

NOTES

FROM DEAN CLARK

Jan. 18, 2016

Dear members of the Hajim School community:

Congratulations to **John Marciante**, Associate Professor of Optics, who is **the first University researcher to receive a second Technology Development Fund award**. His latest project has the potential to greatly increase the spectral purity and beam quality of high power semiconductor lasers by changing the focusing optics and embedding a unique feedback mechanism in a dual-clad fiber. The improvement could enhance the performance of semiconductor lasers not only as laser pumps to boost the power of conventional and ultrafast fiber lasers, but also as direct laser sources. **Applications range from more efficient pumping for ultrafast kW fiber lasers to telecommunications**. John's previous TDF award helped his lab continue work on a uniquely engineered resonant optical cavity to overcome excited-state absorption (ESA), which is a major barrier to using otherwise promising materials for high-power visible lasers because of the energy inefficiencies ESA causes. When used in conjunction with terbium-doped glass fibers, John's new technology **could greatly increase the power and efficiency of visible lasers for use in minimally invasive surgery and digital laser cinema**. The Technology Development Fund was created specifically to help University researchers advance great ideas towards commercialization, and these are two very good examples of that. Read more [here](#).

Congratulations as well to **Robert Boyd**, Professor of Optics, who has been named **this year's recipient of the Arthur L. Schawlow Prize in Laser Science** by the American Physical Society (APS). The award recognizes outstanding contributions to basic research that use lasers to advance knowledge of the fundamental physical properties of materials and their interaction with light. Robert is honored for **"fundamental contributions to the field of nonlinear optics**, including the development of approaches for controlling the velocity of light, of quantum imaging methods, and of composite nonlinear optical materials."

David Narrow '12 of Biomedical Engineering — who was co-founder and CEO of the MonoMano Cycling device that allows persons with disabilities to steer, brake and shift gears with only one hand — **has been named one of *Forbes* magazine's "30 Under 30" notable entrepreneurs** in the health care industry. David, 25, is the CEO of Sonavex, a Baltimore, Md., medical imaging company. *Forbes* recognized Narrow for his company's EchoSure ultrasound implant technology, which "will help nurses find blood clots before they can cause problems." Also noted was David's work with MonoMano Cycling. Read more [here](#).

Interested in studying abroad? Be sure to attend the **Study Abroad Global Fair from 1-3 p.m., Friday, Jan. 29 in Wilson Commons, May Room and Bridge Lounge**. There will be information tables for all UR study abroad programs, as well as other semester, year, and summer international opportunities. Representatives from the Financial Aid Office will be on hand to advise students and a travel agent will be present to provide information about transportation and International Student ID Cards. You'll even be able to apply for a passport on the spot and have passport size photos taken. Read more [here](#).

As always, keep me updated and have a great week.

Sincerely,

Robert L. Clark
Professor and Dean



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