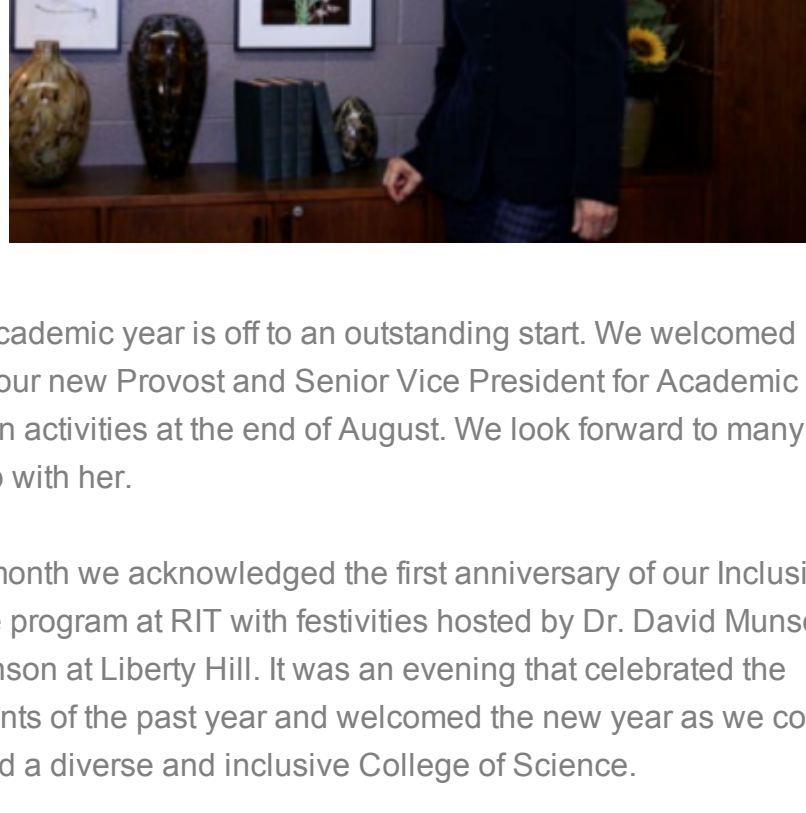


MONTH IN REVIEW



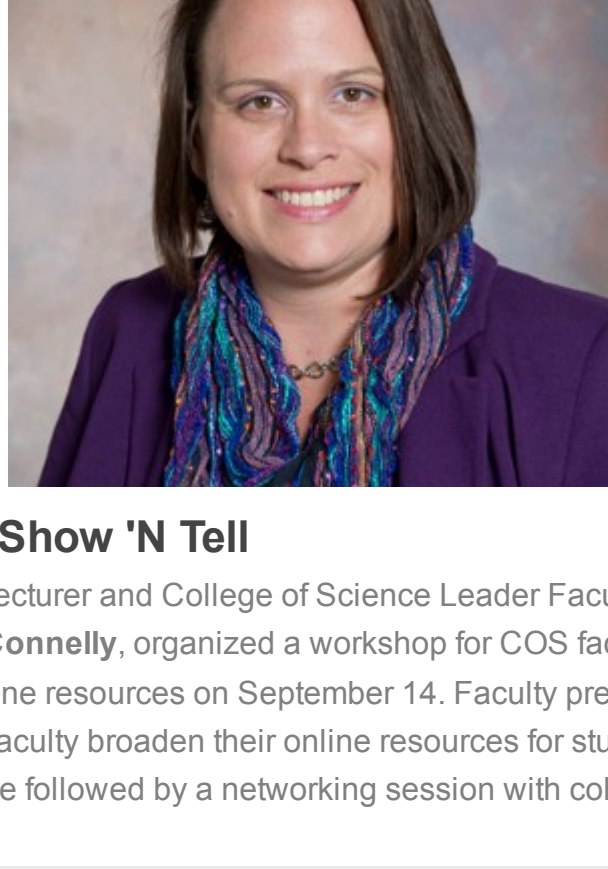
The new academic year is off to an outstanding start. We welcomed Dr. Ellen Granberg, our new Provost and Senior Vice President for Academic Affairs, at convocation activities at the end of August. We look forward to many years in partnership with her.

This past month we acknowledged the first anniversary of our Inclusive Excellence program at RIT with festivities hosted by Dr. David Munson and Mrs. Nancy Munson at Liberty Hill. It was an evening that celebrated the achievements of the past year and welcomed the new year as we continue to work toward a diverse and inclusive College of Science.

This year, the entire university is celebrating the 50th anniversary of RIT's move to the Henrietta campus from our former downtown Rochester campus with activities that recognize the growth and transformation which have resulted from this move. The College of Science is celebrating, too, as we continue to grow our programs and update our spaces. The transformation of the campus and the college is astounding and exciting. If you haven't been here for a while, we'd love to show off our changes the next time you come to campus.

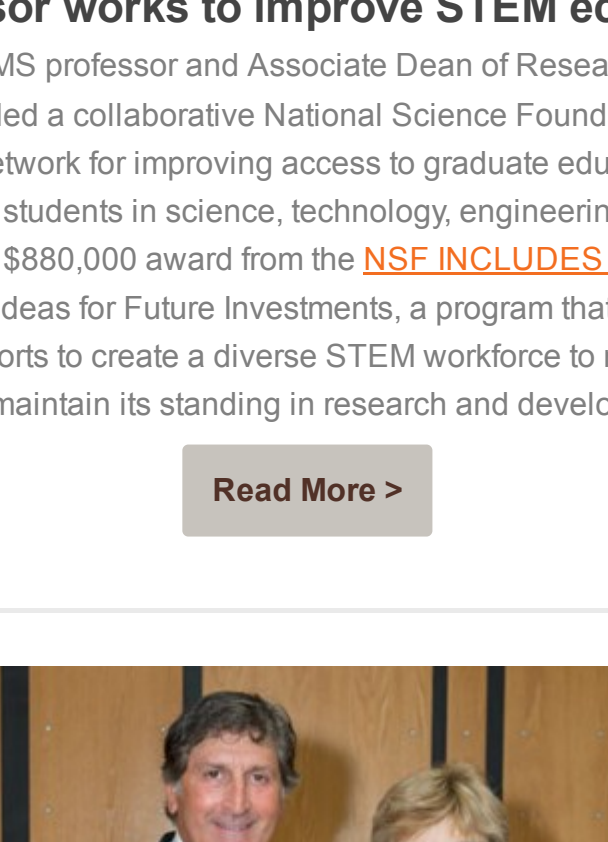
SOPHIA MAGGELAKIS
Dean, RIT College of Science

Our Stories and News



CIS Professor selected to serve as a Fulbright Specialist

Anthony Vodacek, professor, CIS and College of Science Leader Faculty for Study Abroad and International Education was selected to serve a 3-year term on the roster of Fulbright Specialists. The [Fulbright Specialist program](#) allows US scientists and other professionals to serve as short-term experts for competitive projects proposed by the host country.



COS professor works to improve STEM ecosystem

Casey Miller, SCMS professor and Associate Dean of Research and Faculty Affairs, was awarded a collaborative National Science Foundation award to build a national network for improving access to graduate education for underrepresented students in science, technology, engineering, and mathematics. The \$800,000 award from the [NSF INCLUDES program](#) is one of the NSF's 10 Big Ideas for Future Investments, a program that seeks to increase and strengthen efforts to create a diverse STEM workforce to meet the nation's future needs and maintain its standing in research and development.

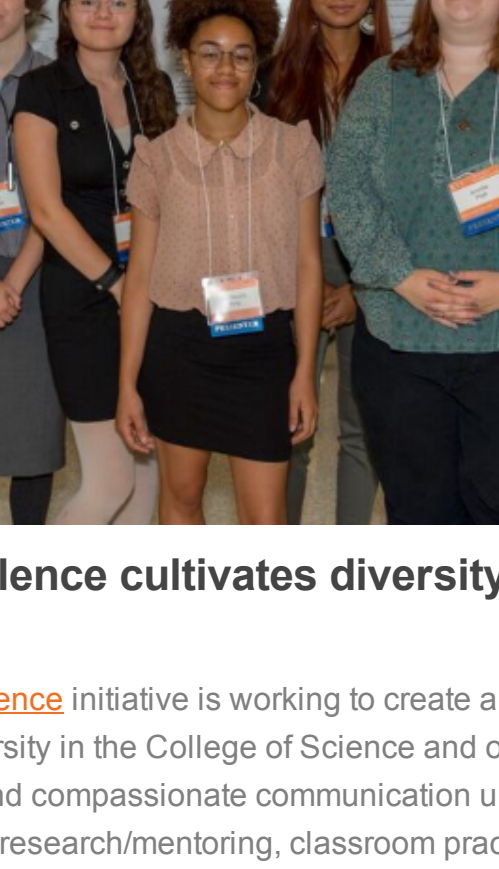
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COS Distinguished Alumnus honored

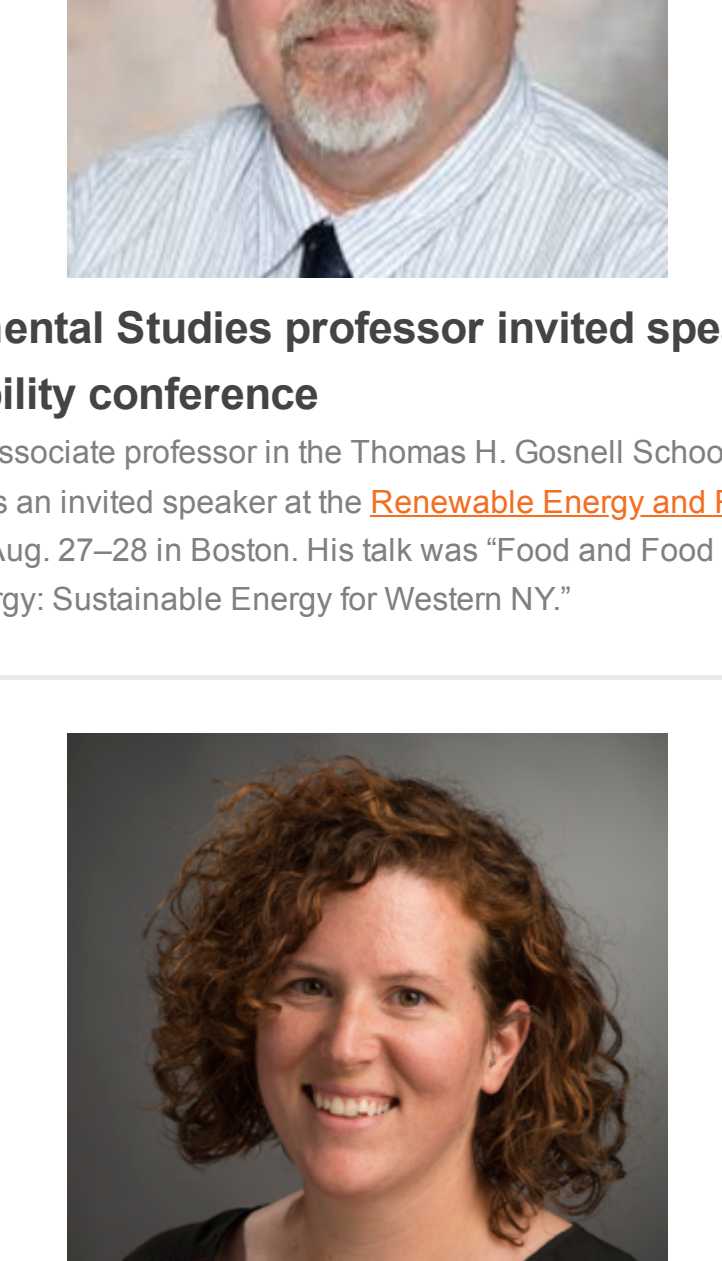
Steve Wear '91, MS imaging science, was honored as the 2018 Distinguished Alumnus for the College of Science at a ceremony on September 14. Steve is the co-founder and a member of the board of directors of [Integrity Applications Inc.](#) (IAI), an engineering services and software development company primarily supporting the intelligence community and other civil, defense and intelligence customers, with a focus on intelligence surveillance reconnaissance systems. He enrolled in RIT's imaging science program while serving as a first lieutenant in the Air Force as part of a military program called Education With Industry. A few years later, in 1999, he founded IAI with three other veterans. The company has grown from the four founders to nearly 800 employees, 24 of whom are RIT alumni, working in 10 offices across the United States. Steve credits RIT with playing an instrumental role in the growth and success of his company. We were especially grateful for Steve's generous \$250,000 gift to establish the [Steven M. Wear Endowed Graduate Fellowship](#) which will be used to provide stipend, tuition, and travel support to MS and PhD candidates.

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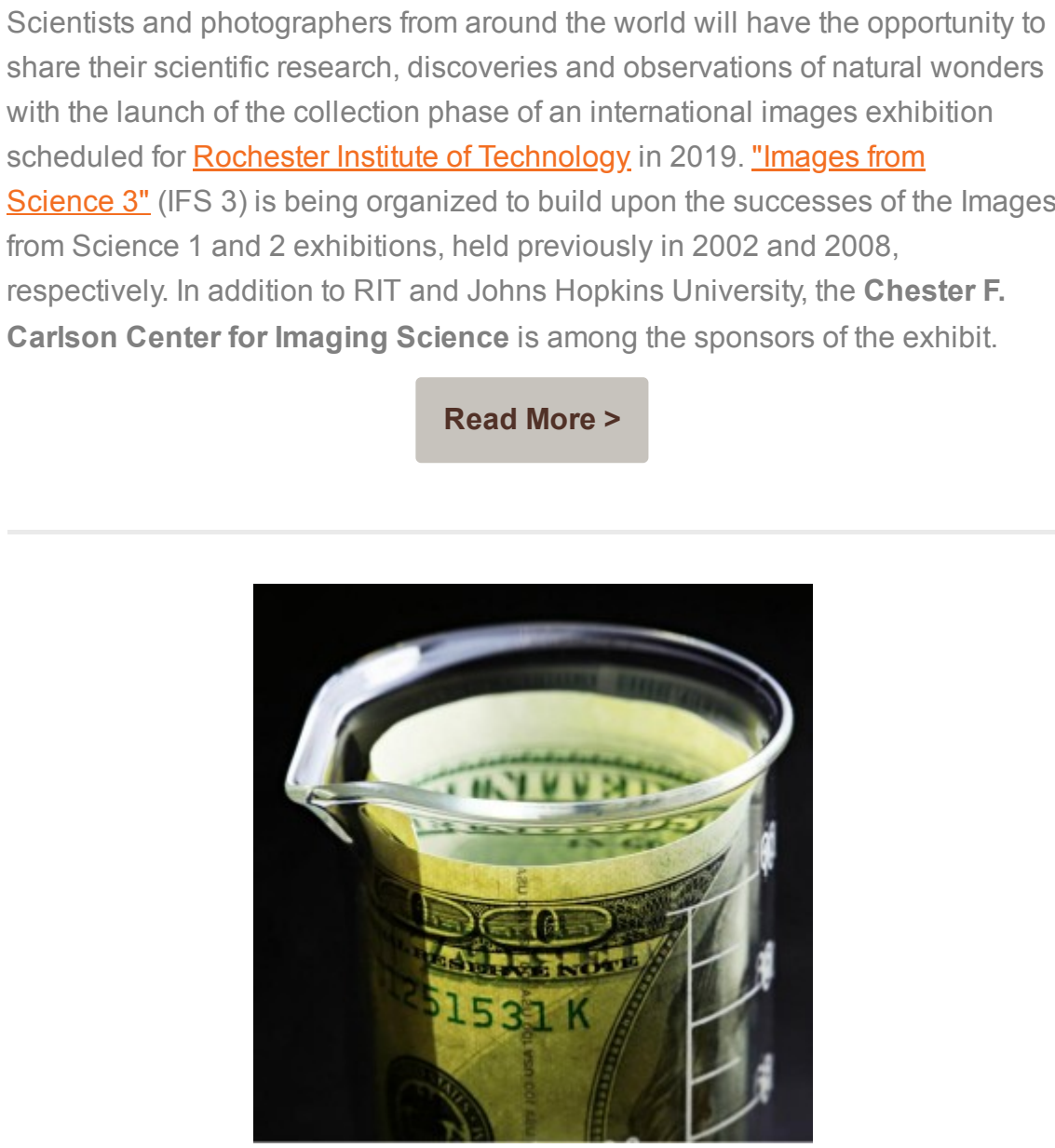
Wise hosts Graduate School Bootcamp

More than 30 students were in attendance on September 26 when the [Women in Science](#) group hosted a workshop for students considering graduate school. The session included advice on the graduate school application process, the application procedure, writing a personal statement, and asking for a letter of reference.



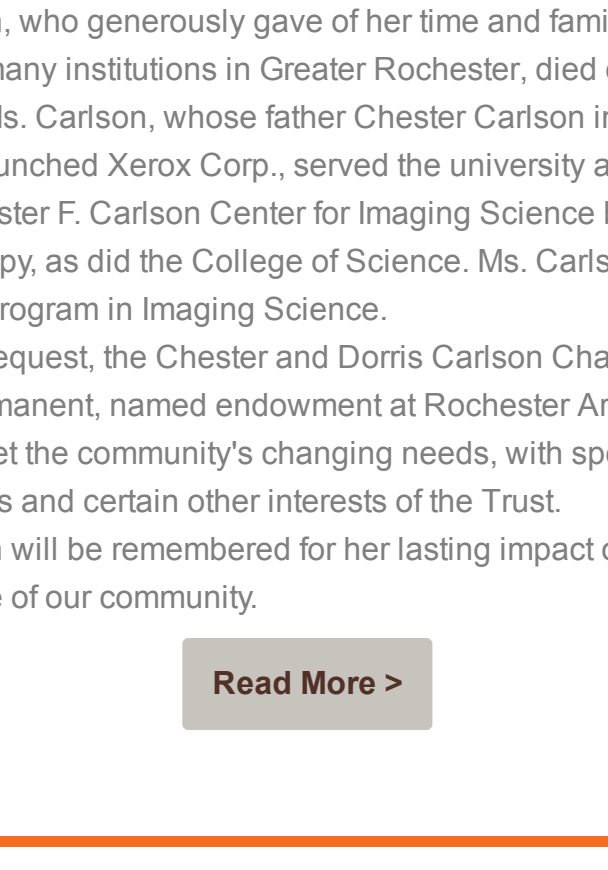
RIT was awarded a National Science Foundation grant to advance high tech computer architectures as part of the [AIM Photonics Initiative](#). Use of photonic integrated circuits to design neural network technologies could improve speed and energy consumption. Aspects of the RIT project will take place at the university, with contributions from researchers in its [Future Photon Initiative](#)—a cross-disciplinary team that collaborates with external university groups, industry and national laboratories to develop and commercialize new photonic device technology—and [CoAI](#), the Center for Human-Aware Artificial Intelligence, an interdisciplinary artificial intelligence research team at the university.

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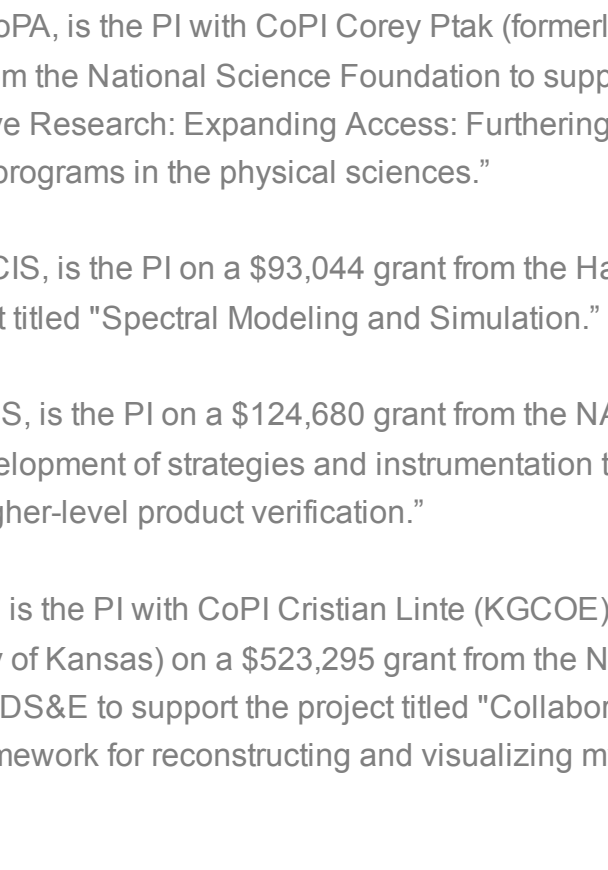
RIT's Inclusive Excellence initiative is working to create a deeper understanding of diversity in the College of Science and on the RIT campus. Awareness training and compassionate communication underlie the program's three practice areas—research/mentoring, classroom practice/teaching and informal community. The first [Inclusive Excellence research fellowship](#) was held this summer and paired seven undergraduate students in the College of Science with research mentors. The 10-week program was supported in part from a grant awarded to RIT in 2017 from the [Howard Hughes Medical Institute](#) through the [Science Education Program](#). The Inclusive Excellence initiative is housed within [CASTLE](#) (Center for Advancing STEM Teaching, Learning & Evaluation) in RIT's College of Science.

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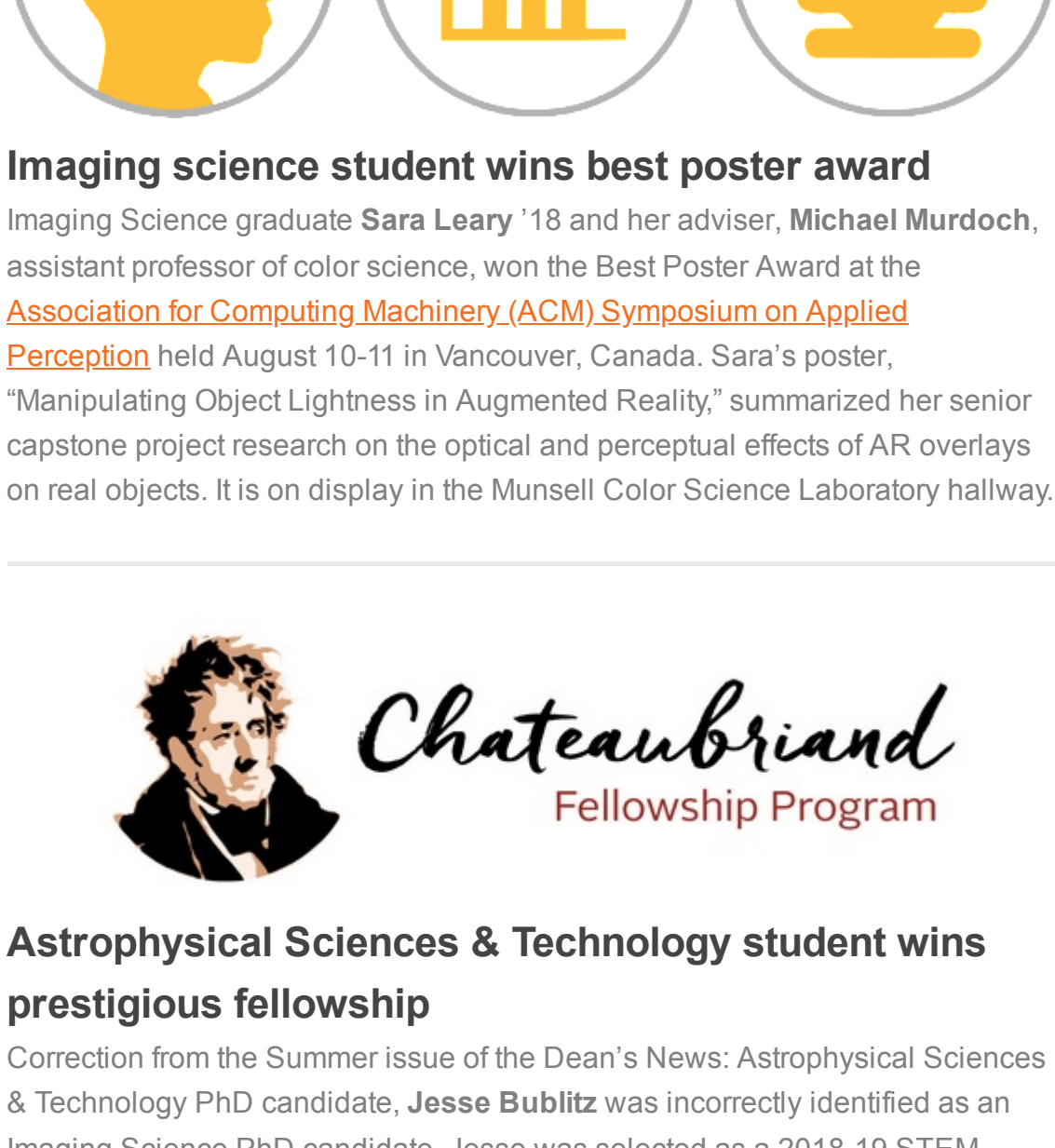


Environmental Studies professor invited speaker at sustainability conference

Jeff Lodge, associate professor in the Thomas H. Gosnell School of Life Sciences, was an invited speaker at the [Renewable Energy and Resources Conference](#), Aug. 27–28 in Boston. His talk was "Food and Food Processing Waste to Energy: Sustainable Energy for Western NY."

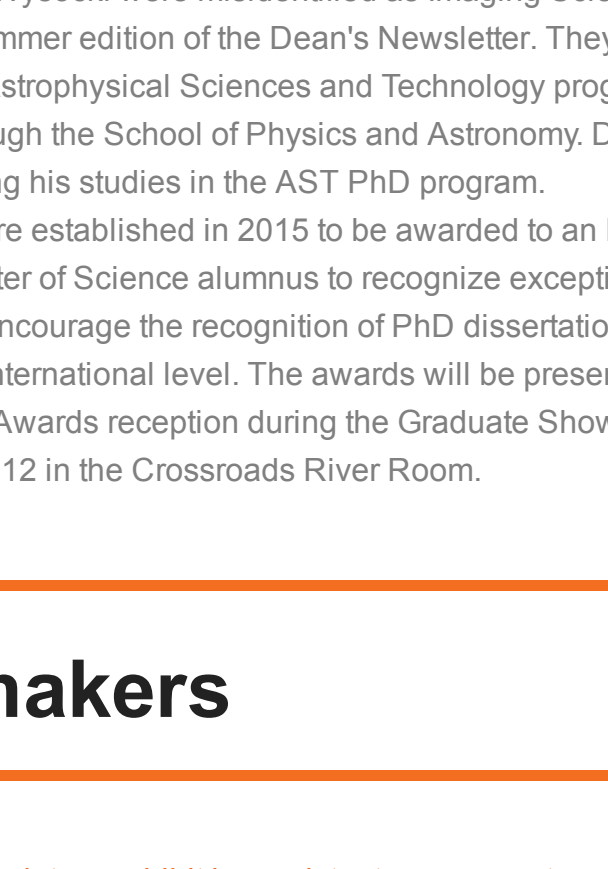


Kaitlin Stack Whitney, visiting assistant professor in the science, technology and society department and the environmental sciences program, had a peer-reviewed chapter in the book *Living with Animals: Bonds across Species*, published Sept. 15 by Cornell University Press. Additionally, she was selected to be part of the [National Ecological Observatory Network's](#) Data Education Fellows Faculty Mentoring Network, which develops and publishes open educational resources to integrate quantitative computing skills into college biology classes.



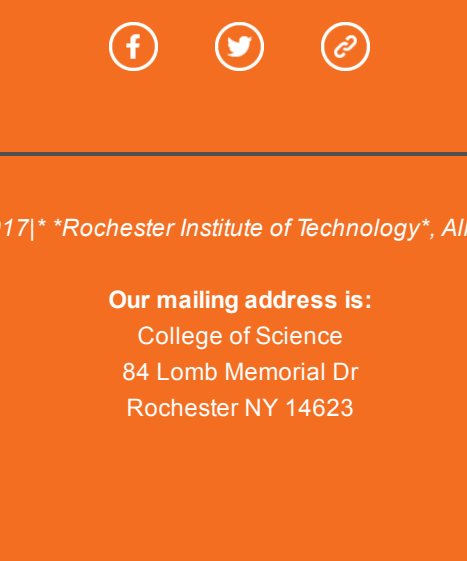
Scientists and photographers from around the world will have the opportunity to share their scientific research, discoveries and observations of natural wonders with the launch of the collection phase of an international images exhibition scheduled for [Rochester Institute of Technology](#) in 2019. "[Images from Science 3](#)" (IFS 3) is being organized to build upon the successes of the [Images from Science 1](#) and [2](#) exhibitions, held previously in 2002 and 2008, respectively. In addition to RIT and Johns Hopkins University, the [Chester F. Carlson Center for Imaging Science](#) is among the sponsors of the exhibit.

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Rochester Institute of Technology's sponsored research portfolio grew in fiscal year 2018, reaching a record \$78 million in funding. RIT received 340 new awards and had a record 333 principal investigators associated with active research awards. As the number of proposals submitted for funding has increased, it has required some staffing changes in the Sponsored Research Services office. As of October 1, we are pleased to announce that Maria Cortes will serve as the pre-award person for GS&S in addition to fulfilling this role for the SCMS and SMS. David Harrison continues to serve in this capacity for SoPA, CIS and ISA.

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RIT mourns the loss of honorary trustee Catherine Carlson

Catherine Carlson, who generously gave of her time and family fortune to support RIT and many institutions in Greater Rochester, died on September 27 at the age of 91. Ms. Carlson, whose father Chester Carlson invented the technology that launched Xerox Corp., served the university as an honorary trustee. RIT's Chester F. Carlson Center for Imaging Science benefited from her family's philanthropy, as did the College of Science. Ms. Carlson helped RIT start its first PhD program in Imaging Science. At Ms. Carlson's request, the Chester and Doris Carlson Charitable Trust will continue as a permanent, named endowment at Rochester Area Community Foundation to meet the community's changing needs, with special attention to education, libraries and certain other interests of the Trust. Catherine Carlson will be remembered for her lasting impact on the civic and cultural landscape of our community.

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Sponsored Research

Christopher Collison, SCMS, is the PI on a \$74,775 grant from the Hewlett-Packard Company to support the project titled "Fuser membrane revolution through bulky nanostructure composites."

Christopher Collison, SCMS, is the PI on a \$52,333 grant from the Hewlett-Packard Company to support the project titled "Self-Healing Coatings for High Transfer Efficiency, Flexible Belts & Films."

Moumita Das, SoPA, is the PI on a \$165,000 grant from the W.M. Keck Foundation and University of San Diego to support the project titled "Building an Artificial Motile Tissue through Self-Organized Rhythmic Stiffening."

Gabriel Diaz, CIS, is the PI on a \$10,000 grant from the University of Rochester to support the project titled "A virtual approach to study and rehabilitate vision after stroke."

Scott Franklin, SoPA, is the PI with CoPI Corey Ptk (formerly GS&S) on a \$134,491 grant from the National Science Foundation to support the project titled "Collaborative Research: Expanding Access: Furthering a network of diversity-focused programs in the physical sciences."

Michael Gartley, CIS, is the PI on a \$93,044 grant from the Harris Corporation to support the project titled "Spectral Analysis and Simulation."

Aaron Geraca, CIS, is the PI on a \$124,680 grant from the W.M. Keck Foundation to support the project titled "Development of strategies and instrumentation to support Landsat calibration and higher-level product verification."

Niels Otani, SMS, is the PI with CoPI Cristian Limte (xGOE) and Suzanne Shontz (University of Kansas) on a \$523,295 grant from the National Science Foundation and CDS&C to support the project titled "Collaborative Research: A computational framework for reconstructing and visualizing myocardial active stresses."

Robert Teese, SoPA, is the PI with co-PI Michelle Chabot (SoPA) and Key Personnel Daniel Krutz (GCCIS) on a \$280,104 grant from the National Science Foundation to support the project titled "Collaborative Research: Interactive Video-enhanced tutorials on problem solving in physics."

Jan Van Aardt, CIS, is the PI with co-PIs Carl Salvaggio (CIS) and Richard DeMartino (SCB) and Key Personnel Donald McKeown (CIS) and Richard Notargiacomo (SCB) on a \$746,844 grant from the National Science Foundation to support the project titled "Fostering Agricultural Remote Sensing (FARMS) Alliance."

Jan Van Aardt, CIS, is the PI with Key Personnel Timothy Bauch (CIS) and Nina Raqueno (CIS) on a \$25,000 grant from the Love Beels to support the project titled "Transformation of the New York Beet Industry through Digital Agriculture."

Michael Zemcov, SoPA, is the PI on a \$456,000 grant from NASA to support the project titled "Studies of the Diffuse Optical Background with New Horizons."

Student & Alumni News

Imaging Science graduate **Sara Leary '18** and her adviser, **Michael Murdoch**, assistant professor of color science, won the Best Poster Award at the [Association for Computing Machinery \(ACM\) Symposium on Applied Perception](#) held August 10-11 in Vancouver, Canada. Sara's poster, "Manipulating Object Lighness in Augmented Reality," summarized her senior capstone project research on the optical and perceptual effects of AR overlays on real objects. It is on display in the Munsell Color Science Laboratory hallway.

Astrophysical Sciences & Technology student wins prestigious fellowship
Correction from the Summer issue of the Dean's News: Astrophysical Sciences & Technology PhD candidate, **Jesse Bublitz** was incorrectly identified as an Imaging Science PhD candidate. Jesse was selected as a 2018-19 STEM Chateaubriand Fellow by the French Embassy. The Chateaubriand Fellowship is a grant offered by the Embassy of France in the United States to support outstanding Ph.D. students from American universities who wish to conduct research in France for a period ranging from 4 to 9 months. Chateaubriand fellows are selected through a merit-based competition, through a collaborative process involving expert evaluators in both countries. Jessie will spend the fall semester in Grenoble, France working with colleagues of his mentor, **Joel Kastner**, professor of imaging science.

The RIT Office of Graduate Education announced that **Dr. Triana Almeyda** is the recipient of the 2018 RIT Graduate Education Dissertation Award (Mentor: Andrew Robinson) and **Daniel Wysocki** is the recipient of the 2018 RIT Graduate Education MS Thesis Award (mentor: Richard O'Shaughnessy). Dr. Almeyda and Mr. Wysocki were misidentified as Imaging Science graduate students in the summer edition of the Dean's Newsletter. They are both graduates of the Astrophysical Sciences and Technology program which is administered through the School of Physics and Astronomy. Daniel Wysocki is currently continuing his studies in the AST PhD program. These awards were established in 2015 to be awarded to an RIT doctoral alumnus and Master of Science alumnus to recognize exceptional graduate research, and to encourage the recognition of PhD dissertation and MS thesis at the national and international level. The awards will be presented at the Graduate Alumni Awards reception during the Graduate Showcase day on Friday, November 12 in the Crossroads River Room.

Newsmakers

Crop pests and predators exhibit inconsistent responses to surrounding landscape succession
Proceedings of the National Academy of Sciences of the United States of America
August 2 - **Kaitlin Stack Whitney**, visiting assistant professor in the science, technology and society department (CoLA) and the environmental sciences program (GS&S), co-author

Connections: Did '2001: A Space Odyssey' accurately predict the AI of the future?
WXXI.org
August 29 - **Christopher Kanan**, assistant professor, Chester F. Carlson Center for Imaging Science, interviewed

Plastic in Water: Health impact on humans remains unknown
August 29 - **Matthew Hoffman**, associate professor of mathematical sciences (SMS), quoted

Why is Printer Ink so Expensive
Consumer Reports
September 15 - **Scott Williams**, professor of chemistry (SCMS), quoted

Test-Driving New Classroom Tech Initiatives
Inside Higher Ed
September 19 - **Sandi Connelly**, principal lecturer, Thomas H. Gosnell School of Life Sciences, featured