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.

**Academic/Research**

Prof. Steinberg's experiment commended the top experiment of the year by Physics World

This past year Prof. Steinberg worked with an international team of researchers in applying a modern measurement technique to the historical two-slit interferometer experiment and was able to accomplish what the physics textbooks said was impossible. Their analysis succeeded in experimentally reconstructing full photon trajectories, which provide a description of how light particles move through the two slits and form an interference pattern. Their description of the experiment was published in *Science* and resulted in coverage by the world’s science media, including a feature in *Physics World*.

For more information check out this article in U of T News.

Prof. Greg Scholes on semiconductor nanostuctures

In a recent issue of Nature Materials Prof. Gregory Scholes discusses new methods for tuning the optical properties of nanomaterials. Specifically, recent work has shown that two-dimensional nanoplatelet sheets are potentially better emitters than the long assumed superior zero-dimensional quantum dots because more atoms are recruited to capture and radiate light coherently. Read more.

**Awards and Recognition**

Media Frenzy
Various media sources have been discovering and covering the IOS, our students, and director this past month.

- Dr. Mallika Das, an IOS Commercialization Fellow, was featured in the article ‘Business Boot Camp’ in the December issue of the U of T Magazine.
- Research Money printed an article on the IOS’s unique student-based approach to university commercialization.
- Michael Helander, a Vanier Scholar and Ph.D. Candidate with IOS faculty member Prof. Zheng-Hong Lu, was a guest blogger for the Ministry of Economic Development and Innovation (MEDI) on the potential for OLED technology to revolutionize how TV’s and other displays are made. Read more.
- The MEDI blog also featured an article by our director, Prof. Cynthia Goh, on how fundamental science can lead to new products and services that improves our quality of life. Read more.

## Entrepreneurship

**Vive Crop Protection raises round of venture funding**

Congratulations to Vive Crop Protection (formerly Vive Nano and an IOS graduate company) for raising a $2.3M round of venture financing with the potential for an additional close in early 2012.

**Vive Crop Protection is hiring!**

Looking to work for a rapidly growing company? Vive Crop Protection focuses on the delivery of crop protection active ingredients using polymer particles and is looking for Research Assistants, Quality Control Chemists, a part-time Lab Technician and a Senior Formulation Chemist. Check out their [website](http://www.vivencorp.com) for more information on the company.

**Luminautics lands first major sale**

Luminautics Inc. completed its first sale of a 14'x48' Large Format LED display screen to a local landowner in Toronto. This is the company's first major sale and establishes Luminautics as a world-class technology provider of digital media systems to the outdoor advertising community. Luminautics was founded by a team of U of T graduate engineers and software specialists and is supported by the IOS.

## Events

**How the World Works Seminar**

Our upcoming How the World Works seminar will feature a discussion on intellectual property (IP), and what is means, what it does, and what it doesn’t do. If you are interested in attending, please contact Emauel Istrate at eistrate@optics.utoronto.ca or visit the [website](http://www.optics.utoronto.ca).

When: Monday January 16th, 2012 at 5:00pm
Brown Bag Lunches: Friday
Starting on Friday January 13th we will continue our weekly informal discussions with faculty and staff on a wide variety of research problems. Bring your own lunch!