RESEARCH SERVICES



October 2019

Inside This Issue:

News	1
Recently Awards	2
Funding Opportunit	ies 3
Continued	4
Continued	5

Conferences &Summer Program 6

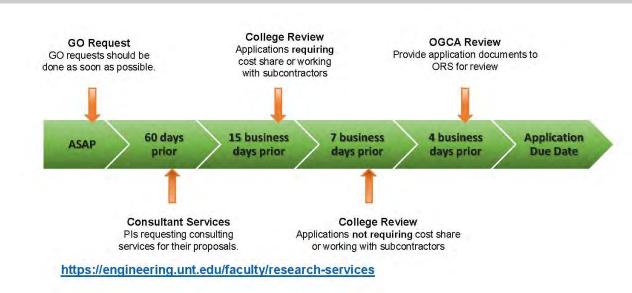
Research, Funding News

The Senate Committee on Appropriations approved the FY2020 Commerce, Justice, Science, and Related Agencies (CJS) Appropriations Act on Sep 26, 2019. \$22.75 billion for NASA, \$1.25 billion above the FY2019 enacted level; \$8.317 billion for NSF, \$242 million above the FY2019 enacted level. NSF Funding is provided for basic research across scientific disciplines to support the development of effective STEM programs. The senators recommend "at least \$106 million for quantum information science research," and fully fund artificial intelligence "across NSF at the request level." \$1.04 billion for NIST, \$53 million above the FY2019 enacted level, to strengthen the U.S. cybersecurity posture through cutting-edge research and development.

New Director for NSF Computer Information Science and Engineering: Princeton University professor Dr. Margaret Martonosi will serve as head of the NSF CISE Directorate Feb. 01, 2020. Martonosi's long-term research has been focused on computer architecture and mobile computing with an emphasis on power-efficiency; more recently, has also focused on architecture and compiler issues in quantum computing as well. Martonosi has also been noted for her leadership in broadening participation in computer science education.

Department of Energy AI Center: The DOE's new Artificial Intelligence and Technology Office (AITO), will serve as a "coordinating hub for the work being done across the DOE enterprise in Artificial Intelligence". The vision is to "transform DOE into a world-leading AI enterprise".

Pre-Award Timeline and Process



Recent Research Grant and Contract Awards

Congratulations to faculty on receiving research grant and contract awards!

PI: Rajiv Mishra

Department: Materials Science and Engineering **Project Title:** Advanced Manufacturing, Processing and Characterization of Light Weight and Adaptive Materials

Sponsor: US Army Research Laboratory - ARL **Project Period:** 9/11/2019 - 9/30/2020

Award: \$70,000.00

PI: Rajiv Mishra

Department: Materials Science and Engineering **Project Title**: Advanced Manufacturing, Processing and Characterization of Light Weight and Adaptive

Sponsor: US Army Research Laboratory - ARL

Project Period: 9/11/2019 - 9/30/2020

Award: \$62,500.00

PI: Marcus Young

Department: Materials Science and Engineering **Project Title:** Advanced Manufacturing, Processing and Characterization of Light Weight and Adaptive Materials

Sponsor: US Army Research Laboratory - ARL

Project Period: 9/11/2018 - 9/30/2020

Award: \$60,000.00

PI: Marcus Young

Department: Materials Science and Engineering **Project Title**: Advanced Manufacturing, Processing and Characterization of Light Weight and Adaptive Materials

Sponsor: US Army Research Laboratory - ARL

Project Period: 9/11/2018 - 9/30/2020

Award: \$62,500.00

PI: Narendra Dahotre

Department: Materials Science and Engineering **Project Title:** Advanced Manufacturing, Processing and Characterization of Light Weight and Adaptive Materials

Sponsor: US Army Research Laboratory - ARL **Project Period:** 10/31/2018 - 9/30/2020

Award: \$62,500.00

PI: Rajiv Mishra

Department: Materials Science and Engineering **Project Title**: Advanced Manufacturing, Processing and Characterization of Light Weight and Adaptive Metarials

Sponsor: US Army Research Laboratory - ARL

Project Period: 9/11/2019 - 9/30/2020

Award: \$62,500.00

PI: Rajiv Mishra

Department: Materials Science and Engineering **Project Title**: Advanced Manufacturing, Processing and Characterization of Light Weight and Adaptive Materials

Sponsor: US Army Research Laboratory - ARL

Project Period: 9/11/2019 - 9/30/2020

Award: \$160,000.00

PI: Andrey Voevodin

Department: Materials Science and Engineering **Project Title:** Advanced Manufacturing, Processing and Characterization of Light Weight and Adaptive Materials

Sponsor: US Army Research Laboratory - ARL

Project Period: 9/11/2018 - 9/30/2020

Award: \$60,000.00

FUNDING OPPORTUNITIES

National Science Foundation

CISE Community Research Infrastructure (CCRI)

Type of Award: Standard or Continuing Grant;

Anticipated Funding: \$25M; Number of Awards: 10 to 20; Solicitation ID: NSF 19-512 LOI due: Nov 12, 2019

Full proposal due: Jan 09, 2020

Inclusion Across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science (NSF INCLUDES)

Type of Award, Standard or

Type of Award: Standard or Continuing Grant;

Anticipated Funding: \$3M; Number of Awards: 20 to 30;

One of the 10 Big Ideas; 12-16 months in duration and the proposed budget for each Planning Grant must not exceed

\$100,000.

Solicitation ID: NSF 19-600

Full proposal due: Dec 03, 2019; Jul 13, 2020

Improving Undergraduate STEM Education: Education and Human Resources (IUSE: EHR)

Type of Award: Standard Grants;
Anticipated Funding: \$63M;
Number of Awards: 105;
Solicitation ID: NSF 19-601

Full proposal due: Dec 04, 2019, Feb 04, 2020

Smart and Connected Health (SCH) Connecting Data, People and Systems

Type of Award: Standard Grant or Continuing Grant or Cooperative Agreement or other funding mechanism;

Anticipated Funding: \$11M to \$20M;

Number of Awards: 8 to 16; Solicitation ID: NSF 18-541 Full proposal due: Dec 11, 2019 **Secure and Trustworthy Cyberspace (SaTC)**

Type of Award: Standard Grants;
Anticipated Funding: \$53M per year;

Number of Awards: 73; Solicitation ID: NSF 19-0603 Full proposal accepted anytime

NSF/DOE Partnership in Basic Plasma Science and Engineering

Type of Award: Standard or Continuing Grant;

Anticipated Funding: \$3M- \$4M;

Number of Awards: 20-30; Solicitation ID: NSF 19-596 Full proposal due: Nov 18, 2019

(Limited) National Science Foundation Research Traineeship (NRT) Program

Type of Award: Standard Grant; Anticipated Funding: \$45M; Number of Awards: 14 to 15; Solicitation ID: NSF 19-522 Internal deadline: Oct 11, 2019 LOI due: Nov 25 - Dec 6, 2019 Full proposal due: Feb 6, 2020

(Limited) IUSE / Professional Formation of Engineers: Revolutionizing Engineering Departments (IUSE/PFE: RED)

Type of Award: Standard or Continuing Grant;

Anticipated Funding: \$8M; Number of Awards: 4 to 6; Solicitation ID: NSF 19-614 Full proposal due: Feb 07, 2020

FUNDING OPPORTUNITIES

Interfacial Engineering

Major research areas of interest include:

1) Chemical separations; 2) Biological separations;

3) Interfacial phenomena at engineered interfaces and surfaces; 4) Nanoconfinement and engineered surfaces

Solicitation ID: NSF PD 20-1417 Full proposal accepted anytime

Nanoscale Interactions

Part of the Environmental Engineering and Sustainabilitycluster, which also includes:

- 1) the Environmental Engineering program;
- 2) the Environmental Sustainability program.

Materials of interest include one- to three-dimensional nanostructures, heterogeneous nano-bio hybrid assemblies, dendritic and micelle structures, quantum dots, and other nanoparticles.

Solicitation ID: NSF PD 20-1179 Full proposal accepted anytime

Biosensing

Proposals that incorporate emerging nanotechnology methods are especially encouraged.
Solicitation ID: NSF PD 20-7909
Full proposal accepted anytime

Engineering of Biomedical Systems (EBMS)

The goal of EBMS program is to provide opportunities for creating fundamental and transformative research projects that integrate engineering and life sciences to solve biomedical problems and serve humanity in the long term.

Solicitation ID: NSF PD 20-5345 Full proposal accepted anytime

Biophotonics

The goal of the Biophotonics program is to explore the research frontiers in photonics principles, engineering and technology that are relevant for critical problems in fields of medicine, biology and biotechnology.

Solicitation ID: NSF PD 20-7236 Full proposal accepted anytime

National Institute of Health

Explainable Artificial Intelligence for Decoding and Modulating Neural Circuit Activity Linked to Behavior (R01 Clinical Trial Optional)

FOA: PAR-19-344 LOI due: Feb 10, 2020

Full proposal due: Mar 10, 2020

NIH Blueprint for Neuroscience Research Education Program on Translational Devices (R25 Clinical Trial Not Allowed)

This NIH Research Education Program (R25) has a focus

on Courses for Skills Development

FOA: RFA-NS-20-003 LOI due: Nov 16, 2019

Full proposal due: Dec 16, 2019

Department of Defense

Long Range Broad Agency Announcement (BAA) for Navy and Marine Corps Science & Technology

Agency: DOD ONR N00014-20-S-B001

Published: Sep 26, 2019

Full Proposals will be accepted until Sep 30, 2020

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

Agency: DOD NRL N00173-19-S-BA01

Published: Sep 06, 2019

Full Proposals will be accepted until Sep 05, 2020

Department of Energy

<u>Performance-Based Energy Resource Feedback, Opti-</u> mization, And Risk Management

Agency: DOE DE-FOA-0002171

Award: \$30M

Concept papers due: Oct 28, 2019

Full proposal due: TBD

FUNDING OPPORTUNITIES

NASA

NASA Space Technology Graduate Research Opportunities Fall 2020 (NSTGRO20)

Solicitation: NASA 80HQTR19NOA01-20NSTGRO B4

Full proposal due: Nov 05, 2019

<u>Use of the NASA Physical Sciences Informatics System - Appendix F</u>

Solicitation: NNH17ZTT001N-17PSI_F

NOIs Due: Oct 28, 2019

Full proposal due: Dec 16, 2019

NASA will conduct a **Proposers' Conference** on Oct 8,

2019, to provide an overview of the solicitation.

Junior Faculty Awards

(Limited) Ralph E. Powe Junior Faculty Enhancement Awards

Eligibility: assistant professors within two years of their initial tenure track appointment at the time of application.

Award: \$5,000

Internal deadline: Nov 15, 2019 Application due: Jan 8, 2020

Gordon and Betty Moore Foundation (Limited) Moore Inventor Fellows

Eligibility: Must be within 10 years of receiving Ph.D.

Award: \$600,000

Internal deadline: Oct 11, 2019 Application due: Dec 13, 2019

Graduate student Funding

Graduate Research Fellowship Program (GRFP)

Type of Award: Fellowship;

Anticipated Funding: \$138,000 per award; Number of Awards: 1,600 per fiscal year;

Solicitation ID: NSF 19-590

Eligibility: U.S. citizen, national, or permanent resident Award: three years of support during a five-year fellowship period. Currently, NSF provides a stipend of \$34,000 to the Fellow and a cost-of-education allowance of \$12,000 to the graduate degree-granting institution for each Fellow who uses the fellowship support

in a fellowship year.

Application due: Oct 22, 2019

ACI Foundation Graduate Fellowships

Award: \$5,000 to \$50,000 pe award Application due: Dec 02, 2019

Science, Mathematics and Research for Transformation (SMART) Scholarship for Service Program

Eligibility: citizen of the United States, Australia, Canada, New Zealand, or United Kingdom at time of appli-

cation

Application due: Dec 03, 2019

The NCI Predoctoral to Postdoctoral Fellow Transition Award (F99/K00)

The F99/K00 award is intended for individuals who require 1-2 years to complete their Ph.D. dissertation research training (F99 phase) before transitioning to mentored postdoctoral research training (K00 phase). Award: \$1.2 M to fund up to 24 awards in FY2020.

FOA: RFA-CA-19-057

Application due: Dec 04, 2019

CONFERENCE, WORKSHOP & MORE

NSF

Fall 2019 Grants Conference November 18-19, 2019 Boston, MA

NIH

Fall 2019 NIH Regional Seminar Nov 6-8, 2019 Phoenix, AZ Registration now opens.

NIST

10th Annual NICE Conference and Expo November 18-20, 2019 Phoenix, Arizona

SUMMER VISITING FACULTY PROGRAM

ONR Summer Faculty Research Program

Applications for the 2019 ONR Summer Faculty Research Program are accepted September 1, 2019 through December 12, 2019.

Fellowship announcement will be made March 1, 2020. Fellowship Begins: May 4, 2020

U.S. Air Force Research Lab Summer Faculty Fellowship Program

Eligibility: Citizens of the United States
The online application for the FY 2019 Air Force Summer
Faculty Fellowship Program is now open. Reference forms
and letters must also be submitted electronically no later
than Nov 29, 2019 at 5:00 PM EST.

Award notifications will be made in Spring 2020.

FUNDING SEARCH ENGINES

Federal Grants World

https://grants.gov

PIVOT- 26,000 Funding Opportunity Database

https://pivot.proquest.com

Fed biz opps- Federal Business Opportunities

https://www.fbo.gov

Nine Sigma—Open Innovations Community

www.ninesigma.com