iterative refinement of such tools and technologies with the end-user community with an end-goal of scaling manufacture towards reliable, broad, sustainable dissemination and incorporation into regular neuroscience practice. See more at:

http://grants.nih.gov/grants/guide/pa-files/PAR-15-091.html

NIH Blueprint for Neuroscience

NIH Blueprint Diversity Specialized Predoctoral to Postdoctoral Advancement in Neuroscience (D-SPAN) Award (F99/K00)

The purpose of the NIH Blueprint Diversity Specialized Predoctoral to Postdoctoral Advancement in Neuroscience (D-SPAN Award is to support a defined pathway across career stages for outstanding graduate students who are from diverse backgrounds underrepresented in neuroscience research. More at: <u>https://grants.nih.gov/grants/guide/rfafiles/RFA-NS-19-011.html</u>

BRAIN Initiative: Development, Optimization, and Validation of Novel Tools and Technologies for Neuroscience Research (SBIR) (R41/42)

The purpose of this funding opportunity announcement (FOA is to support the development of novel tools and technologies through the Small Business Innovation Research (SBIR program to advance the field of neuroscience research including 1 tools to facilitate the detailed analysis of complex circuits and provide insights into cellular interactions that underlie brain function, 2 proof-of-concept testing and development of new technologies and novel approaches for large scale recording and manipulation of neural activity, at or near cellular resolution, at multiple spatial and/or temporal scales, in any region and throughout the entire depth of the brain, and 3 iterative refinement of such tools and technologies with the end-user community with an end-goal of scaling manufacture towards reliable, broad, sustainable dissemination and incorporation into regular neuroscience practice. See more at:

https://grants.nih.gov/grants/guide/pa-files/PAR-15-091.html

Enhancing Neuroscience Diversity through Undergraduate Research Education (ENDURE)

Funds collaborative neuroscience research partnerships between undergraduate institutions and graduate neuroscience research training programs. Additional information at <u>https://neuroscienceblueprint.nih.gov/</u>



NIH Common Fund (Roadmap)

NIH Director's Early Independence Awards

Allow exceptional early-career researchers to omit postdoctoral training and establish independent research programs.

https://commonfund.nih.gov/earlyindependence/

NIH Director's Pioneer Awards

Complement NIH's traditional, investigator-initiated grant programs by supporting individual scientists of exceptional creativity, who propose pioneering – and possibly transforming approaches – to major challenges in biomedical and behavioral research. https://commonfund.nih.gov/pioneer/

NIH Director's New Innovator Awards

Support innovative proposals from early-career researchers with the potential for high impact on biomedical research. <u>https://www.commonfund.nih.gov/newinnovator</u>

NIH Director's Transformative Research Awards

Created specifically to support exceptionally innovative and/or unconventional research projects that have the potential to create or overturn fundamental paradigms. <u>http://commonfund.nih.gov/TRA</u>

Additional information at https://commonfund.nih.gov/

Contact

Zeynep Erim, Ph.D. Director, Division of Interdisciplinary Training (DIDT) 301-451-4792 <u>erimz@mail.nih.gov</u>

