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 shelley.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 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

AFWERX  
New Advanced Microelectronics Prototype and Design Challenge (link) – Phase 1: Proposals accepted until January 22, 2019; Phase 2: Design and Simulation Dates are March 1, 2019 - June 28, 2019 – The USAF is providing access to a platform that includes a commercial cloud-based development environment, design and verification tools, IP libraries, design expertise support and fabrication. Access to the EDA tools and IP libraries is valued at $10M per license, but the USAF is offering it FREE to selected participants.

DOC  
New NOAA NESDIS Competition for a Cooperative Institute for Satellite Earth System Studies (link) – Due January 31, 2019 – All funding is contingent upon the availability of Federal appropriations. NOAA anticipates that up to approximately $20M - $40M will be available annually for this CI. The award period will be 5 years and may be renewed for up to an additional 5 years.

DOD  
New AFRL Data-Driven Discovery of Optimized Multifunctional Material Systems Center of Excellence (D³OM²S CoE) (link) – White Paper Due January 3, 2019; Proposal Due Date: To be provided in the Requests for Proposals sent to recipients that submit White Papers considered to meet the needs of the Air Force. – The government’s anticipated share is $5,000,000. The Air Force anticipates one award.

R DARPA Program Announcement for Artificial Intelligence Exploration (AIE) (link) – Due July 20, 2019 – Multiple awards are anticipated. The amount of resources made available under each AIE Opportunity issued under DARPA-PA-18-02 will depend on the quality of the proposals received and the availability of funds.

R DARPA Biological Technologies (link) – Proposal Abstracts and Full Proposals will be submitted on a rolling basis until April 25, 2019 – Multiple awards are possible. The amount of resources made available under this BAA will depend on the quality of the proposals received and the availability of funds.

R Broad Agency Announcement for the Army Rapid Capabilities Office (link) – Due March 23, 2023; Open continuously for the next 5 years – In anticipation, but not limited to, three to twelve month period of performance awards, with dollar amounts ranging from $500,000 to $2,000,000 may be expected.

R DTRA Fundamental Research to Counter Weapons of Mass Destruction (link) – Due September 30, 2019 – Grants resulting from submissions to Thrust Areas 1-7, including topics associated with these thrust areas, may range from small dollar value (e.g., $25K) up to $1M annually (total, including both direct and indirect costs) depending on the nature and the scope of work.

DOE
New Manufacturing Innovator Challenge (link) – Manufacturing prize opportunities: Additive Manufacturing for Disaster Response: Ends December 17, 2018; Solid State Lighting (SSL) Manufacturing Concept: Ends December 17, 2018; Biobased Additive Manufacturing (BAM) Prize: Ends January 10, 2019; Novel Concepts for Large Scale 3D Printing: Ends February 1, 2019; Two Coming Soon: Low-Cost Portable Refrigerant Leak Detector for Residential Use and Lightweight Turbocharger Turbine Wheel – Individual prizes ranging from $2,500 to $10,000 will be awarded to innovators with the best solutions for today’s manufacturing challenges.

FY 2019 Phase I Release 2 (link) – LOI Due December 17, 2018; Application Due February 4, 2019 – Maximum Award Amount: $200,000; Maximum Phase II Award Amount: $1,100,000

FY 2019 Research Opportunities in High Energy Physics (link) – LOI Due December 5, 2018; Full Due January 22, 2019 – Ceiling: $5,000,000 per year; Floor: $20,000 per year. The award size will depend on the number of meritorious applications, the results of merit review, the program policy factors, and the availability of appropriated funds. Approximately 10 to 100 awards are expected.

NASA

New Human Exploration Research Opportunities (HERO) – Appendix C: Countermeasures for Mitigation of Spaceflight Associated Neuro-ocular Syndrome (link) – Step 1 Proposals Due January 4, 2019; Step 2 Response Period: February 4, 2019 - April 4, 2019 – NASA does not provide separate funding for direct and indirect costs; thus, the amount of the award requested is the total of all costs submitted in the proposed budget. The selected proposal is expected to be funded as a research grant in one-year increments.

The National Academies of Sciences, Engineering, and Medicine

New Gulf Research Program Fellow – Early-Career Research Fellow (link) – Applications Due February 20, 2019 – An award of $76,000 is paid to each fellow’s institution in the form of a two-year grant.

NIH

R NLM Research Grants in Biomedical Informatics and Data Science (R01 Clinical Trial Optional) (link) – Standard Due Dates: February 5, June 5, October 5 – The number of awards is contingent upon NIH appropriations and the submission of a sufficient number of meritorious applications. Award Budget: Application budgets are limited to $250,000 per year in direct costs and need to reflect the actual needs of the proposed project.

R Wearable Alcohol Biosensors (STTR) (R41/R42- Clinical Trial Optional) (link) – Standard Due Dates: September 5, January 5, April 5 – According to statutory guidelines, total funding support (direct costs, indirect costs, fee) normally may not exceed $150,000 for Phase I awards and $1,000,000 for Phase II awards.

R Wearable Alcohol Biosensors (SBIR) (R43/R44- Clinical Trial Optional) (link) – Standard Due Dates: September 5, January 5, April 5 – According to statutory guidelines, total funding support (direct costs, indirect costs, fee) normally may not exceed $150,000 for Phase I awards and $1,000,000 for Phase II awards.

NSF
Dear Colleague Letter: STEM Workforce Development Utilizing Flexible Personal Learning Environments (link)

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

Designing Materials to Revolutionize and Engineer our Future (DMREF) (link) – Submission Window: January 28, 2019 – February 4, 2019 - Estimated Number of Awards: 20 to 25; Anticipated Funding Amount: $36,000,000; These funds will be partitioned among the participating Divisions (funds are not pooled), each of which will support proposals of scientific interest to that Division. An additional $100,000 worth of Google credits will be made available to PIs through Google Cloud services by virtue of an MOU between NSF and Google. Once activated, Google credits will remain available through 4 years.

Harnessing the Data Revolution (HDR): Data Science Corps (DSC) – Building Capacity for HDR (link) – Due January 28, 2019 - February 4, 2019 – Up to $10,000,000 is expected to be available for eight to eleven awards, for 3 years each, subject to the availability of funds. Awards will typically be in the range of $1,000,000 to $1,200,000 for 3 years.

CyberCorps® Scholarship for Service (SFS) – Defending America’s Cyberspace (link) – Full Due February 4, 2019 and July 31, 2019 – Estimated Number of Awards: 8 to 12; Anticipated Funding Amount: $15,000,000

Accelerating Research through International Network-to-Network Collaborations (AccelNet) (link) – LOI Due December 21, 2018; Full Due February 28, 2019 - Estimated Number of Awards: 7 to 9; Anticipated Funding Amount: $3,000,000 to $6,000,000

Joint DMS/NLM Initiative on Generalizable Data Science Methods for Biomedical Research (DMS/NLM) (link) – Due January 2 - January 16, 2019 – Approximately 8 to 10 Awards from this competition may be made by either NSF or NIH at the option of the agencies, not the grantee. The number of awards will depend on the availability of funds and quality of proposals received. Anticipated Funding Amount: $4,000,000 per year for new applications ($2,000,000 from NSF, $2,000,000 from NIH), subject to availability of funds and receipt of proposals of adequate quality. Award sizes are expected to range from $200,000 to $300,000 (total costs) per year with durations of up to 3 years.

DMR Crosscutting Activities in Materials Research (link) – Full Proposal Accepted Anytime – PD 18-7222

CMMI Advanced Manufacturing (AM) (link) – Full Proposals Accepted Anytime – PD 19-008Y

ECCS Energy, Power, Control, and Networks (EPCN) (link) – Full Proposal Accepted Anytime – PD 18-7607

Requests for Information/Notices of Intent

IARPA Request for Information: Portable Electronic Cooling (link) – Responses Due January 14, 2019

IARPA Request for Information: Securing the SCIF of the Future (link) – Responses Due December 31, 2018

Student/Postdoctoral Opportunities
NIH Blueprint Diversity Specialized Predoctoral to Postdoctoral Advancement in Neuroscience (D-SPAN) Award (F99/K00 Independent Clinical Trial Not Allowed) (link)
– LOI Due 30 Days Prior to Application; Application Due December 13, 2018; April 15, 2019 - The NIH Blueprint intends to commit $1,000,000 in FY2019 to fund approximately 20 awards. Award Budget: For the F99 phase award budgets are composed of stipends, tuition and fees, and institutional allowance, as described below. For the K00 phase, award budgets are composed of salaries and fringe benefits, research and career development support, and indirect costs.

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

Gulf Research Program Fellow – Early-Career Research Fellow (link) — Applications Due February 20, 2019 – An award of $76,000 is paid to each fellow’s institution in the form of a two-year grant.

Seminars/Events/Workshops

NSF 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
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)*

**Webinar was Rescheduled**

**NSF Advanced Computing Systems & Services Webinar**
December 6, 2018
3:00 p.m. - 4:00 p.m. ET
[Information and Registration](#) – Registration closes on December 5.

**DARPA Angler Proposers Day**
December 13, 2018
8:00 a.m. - 5:00 p.m. ET
The Executive Conference Center, 4075 Wilson Blvd., Suite 300, Arlington, VA
[Information and Registration](#) – Advance registration is required. Registration closes on December 10, 2018.

**NSF Partnerships for Innovation Webinar**
December 13, 2018
2:00 p.m. - 4:00 p.m. ET
[Information and Registration](#)

**NSF Engineering Education CAREER Webinar**
December 17, 2018
1:00 p.m. - 2:00 p.m. ET
[Information](#) – Registration is not required.
Save the Date
Texas Sea Grant’s Biennial Research Competition Pre-proposal Webinar
January 7, 2019
Information – For more information, contact Mia Zwolinski, Texas Sea Grant Research Coordinator, at mzwolinski@tamu.edu or 979-458-0449.

Seminars/Events/Workshops for All Faculty
http://tees.tamu.edu/researchsupport/events/

STEM 4 Innovation Conference for K-12 Education
February 21-22, 2019
College Station – Lab tours are being held on February 21; Exhibitor Booths will be at the Texas A&M Hotel and Conference Center – Century Ballroom on February 22.
Information and Registration

Research News

Texas A&M and Yale to Develop Wrist-worn, Cuffless Blood Pressure Monitor

The National Institute of Biomedical Imaging and Bioengineering has announced the funding of a grant to investigators at Texas A&M University and Yale University for the development of a wrist-worn, cuffless blood pressure monitoring system. The project is sponsored for $1.2 million over four years.

With a team of engineers, computer scientists and physician-scientists led by Drs. Roozbeh Jafari and Bobak Mortazavi at Texas A&M, and Drs. Harlan Krumholz and Erica Spatz at Yale, the goal is to create a device that can unobtrusively measure blood pressure throughout the day and night and across a range of activities.

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

Kameoka Receives Grant for New Paper Sensor Technology to Monitor Crop Conditions

Dr. Jun Kameoka, professor in the Department of Electrical and Computer Engineering at Texas A&M University, received a grant from the Bill and Melinda Gates Foundation for his work centered on the growing field of paper electronics and its application in the agriculture industry.

In order to better assess the conditions of the soil of surrounding areas of land, Kameoka and his collaborators have designed a paper-based sensor that will monitor physical, biological and chemical soil conditions that are altered by plant diseases. Because the full crop yield is so valuable, it is important to assess the conditions in various parts of the land to guarantee that each piece is thriving. Where one piece of land may be getting adequate moisture and is free of pests, another may be suffering.
The paper sensor is buried in the soil with an antenna. The unique paper is coated with silicon and is resistant to weather conditions due to its hydrophobic nature. Using conductive ink, the paper can receive and transmit radio frequency signals to a quadcopter aircraft up above as it surveys the land. Currently, the team’s focus is to explore the applications within the agriculture industry and develop a low-cost crop surveillance system that can detect moisture, heat and other weather variables that can complicate crop season.

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

Prepared by TEES Research Development under the auspices of the Associate Agency Director for Strategic Initiatives and Centers. For questions, email researchnews@tees.tamus.edu.