Opportunity for Assistant Professors

There are funds available to help Assistant Professors in visiting funding agency program officers at DoD, DoE, NSF, DARPA, etc., when they are ready. Readiness will be assessed by Dr. Z.J. Pei based on a justification statement submitted by the faculty member, including expertise, experience, and research ideas. TEES will pay up to half of the cost of travel to Washington, D.C., for an approved Assistant Professor. Please contact Dr. Z.J. Pei, TEES Director of Research Development, at zjpei@tamu.edu for more information.

Funding Opportunities

http://tees.tamu.edu/researchsupport/funding/

TEES Research Development – Proposal Development Assistance

Assistance for Junior Faculty
If you are junior faculty and would like help in submitting a proposal, please contact Dr. Laurie Garton at lsgarton@tamu.edu at least 4 weeks before your proposal is due. For the most assistance, please contact her 2-3 months in advance.

Also, see Junior Faculty Opportunities below.

If you are working on a multidisciplinary and/or multi-university proposal and would like to use the services of TEES Research Development, please contact Dr. Laurie Garton at lsgarton@tamu.edu at least four weeks prior to the due date and after successfully negotiating the white paper or preproposal stage.

LIMITED SUBMISSIONS
If you would like to receive all notices of limited submission opportunities, please email shelly.martin@tamu.edu. Note that if you are on this list, you will receive any and all announcements, whether or not they apply to you. All limited submission opportunities are also posted on the VPR’s site.

Limited Submission NSF Cultivating Cultures for Ethical STEM (CCE STEM) – Email of Intent Due November 28, 2018; Internal Proposal Due December 5, 2018
Limited Submission NIH Outstanding New Environmental Scientist (ONES) Award – Email of Intent Due December 5, 2018; Internal Proposal Due December 12, 2018
Limited Submission NIH Initiative for Maximizing Student Development (IMSD) (T32) – Email of Intent Due December 7, 2018; Internal Proposal Due December 14, 2018

DOC

FY2019 Office of Weather and Air Quality Research Programs (link) – LOIs and Full Proposals Due at Different Times Depending on the Topic (Please see funding announcement) – There will be eight grant competitions from this notification valued at approximately $16,200,000.

NOAA FY 2018-2020 – Broad Agency Announcement (BAA) Announcement Type: Initial (link) – Due September 30, 2020 – There are no funds specifically appropriated by Congress for this BAA. Funding for potential projects in this notice is contingent upon the availability of Fiscal Year 2018, Fiscal Year 2019, and Fiscal Year 2020 appropriations.

DOD

DARPA Microsystems Technology Office (MTO) Office-Wide (link) – Abstracts may be submitted on a rolling basis until 1:00 p.m. on May 26, 2020; Proposals Due June 26, 2020 – Multiple awards are anticipated.

DARPA Polyplexus Pilot 2 (link) – Final Abstract Due August 14, 2109; Final Full Due September 3, 2019 – Approximately 10 awards at the $100,000 level are anticipated throughout the duration of this Broad Agency Announcement (BAA); however, the level of funding for individual awards made under this solicitation has not been predetermined and will depend on the scope and quality of the proposals received, as well as the availability of funds.

United States Special Operations Command Broad Agency Announcement (BAA) for Extramural Biomedical Research and Development (link) – It is continuously open for a 5-year period, from 1 August 2018 closing 31 July 2023, 11:59 p.m. Eastern Time. – The Anticipated total costs budgeted for the entire period of performance will not exceed $3 Million annually. The number of awards is indeterminate and contingent upon funding availability.

Research Interests of the Air Force Office of Scientific Research (link) – This announcement remains open until superseded. We review and evaluate proposals as they are received. You may submit proposals at any time; however, some specific topic instructions may recommend submission by specific dates that align with funding expectations. – Approximately $300 million is anticipated to be available for support of actions awarded under this announcement, subject to availability of funds. Research proposals funded between $200,000 and $400,000 per year are encouraged. Most of our awards are three (3) years in duration. Awards may be proposed for not more than five (5) years.

DARPA Defense Sciences Office (DSO) Office-Wide (link) – Executive Summary Due April 8, 2019; Abstract Due May 6, 2019; Full Due June 11, 2019 – Multiple awards are anticipated; however, the level of funding for individual awards made under this solicitation has not been predetermined and will depend on the scope and quality of the proposals received, as well as the availability of funds.

DARPA Disruptive Capabilities for Future Warfare (link) – Full Due June 11, 2019 – Multiple awards are anticipated. The amount of resources made available under this BAA will depend on the quality of the proposals received and the availability of funds. Initial
awards are anticipated to be for less than $1 million and less than 18 months duration, although options that follow the base effort may also be proposed.

**NRL Long Range Broad Agency Announcement (BAA) for Basic and Applied Research**

**Synopsis 3** ([link](#)) – Due May 9, 2019 – The funded amount and period of performance of each proposal selected for award may vary depending on the research area and the technical approach to be pursued by the offeror selected.

**National Geospatial-Intelligence Agency Academic Research Program (NARP)** ([link](#)) – White papers will be accepted on a continuous, rolling basis and may be submitted at any time before 11:59 p.m. EDT on 31 September 2021. Proposals, if requested, may be submitted at any time until the closing date of 31 December 2021 at 11:59 p.m. EST. – NURI awards are expected to have not more than a 24-month base period and a value of up to $400,000, with up to three one-year options valued at up to $200,000 per option year. NIP award grants are expected to have a 24-month base period valued up to $200,000, with up to one-year option valued at $100,000. NRCF grants are normally less than $30,000 per event based on merit.

**DOE**

**New HPC4EnergyInnovation Program: Collaborations for U.S. Manufacturers** ([link](#)) – Eligibility is limited to U.S. manufacturers, defined as entities that are incorporated (or otherwise formed) under the laws of a particular state or territory of the United States, and that manufacture products in the United States (HPC4Mfg) or that develop and/or manufacture new or modified materials in the United States (HPC4Mtls). U.S. universities, institutes, and other non-profit organizations are also eligible to participate as collaborators. Funding for university participants must be provided by the industrial partner and can be considered a component of the industrial partner’s in-kind funding contribution.

**New DOE Computational Materials Sciences** ([link](#)) – Pre-applications Due December 21, 2018; Applications Due February 28, 2019 – It is anticipated that up to $24,000,000 ($6,000,000 annually for up to 4-years) will be available under this FOA, contingent on satisfactory peer review and the availability of appropriated funds. Up to 8 awards are anticipated, with a mix of single PI/small group and larger team awards. Applicants should request project support for four years, with the release of out-year support contingent on adequate progress of the research.

**Manufacturing Innovator Challenge** ([link](#)) – There are six manufacturing prize opportunities. The first two are due December 7, 2018. – Individual prizes ranging from $2,500 to $10,000 will be awarded to innovators with the best solutions for today's manufacturing challenges.

**Google**

**Google AI Impact Challenge** ([link](#)) – Applications Due January 22, 2019 – $25,000,000 pool; we expect grants may range from $500k to $2M USD, but will ultimately be sized based on project needs. We encourage applicants to submit budgets that accurately reflect the scope of their proposal.

**NASA**

**Human Exploration Research Opportunities (HERO) – 2018 Omnibus Opportunity** ([link](#)) – Proposals Due September 5, 2018 through September 5, 2019 – Awards generally range from
under $100K per year for focused, limited efforts (e.g., data analysis) to $1M per year for extensive activities (e.g., development of scientific hardware) and will be made as grants. The funds available for awards in each research opportunity offered in this NRA range from less than one million to several million dollars. (Details of the solicited research opportunities are given in the HERO appendices of this NRA, and it is anticipated that several response area appendices will be issued throughout this year as needed. All appendices will use a two-step solicitation process requiring that a compliant and relevant Step-1 proposal be submitted in order to be considered to be invited to submit a Step-2 proposal.)

**NIH**

*Short-term Mentored Career Enhancement Awards in Mobile and Wireless Health Technology and Data Analytics: Cross-Training at the intersection of Behavioral and Social Sciences and STEM Disciplines (K18 Independent Clinical Trial Not Allowed)* ([link](#)) – Due July 12, 2019 – Award budgets are composed of salary and other program-related expenses as described in the solicitation. The total project period may not exceed 2 years.

*NHLBI Career Transition Award for Intramural Postdoctoral Fellows and Research Trainees (K22 Independent Clinical Trial Not Allowed)* ([link](#)) – Standard Due Dates: February 12, June 12, October 12 – The number of awards is contingent upon NIH appropriations and the submission of a sufficient number of meritorious applications. Award Budget: Award budgets are composed of salary and other program-related expenses, as described in the solicitation.

**NSF**

*New* **National Robotics Initiative 2.0: Ubiquitous Collaborative Robots (NRI-2.0)** ([link](#)) – Full Due February 19, 2019 and January 22, 2020 – Foundational projects will range from $250,000 to $750,000 in total costs for up to three years. Integrative projects will range from $500,000 to $1,500,000 in total costs for up to four years. Please refer to Section III for agency-specific budget criteria.

*New* **Mid-scale Research Infrastructure-1 (Mid-scale RI-1)** ([link](#)) – Prelim Due February 19, 2019; Invited Full Due May 20, 2019 – Estimated Number of Awards: 3 to 10. Mid-scale RI-1 program funding is pending the availability of funds. The number of awards within each Mid-scale RI-1 category (Implementation and Design) will depend on program funding level, categories of proposals and amounts requested, quality of proposals as determined by the NSF merit review process and award mechanisms utilized. “Implementation” projects may have a total project cost ranging from $6 million to below $20 million. Only “Design” projects may request less than $6 million, with a minimum request of $600,000 and a maximum request below $20 million.

*New* **Campus Cyberinfrastructure (CC*)** ([link](#)) – Full Due February 20, 2019 – The estimated number of awards per program area is as follows: 5-10 Data-Driven Networking Infrastructure awards; 3-5 Regional Connectivity for Small Institutions awards; 2-5 Network Integration and Applied Innovation awards; 5-15 Campus Computing and the Computing Continuum awards; and 3-5 Cyber Team—Research and Education CI-based Regional Facilitation awards. Anticipated Funding Amount: $10,000,000 to $17,000,000.

**Limited Submission** **IUSE / Professional Formation of Engineers: Revolutionizing Engineering Departments (IUSE/PFE: RED)** ([link](#)) – Full Due January 24, 2018 – 2-3
RED Innovation awards and 2-3 RED-A&I awards depending on funding availability and quality of proposals received. Anticipated Funding Amount: $8,000,000

**Limited Submission Enabling Access to Cloud Computing Resources for CISE Research and Education (Cloud Access)** ([link](#)) – Prelim Due December 20, 2018; Full Due February 19, 2019 – The maximum award amount is $5,000,000 via a Cooperative Agreement, pending the availability of funds and quality of proposals received. The annual project operating costs are not expected to exceed $850,000 per year for five years, for a total of $4,250,000. The proposed budget may also include a request, not to exceed $750,000, for initial cloud computing resources, as part of the maximum $5,000,000 award amount (see section II, Program Description). Future cloud computing resources may be supported through supplemental funding requests by the awardee organization.

**Cybersecurity Innovation for Cyberinfrastructure (CICI)** ([link](#)) – Full Due January 23, 2019 – Total funding for the CICI program is $10,000,000 to $19,500,000, subject to the availability of funds. Secure Scientific Cyberinfrastructure (SSC) awards will be supported at up to $1,000,000 total per award for up to three years. Research Data Protection (RDP) awards will be supported at up to $1,000,000 total per award for up to three years. A single Cybersecurity Center of Excellence (CCoE) award will be supported at up to $12,500,000 for up to five years.

**CISE Community Research Infrastructure (CCRI)** ([link](#)) – LOI Due January 8, 2019; Full Due February 20, 2019 (LOI Due November 12, 2019; Full Due January 9, 2020) – With up to 10 New awards, up to 5 ENS awards, and 3-5 Planning awards in each competition. The majority of the New awards will be made in the $750,000 - $1,500,000 Medium range. A small number of Grand awards may be made in the $1,500,000 - $5,000,000 range. The majority of the Planning awards will be made in the $50,000 - $100,000 range. The majority of the ENS awards will be made in the $750,000 - $2,000,000 range.

**Accelerating Research through International Network-to-Network Collaborations (AccelNet)** ([link](#)) – FY 2019 Competition: LOI Due December 21, 2018; Full Due February 28, 2019 (FY 2020 Competition: LOI Due October 30, 2019; Full Due January 31 2020) – Estimated Number of Awards: 7 to 9; Anticipated Funding Amount: $3,000,000 to $6,000,000

**MPS Ceramics (CER)** ([link](#)) – Full Proposals Accepted Anytime. Investigators are advised that the following dates – March 15 to May 15 and July 15 to Aug. 15 – should, optimally, be avoided for submissions. - Estimated Number of Awards: 25; Anticipated Funding Amount: $10,000,000

**Understanding the Rules of Life: Building a Synthetic Cell – An Ideas Lab Activity** ([link](#)) – Prelim Due December 28, 2018; Full Due May 13, 2019 – Estimated Number of Awards: 4 to 6; Anticipated Funding Amount: $10,000,000; Subject to the availability of funds

**Understanding the Rules of Life: Epigenetics** ([link](#)) – Full Due February 1, 2019 – The URoL:Epigenetics Program offers two submission tracks: Track 1 – for projects with a total budget of up to $500,000 and an award duration of up to 3 years, and Track 2 – for projects with a total budget of up to $3,000,000 and award duration of up to 5 years.

**Collaborative Research in Computational Neuroscience (CRCNS) – Innovative Approaches to Science and Engineering Research on Brain Function** ([link](#)) – Full Due November 27, 2018 (Deadline for FY 2019 competition) – Estimated Number of Awards: 15 to 25 per year; Anticipated Funding Amount: $5,000,000 to $20,000,000 per year, subject to availability of funds
DBI Cyberinfrastructure for Biological Research (CIBR) (link) – Full Proposals Accepted Anytime – PD 18-1165
DBI Infrastructure Innovation for Biological Research (IIBR) (link) – Full Proposals Accepted Anytime – PD 18-595
DBI Advances in Biological Informatics (ICB) (link) – Full Proposals Accepted Anytime – PD 18-594
Computing and Communication Foundations (CCF): Core Programs (link) – Due September 9, 2019 - September 16, 2019 for MEDIUM projects; October 31, 2019 - November 14, 2019 for SMALL projects – Small Projects: up to $500,000 total budget with durations up to three years; and Medium Projects: $500,001 to $1,200,000 total budget with durations up to four years.
Computer and Network Systems (CNS): Core Programs (link) – Due September 09, 2019 - September 16, 2019 for MEDIUM projects; September 18, 2019 - September 25, 2019 for LARGE projects; October 31, 2019 - November 14, 2019 for SMALL projects – Small Projects: up to $500,000 total budget with durations up to three years; Medium Projects: $500,001 to $1,200,000 total budget with durations up to four years; and Large Projects: $1,200,001 to $3,000,000 total budget with durations up to five years.
Information and Intelligent Systems (IIS): Core Programs (link) – Due September 09, 2019 - September 16, 2019 for MEDIUM Projects; September 18, 2019 - September 25, 2019 for LARGE Projects; October 31, 2019 - November 14, 2019 for SMALL Projects – Small Projects: up to $500,000 total budget with durations up to three years; Medium Projects: $500,001 to $1,200,000 total budget with durations up to four years; and Large Projects: $1,200,001 to $3,000,000 total budget with durations up to five years.

Texas Sea Grant
Texas Sea Grant’s Biennial Research Competition (link) – Pre-proposal Due February 4, 2019; Full Due June 14, 2019 – Keep watching for the release of the Request for Proposals. For more information, contact Mia Zwolinski, Texas Sea Grant Research Coordinator, at mzwolinski@tamu.edu or 979-458-0449.

This section contains resources, funding opportunities and seminars, events, and workshops of special interest to junior faculty. See Seminars/Events/Workshops below for more offerings.

**Junior Faculty Opportunities**

Young Investigator Programs
http://tees.tamu.edu/researchsupport/young-investigator-programs/

Young Investigator Programs are for junior faculty who are untenured, Assistant Professors. Resources are available including CAREER/YIP workshops and seminars, proposal assistance, writing resources, and junior faculty targeted funding opportunities.
Junior Faculty Targeted Funding Opportunities – This spreadsheet contains numerous funding opportunities for junior faculty in Engineering.
Young Investigator Awards – This spreadsheet lists early career and young investigator awards (general list).

Funding Opportunities

*Future Funding Opportunities will be posted here.*

Seminars/Events/Workshops

**Engineering Education CAREER Webinar**
December 17, 2018
1:00 p.m. - 2:00 p.m. ET
**Information** – Registration is not required.

**Save the Date**
**Junior Faculty Proposal Writing Academy: NSF Broader Impacts & Education Plan Seminar & Expo**
February 6, 2019
1:00 p.m. - 5:00 p.m.
ILSB Auditorium and Lobby
Registration to come

**Junior Faculty Proposal Writing Academy**
The TEES Research Development group and the Division of Research’s Research Development Services office have partnered to create the Junior Faculty Proposal Writing Academy. For more information, please visit [http://jfa.tamu.edu/](http://jfa.tamu.edu/).

**Additional Resources**

**Facilities** – A list of facilities for each department in the College of Engineering is available on the TEES Research Development website. Faculty can use this list in creating facilities statements for multi-PI proposals.

**NSF Broader Impacts Expo List of Resources** – A list of the organizations and resource representatives who participated in the NSF Broader Impacts Seminar and Expo.

**Funding Opportunities Spreadsheet** – A spreadsheet of funding opportunities from past digests.

**Education/Broader Impacts** – A list of resources available through EASA, College of Engineering, Texas A&M, and national resources.

**Proposers Days/Webinars**

*(All times Central unless otherwise noted)*

**NSF Partnerships for Innovation Webinar**
November 29, 2018 – 2:00 p.m. - 4:00 p.m. ET – [Information and Registration](#)
December 13, 2018 – 2:00 p.m. - 4:00 p.m. ET – [Information and Registration](#)
Researchers Use 3D X-rays to See the Spine Like Never Before

From construction workers carrying heavy building materials to a traveler hauling luggage, lower back pain is most commonly caused by overstressing and damaging the spine through actions such as improper lifting techniques.

While this ailment is often treatable, it is uncomfortable and disruptive to the daily lives of those who suffer from it and can be a slippery slope leading to surgery or permanent spinal damage. As part of an ongoing effort to investigate spine-related disorders, a team of researchers at Texas A&M University became the first to successfully use dynamic X-ray technology to map the
lumbar spine. The revolutionary, computerized visuals produced in the study will set the stage for future research on the prevention and treatment of lower back pain and other spinal injuries.

Funded by the National Institute for Occupational Safety and Health, the project is led by Dr. Xudong Zhang, professor and Liollio Family Faculty Fellow in the Department of Industrial and Systems Engineering at Texas A&M. Zhang also holds joint courtesy appointments in the J. Mike Walker ’66 Department of Mechanical Engineering and Department of Biomedical Engineering.

To view the complete story, please visit the Engineering website.

Jarrahbashi and Team are Bringing the Heat to Solar Power Plants

Dr. Dorrin Jarrahbashi and students working in her lab on the Texas A&M University campus. | Image: Justin Baetge/Texas A&M Engineering Communications

Clean energy is at a crossroads. To become a viable replacement for fossil fuels, solar power plants must first improve their efficiency to match the electrical output of nonrenewable energy sources. This relies heavily upon the innovation and development of new products that absorb and exchange heat at higher temperatures.

Paving the way for clean energy to power the future, a team of researchers have created a synthetic material that will make solar energy a more cost-effective, efficient and reliable source of power. Their findings were published in Nature, a leading multidisciplinary science journal.

Dr. Dorrin Jarrahbashi, assistant professor in the J. Mike Walker ’66 Department of Mechanical Engineering at Texas A&M University, led the thermal-hydraulic design simulations and performance analysis for the project.

To view the complete story, please visit the Engineering website.