February 2018

The season of Awards and Recognitions has begun at RIT and within the College of Science. We are proud to recognize the outstanding accomplishments of our students and faculty and are excited about the role our RIT professors have in preparing our students for their future work. Congratulations to all!

SOPHIA MAGGELAKIS
Dean, RIT College of Science
SMS Assistant Professor receives RIT’s highest teaching honors

In the January 2018 newsletter we highlighted a story in University News about Assistant Professor Nathan Barlow (SMS) using 3-D printed models of waves to as visual aids for students learning differential equations in the classroom. We are incredibly proud to share news that Nate was awarded the 2017-2018 Provost’s Innovative Teaching with Technology Award for this work! In addition to this award, we have just learned that Nate is also the recipient of the 2017-18 Richard and Virginia Eisenhart Provost’s Award for Excellence in Teaching! Congratulations, Nate for these well-deserved honors and many thanks for your dedication to our students. Nate will be honored in ceremonies later this semester to celebrate excellence among faculty and staff at RIT.
SMS Professor recognized for Outstanding Teaching

Congratulations to Mathematics professor, Carl Lutzer, the winner of the 2017 Clarence F. Stephens Distinguished Teaching Award for the Seaway Section of the Mathematical Association of America for his teaching effectiveness and the influence his teaching has had on the greater mathematics community outside of RIT. He will be honored at the spring meeting of the section with a certificate and an invitation to speak. With this award, he is entered as the Seaway Section nominee for the national outstanding teaching award of the MAA.
2018 College of Science
Undergraduate Commencement Delegate

We are proud to announce Madison Ricco (Biology) has been selected as this year's COS Undergraduate Commencement Delegate. Congratulations! Madison has contributed in many ways to mission of the college, including organizing the Alumni Fast Chat events that have been successful at the past two Brick City weekends. She is also the president on the COS Student Advisory Board.

2018 College of Science
Graduate Commencement Delegate

We are pleased to announce that Ronald Kemker (Imaging Science) was selected as this year’s COS Graduate Commencement Delegate. Congratulations! While pursuing his PhD in Imaging Science as an active duty Air Force officer, Ronald has taken on many roles that allow him to be a mentor to the next generation of STEM researchers including starting an outreach program that teaches optics/photonics to high school students.
2018 Outstanding Undergraduate Scholars Announced

The 2018 College of Science Outstanding Undergraduate Scholars were announced and will be honored in an awards ceremony on Thursday, March 22 in the Gordon Field House & Activities Center. The COS recipients this year are:

- Melissa Barton
- Jordan Cardenas
- Callie Donahue
- Nicole Pannullo*
- Madison Ricco*
- Maria Smith
- Elise Walsh*
- Nicholas Wilkins*

*Scholar is a member of the RIT Honors Program

Congratulations to all of our Outstanding Undergraduate Scholars! We wish you continued academic and professional success in your future endeavors.

Generous gift comes to COS

We are humbled and grateful for the generous donation of $140,000 to the Richard J. Hoerner Endowed Scholarship that was received last month from a
faculty donor who wishes to remain anonymous. This generous donation brings our year-to-date COS fundraising attainment to nearly $1.6 million. We thank our donor for their continued support of our college!

Gift to Galapagos Island Research

The Galapagos Research Project, led by Robert Rothman, a professor in GSoLS, received a generous donation from Once Upon a Time, a foundation established by Texas hedge fund manager, Geoffrey Raynor. Mr. Raynor directed his foundation to send the donation in gratitude to Dr. Rothman for the advice and council that was shared as Mr. Raynor was preparing a family trip to the Galapagos Islands. Dr. Rothman has lead teams of RIT students to the Galapagos for many years to study evolution first-hand. His insight and knowledge about the ecosystem of the island chain is invaluable.
Dr. Jie Qiao appointed in exciting new role

Jie Qiao, Associate Professor in CIS, was recently appointed as an Associate Editor for Optics Express by OSA, the Optical Society, a high-impact leading journal in this field. This prestigious position is a three-year term—congratulations! In addition to this, Jie’s latest publication has also be accepted for print in the journal Optics Material Express.

RIT Professor Scott Franklin shares Science Education research abroad

Scott Franklin, director, RIT’s Center for Advancing STEM Teaching Learning & Evaluation, gave a talk on “Emergent methods of science education research: quantitative and qualitative studies” at University of Rwanda’s College of Education in Rukara. He presented to the first class of Ph.D. students in the World Bank African Center of Excellence for Innovative
Teaching and Learning Mathematics and Science, of which RIT is a primary international partner. Franklin’s trip, Jan. 13-23, was funded by Jim Myers, RIT associate provost of International Education and Global Programs and the Paul and Francena Miller Chair in International Education.

Distinguished Speaker Series

On February 7, the College of Science welcomed Hong Hua of the University of Arizona as part of the Distinguished Speaker Series to discuss “Head-Mounted Light Field Displays for Virtual and Augmented Reality: Challenges and Opportunities.” The series is on hiatus in March due to spring break, but mark your calendars now for the return of the lecture series in April with the following visits:

- **Sönke Johnsen** of Duke University will give a lecture titled, “Hide and Seek in the Open Sea: Using Color, Clarity, Mirrors, and Lamps for Camouflage,” on April 5,
- **Richard De Veaux** of Williams College on April 11 will present a lecture titled “The Seven Deadly Sins of Big Data and How to Avoid Them,” and
- **Kristen Parent** of Michigan State University will speak about "Host Entry Mechanisms of Salmonella and Shigella Phages" on April 16.
COS Student receives honors for her academic success

Elise Walsh (Biotechnology and Molecular Biosciences) (pictured above on far left) contributes to and participates in a myriad of activities outside of the classroom, on top of being an excellent student in the classroom. She is a member of the RIT Pep Band, the Service Chair for the RIT Biotech Club, in the Honors Program, is an NTID note taker, and is a lead peer adviser for the YearOne Program. She also is a research assistant with Dr. Feng Cui (GSoLS). Outside of RIT, Ms. Walsh competes in events like the CrossFit Boomtown’s ROCStrong for lifting, and the upcoming Reebok CrossFit Games Open. So far, Elise’s community service and academic success have been recognized with her awards from the David M Baldwin Memorial Scholarship, the Alfred L. and Ruby C. Davis Scholarship, and this year she’s being recognized as an Outstanding Undergraduate Scholar.
RIT Alumnus Steven Van Slyke inducted into National Inventors Hall of Fame

Steven Van Slyke (Materials Science, MS, ’88) was recently inducted into the National Inventors Hall of Fame for co-inventing the organic light-emitting diode, or OLED. This technology is ubiquitously used in smartphones, smart watches, televisions, and computers for improved image quality, power efficiency, and battery life. Van Slyke is currently the CTO at Kateeva, Inc., which specializes in ink-jet printing manufacturing equipment for the mass production of OLED displays.
New studies advance multimessenger astrophysics

A new simulation of supermassive black holes—the behemoths at the centers of galaxies—uses a realistic scenario to predict the light signals emitted in the surrounding gas before the masses collide. The study, led by Dennis Bowen (CCRG), represents the first step toward predicting the approaching merger of supermassive black holes using the two channels of information now available to scientists—the electromagnetic and the gravitational wave spectra—known as multimessenger astrophysics. The group’s research is part of a collaborative NSF-funded project with Manuela Campanelli (SOPA).
Promoting Diversity in Science at RIT

In the spring of 2017, RIT was awarded $1 million from the Howard Hughes Medical Institute to increase diversity and inclusivity among undergraduate science majors and develop a strategy for supporting their success. The Howard Hughes Medical Institute’s Inclusive Excellence Initiative is a five-year science education grant to develop future scientists reflecting the nation’s diversity. RIT is one of 24 institutions selected to develop strategies for expanding access to science education to all students. These initiatives will serve as national models for other institutions.

Sponsored Research
Mark Fairchild, PoCS, is the PI on a $60,000 grant from the NHK (Japan Broadcasting Corporation) to support the project titled "Color Appearance for High Dynamic Range."

Zoran Ninkov, CIS, is the PI with co-PI Dmitry Vorobiev, CIS, on a $551,981 grant from the National Aeronautics & Space Administration to support the project titled "Development of Digital Micromirror Devices for Far-UV Applications."

Scott Williams, SCMS, is the PI on a $5,000 contract from VentureWell to support the project titled "Additive Manufacturing of Perovskite Photovoltaics."

Leslie Kate Wright, GSoLS, is the PI with co-PI Dina Newman, GSoLS on a $337,000 grant from the National Science Foundation to support the project titled "Research Experiences for Undergraduate in Model-based Reasoning in STEM Education at the Rochester Institute of Technology." Additional Key Personnel on the grant include Jennifer Bailey, KGCOE, Christina Collison Goudreau, SCMS, Scott Franklin, SoPA, Kelly Martin, CLA, and Ben Zwickl, SoPA.

Newsmakers

VERIFY: Is blue the fastest color?
Susan Farnand, assistant professor of color science, quoted, KARE-TV, Feb. 12 (Link)

Connections: Are we ready for driverless cars?
Clark Hochgraf, associate professor of electrical, computer and telecommunications engineering technology, and Roger Dube, research professor and director, Science Exploration Program, interviewed, WXXI.org, Feb. 9 (Link)