Engineering Research Digest
A weekly newsletter for Engineering PIs interested in funding opportunities and news

August 23, 2017

http://teesresearch.tamu.edu/  researchnews@tees.tamu.edu

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.**

**In September, we will announce a professional development opportunity for junior faculty.**

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**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.

**TAMU Division of Research and São Paulo Research Foundation (FAPESP)**
*Texas A&M–FAPESP Research Program SPRINT – 3rd Edition 2017 (link) – Informational Meeting September 6, 2017; Proposal Due October 30, 2017 – $10,000/year for TAMU PI*

**Alfred P. Sloan Foundation**
*Sloan Research Fellowships (link) – Due September 15, 2017 – $65,000 fellowships awarded annually to exceptional junior faculty in the fields of: chemistry, computational and evolutionary molecular biology, computer science, economics, mathematics, neuroscience, ocean sciences, and physics*

DOC
NIST Measurement Science and Engineering (MSE) Research Grant Programs (link) – Due: On-going – $5,000 - $1,500,000 budget range depending on specific grant program, 240 awards last year.

DOD
DARPA Harnessing Autonomy for Countering Cyberadversary Systems (HACCS) (link) – Due October 1, 2017 – Multiple awards are anticipated. The level of funding for individual awards made under this solicitation has not been predetermined and will depend on the quality of the proposals received and the availability of funds.

DARPA Radio Frequency Machine Learning Systems (RFMLS) (link) – Due October 10, 2017 – 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.

DARPA Biological Technologies Office Open BAA (link) – Proposal Abstracts and Full Proposals will be submitted on a rolling basis until April 26, 2018 – 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.

DOE
H2@Scale CRADA Call (link) – Due September 15, 2017 – FCTO anticipates making multiple awards, subject to the availability of funding, and the project selections will continue to be announced until all funds are allocated. Proposals submitted with a higher degree of funds-in allocations will have a greater likelihood of being considered for funding. No adjustments are expected for the estimated total DOE funding available for this call (approximately $6,000,000), but adjustments may be made in the total project value (about $12,000,000) depending upon the ratio of industry to university, nonprofit, or government projects that are selected.

NIH
BRAIN Initiative: Development and Validation of Novel Tools to Analyze Cell-Specific and Circuit-Specific Processes in the Brain (R01) (link) – Due October 13, 2017 (See new dates in NOT-MH-16-026) – Application budgets are not limited but need to reflect the actual needs of the proposed project.

Innovative Research in Cancer Nanotechnology (IRCN) (R01) (link) – Due November 21, 2017; May 23, 2018 – Application budgets are limited to $450K in direct costs per year and need to reflect the actual needs of the proposed project.

NSF
Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science (link) – Full Due November 27, 2017

Improving Undergraduate STEM Education: Education and Human Resources (IUSE: EHR) (link) – Development and Implementation Tier Due December 12, 2017; Exploration and Design Tier Due October 1, 2017 – October 1, 2018;

Dear Colleague Letter: Special Guidelines for Submitting Collaborative Proposals under National Science Foundation (NSF) and US-Israel Binational Science Foundation (BSF) Collaborative Research Opportunities (link)
Division of Materials Research: Topical Materials Research Programs (DMR-TMRP) (link) – Full Due October 1, 2017 - November 1, 2017 – Anticipated Funding Amount: $55,000,000 for estimated 225 awards.

CISE Research Infrastructure (CRI) (link) – Prelim Due November 2, 2017; Full Due Full Due January 18, 2018 – With up to 15 Institutional Infrastructure (II) awards and up to 15 Community Infrastructure (CI) awards in each competition. The majority of the II awards will be made in the $200,000 - $750,000 range, though a small number of II awards may be made in the $750,000 - $1,000,000 range. The majority of the CI awards will be made in the $500,000 - $1,000,000 range, though a very small number of CI awards may be made in the $1,000,000 - $2,000,000 range. The majority of the Community Infrastructure Planning (CI-P) awards will be made in the $50,000 - $100,000 range.

Discovery Research PreK-12 (DRK-12) (link) – Full Due November 14, 2017 – Normal limits for funding requests of DRK -12 proposals are as follows: (1) Level I projects up to $450,000 with duration up to three years; (2) Level II projects up to $3,000,000 with duration up to four years; and (3) Level III projects up to $5,000,000 with duration up to five years. Synthesis proposals are up to $300,000 and two years duration. Conference proposals are up to $100,000 and one year duration.

Joint DMS/NIGMS Initiative to Support Research at the Interface of the Biological and Mathematical Sciences (DMS/NIGMS) (link) – Due September 18, 2017 – Up to $5,000,000 per year for new applications (up to $2,000,000 from NSF and up to $3,000,000 from NIGMS), subject to availability of funds and receipt of proposals of adequate quality. Award sizes are expected to range from $100,000 to $400,000 (total costs) per year with durations of 3-5 years.

CyberCorps(R) Scholarship for Service (SFS) (link) – Full Due November 17, 2017-December 5, 2017 (Capacity Track) – Award Ceiling: $5,000,000; Award Floor: $200,000

Computational and Data-Enabled Science and Engineering (CDS&E) (link) – Full Proposal Window: September 1, 2017 - August 31, 2018 (Check Directorate/Division information for exact dates) – PD 12-8084

AGS Solar Terrestrial Program (link) – Full Proposal Accepted Anytime – PD 98-1523

CMMI Mechanics of Materials (MOMs) (link) – Due September 15, 2017 – PD 17-1630

AGS Magnetospheric Physics (link) – Full Proposal Accepted Anytime – PD 98-5750

AGS Geospace Facilities (link) – Full Proposal Accepted Anytime – PD 04-4202

Semiconductor Synthetic Biology for Information Processing and Storage Technologies (SemiSynBio) (link) – Full Due October 18, 2017

Centers for Chemical Innovation (link) – Full Due October 11, 2017 – Total Program Funding: $9,400,000, Award Floor: $4,000,000

Requests for Information/Notices of Intent

DOE Request for Information (RFI): Clean Water Technologies Synopsis 2 (link) – Responses Due August 28, 2017

Student/Postdoctoral Opportunities

AFCEA ROTC Honor Award (link) – Nominations must be received 20 days prior to the presentation date. Nominee must currently be enrolled in junior year. – The award includes a framed parchment certificate with the honoree's name prominently inscribed and a ribbon bar.
**TAMU Public Policy Internship Program (PPIP)** ([link](#)) – Applications Due September 14, 2017 – Participants in our Washington, D.C. program are placed in policy-related internships within their individual areas of interest, including federal agencies, lobbying groups, or think tanks. Interns with our European program are either placed with the U.S. Commercial Service in London, Paris, or Madrid, or with a European think tank in Berlin.

### Additional Resources

**Funding Opportunities Spreadsheet** – A spreadsheet of funding opportunities from the past year’s newsletter. Link is on the Proposal Tips and Resources page.

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

### Proposers Days/Webinars

**TEES/Hanover Research Multi-PI/Multi-Institution Proposals Webinar**
August 25, 2017
11:00 a.m. - 1:00 p.m.
[Information and Registration](#) – Registration deadline is August 24, 2017.

**DARPA Young Faculty Award (YFA) Program Proposers Day Webcast**
August 29, 2017
1:00 p.m. - 4:00 p.m.
[Information and Registration](#) – Registration closes at 12:00 p.m. (EST) on August 24, 2017, or when capacity is reached.

**NSF Emerging Frontiers in Research and Innovation Program – Informational Webinar**
September 7, 2017
12:00 p.m. - 1:30 p.m.
[Information and Registration](#)

**TEES/Hanover Research Foundation Outreach, Cultivation & Proposal Development Webinar**
September 29, 2017
11:00 a.m. - 1:00 p.m.
[Information and Registration](#) – Registration deadline is September 28, 2017.

**TEES/Hanover Research Responding to Reviewer Comments & Resubmission Strategies Webinar**
October 27, 2017
11:00 a.m. - 1:00 p.m.
[Information and Registration](#) – Registration deadline is October 26, 2017.
TEES/Hanover Research Creating a Timeline for Developing & Submitting a Grant Webinar
November 17, 2017
11:00 a.m. - 1:00 p.m.
Information and Registration – Registration deadline is November 16, 2017.

TEES/Hanover Research Crafting Specific Aims or Objectives Webinar
December 15, 2017
11:00 a.m. - 1:00 p.m.
Information and Registration – Registration deadline is December 14, 2017.

TEES/Hanover Research Proposal Basics (Biosketches, Budgets, Etc.) Webinar
January 26, 2018
11:00 a.m. - 1:00 p.m.
Information and Registration – Registration deadline is January 25, 2018.

Upcoming Events/Workshops
http://tees.tamu.edu/researchsupport/events/

TEES Research Development
In September, we will announce a professional development opportunity for junior faculty.

Other Opportunities

TAMU DOR 2018 NIH and NSF Grant Proposal Writing Program
This six-month program, open to all Texas A&M PI-eligible researchers, will help principal investigators develop a full, competitive proposal ready for submission to the National Institutes of Health or the National Science Foundation in 2018.

Please visit the TAMU DOR website to see the prerequisites and application process. Application deadline is October 6, 2017. Pre-proposals are due on November 9. There is a required onsite group meeting on January 24, 2018, from 8:00 a.m. -12:00 p.m. in 301 Rudder. PIs must attend the Write Winning NIH and NSF Grant Proposal Seminar on September 21-22, 2017.

TAMU DOR NIH Proposal Writing & Feedback Groups
September 1, 2017 – Application Deadline
Full Schedule and Application Form – Participants will prepare a submission-ready grant proposal (new or resubmission) for NIH submission deadlines in either February/March 2018 (fall semester groups) or June/July 2018 (spring semester groups).

TAMU DOR NIH Specific Aims Writing Clinic
September 5, 2017 (Kickoff Meeting)

TAMU DOR Informational Meeting: An Introduction to the Texas A&M-FAPESP Research Program
September 6, 2017
2:00 p.m. - 3:00 p.m.
3147 ILSB

Information and Registration

TAMU 2nd Annual Postdoctoral Research Symposium
September 20, 2017
12:00 p.m. - 6:00 p.m.
Thomas G. Hildebrand, DVM ’56 Equine Complex Auditorium

Information and Registration – The abstract submission deadline is August 15, 2017.

TAMU DOR Write Winning NIH and NSF Grant Proposals Seminar
September 21-22, 2017
601 Rudder

Information and Registration – Three sessions are being offered. Registered attendees will receive a free copy of The Grant Application Writer’s Workbook, NIH or NSF version.

TAMU DOR Demystifying the NSF: NSF Funding Opportunities, Proposal Preparation, and Review Process
October 3, 2017
1:00 p.m. - 4:00 p.m.
3147 ILSB

Information and Registration

Defense Innovation Technology Acceleration Challenges Co-Located with SBIR/STTR Innovation Summit
October 3-5, 2017
Tampa Convention Center, Tampa, Florida

Information and Registration

TAMU DOR Writing Successful Proposals
October 18, 2017
1:00 p.m. - 4:00 p.m.
3147 ILSB

Information and Registration

2nd IEEE International Conference on Communication and Electronics Systems (ICCES 2017)
October 19-20, 2017
Hotel Arcadia, Coimbatore, India

Information and Registration
2017 NIH Regional Seminar  
October 25-27, 2017  
Renaissance Baltimore Harborplace Hotel, Baltimore, Maryland  
Information and Registration – A waitlist is available for a limited time.

Texas Energy Summit – CATEE 2017  
November 13-15, 2017  
Dallas/Plano Marriot at Legacy Town Center, Plano, Texas  
Information and Registration – Applications Due October 15, 2017

NASA Aerospace Battery Workshop  
November 14-16, 2017  
Holiday Inn – Research Park, Huntsville, AL  
Information and Registration – Deadline for registration and abstracts is November 3, 2017

DTRA 2017 Chemical and Biological Defense Science & Technology (CBD S&T) Conference  
November 28-30, 2017  
Long Beach Convention Center, Long Beach, CA  
Information and Registration – The registration deadline is November 3, 2017.

Research News

NSF Posts Aug/Sep 2017 Edition of the Proposal & Award Policy Newsletter

NSF recently posted the August/September issue of the Proposal & Award Policy newsletter. This issue has information on proposed significant changes to the PAPPG, newly revised common rule for the protection of human subjects, faculty salary policy–two month rule, collaborators and other affiliations pilot FAQs, project reporting policies and reminders, upcoming outreach, and the NSF’s move to a new location in Alexandria, Virginia.

To view the current or past issues of the NSF Proposal & Award Policy newsletter, please visit the website.

NSF-BSF Offers Programs for Chemical Engineers, Chemists and Biochemists

The U.S.-Israel Binational Science Foundation (BSF) and the NSF have agreed to expand their cooperation to include the following program, NSF’s Chemical Engineering, Environmental and Transport Systems (CBET) division:

- Catalysis
- Separations
- Energy for Sustainability (an existing program)
- Process Systems, Reaction Engineering and Molecular Thermodynamics
- Cellular and Biochemical Engineering
Applications by U.S. scientists to the NSF, which include Israelis, will be possible starting the coming round in autumn 2017. Evaluation will be carried by the NSF, and if awarded a grant, the NSF will fund the U.S. scientist, whereas the BSF will fund the Israeli scientist.

Recent success rates table in the various NSF-BSF programs can be found here. Interested scientists are invited to read more here.

**The Dear Colleague Letter is listed under NSF in the Funding Opportunities section above.**

**Crafting Reliable Emergency Communications Networks**

When disaster strikes, it is important for first responders to have reliable, unhindered access to a controlled network, allowing them to receive and deliver critical information while ensuring effective emergency response.

Unfortunately this is currently not the case. Due to power outages and cell tower damages, the infrastructure for communications is not readily available during the response to an incident or disaster, and furthermore, the cost of this infrastructure is unreasonable, even for large organizations.

In response to this, Dr. Radu Stoleru, professor in the Department of Computer Science and Engineering at Texas A&M University, and his collaborators have proposed a way to enhance the resilience of public safety mission critical systems and services in the face of connectivity challenges.

The Middle Class Tax Relief and Job Creation Act of 2012 produced the First Responder Network Authority (FirstNet), which was designed to provide emergency responders with the first nationwide, high-speed, broadband network dedicated to public safety. AT&T has just been selected by FirstNet and awarded $6.5 billion to build the wireless network, with construction beginning later this year.

Stoleru’s current project centers on the development of DistressNET-NG, which is a fault-tolerant, energy-efficient and load-balanced solution for mobile broadband communication and mobile edge computing for FirstNet. Edge/fog computing is a method of optimizing cloud computing systems by performing data processing at the edge of the network near the source of the data.

To view the complete story, please visit the [website](#).

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