Welcome to the monthly IOS Newsletter. We hope that this will serve to keep our community informed on the events and happenings around the IOS.

**Awards and Recognition**

**Grand Challenges Canada proposals**

The Stars in Global Health program from Grand Challenges Canada supports bold ideas with big impact from the best and brightest talent, both in Canada and in low- and lower-middle-income countries, to use scientific/technical, social and business innovation to address some of the most pressing global health problems. Three members of the IOS community have submitted proposals on issues ranging from creating healthy snacks for children in the Philippines, engineering healthy bacteria to protect against disease, and a device to detect antimicrobial resistant organisms in low-resource settings. To view and vote on the video applications, follow the links below:

Prof. Cynthia Goh: [Healthy Kids - Snack your way to health!](#)

Dr. Richard McAloney: [Battling Antimicrobial Resistant Microorganisms with a Monitoring System Tailored for Under-Resourced Settings](#)

Prof. David McMillen: [Grow-your-own bacterial defenders against waterborne diseases](#)

**Entrepreneurship**

**New TechnoLABS tenants**

The past month has seen a lot of action in our newly opened TechnoLABS. Desks have been filling up with companies moving their operations from our McLennan Physical Labs office as well as some of the newer companies establishing their offices here for the first time. Sense Intelligent, which is developing an intuitive, non-invasive and cost effective tool to help deaf people experience sound through their vision, is one of the companies that participated in Techno2012 who has recently set up in the TechnoLABS space and we expect many more Techno alumni to utilize the office, meeting, and lab space in the coming months.
**Student Activities**

**IOS1500 Seminar Series November schedule**

Taking place every Wednesday during the Fall semester from 4:00 - 6:00pm in MP137 this graduate-level seminar course is the core course for the [Collaborative Master’s Program in Optics](http://www.optics.utoronto.ca/academic/graduate/ios1500) organized by the IOS. It is open to students within the the IOS program and consists of both research presentations by fellow students and faculty as well as educational lectures on various topics in optics. If you are interested in attending the presentations see the IOS 1500 - Selected Topics in Optics Research page and contact Emanuel Istrate.

- Wed Nov 7 - Noise in Measurements
- Wed Nov 14 - Best Practices in Fibre Optics: Splicing & Handling
- Wed Nov 21 - Measurement of light and optimal detection
- Wed Nov 28 - Get to know your IOS (presentations on research topics studied at the Institute for Optical Sciences)

**Events**

**The UofT student as inventor and entrepreneur**

On November 12th, 2012, we are hosting a free afternoon symposium titled ‘The UofT Student as Inventor and Entrepreneur.’ This event will launch TechnoLABS, located in the Banting & Best Centre for Innovation & Entrepreneurship, and will feature stories from UofT alumni who have led successful technology-based companies that improve our quality of life. Speakers for the event include Tony Redpath (MaRS advisor and former CEO of Eco-Plastics), Graeme Ferguson (co-founder of IMAX), Darren Anderson (co-founder and CTO of Vive Crop Protection) and others. Also, students participating in TechnoLABS will present their companies at a poster session before the formal presentations and during the break. The event schedule and registration information can be found [online](http://www.optics.utoronto.ca/commercialization/technopreneurship/technolabs/121112_invitation) at the IOS website.

**IOS Alumni**
IOS student alumnus awarded $400,000 NSF grant

Prof. Jason Dwyer, chemistry assistant professor at the University of Rhode Island, former graduate student in Prof. Dwayne Miller's group, and co-founder of Insight Nanofluidics, was recently awarded a five-year $400,000 CAREER award for research from the National Science Foundation (NSF). The award was granted through the NSF’s Faculty Early Career Development Program. Prof. Dwyer plans to use the award to combine elements of chemistry and engineering in order to develop new methods for diagnosing medical conditions using hand-held technology. More information on the project can be found at Providence Business News.

Congratulations Jason!

If you know of any alumni of IOS faculty members who are working on exciting projects in academia or industry, get in touch with Scott at smcauley[at]optics.utoronto.ca.