


Year in Review: 2015

Greetings and warm regards from The Institute of Optics! At the close of my fourth year as Director, the review of 2015 reveals a year of significant growth. With awards and recognitions, two successful summer programs, the announcement of a national photonics center to be based in Rochester, more students studying abroad, and our involvement in the International Year of Light, it has been a very good year. We have truly increased our recognition in the regional, national, and international spheres. We are very proud of the hard work that everyone at the Institute has contributed in 2015. I am extremely grateful for the development in our IA program.

This year, we sadly lost two of our best, Dr. Stephen Jacobs and Dr. Kevin Rolland-Thompson. We also had faculty retirements, a revision of staffing and approval for new faculty hires. While these have been challenging times for the Institute; our students, faculty, staff, alumni, and friends have kept us strong. 2015 has also been a celebration of much that we are capable of when minds, talents, and efforts are focused. And as we continue growing forward into 2016, here's to celebrating the 100th anniversary of OSA; furthering leadership, continuing innovation, and increasing collaboration!

Meliora,

Xi-Cheng Zhang



January.

The **International Year of Light 2015** opened in Paris, France, **Dr. Duncan Moore** and **Dr. Xi-Cheng Zhang** attended the event.

February.

The annual Optics alumni and IA reception was held during Photonics West at the Marriott Marquis in San Francisco.

March.

Institute alumni **Dan Christensen** (MS '08 PhD '13) co-authored a paper that was awarded the **AAAS Newcomb Cleveland Prize**.

Dr. Govind Agrawal received the OSA **Esther Hoffman Beller Medal** in commendation of his efforts to inspire and teach the next generation of optical scientists.

April.

The **Rochester Distinguished Scholar Award** was bestowed to Institute alumni **Stephen D. Fantone** (PhD '79).

Our **Spring IA meeting** featured a special celebration of the career of **Dr. Nicholas George** and his transition to Professor Emeritus of Optics.

Assistant professor of optics **Dr. Nick Vamivakas** received the **G. Graydon '58 and Jane W. Curtis Award for Non-tenured Faculty Teaching Excellence**.

Jon Ellis received a **Wilmot Assistant Professorship**.

May.

A UR team, with **David Williams** (PI), was awarded a grant from the **National Eye Institute**, towards an optical research team studying cures for blindness.

PhD candidate **Kyle Fuerschbach** was a recipient of the University's **Outstanding Dissertation Award in Engineering and Applied Sciences**.

Institute alumnus and faculty member **Dr. Stephen Jacobs** (BS 1970; PhD 1976) passed away on May 30th, following forty-years at the University. He is dearly missed by colleagues and friends, both at the Institute and within the wider optics community.

June.

Graduate students **James Corsetti** and **Eric Schiesser** were awarded the SPIE 2015 **Optical Design and Engineering** and **Michael Kidger Memorial Scholarships**, respectively.

To celebrate the **International Year of Light 2015**, a team of painters in St. Petersburg, Russia created street art depicting **Dr. Xi-Cheng Zhang**, Vladimir Vasilev (Rector, ITMO Univ.) and Sergei Kozlov (Dean, ITMO Univ.).

Undergraduate students **Tyler Berryman**, **Yang Deng**, **Lei Ding**, **Sze Wah Lee**, **Guntis Rutins**, and **Kaia Williams**, accompanied by Senior Scientist **Svetlana Lukishova**, and **Dr. Xi-Cheng Zhang** travelled to Russia to attend an optical research school at ITMO; this was the first time that the Institute had ever participated in the two-week summer program.

The 54th annual **Summer Course Series** was attended by over 85 professionals and scientists from eight different nations who gathered to learn about the field of optics at the Institute.



July.

The third annual **Photon Camp** was a great success. Twenty-four high school students from across the Rochester metropolitan area learned about optics through a series of lectures, labs, field trips, and other activities.

Rochester was designated the future headquarters of the **Integrated Photonics Institute for Manufacturing Innovation**, a federal endeavor that is expected to bring millions of dollars and hundreds of optics jobs to the area.

August.

Prof. Jennifer Kruschwitz joined The Institute as Assistant Professor of Optics, to develop and teach courses to strengthen our MS program. Jennifer previously taught as an Adjunct Assistant Professor.

Dr. Xi-Cheng Zhang received a special invitation to meet with Chinese President Xi Jinping in NY, during his visit to the US.

September.

The **Nicholas George Endowed Professorship** was established in celebration of Professor Emeritus **Dr. Nicholas George's** thirty-eight year University career, for four of which he headed the Institute.

Undergraduate student **Zhaoyu Nie** had the opportunity to travel to Munich, Germany, where he was a **DAAD-Rise** intern at the **Max Planck Institute of Quantum Optics**.

Dr. Jannick Rolland and post-doctoral fellow **Dr. Cristina Canavesi** won a grant from the NSF for their work in developing an advanced microscope based on whale eyes.

October.

Three endowed MS student prizes established in honor of faculty and staff who made significant contributions to the graduate program (esp. MS); **Dr. Jim Fienup, Dr. Gary Wicks and Per Adamson**.

In honor of the **International Year of Light**, the University's OSA student chapter held an art exhibit. "**Projections: Images of Imagination**" was open for five weeks in the Art and Music Library.

The Fall IA meeting featured NY State Representative **Louise Slaughter** as a special speaker. The strong student growth, combined with high member participation resulted in 319 registered attendees.

Graduate students **Jacob Reimers** and **Scott Paine** placed 1st and 3rd respectively in Synopsys' 2015 **Robert S. Hilbert Memorial Optical System Design Competition**.

For his efforts in research and outreach, graduate student **Daniel Nikolov** received an AS&E **Donald M. and Janet C. Barnard Fellowship**.

Sigma Xi's 2015 **William Procter Prize for Scientific Achievement** was awarded to faculty member and AS&E dean **Dr. David Williams**.

Adrienne Snopkowski joined the Institute as the Information Analyst & Financial Manager.

November.

November 18th marked the centennial anniversary of the founding of the **Rochester Association for Advancement of Applied Optics** in 1915, which later became the **OSA**. The local chapter, having strong ties to the Institute, is still very active today.

Institute scientist **Dr. Kevin Rolland-Thompson** passed away on November 20th. The husband of faculty member **Dr. Jannick Rolland-Thompson**, he was regarded very highly internationally, and is missed greatly by the optics community.

December.

Dr. Xi-Cheng Zhang helped to establish an International Consortium of THz Photonics and Optoelectronics in Moscow with 71 partners from 15 countries.

The Institute has experienced a tremendous growth in terms of enrollment in the past few years. Between the fall of 2012 and the fall of 2015, the entering undergraduate class doubled in size, numbering about forty freshmen by December.



June 2015 // St. Petersburg, Russia
Street art in commemoration of the International Year of Light



July 2015 // U of R
Photon Camp students on a tour of the University's River Campus



November 2015
Rep. Louise Slaughter addresses the Optics community at the Fall IA meeting reception



September 2015 // U of R
Nicholas George Professorship:
Xi-Cheng Zhang, Joel Seligman, Nicholas and Carol George, Milton Chang, & Duncan Moore



September 2015 // Innsbruck, Austria
Undergraduate Zhaoyu Nie (front) and Sze Wah Lee (center) with two Russian students



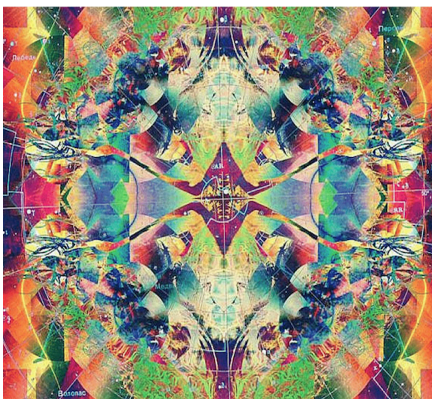
June 2015 // St. Petersburg, Russia
Undergraduates Tyler Berryman and Sze Wah Lee (center) with two Russian students



July 2015 // Rochester, NY
Vice President Joe Biden speaking on the new photonics center



February 2015 // Paris, France
Director Xi-Cheng Zhang's view of the International Year of Light opening ceremony



October 2015 // U of R
A piece from the "Projections" show

IN MEMORIAM



Stephen Jacobs
(1948-2015)



Kevin Rolland-Thompson
(1954-2015)



December 2015 // Moscow, Russia
International Consortium of THz Photonics and Optoelectronics established with 71 partners from 15 countries.