

From: [Research Funding Announcement from the Office of the Dean For Research](#) on behalf of [Coleen Burrus](#)
To: Research-Funding@Princeton.EDU
Subject: Research Funding Announcement - July 22, 2021
Date: Thursday, July 22, 2021 6:55:58 PM



Research Funding Announcement July 22, 2021

Visit the [Princeton Research Funding Gateway](#) for more funding opportunities.

Dear Deans, Chairs, Directors, Faculty, and Administrators of Divisions I, II, III & IV:

I am writing to alert you to the following open submission opportunities. Please share this information with any Princeton colleagues who may be interested.

The [Corporate Engagement and Foundations Relations team](#) is available to assist faculty with proposal development and submission.

The [Office of the Dean for Research](#) is available to assist faculty with collaborative federal proposals for centers and institutes, training grants, and equipment grants, as well as initiatives that advance strategic priorities such as diversity, equity, and inclusion.

We welcome the opportunity to work with you.

Alerts and Notices

Revised Submission Deadline: In the June 24 issue, we announced a funding opportunity through the [Samsung Advanced Institute of Technology Global Research Outreach \(GRO\) Program](#). The submission deadline has been changed from August 31 to **Monday, August 30 at 8:00 pm ET**.

The [White House Office of Science and Technology Policy](#) (OSTP) is organizing [a series of three virtual listening sessions](#) to hear about issues and concerns related to scientific integrity from members of the public who produce, communicate, and use scientific and technical information. Perspectives gathered during these sessions will inform the assessment of Federal agencies' scientific-integrity policies and identification of best practices and lessons-learned that the National Science and

Technology Council's Task Force on Scientific Integrity is preparing. **Topics:**
Communications: Wed., July 28, 2:00–4:00 pm; **Science and Education:** Thurs., July 29, 11:00 am–1:00 pm; **Use of Scientific and Technical Information:** Fri., July 30, 2:00–4:00 pm. [Register](#) for any or all of these sessions by Friday, July 23, 5:00 pm.

Upcoming Funding Opportunities

[Innovare Advancement Center and Air Force Office of Scientific Research – Harnessing Entanglement Distribution – Up to \\$450K – White Paper Due: 7/25/21, 11:59 pm*](#)

Funds basic research ideas that challenge conventional assumptions and explore new ways to approach and leverage distributed entanglement

This call seeks to discover any advantages over classical system analogs (if any exist), either in functionality or in performance, as well as a quantitative understanding of the benefits and limitations of interconnected quantum devices or nodes that function together to achieve overarching goals. Proposals should describe new concepts and processes that inherently rely on distributing quantum information and entanglement across the nodes in a realistic environment. This opportunity is in scope of the Quantum Information Science (QIS) program, Air Force Office of Scientific Research, as outlined in Open BAA [FA9550-21-S-0001](#). *Required [White Papers](#) are due by July 25, 11:59 pm; invited proposals will be due by September 19, 2021. [View](#)

[National Institutes of Health #RFA-HG-21-025 – New Investigators to Promote Workforce Diversity in Genomics, Bioinformatics, or Bioengineering and Biomedical Imaging Research – \\$500K to \\$2.5M* – Application Due: 8/3/21](#)

Funds research in biomedical, behavioral, clinical, and social sciences by early-career faculty from underrepresented groups

Promotes diversity in the biomedical, behavioral, clinical, and social sciences workforce by supporting independent research projects by early-career tenure-track faculty from groups underrepresented in the health-related sciences. *Award provides up to \$500K in direct costs per year for up to 5 years. [View](#)

[Rita Allen Foundation & U.S. Association for the Study of Pain – Rita Allen Foundation Award in Pain – \\$150K – Application Due: 8/6/21](#)

Supports early-career faculty pursuing innovative research on mechanisms that initiate and propagate pain in the nervous system

Recognizes emerging leaders of distinguished achievement or extraordinary promise in basic pain research whose work holds high potential for uncovering new pathways to improve the treatment of chronic pain. Grants of \$50K per year over three years support research projects on the molecular biology of pain and/or basic science topics related to the development of new analgesics for the management of pain due to terminal illness. Applicants typically must be within the first three years of an assistant professor appointment; however, in 2021 applications will be accepted from individuals up to four years from the start of their faculty position, if there are extenuating circumstances that slowed their normal trajectory (e.g., homeschooling children during

the COVID-19 pandemic). [View](#)

Facebook Research – Building Tools to Enhance Transparency in Fairness and Privacy – Up to \$100K – Proposal Due: 8/18/21

Funds research to understand and detect issues such as privacy risks and fairness harms in data driven systems

The goal of this RFP is to help academics build tools to more effectively monitor systems to help spot concerns in areas like fairness, privacy, and safety so that trust in data driven systems and AI-powered tools will increase. Areas of interest include, but are not limited to, the following: Privacy Leakage Detection; Safety; Fairness Issue Detection; Interpretability and Explainability; Stability; and Robustness. [View](#)

National Institutes of Health #RFA-RM-21-016 – NIH Director's New Innovator Award Program – Up to \$1.5M* – Application Due: 8/20/21

Encourages highly innovative research by extremely creative early-career scientists working in areas relevant to NIH

Supports early-stage investigators of exceptional creativity who propose highly innovative research projects with the potential to produce a major impact on broad, important areas relevant to the mission of NIH. Individuals from diverse backgrounds, including those from underrepresented groups, are strongly encouraged to apply. The review process will emphasize the individual's creativity, the innovativeness of the research approaches, and the potential of the project, if successful, to have a significant impact on an important biomedical or behavioral research problem. Applications in all topics relevant to the broad mission of NIH are welcome, including, but not limited to, topics in the behavioral, social, biomedical, applied, and formal sciences and topics that may involve basic, translational, or clinical research. ***Awards will be in two multi-year segments of three years and two years. The three-year segment will have an award budget up to \$900K in direct costs. The two-year segment will have an award budget up to \$600K.** [View](#)

Hudson River Foundation for Science and Environmental Research – Hudson River Fund Research Grants – \$30K to \$50K – Proposal Due: 8/27/21

Funds research projects to advance the conservation and restoration of the Hudson River ecosystem

The Foundation supports scientific and public policy research, education, and projects needed to advance the conservation and restoration of the Hudson River ecosystem, with emphasis on studies that bear on its human uses. Currently the Foundation is interested in innovative approaches to understanding current and emerging issues for the Hudson River Estuary and Watershed; areas of interest for this special competition include, but are not limited to: Environmental and Climate Justice; Water Quality; Climate Change Impacts on the Ecosystem; and Emerging Issues of Concern. Those who have not previously received funding from the Foundation, researchers from the social and behavioral sciences, postdoctoral fellows, and early-career researchers within five years post-completion of postdoctoral or graduate studies are especially encouraged to apply. Interested applicants should contact the Foundation to discuss their ideas prior to submitting a proposal (email Jonathan Kramer jkramer@hudsonriver.org or James Lodge jim@hudsonriver.org). [View](#)

National Institutes of Health #RFA-RM-21-017 – NIH Director's

Transformative Research Award – Amount TBD – Application Due: 9/1/21

Supports exceptionally creative or unconventional research with the potential for significant impact on scientific paradigms

Assists individuals or teams proposing transformative projects that are inherently risky and untested but have the potential to create or overturn fundamental paradigms and may require very large, flexible budgets. Open to all career stages; no preliminary data required. Researchers from diverse backgrounds, including those from underrepresented racial and ethnic groups, persons with disabilities, and women are strongly encouraged to work with their institutions to develop applications. Projects in all topics relevant to the broad mission of NIH are welcome, including, but not limited to, topics in the behavioral, social, biomedical, applied, and formal sciences and topics that may involve basic, translational, or clinical research. Application budgets are not limited but must be commensurate with the scope of the proposed research; the maximum project period is five years. [View](#)

National Science Foundation #NSF 21-597 – Secure and Trustworthy Cyberspace Frontiers (SaTC Frontiers) – \$5M to \$10M – Required Letter of Intent Due: 9/7/21*

Funds large, high-profile research projects on grand challenges in cybersecurity and privacy

Supports ambitious and potentially transformative center-scale projects in the area of cybersecurity and privacy that (1) catalyze far-reaching research explorations motivated by deep scientific questions or hard problems and/or by compelling applications and novel technologies that promise significant scientific and/or societal benefits, and (2) stimulate significant research and education outcomes that promise scientific, economic and/or other societal benefits. Prospective PIs are encouraged to also consult the SaTC program solicitation ([NSF 21-500](#)) for additional details about areas of interest as well as other proposal size classes. SaTC Frontiers projects should be large, multidisciplinary, multi-organizational, and/or multi-institutional, and should provide high-level visibility to grand challenge research areas in cybersecurity. ***A mandatory Letter of Intent is due by September 7; full institutional proposals are due by November 17, 2021.** [View](#)

National Institutes of Health #RFA-RM-21-015 – NIH Director's Pioneer Award – Up to \$3.5M – Application Due: 9/10/21

Supports opportunities for exceptionally creative scientists proposing pioneering approaches in areas of interest to NIH

Assists scientists with outstanding records of creativity pursuing new research directions to develop pioneering approaches to major challenges in biomedical, social science, and behavioral research. Open to all career stages; no preliminary data required. Individuals from diverse backgrounds, including those from underrepresented groups, are strongly encouraged to apply. Projects in all topics relevant to the broad mission of NIH are welcome, including, but not limited to, topics in the behavioral, social, biomedical, applied, and formal sciences and topics that may involve basic, translational, or clinical research. Projects must have a single PI only, and individuals may serve as the PI on only one application. [View](#)

National Institutes of Health #PAR-21-269 – Research on Interventions that Promote the Careers of Individuals in the Biomedical Research Enterprise – Up to \$1.25M – Letter of Intent Due: 9/13/21*

Funds research on effective, high-impact, scalable interventions to enhance diversity in the biomedical research workforce

Supports research designed to test interventions to enhance research-oriented individuals' interest, motivation, persistence and preparedness for careers in the biomedical research workforce. Projects are expected to produce research findings that will guide the implementation of interventions in a variety of academic settings and career levels to enhance the diversity of the biomedical research workforce. Collaborative effort is encouraged among biomedical researchers, program administrators, educators, psychologists, sociologists, statisticians, and/or economists, etc. as appropriate, to bring complementary and integrated expertise to ensure rigor, validity, generalizability, and integration of the research elements. Up to \$250K in direct costs per year for up to five years may be requested. ***Letter of Intent (requested but not required) is due by September 13; full institutional application due by October 13, 2021.** [View](#)

Canada-U.S. Fulbright Program – 2022-2023 Awards for American Scholars – Amount varies – Applications Due: 9/15/21

Supports opportunities to conduct research and/or lecture in Canada on a wide range of scholarly topics

The Canada-U.S. Fulbright Program operates on the principle of reciprocal exchange and provides the opportunity for outstanding American scholars – both prominent and promising – to lecture and/or conduct research in Canada. Awards offer a unique opportunity to explore a wide range of scholarly issues, including important contemporary issues that are relevant to Canada, to the U.S., and to the relationship between the two countries. While the competition is officially field-open, the Program is especially interested in scholars in the humanities, in the areas of communications and culture, in Canadian-American relations, in all areas of contemporary public policy, on topics relating to culture and to the environment, law, indigenous issues, and in pure and applied sciences. **Applicants must be U.S. citizens.**

[Traditional \(All Disciplines\) Award](#): US\$12,500 for one semester (4 months). These awards are field open and can be taken up at any university, think tank, or government agency in Canada.

[Postdoctoral Research Awards](#): US\$30K for one academic year (9 months).

Postdoctoral research awards support promising new scholars and assist them in establishing a research base at an important time in their research careers.

[Distinguished Chairs Program](#): US\$50K for one academic year (9 months). These Distinguished Visiting Research Chairs are targeted opportunities at Carleton University designed to host exceptional scholars and experienced professionals who conduct research in specific areas.

[Research Chairs Program](#): US\$25K for one semester (4 months). Visiting Research Chairs are targeted opportunities at select universities/institutions designed to host exceptional scholars and experienced professionals who conduct research in a specific area.

[Fulbright-Carlos Rico Award for North American Studies](#): US\$12,500 for one semester in Canada plus US\$2,300 per month in Mexico.

[Specialists Program](#): Short-term collaboration on curriculum and faculty development, institutional planning and a variety of other activities at Canadian institutions.

[Fulbright Global Scholar Award](#): Allows U.S. academics and professionals to engage in multi-country, trans-regional projects. As a truly worldwide award, U.S. scholars will be able to propose research or combined teaching/research activity in two to three countries with flexible schedule options; trips can be conducted within one academic year or spread over two consecutive years. [View](#)

Alfred P. Sloan Foundation – Sloan Research Fellowships – \$75K – Nomination Due: 9/15/21*

Recognizes outstanding early-career faculty with the potential to revolutionize economics, mathematics, or selected fields in the sciences

The Sloan Research Fellowships seek to stimulate fundamental research by early-career scientists and scholars of outstanding promise. They are awarded in recognition of distinguished performance and a unique potential to make substantial contributions to the Fellow's field. Candidates must be tenure-track, though untenured, as of September 15 of the nomination year, and hold a PhD or equivalent degree in chemistry, computer science, Earth system science, economics, mathematics, neuroscience, physics, or a related field. ***Each department chair may nominate up to three candidates.** [View](#)

National Science Foundation #NSF 20-603 – NSF Dynamic Language Infrastructure–NEH Documenting Endangered Languages (DLI-DEL): Data, Infrastructure & Computational Methods – Up to \$450K – Proposal Due: 9/15/21

Funds research to advance scholarly knowledge of endangered human languages

This funding partnership between NSF and the National Endowment for the Humanities supports projects to develop and advance scientific and scholarly knowledge concerning endangered human languages. This effort seeks not only to acquire scientific data that will soon be unobtainable, but to integrate, systematize, and make the resulting linguistic findings widely available by exploiting advances in information technology. The program supports fieldwork and other activities relevant to the digital recording, documentation and analysis, and archiving of endangered language data, including the preparation of lexicons, grammars, text samples, and databases, as well as the development of the next generation of researchers. Funding is available in the form of one- to three-year senior research grants and/or conference/workshop proposals; there are two submission deadlines annually in September and February. [View](#)

Sony – Research Award Program – Up to \$150K– Application Due: 9/16/21 by 2:59 am EDT

Supports cutting-edge faculty research in Sony's areas of interest

Provides one year of funding for pioneering academic research and helps build a collaborative relationship between faculty and Sony researchers. Sony may ask the PI to support a Sony visiting researcher(s) at Sony's option and expense.

[Faculty Innovation Award](#): Up to \$100K for research projects in the general areas of Information Technology and Devices & Materials, as well as in Digital Health.

[Focused Research Award](#): Up to \$150K to conduct collaborative, focused research in areas of immediate interest to the company.

[View](#)

National Science Foundation #NSF 20-575 – Joint DMS/NIGMS Initiative to Support Research at the Interface of the Biological and Mathematical Sciences – Funding varies by Track* – Proposal Due: 9/18/21

Encourages research collaborations at the interface between mathematical and life sciences

NSF's Division of Mathematical Sciences (DMS) and the National Institute of General Medical Sciences (NIGMS) at NIH plan to support fundamental research in mathematics and statistics necessary to answer questions in the biological and

biomedical sciences. This program is designed to encourage new collaborations, as well as to support innovative activities by existing teams. ***There are two submission tracks: Track 1 – for projects of high-risk, high-reward exploratory, or those from new teams of collaborators, with a total budget of up to \$600K over up to 3 years, and Track 2 – for projects of large scope from well-established teams, with a total budget of up to \$1.2M over 3-4 years.** [View](#)

National Science Foundation – Alan T. Waterman Award – \$1M – Nomination Due: 9/20/21

Honors exceptional individual achievement in scientific or engineering research

Recognizes outstanding young researchers in any field of science or engineering supported by NSF. In addition to a medal, the awardee receives a grant of \$1M over five years for scientific research or advanced study in the mathematical, physical, biological, engineering, social, or other sciences at the institution of the recipient's choice. Candidates must be U.S. citizens or permanent residents, and 40 years of age or younger, **OR** not more than 10 years beyond receipt of the PhD degree, by December 31st of the year in which they are nominated. Institutions may nominate an unlimited number of individuals. [View](#)

National Science Foundation #NSF 21-591 – Computer and Information Science and Engineering (CISE) Research Initiation Initiative (CRII) – Up to \$175K – Proposal Due: 9/20/21

Assists early-career faculty and research scientists in CISE fields who lack funding for full-time graduate student support

Grants are intended to support research independence among early-career academics who specifically lack access to adequate organizational or other resources. Funds will support untenured faculty or research scientists in their first three years in a primary academic position after the PhD, but not more than six years after completion of their PhD for proposals submitted in 2021, and not more than five years after completion of their PhD for proposals submitted after 2021. The CRII program provides sufficient funds for 48 months of graduate student support to enable early-career PIs to launch their research careers. Applicants must not already have (or had) resources available from all other sources sufficient for more than 24 months of full-time graduate student support. In addition, applicants may not have served as the PI on any other federal grants or contracts, with certain exceptions. [View](#)

Simons Foundation – Mathematics and Physical Sciences: Targeted Grants to Institutes – Up to \$600K – Application Due: 9/23/21

Helps math, theoretical physics and theoretical computer science centers to strengthen contacts with the international scientific community

Supports established institutes or centers in mathematics, theoretical physics and theoretical computer science to help strengthen contacts within the international scientific community and enable institutes to extend and enhance their missions. This program does not provide primary support for operating or establishing an institute, or support institutes or centers whose main purpose is to provide a focal point for faculty research at a specific university. Grants provide up to \$200K per year for up to three years (includes 20 percent indirect costs). [View](#)

Simons Foundation – Simons Fellows in Mathematics –

Amount varies* – Application Due: 9/28/21

Funding extends a single-semester sabbatical research leave to a full academic year

Fellowship awards make sabbatical research leaves for tenured faculty more productive by extending them from a single term to a full academic year. For awards made in 2022, the Foundation encourages applications from those severely impacted by COVID-19 and for whom travel during the sabbatical period will be difficult. Award decisions will be based on the applicant's scientific accomplishments in the five-year period preceding the application and on the potential scientific impact of the work to be done during the leave period. ***Salary replacement is provided for up to 50 percent (up to a maximum of \$100K) of the Fellow's current academic-year salary, plus up to \$10K for expenses related to the leave. The Fellow's home institution will receive an additional 20 percent overhead on allowable expenses.** [View](#)

Simons Foundation – Simons Fellows in Theoretical Physics – Amount varies* – Application Due: 9/28/21

Funding extends a single-semester sabbatical research leave to a full academic year

Fellowship awards make sabbatical research leaves for tenured faculty more productive by extending them from a single term to a full academic year. For awards made in 2022, the Foundation encourages applications from those severely impacted by COVID-19 and for whom travel during the sabbatical period will be difficult. Award decisions will be based on the applicant's scientific accomplishments in the five-year period preceding the application and on the potential scientific impact of the work to be done during the leave period. ***Salary replacement is provided for up to 50 percent (up to a maximum of \$100K) of the Fellow's current academic-year salary, plus up to \$10K for expenses related to the leave. The Fellow's home institution will receive an additional 20 percent overhead on allowable expenses.** [View](#)

National Science Foundation #NSF 21-589 – Division of Chemistry (CHE): Disciplinary Research Programs – \$450K* – Proposal Due: 9/30/21 or 11/1/21 depending on topic area

Funds research in a wide array of chemical sciences

The projects supported by CHE explore the frontiers of chemical science, develop the foundations for future technologies and industries that meet changing societal needs, and prepare the next generation of chemical researchers. Institutional proposals for individual or small team research projects are submitted to the NSF Division of Chemistry's nine disciplinary research programs through this RFP; there are no restrictions or limits on who may serve as the PI. ***Average award size varies among programs but averages \$150K per year for three years for single PI awards. Larger awards are anticipated for collaborative projects depending on the number of investigators.** [View](#)

Heising-Simons Foundation – 51 Pegasi b Fellowship in Planetary Astronomy – Up to \$385K – Application Due: 10/1/21

Supports postdoctoral fellowships in planetary astronomy at selected institutions

Provides an opportunity for recent doctoral scientists to develop innovative instrumentation or to conduct novel theoretical and observational research in planetary astronomy. **Fellowship research may only be pursued at participating institutions.** Each recipient will receive a three-year grant of up to \$385K to cover

salary, benefits, highly-flexible discretionary spending (e.g., travel, family care, moving expenses, research equipment, personal computers, etc.), and indirect costs. The Foundation particularly welcome applications from individuals who belong to groups that have been historically underrepresented in planetary sciences and astronomy such as women, persons with disabilities, racial and ethnic minorities, persons of minority sexual orientation or gender identity, and others who may contribute to diversification of the field. [View](#)

National Science Foundation #NSF 21-590 – Predictive Intelligence for Pandemic Prevention Phase I: Development Grants (PIPP Phase I) – Amount TBD* – Proposal Due: 10/1/21

Funds the development of innovative, interdisciplinary projects to address grand challenges in infectious disease pandemics

This solicitation is for Development Grants as part of NSF's new PIPP initiative, which focuses on fundamental research and capabilities needed to tackle grand challenges in infectious disease pandemics through prediction and prevention. Institutional proposals must identify an innovative interdisciplinary grand challenge that engages integrated computational, biological, engineering, and social/behavioral approaches to formulate and solve critical problems relating to predictive intelligence for pandemic prevention. Prospective PIs must assemble interdisciplinary teams, and develop proposals that work across scientific, disciplinary, geographic, and organizational divides, push conceptual boundaries, and build new theoretical framings of the understanding of pandemic predictive intelligence, and teams. ***Up to a total of \$25M is available in FY 2022 for 25-30 eighteen-month PIPP Phase I Development Grants.** (NOTE: NSF anticipates releasing a Phase II Center Grants solicitation around 2023; however, a Development Grant is not required to participate in the Phase II competition.) [View](#)

IEEE Computer Society – various Society Awards – Recognition varies; see below – Nominations Due: 10/1/21

Honors technical achievement and service to the computer profession and society

Awards recognizing outstanding work by Society members who enhance the field through technical achievement and service to the computer profession and society.

Charles Babbage Award: For significant contributions in any aspect of parallel computation.

Computer Entrepreneur Award: A sterling silver chalice recognizes managers and leaders responsible for the growth of some segment of the computer industry, or technical managers whose entrepreneurial leadership built the computer industry.

Women of ENIAC Computer Pioneer Award: A bronze medal is awarded for significant contributions to concepts and developments in the electronic computer field which have clearly advanced the state of the art in computing.

Mary Kenneth Keller Computer Science & Engineering Undergraduate Teaching Award: A plaque, certificate and \$2K stipend are awarded to recognize outstanding contributions to undergraduate education through both teaching and service and for helping to maintain interest, increase the visibility of the Computer Society, and make a statement about the importance of undergraduate education.

Harry H. Goode Memorial Award: A bronze medal and \$2K are awarded to recognize achievements in the information processing field that are considered either a single contribution of theory, design, or technique of outstanding significance, or the accumulation of important contributions on theory or practice.

Hans Karlsson Standards Award: A plaque and \$2K honorarium is presented in recognition of outstanding skills and dedication to diplomacy, team facilitation and joint achievement, in the development or promotion of standards in the computer industry where individual aspirations, corporate competition, and organizational rivalry could

otherwise be counter to the benefit of society. Eligibility is limited to present or past participants in IEEE CS Standards activities.

Harlan D. Mills Award: Recognizes researchers and practitioners who have demonstrated long-standing, sustained, and impactful contributions to software engineering practice and research through the development and application of sound theory. The award consists of a \$3K honorarium, museum-quality memento, and a possible invited talk during the annual International Conference on Software Engineering (ICSE).

Richard E. Merwin Award for Distinguished Service: The highest level volunteer service award of the Computer Society. A bronze medal and \$5K are given for outstanding service to the profession at large, including significant service to the Computer Society or its predecessor organizations.

Edward J. McCluskey Technical Achievement Award: A certificate and \$2K honorarium are presented for outstanding and innovative contributions to the fields of computer and information science and engineering or computer technology, usually within the past ten, and not more than fifteen years.

Taylor L. Booth Education Award: A bronze medal and \$5K honorarium are awarded for an outstanding record in computer science and engineering education. The individual must meet two or more of the following criteria in the computer science and engineering field: 1. Achieving recognition as a teacher of renown. 2. Writing an influential text. 3. Leading, inspiring or providing significant education content during the creation of a curriculum in the field. 4. Inspiring others to a career in computer science and engineering education.

W. Wallace McDowell Award: A bronze medal and \$2K honorarium are presented for outstanding recent theoretical, design, educational, practical, or other similar innovative contributions that fall within the scope of Computer Society interest.

[View](#)

Simons Foundation – Simons Collaborations in Mathematics and the Physical Sciences – Up to \$8M* – Letter of Intent Due: 10/6/21

Funds highly collaborative work on significant questions in mathematics, theoretical physics and theoretical computer science

A Simons Collaboration in MPS should stimulate progress on fundamental scientific questions of major importance in mathematics, theoretical physics and theoretical computer science, where a significant, new development creates a novel area for exploration or provides a new direction for progress in an established field. The questions addressed may be concrete or conceptual, but answering them would constitute a major scientific milestone. The project should involve outstanding researchers in a range of career stages, and be highly collaborative in nature. Excellence in the scientific leadership is one of the main criteria in the selection process. The Collaboration director and their institution must submit the Letter of Intent, as well as the full proposal application, if invited (due by February 15, 2022). If awarded, each PI in the Collaboration will receive their own award and their institution paid separately. ***A Collaboration in MPS is budgeted at up to \$2M per year for an initial four years; an extension of three additional years may be granted.** [View](#)

National Academies of Sciences, Engineering & Medicine – Jefferson Science Fellowship Program – see below – Application and MOU Due: 10/15/21*

Faculty fellowships advising government on science and technology in foreign policy and international development

The program is structured as a partnership between the academic community and the Department of State and the Agency for International Development, designed to meet the challenges of science and technology in foreign policy and international

development. Open to tenured faculty in the sciences and engineering who are U.S. citizens; social scientists whose research interfaces with, or is relevant to, foreign policy or international development are also eligible. Fellows spend one year in an on-site assignment in Washington, D.C., that **may also involve extended stays at U.S. foreign embassies and/or missions**, serving as advisers. The Fellow's salary and benefits will be paid by their academic institution; the NAS will provide a stipend of approximately \$50K toward living expenses in the Washington, D.C. metro area, plus a \$10K travel budget for fellowship-related travel. ***Application and institutional Memorandum of Understanding must be submitted by October 15, 2021; successful applicants will be required to obtain a security clearance.** [View](#)

Previously Announced Funding Opportunities – June 24, 2021

National Science Foundation – National Medal of Science – no funds awarded – Nominations Due: 7/30/21

National award honoring exceptional achievement in the sciences

The National Medal of Science, the Nation's highest honor for scientists and engineers, is presented annually by the President of the United States to individuals “deserving of special recognition by reason of their outstanding contributions to knowledge in the physical, biological, mathematical, engineering, or social and behavioral sciences.” A complete nomination consists of a nomination form and three to five letters of support. Self-nominations are not accepted. [View](#)

National Science Foundation #NSF 21-585 – Fairness in Artificial Intelligence in Collaboration with Amazon (FAI) – \$600K to \$1M – Proposal Due: 8/3/21

Funds research on fairness in AI to increase society's acceptance of AI systems

NSF and Amazon are partnering to jointly support computational research focused on fairness in AI, with the goal of contributing to trustworthy AI systems that are readily accepted and deployed to tackle grand challenges facing society. Specific topics of interest include, but are not limited to, Transparency, Explainability, Accountability, Inclusivity, Potential Adverse Biases (including social biases) and Effects, Mitigation Strategies, Algorithmic Advances, Fairness Objectives, Validation of Fairness, Participatory Design, and Advances in Broad Accessibility and Utility. While providing partial funding for this program, Amazon will not play a role in selecting recipients. The lead PI on each proposal must bring computer science expertise to the research. Computationally focused research efforts informed by socio-technical and social behavioral needs of the field are encouraged. [View](#)

John Templeton Foundation – Psychological Science Cross-Training for Christian Theology – Amount TBD – Online Funding Inquiry Due: 8/20/21*

Supports cross-training in psychological science for theologians, philosophers of religion, and scholars in religious studies

This program is aimed at giving theologians, philosophers of religion, and scholars in religious studies who work in Christian theology (broadly construed) the opportunity to cross-train in psychological sciences (includes cognitive, social, personality, moral, developmental, evolutionary, and cultural psychology; cognitive anthropology; behavioral economics; cognitive science; and cognitive and social neuroscience). The objective is to help them better position themselves to conduct research – in conversation and collaboration with scientists – on topics at the intersection of Christian theology and the psychological sciences. There is no cap on the amount of funding that may be requested, but proposals will be scrutinized closely for cost-effectiveness. Project durations cannot exceed 5 years; however, no more than 3 years is strongly preferred. ***Funding Inquiries must be submitted online no later than August 20; invited Full Proposals will be due by January 14, 2022. There will be a virtual information session on July 21 (time TBD), during which prospective applicants may ask questions about how best to structure their Funding Inquiries. To participate in the information session, please email psychfortheologyRFP@templeton.org. [View](#)**

National Science Foundation #NSF 21-587 – Centers for Chemical Innovation (CCI): Phase I (Center Development) Awards and New/Renewal Phase II (Major Research) Centers Awards – Amount varies by Phase – Preliminary Proposal Due: 8/23/21*

Creates research centers with the potential for transformative impact in chemistry

Supports research centers focused on major, long-term fundamental chemical research challenges; addressing these will produce transformative research, lead to innovation, and attract broad scientific and public interest. CCIs can respond rapidly to emerging opportunities through enhanced collaborations, and integrate research, innovation, education, broadening participation, and informal science communication. Phase I awards (up to \$1.8M for 3 years) provide resources to develop the science, management and broader impacts of a major research center before requesting Phase II funding (up to \$4M per year for 5 years); Phase I proposals funded in FY 2022 will seek Phase II funding in FY 2025. The Phase I competition is open to projects in all fields supported by NSF's Division of Chemistry, which particularly encourages fundamental chemistry projects aligned with articulated budget priorities, including Advanced Manufacturing, Artificial Intelligence, Biotechnology, Climate Research and Sustainability, and Quantum Information Science. ***Preliminary Proposals due August 23; Phase II Full Proposals due October 19; Phase I Full Proposals (by invitation only) due February 22, 2022. [View](#)**

National Science Foundation #NSF 21-577 – Grand Challenges in Integrative Geospace Sciences: Advancing National Space Weather Expertise and Research toward Societal Resilience (ANSWERS) – \$900K to \$2.5M – Proposal Due: 8/23/21

Supports compelling, trans-disciplinary research projects in solar and space physics, and space weather and space climate

Brings together collaborative teams of solar and geospace observers, theorists, modelers, experimenters, educators and computational experts to address some of the most challenging problems in solar and space physics and space weather. ANSWERS enables deep and transformative understanding of the dynamic, integrated Sun-Earth system and the solar and terrestrial drivers of space weather and their effects. In combination with forward-looking educational endeavors, ANSWERS also aims to advance the nation's science, technology, engineering, and mathematics expertise and build societal resilience against space weather hazards. Proposing

teams must have complementary expertise to deal with the full Sun-Earth system and space weather phenomena as well as geospace education. SMALL team efforts may apply for up to \$900K total over 3 years; LARGE team efforts may request up to \$2.5M total over up to 4 years. [View](#)

Samsung Advanced Institute of Technology (SAIT) – Global Research Outreach (GRO) Program – Amount TBD – Proposal Due: 8/31/21*

Funds innovative research projects that align with the company's various areas of interest

SAIT is actively engaged in the pursuit of open innovation in order to foster the discovery of new ideas and technological breakthroughs, and build research partnerships with academia and research institutions. University researchers are invited to propose novel research ideas and to work with Samsung's R&D teams to foster technological innovation. ***Applicants shall submit a research proposal and signed GRO Research Agreement (RA) acceptance letter without any modifications. A detailed GRO RA document may be reviewed in advance; a copy should be requested by an authorized official of the University from gro.usa@samsung.com. Please contact your department's ORPA representative.** [View](#)

Merck KGaA, Darmstadt, Germany – Research Grants Program – Amount varies by topic area – Application Due: 8/31/21 by 23:59 central European summer time*

Provides research grants to stimulate innovative research in challenging areas of future importance to the company

The Research Grants program is open to scientists in all career stages. Grants of 40,000 € - 450,000 € per year for up to 3 years are available in these topic areas:

- **Drug Discovery** - 3 grants comprising 350,000 €/year for 3 years with the option of extension.
- **Real time testing and sensors** - grant comprising between 100,000 - 500,000 \$/year for 2 years with the option of extension
- **Nanoparticle for nucleic acid delivery** - grant comprising between 100,000 - 300,000 \$/year for 2 years with the option of extension
- **Digital Innovation** - 3 grants comprising 40,000 - 100,000 € for 1 year with the option of extension
- **Bioelectronics** - grant comprising 150,000 €/year for 3 years

- **Sustainability** - grant/s to be negotiated on a case by case basis
- **Media recycling for cultured meat** - grant/s to be negotiated on a case by case basis
- **Organoids** - grant/s to be negotiated on a case by case basis

***Applicants submit their application(s) for the focus topics containing non-confidential information only. Invited full proposals will be submitted under confidentiality and applicants will join a deep-dive workshop in November or December 2021 with the other finalists, and work with company managers and scientists to jointly optimize submitted project proposals. (Merck KGaA, Darmstadt, Germany is not affiliated with or related to Merck & Co. in the U.S.)** [View](#)

Nasdaq Philanthropic Foundation – Quarterly Grant Program – Amount TBD – Proposal Due: 8/31/21*

Strives to accelerate progress in diversifying entrepreneurship and

empowering a more diverse group of investors

Supports efforts to empower diverse investors (women and under-represented communities) with the financial knowledge and confidence they need to share in the wealth that markets can create, or provide them with the mentoring and resources to strengthen and scale their businesses and contribute to the prosperity of society. The Foundation also is interested in building a deeper, data-led understanding of where the challenges are greatest, what existing efforts could be amplified, and how the Foundation can make new and distinctive contributions. ***There are four proposal deadlines annually: March 31, May 31, August 31, and November 30.** [View](#)

Arnold and Mabel Beckman Foundation – Postdoctoral Fellowship in Chemical Sciences or Chemical Instrumentation – \$180K – Letters of Intent Due: 9/2/21 by 3:00 pm*

Supports postdoctoral fellowships in selected areas of fundamental chemistry or in development of instrumentation for these fields

Supports advanced research by postdoctoral scholars within the core areas of fundamental chemistry, such as chemical physics, chemical engineering, and chemistry of materials research, or the development and build of instrumentation suitable to advanced research in chemistry, chemical physics, chemical engineering, and chemistry of materials science. The fellowship is not intended to fund proposals that are supported by traditional NIH mechanisms in the fields of chemistry, chemical biology, and biochemistry. Award amount is \$180K over 2 years for salary, fringe benefits and research expenditures; instrumentation fellowships will receive an additional one-time amount of up to \$200K. Fellows receiving year 3 renewal award will receive an additional \$90K. ***Letters of Intent are due September 2 by 3:00 pm; invited Full Applications will be due December 13 by 3:00 pm.** [View](#)

National Science Foundation #NSF 16-577 – Focused Research Groups in the Mathematical Sciences (FRGMS) – \$150K to \$1.5M – Proposal Due: 9/8/21

Funds research teams working to solve significant challenges in the mathematical sciences

Supports collaborative groups employing innovative methods to solve specific, major research challenges in the mathematical sciences. A major challenge is an outstanding problem of significant importance that requires the focused and synergistic efforts of a collaborative group to solve, and whose solution will have wide impacts in the mathematical sciences and potentially in other areas. Groups may include, in addition to statisticians and mathematicians, researchers from other science and engineering disciplines appropriate for the proposed research. Risky projects are welcome, as are interdisciplinary projects. Any funding amount from \$150K up to \$500K per year, for up to 3 years, may be requested. [View](#)

National Science Foundation #NSF 20-570 – Industry-University Cooperative Research Centers Program (IUCRC) – Amount varies by Phase – Preliminary Proposal Due: 9/8/21*

Funds centers through which academic scientists conduct fundamental research of interest to industry and government

The IUCRC program catalyzes breakthrough pre-competitive research by enabling close and sustained engagement between industry innovators, world-class academic teams, and government agencies. IUCRCs help industry partners and government agencies connect directly and efficiently with university researchers to achieve three primary objectives: 1) Conduct high-impact research to meet shared and critical

industrial needs in companies of all sizes; 2) Enhance U.S. global leadership in driving innovative technology development, and 3) Identify, mentor and develop a diverse, highly skilled science and engineering workforce. Companies of all sizes/types are encouraged to participate as Center Members. The PI on a proposal must be a tenured faculty member. Award amounts: \$20K for Planning Grants; \$150K per year for Phase I; \$100K per year for Phase II; \$150K per year for Phase II+; \$50K per year for Phase III, after which a Center should be self-supporting through membership fees. Recipients of Planning Grants are required to participate in: 1) a Boot Camp to learn how to create a sustainable Center; and 2) a two-day Planning Workshop organized by the Grantees. ***A mandatory Preliminary Proposal is due September 8 for planning grants only; Full Proposals for all phases are due December 8, 2021.**

[View](#)

National Institutes of Health #RFA-MH-21-175 – BRAIN Initiative: Development and Validation of Novel Tools to Probe Cell-Specific and Circuit-Specific Processes in the Brain – Amount TBD – Letter of Intent Due: 9/8/21*

Supports development of next-generation, innovative technologies to define and target specific cell types in the brain

Funds development and validation of novel tools to facilitate the detailed analysis of cells and circuits and provide insights into the neural circuitry and structure underlying complex behaviors. Of particular interest are first-in-class and/or cross-cutting non-invasive or minimally invasive techniques that permit repeated measurements from cells over time in a non-destructive manner. Applicants from the biological sciences are encouraged to establish collaborations with nanobiologists, material scientists, engineers and colleagues in other disciplines to develop groundbreaking approaches to study brain activity. Application budgets are not limited but must reflect the project's actual needs; NIH expects to commit an estimated total of \$8M to fund 6-9 awards.

***Requested but optional Letters of Intent should be emailed to nimhpeerreview@mail.nih.gov by September 8; full applications are due October 8, 2021.** [View](#)

Do you know of an upcoming funding opportunity that should be shared with your Princeton colleagues? Please email it to res_fund@princeton.edu at least four weeks prior to the application due date, and we'll include it in an upcoming Funding Announcement and/or add it to the [Princeton Research Funding Gateway](#). Thank you!

Best regards,
Coleen Burrus
Director