

# The Institute of Optics – 2012 in Review

## January

**Xi-Cheng Zhang** joins The Institute as the new Director and M. Parker Givens Professor of Optics.



## April



**Brian Thompson**, former director of the Institute and a professor emeritus of optics, receives the 2011 Engineer of the Year by the Rochester Engineering Society.

## February



Professor **Julie Bentley** is accepted as a SPIE fellow for developing new courses in lens design.

**James Fienup**, the Robert E. Hopkins Professor of Optics, is elected to the National Academy of Engineering for his work in the development and application of phase retrieval algorithms.



## May

**Joseph Eberly**, the Andrew Carnegie Professor of Physics and Professor of Optics, is announced as the recipient of the 2012 Distinguished Service Award from the Optical Society.



PhD candidate **Cristina Canavesi** is a member of the winning team in the University's **Mark Ain Business Model Competition**.

Optics' Graduate students **Rebecca Berman**, **Shawn Divitt** and **Dan Williams**, (with 2 others) spent late May through late June in Africa as part of the University's **Integrative Graduate Education and Research Traineeship (IGERT)** program. Their many experiences included introducing school children to

optics concepts via one of **Prof. Stephen Jacobs'** Optics Suitcases; presenting at an International

Solar Energy Experts Workshop and bringing solar panels to a small health clinic and one-room school.



Institute students win accolades the Wavefront Congress in San Diego. **Ramkumar Sabesan** wins the Founder's Award (best invited talk) and **Len Zheleznyak** wins the Best Presented Free Paper Award.

## March



Optics wins the 2<sup>nd</sup> annual Photon Cup against Physics (6-2) !!

## June

An article by **Prof. Jim Fienup** (see February as well) comes in fourth on a list of the 50 most cited articles in the 50-year history of the journal Applied Optics.

170<sup>th</sup> Birthday Celebration for **Emil Wolf** (90) and **Brian Thompson** (80) hosted by Provost Ralph Kuncel and Duncan Moore



Ninety-one domestic and international participants, representing 38 companies, attend The Institute's **51st annual Summer School Short-Course Series**.



**Kathleen Adelsberger**, a PhD candidate, is awarded a National Physical Science Consortium fellowship.

PhD candidate **Cristina Canavesi** (see May as well) wins SPIE's Bill Price and Warren Smith Optical Design and Engineering Scholarship.

The Institute welcomes **George Fraley** back to campus for lunch and a proclamation of George Fraley Day on June 6.



## July

The **Center for Freeform Optics** is awarded a National Science Foundation planning grant.

**Corning Inc.**, hosts Institute students at its global headquarters (about 100 miles southeast of Rochester), providing tours and networking.



## August

Scientists from over 20 countries attend the **8th International Conference on Photo-Excited Processes and Applications** at The Institute, hosted by **Prof. Chunlei Guo**.



Five of our graduate students—**Matthew Bergkoetter**, **Kyle Fuerschbach**, **Leva McIntire**, **Brent Plansinis**, and **Travis Petersen**—receive Frank Horton Fellowships from the Laboratory of Laser Energetics.

## September

**David Williams**, the William G. Allyn Professor of Medical Optics, receives the Antonio Champalimaud Vision Award at a ceremony chaired by the president of Portugal in Lisbon.



**Prof. Govind Agrawal** receives the IEEE Photonics Society's prestigious Quantum Electronics Award during the group's annual conference in San Francisco.

When Google lists its 12 most-cited books about physics, a quarter of them are by **Professors Govind Agrawal, Robert Boyd, and Emil Wolf**, all members of the Institute's faculty.



Professor **Robert Boyd**, who holds a special position sharing his time between Rochester and the University of Ottawa, dedicates his Photonics Center at Ottawa with a \$55 million building.

**Duncan Moore**, the Rudolf and Hilda Kingslake Professor of Optical Engineering, is recognized for his outstanding record of research, teaching, and leadership with the Hajim School's 2012 Lifetime Achievement Award.



**October**



Optical Society holds annual meeting in Rochester. Prof. **Emil Wolf** is honored for his 90<sup>th</sup> birthday. Institute graduate students **Wei Jiang**, **Mehul Malik** and **Robin Sharma** win three of the seven best paper awards named in Wolf's honor; **Peter McCarthy** receives a prestigious scholarship.

During OSA, the current and former Directors of the Rochester, Arizona and Orlando Optics Institutes' gathered for a Leaders Lunch.



A \$1.9 million federal grant, awarded to the Center for Emerging and Innovative Sciences, will fund the **Rochester Regional Optics, Photonics, and Imaging**

**Accelerator** (RRPA) program. Principal investigators will include **Jannick Rolland**, the Brian J. Thompson Professor of Optical Engineering, and **Gary Wicks**, professor of optics.



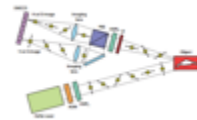
**November**

The role of former Institute director **Robert Hopkins** in pioneering entrepreneurship is highlighted in a *Democrat and Chronicle* article based on a study by Duncan Moore, professor of optical engineering, and Susanna Virgilio, a project assistant at the University's Center for Entrepreneurship.



**December**

**Mehul Malik**, PhD candidate with the Boyd Quantum Photonics Research Group, is highlighted in an online *MIT Technology Review* article about his research using the quantum properties of photons to create unjammable aircraft detection.



*This is only a sampling of the many happenings during 2012 within The Institute. As you can tell, we had a phenomenal year in 2012, and look forward to much more excitement and opportunity in 2013. While I have done my best to highlight our faculty, students, and corporate partners in this note, I would be remiss if I did not add my personal thanks to all our alumni, friends, and members of our Industrial Affiliates program, who have been more than generous this past year in supporting our efforts. Thank you all!*

*We would welcome hearing from you. As part of the rich heritage that makes our Institute so stellar, you are the foundation that allows us to progress into the bright future. Please, keep in touch.*

*Cheers and Meliora!*

*Xi-Cheng Zhang*