

# FUNDING OPPs & INFO

For Hajim School Researchers



Oct. 6, 2015

## FUNDING OPPORTUNITIES

As a follow-up to the Optics across UR event last evening, the Dear Colleague Letter 16-004 posted today allows identification of a proposal by tagging the title with OP. Details follow and I highlight crosscutting optics and photonic funding opportunities across NSF. Note that GOALI proposals are acceptable anytime. As always connect with program managers for feedback before submission. Given the efforts around AIM Photonics and URI this is a great time to be submitting to NSF.

### National Science Foundation

**Dear Colleague Letter: Optics and Photonics (NSF 16-004) – released 10/5/15**  
<http://www.nsf.gov/pubs/2016/nsf16004/nsf16004.pdf>

### National Science Foundation announces a new crosscutting program, PD 15-9102, Optics and Photonics (OP).

Through this Dear Colleague Letter, NSF encourages innovative research proposals on optics and photonics that are relevant to one or more Divisions in the Directorates for Mathematical and Physical Sciences (MPS), Engineering (ENG), Biological Sciences (BIO), and Computer and Information Science and Engineering (CISE). The group will ensure that proposals are reviewed by the most suitable NSF disciplinary program and will coordinate co-review by more than one disciplinary program when appropriate. Investigators should identify OP proposals by including the three characters “OP:” at the beginning of the proposal title. This designation will serve to bring the proposal to the attention of the crosscutting OP working group. \* Proposals that would particularly benefit from joint review should be submitted to a primary disciplinary program with secondary disciplinary program(s) in another Division(s) identified in the Proposal Cover Sheet, by the due date of the primary program.

### NSF Crosscutting Opportunities

#### Optics and Photonics (OP) PD 15-9102

[http://www.nsf.gov/funding/pgm\\_summ.jsp?pims\\_id=505213](http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=505213)

*This weekly message from Cindy Gary, Assistant Dean for Grants and Contracts, highlights research funding opportunities and announcements that are particularly relevant to Hajim School faculty, staff and students. If you have any questions, please contact [cindy.gary@rochester.edu](mailto:cindy.gary@rochester.edu) or call 253-5173.)*

Optics and Photonics (OP) program is an NSF-wide activity that involves multiple Divisions within the Directorate for Mathematical and Physical Sciences (MPS), the Directorate for Engineering (ENG), the Directorate for Biological Sciences (BIO), and the Directorate for Computer and Information Science and Engineering (CISE). The appropriate contact for the OP program is the Program Director and the list is available via the link.

The importance and timeliness of fundamental research in optics and photonics has been emphasized by recent publications, including:

- Optics and Photonics: Essential Technologies for Our Nation
- Building a Brighter Future with Optics and Photonics
- Science Opportunities in Optics and Photonics
- *Dear Colleague Letter – Optics and Photonics*

The Optics and Photonics (OP) program is designed to address the critical national need to enhance the support of basic and early applied research in optics and photonics. The OP program is a crosscutting NSF activity; by providing a common program for submission and review of proposals in this important area, it seeks to promote activities that significantly accelerate optics and photonics research. If there are strong collaborations with industry, please see the Grant Opportunities for Academic Liaison with Industry (GOALI) program solicitation, which can be used in conjunction with this effort.

**Following are descriptions of areas of optics and photonics research emphasis within Divisions of the Directorate for Mathematical and Physical Sciences (MPS), the Directorate for Engineering (ENG), the Directorate for Biological Sciences (BIO), and the Directorate for Computer and Information Science and Engineering (CISE). Proposals to the OP program must be submitted to one of the relevant Divisional programs indicated in the following.**

### **Directorate for Computer and Information Science and Engineering**

#### **-Computer and Network Systems (CNS)**

**<http://www.nsf.gov/pubs/2015/nsf15572/nsf15572.pdf> : CNS programs deadlines: Small Project deadline = November 18, 2015; Medium = September 16, 2016; Large = September 24, 2016**

- **[Computer Systems Research](#)** (part of CNS core program)
- **[Networking Technology and Systems](#)** (part of CNS Core program – highlighted areas include optical networking)

## Directorate for Engineering

### -Chemical, Bioengineering, Environmental, and Transport Systems (CBET):

- [Biophotonics](#) (October 20, 2015)

### -Electrical, Communications, and Cyber Systems (ECCS): ECCS programs are:

- [Electronics, Photonics, and Magnetic Devices \(EPMD\)](#) (November 2, 2015)
- [Communications, Circuits, and Sensing Systems \(CCSS\)](#) (November 2, 2015)

## Directorate for Biological Sciences

### - Biological Infrastructure (DBI):

- [Instrument Development for Biological Research](#) (July 29, 2016)

## Directorate for Mathematical and Physical Sciences

### - Astronomy (AST)

- [Astronomy and Astrophysics Research Grants](#) (November 16, 2015)
- [Advanced Technologies and Instrumentation](#)

### - Chemistry (CHE) Relevant CHE programs are:

- [Chemical Measurement and Imaging](#) (November 2, 2015)
- [Macromolecular, Supramolecular and Nanochemistry](#) (November 2, 2015)
- [Chemical Structure, Dynamics and Mechanisms \(CSDM-A\)](#) (September 30, 2016)
- [Chemical Structure, Dynamics and Mechanisms \(CSDM-B\)](#) (September 30, 2016)
- [Chemical Theory, Models and Computational Methods](#) (September 30, 2016)
- [Chemical Catalysis](#) (September 30, 2016)

**-Materials Research (DMR). Relevant DMR programs – all deadlines October 31, 2015:**

- [Biomaterials \(BMAT\)](#)
- [Ceramics \(CER\)](#)
- [Condensed Matter and Materials Theory \(CMMT\)](#)
- [Condensed Matter Physics \(CMP\)](#)
- [Electronic and Photonic Materials \(EPM\)](#)
- [Metals and Metallic Nanostructures \(MMN\)](#)
- [Polymers \(POL\)](#)
- [Solid State and Materials Chemistry \(SSMC\)](#)

**-Mathematical Sciences (DMS): DMS programs are:**

- [Applied Mathematics](#) (November 15, 2015)
- [Computational Mathematics](#) (December 1, 2015)
- [Statistics](#) (November 7, 2015)

**-Physics (PHY): Relevant PHY programs are:**

- [Atomic, Molecular and Optical Physics - Experiment](#) (October 28, 2015)
- [Atomic, Molecular and Optical Physics - Theory](#) (October 28, 2015)
- [Computational Physics](#) (December 3, 2015)
- [Gravitational Physics - Experiment](#) (October 28, 2015)
- [NSF/DOE Partnership in Basic Plasma Science and Engineering](#) (November 19, 2015)
- [Quantum Information Science](#) (December 3, 2015)

**GOALI**

**Grant Opportunities for Academic Liaison with Industry (GOALI) 12-513**

<http://www.nsf.gov/pubs/2012/nsf12513/nsf12513.pdf>

**Deadline: Proposals Accepted Anytime, but generally fall into the unsolicited program review window. GOALI proposers must communicate with a specific program director in the disciplinary area of the proposed research for guidance on proposal submission**

**Funding:**

\*Program 1: Industry - University Collaborative Projects (Full proposals or requests for supplemental funding) – typically <\$100,000 per year and pays for university research/educational activities. The university grant may support activities of faculty and his/her

students and research associates in the industrial setting. NSF funds cannot be used by the industrial research partner.

\*\* Program 2: Faculty and Students in Industry (requests for supplemental funding to existing NSF awards). Faculty-in-Industry awards will typically range from \$30,000 to \$75,000 for up to one year; Postdoctoral Industrial Fellowship \$75,000 (inclusive) for a 12-month period.

\*\*\* Program 3: Industry Engineers and Scientists in Academe (requests for supplemental funding to existing NSF awards). Supplement awards are for a maximum of \$75,000 for up to one year.

Synopsis: Industry involvement and participation is required for GOALI funded projects. A co-investigator or co-advisor from industry is required in a collaborative project or industrial fellowship/traineeship. GOALI promotes university-industry partnerships by making project funds or fellowships/traineeships available to support an eclectic mix of industry-university linkages. Special interest is focused on affording the opportunity for: Faculty, postdoctoral fellows, and students to conduct research and gain experience in an industrial setting; Industrial scientists and engineers to bring industry's perspective and integrative skills to academe; and Interdisciplinary university-industry teams to conduct research projects. This solicitation targets high-risk/high-gain research with a focus on fundamental research, new approaches to solving generic problems, development of innovative collaborative industry-university educational programs.