The Industry University Cooperative Research Center (I/UCRC) program was originally conceived and launched by the National Science Foundation (NSF) more than 30 years ago as an initiative to stimulate nonfederal support of research and development, speed the transfer of technology to industry, and improve US industrial competitiveness. There are now approximately 50 active I/UCRCs with 600+ industrial firms and government labs as members. The Boston University Photonics Center, along with the Center for Biophotonics at UC Davis, leads an I/UCRC for Biophotonic Sensors & Systems (CBSS). CBSS was launched in July 2011 and is the only NSF-approved center to focus on biosensors.

**Our Mission**

- Create a National Center of Excellence
- Cultivate embryonic biosensor applications
- Develop methods for technology transfer
- Educate a pipeline of professionals
- Provide solutions for:
  - Disease diagnosis
  - Patient monitoring
  - Drug efficacy testing
  - Food & water safety

**BACKGROUND**

Boston University Photonics Center
Tom Dudley — tjdudley@bu.edu
8 Saint Mary's Street
Boston, MA 02215

Center for Biophotonics
University of California Davis
Gabriela Lee — gabriela.lee@cbst.ucdavis.edu
2700 Stockton Boulevard
Sacramento, CA 95817

NATIONAL SCIENCE FOUNDATION
I/UCRC PROGRAM
nsf.gov/eng/iip/iucrc

BOSTON UNIVERSITY PHOTONICS CENTER
bu.edu/photonics

UC DAVIS CENTER FOR BIOPHOTONICS
SCIENCE & TECHNOLOGY
cbst.ucdavis.edu

BU CENTER FOR BIOPHOTONIC SENSORS & SYSTEMS
bu.edu/cbss/
The Center for Biophotonic Sensors & Systems (CBSS) focuses on precompetitive research and provides the enabling technologies for advanced methods to detect/sense and identify biological properties, conditions, or changes at the molecular, cellular, and subcellular level.

**MEMBERSHIP**

CBSS membership is open to nonprofit and for-profit corporations, government labs, federally funded research and development corporations (FFRDC), and government-owned contractor-operated labs. There are two classes of membership: full membership and associate membership. Full membership entitles the organization to have full leadership responsibilities in setting the center’s strategic direction and has an annual fee of $50,000. The associate level entitles the member to have a seat on the Industry Advisory Board and has an annual fee of $25,000.

**BENEFITS OF MEMBERSHIP**

- Leverage research funds from other members and NSF
- Gain access to nearly 100 multidisciplinary researchers
- Interact with students who fill a pipeline of qualified scientists and engineers to industry
- Share access to prepublication research results
- Set direction of research to address a member’s technology roadmap goals
- Build networking opportunities with customers, competitors, and vendors
- Get a jump-start on technology transfer: Industry has the ability to influence applied research to be aligned with “design rules” optimized for their manufacturing operations
- Royalty-free/nonexclusive license to output of research
- First options for exclusive/royalty bearing license
- Low overhead rates—capped at 10%
- Options for multiple memberships

**I/UCRC DOMAIN**

- User-inspired fundamental research
- Jointly funded (leverage)
- IP access
- Trusted relationships based on delivery of value

**RESEARCH**

Details on scope and depth of research available by contacting CBSS

**INDUSTRY ADVISORY BOARD**

CBSS operates under the guidance and advice of an Industry Advisory Board (IAB). Each member has a seat on the IAB and will be responsible for making recommendations on research projects and the allocation of resources to these projects, setting the strategic direction for the center, and providing guidance on the center’s operations.

**I/UCRC: RESEARCHING TOGETHER**

- Academic Fundamental Research
- Sector Pre-Competitive Research
- Industry Sector-Competitive Research

**INDUSTRY MEMBERS**

Individually sponsored research agreements may continue outside the I/UCRC when necessary to protect IP.

“eLutions involvement has been nothing short of wonderful...and has allowed our start-up to cut development time by nearly 20%.”

RAJ GUPTA, PRESIDENT
ELUTIONS INTEGRATED SYSTEMS, INC.

“The center has been extremely useful in building new networks and creating opportunities for collaboration.”

JOHN TARANTO, ADVANCED SYSTEMS TECHNOLOGIES GROUP, THORLABS, INC.