

Message from the Dean

While CSM and SHP prides itself on being student centered, this year we made it a central theme. We examined best practices in several departments and adopted, adapted, and expanded them.



The Learning Assistant (LA) program grew out of the Physics & Astronomy Department where the development of the LA program was a key component of the PhysTEC grant awarded to recruit, mentor, and train future high school physics teachers. What started in Physics expanded to five other departments within CSM/SHP.

Another “best practice” was identified from the Psychology Department where they used veteran upper class majors to serve as a bridge between assigned academic advisors and new freshmen/transfer students. All departments in CSM/SHP now have a framework to start this program.

Tutoring in all departments is now partnering with the University Tutoring Center and is available as an expanded, drop-in service. In each semester, 75 courses had nearly 6500 visits to help students keep on the path to academic success. Tutoring hours were increased as well.

While the above initiatives certainly help students keep on the path to academic success, an important piece of all initiatives is that the students who serve as LAs, Peer Mentors, and Tutors develop critical professional skills outside of the academic classroom.

I am excited for you to read about the many other activities and achievements that happened outside of the classroom this past Winter/Spring.

Karen Magee-Sauer, Dean
College of Science & Mathematics
School of Health Professions

Rowan Awarded Noyce Grant from NSF to Improve STEM Diversity

Courtesy of Pat Quigley, Rowan University Public Relations

In the near future, students in South Jersey schools will be learning about fundamentals in gravity and specifics about calculus from people who look a little more like them thanks to a program the National Science Foundation is funding at Rowan University.

In July, a team headed by Dr. Trevor Smith, an assistant professor in the Department of Physics & Astronomy and the Department of STEAM Education (Science, Technology, Engineering, Art and Mathematics) will initiate “South Jersey STEM Education Scholars: Recruiting and Supporting STEM Teachers from Underrepresented Populations.” An anticipated \$1.2 million grant through NSF’s Robert Noyce Teacher Scholarship Program will fund the effort. The collaboration will include faculty from the College of Science & Mathematics and the College of Education.

At the heart of the project is attracting more individuals from underrepresented groups into science, technology, engineering, and mathematics (STEM) education. During the first three years, the team will use \$537,437 in funding to plan the project in detail and recruit students into the M.A. in STEM Education program at Rowan, providing them with one-year \$30,000 scholarships. In turn, the students must commit to working for two years after graduation in a high-need school district. The M.A. in STEM Ed teacher preparation program focuses on research-based best practices for teacher candidates and centers around a yearlong residency in a high-need school.

“Our primary goal is to promote diversity among STEM teachers in South Jersey, trying to make the population of science and math teachers in particular more reflective of the student population in our region,” Smith said.

“The population in general in the seven South Jersey counties is approximately 70 percent white, 15 percent African American, 10 percent Hispanic, four percent Asian and one



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Departments

Biological Sciences
Biomedical & Translational Sciences
Chemistry & Biochemistry
Computer Science
Mathematics
Physics & Astronomy
Psychology
School of Health Professions
Health & Exercise Science
Nursing

Rowan Awarded Noyce Grant from NSF to Improve STEM Diversity

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Professor Trevor Smith

percent Native American. While Rowan University and the College of Science & Mathematics reflects that breakdown, Rowan's science and math education majors do not – that group is approximately 87 percent white and 13 percent minority, which is representative of STEM teachers in the region.”

During the life of the initiative, the Rowan team will recruit and support teacher candidates from underrepresented groups. They will study the experiences of those candidates, gathering insight into, among other areas, factors that support and impede entry into and retention in STEM teaching for those populations and factors that contribute to their effectiveness in the classroom. The project also offers support for Noyce Scholars, including advising and competitive grants during their clinical field experience; professional development opportunities while in school; and support for recent graduates during their first two years of teaching, including professional development and mentorship by veteran teachers.

“There are studies that show the impression that high school students get from their teachers is critical. If high school students see teachers who are all of similar demographics, that sends the message that only people of those demographics can go into those professions. Basically, what we have right now is sort of a reinforcing cycle that the current population of STEM teachers is overwhelmingly white and from the upper middle class,” said Smith, who earned a doctorate in physics, a Master of Science in Teaching with a concentration in physics and a Bachelor of Science in physics, all from the University of Maine.

Through the NSF-funded initiative, the team will collaborate with school districts in Millville, Vineland, and Glassboro with which Rowan already has strong relationships, placing students there for student teaching assignments.

“We are building on those partnerships and relationships to get our Noyce Scholars working as teacher candidates in those districts,” said Smith, who is partnering on the initiative with Drs. Robert Wieman, Jill Perry, David Klassen and Issam Abi-El-Mona. “We also are aiming to serve districts that are more diverse.” He anticipates 25 Noyce Teachers will begin their teaching careers in high-need districts by the end of the five-year project.

Dr. Monika Williams Shealey, dean of the College of Education, noted, “This is one of many innovative initiatives offered by the College of Education dedicated to diversifying the teacher workforce, and it demonstrates the commitment of our college to addressing the most vexing issues facing public education”

Other programs include Project Increasing Male Practitioners and Classroom Teachers (IMPACT), which is designed to prepare diverse male educators, and the Urban Teacher Residency Project, which provided high-quality teachers for high-need schools emphasizing the needs of English learners.

Added Dr. Karen Magee-Sauer, dean of the College of Science & Mathematics, “Preparing highly qualified high school science and mathematics teachers is central to the mission of the College of Science & Mathematics.” Magee-Sauer is the principal investigator on a PhysTEC Comprehensive Grant awarded to increase the number of high school physics teachers graduating from Rowan.

Along with the PhysTEC grant, Rowan's Woodrow Wilson Teaching Fellowship Program has contributed to Rowan's recent increase in preparing highly qualified high school science and mathematics teachers. “The success of Rowan's WWTF grant certainly was instrumental in our success in winning this new funding,” said Perry, principal investigator for the WWTF Award and associate professor in the STEAM Department.

“This grant isn't just an investment in our local students and schools, it's an investment in our entire area and workforce,” said Rep. Donald Norcross. “It's no secret that we need more STEM teachers, and it's encouraging to see such an innovative, needed recruitment program in South Jersey. Our country must prioritize STEM education in order to build our 21st century workforce, and I am so proud that Rowan University is at the forefront of this effort.”

Rowan Hosts Inaugural Regional Nutrition Symposium

In March, students and faculty learned about the change drivers and trends for nutrition care at the 1st Annual South Jersey Nutrition Symposium, hosted by the Rowan Nutrition Program in the Eynon Ballroom. The all-day event offered professional views on nutrition care, insight on career paths in nutrition professions, resume building, and professional networking.

Dr. Qian Jia, assistant professor and Nutrition Program Coordinator at Rowan University, organized the event with Jill Rohlf, the student symposium coordinator from the Nutrition Care Club.

“The symposium came about to help advertise the new nutrition program at Rowan University. It was the perfect way to bring attention to the program on and off campus. Another purpose was to provide a continuing education opportunity for health care professionals, especially Registered Dietitians, and build a strong alliance with preceptors for the nutrition program,” said Jia.

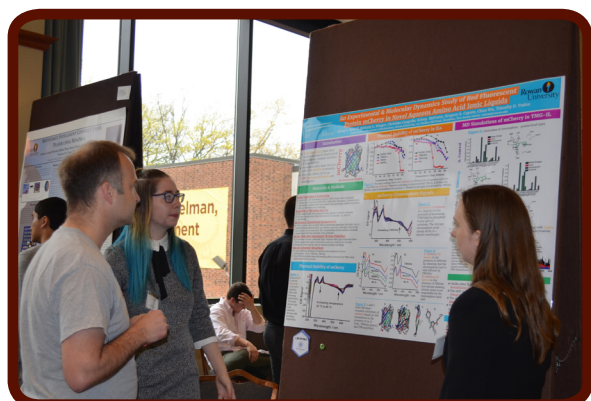
Presenters captivated the attendees with various talks, including weight management and New Jersey’s efforts to increase its people’s well-being. Tracy Oliver, PhD, RDN, LDN from Villanova University spoke about change drivers for weight management and the challenges for nutrition care of obese individuals. The Director of the Center for Medical Weight Loss & Metabolic Control at RowanSOM, Adarsh K. Gupta, DO discussed the challenges faced in managing obese patients in today’s world.

After lunch, Kathleen T. Morgan, Dr.M.H., DTR, Chair of Family and Community Health Sciences, Rutgers Cooperative Extension/Rutgers University, explained how the change drivers for nutrition care influence community based programs. Lastly, Kathleen Carozza, MA, RDN and President of The NJ Academy of Nutrition and Dietetics analyzed state affiliate’s efforts and direction as well as addressed the 2017 Accreditation Council for Education in Nutrition and Dietetics standards.

Nearly 80 students and professionals attended. They offered wonderful feedback about the event, including “The symposium was a great learning and networking experience. There were exhibitors from different fields of nutrition, as well as guest speakers and roundtable discussions in which attendees could speak with professionals about their career field.”



STEM Symposium Celebrates 20th Anniversary



Professor Mark Hickman discusses poster with students during the STEM Symposium

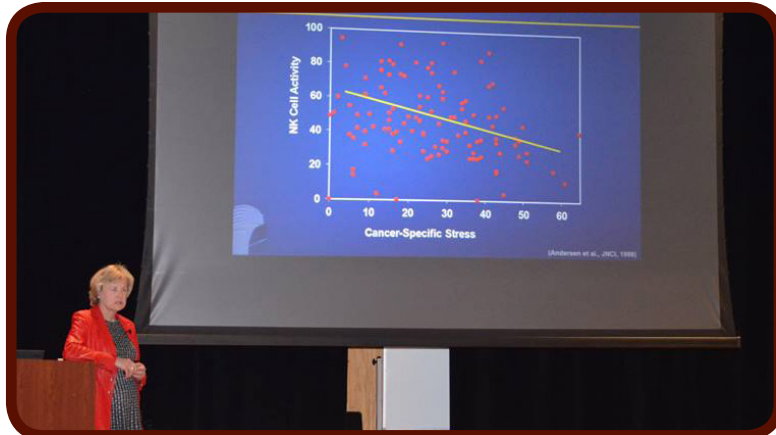
In April, Rowan held the 20th Annual Science, Technology, Engineering and Mathematics (STEM) Symposium. The event brought hundreds of attendees to the Student Center with more than 175 research projects from over 400 students and 75 faculty members. The innovative research included smart parking, downtown Camden traffic improvements, and drug distribution via contact lenses. Students from Rowan’s Glassboro Campus, as well as the Cooper Medical School at Rowan University and Rowan’s School of Osteopathic Medicine presented their research at this year’s event.

When the symposium started in 1998, just 40 posters from science and math students hung in a unrenovated Student Center Ballroom. But, in the past 20 years, the event has blossomed into a cornerstone of not only the College of Science & Mathematics, but the whole university through funding, technological advancements, research growth, and hard work.

“This event couldn’t be the success it is, year after year, without the broad-based support from the Rowan campus,” says Dr. Gregory Hecht, biological sciences professor and longtime coordinator of the symposium. To make this event so successful, student coordinators help him plan and work with a multitude of campus offices including the Student Center, dean’s offices, various faculty, and more. The symposium continually evolves with newly integrated departments such as biomedical engineering and geology, as well as the inclusion of more Rowan campuses.

“There isn’t just one thing that makes the symposium rewarding,” says Hecht. “From the number of people who want to participate, showcasing their research, to the number of attendees, it feels good to know we’ve made something that remains important to the larger Rowan community.”

Dean's Outstanding Speaker Series Includes World Renowned Cancer Researcher and Neuroartist With Work at Franklin Institute



Dr. Barbara Andersen explains research that improves lives of cancer patients

The CSM Dean's Distinguished Speaker Series brings experts from scientific fields to campus to discuss their experiences, give advice to students and faculty as well as answer questions about their field or industry.

Nearly everyone has seen the effects of cancer on someone they know. The disease takes not only a physical toll, but an emotional toll as well. Dr. Barbara Andersen, professor in the Department of Psychology and Obstetrics and Gynecology at The Ohio State University, spoke on February 24th about her research on cancer patients' stress management. During the presentation, she discussed the biobehavioral model that links cancer-related stress with disease progression and how her work has saved lives through her biobehavioral intervention.

Her team initially assesses patients within the three months following diagnosis and they are enrolled in her one-year

intervention (nearly 80 percent are diagnosed Stage II; the other are Stage III). The "assessment" group underwent bio-psycho-social assessments of their cancer experience quarterly. The "intervention" group received the same assessment coupled with empirically supported psychoeducational group meetings (weekly for the first 8 months, monthly for the last 4 months) designed to help them reduce emotional distress, improve social support and treatment adherence, increase health behaviors, and improve symptom and functional status.

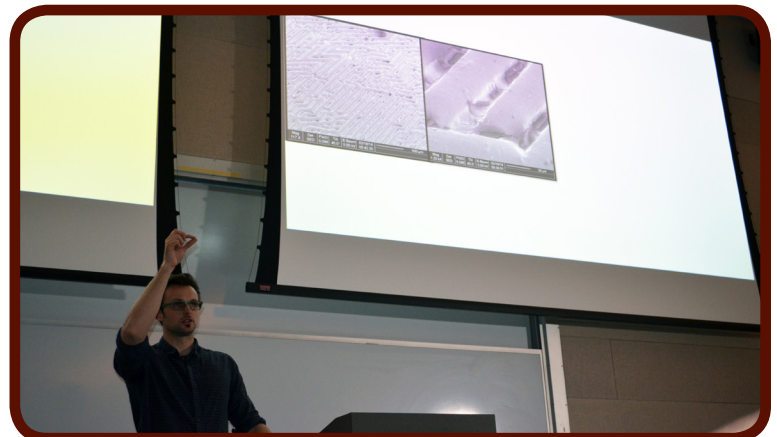
The results were astounding as 45% of the patients in the "intervention" group experienced reduced risk of breast cancer recurrence and a significant decrease in self-reported stress. Perhaps the most astonishing statistic is a 60% reduction in the mortality rate of breast cancer patients following recurrence. Dr. Andersen's biobehavioral intervention has profound long-term positive psychological and physical health effects.

On March 31st, artist and neuroscientist Greg Dunn, Ph.D. showed attendees just how beautiful the most powerful computer in the world is. The main attraction was a microetching of the human brain. His lecture was co-sponsored by the College of Communications and Creative Arts.

While Dunn studied to receive his doctorate in neuroscience from the University of Pennsylvania, he found an interesting parallel between his studies and his love of minimalist Japanese art. Neurons in the brain resemble the thin, stark branches painted in many Japanese scrolls.

Together with Dr. Brian Edwards, a collaborating artist and electrical engineer at Penn, Dunn invented a revolutionary technique called reflective microetching that allows dynamic control of imagery and color in reflective gold surfaces. This medium expertly visualizes the processes of neurons and synapses firing when light is moved across the piece's surface. The piece, 8' x 12' at completion, was made possible by a grant from the National Science Foundation. *Self Reflection* remains on permanent display in the Franklin Institute's exhibit, *Your Brain*.

During the presentation, Dunn explained that images of the brain in popular culture don't often reflect the actual science and structure of it. He also said that there is often a disconnect between art and science as they are viewed as separate entities. Dunn's mission is the fusion of art and science in a way that complement's each other.



Dr. Greg Dunn shows his new way of showing the world the brain

AAUW Grant Offers Students An Opportunity to Network

While women are increasingly prominent in medicine, law, and business, there's still a large gender divide in science and engineering. Tricia Yurak, Ph.D. Associate Provost for Academic Affairs, together with Rowan University's student organization WiNGS (Women Inspiring the Next Generation of Scientists) seeks to lessen that divide.

In December 2016, the American Association of University Women (AAUW) awarded a \$4,700 grant to CSM through the Campus Action Project to fund a series of events intended to promote and cultivate career leadership skills within female undergraduate STEM students. Each event proved to be a huge success, filling rooms to capacity and inciting lively and thought-provoking discussions.



Students talk with mentors during networking event

Panelists included, Kim Case, Esq., Vice-President of CN Communications, Dr. Nannette Wright, who has over 20 years of experience working in the DoE and DoD, Dr. Kauser Jahan, Professor of Environmental Engineering at Rowan, Dr. Mary Alpaugh, Associate Professor of Biomedical and Translational Sciences at Rowan, Magda Batista-Carver, senior system engineer at the FAA, and Jennifer McCulley, a Software Project Manager at Agilent Technologies. Attendees gained knowledge, insight, and advice from established STEM professionals, which reached beyond what they learned within courses and research labs.

“Because women are underrepresented within STEM fields, it's important to encourage Rowan's female students to pursue those programs and careers if they are passionate about doing so,” says Yurak. This grant absolutely accomplishes that goal. Thank you for inspiring the next generation of scientists.

“The events provided excellent opportunities for our female STEM students to learn from professional women who are established in their careers,” says Yurak. “While our female STEM faculty already provide great advice, insight, and encouragement to our students, being exposed to additional perspectives from other professionals is invaluable.”

One of the grant's first sponsored events was Dr. Susan Ng's presentation, “Lessons Learned as a Woman in Science.” She discussed her choice for entering the field and the challenges she still faces today. Dr. Ng organized her presentation into 10 pieces of advice including a personal story of how she learned each lesson. The feedback from students and professors in attendance was overwhelming.

WiNGS, the Society of Women Engineers (SWE) and the American Chemical Society (ACS) hosted a networking event in April, which included two different panels of women who spoke about their experiences in the field.



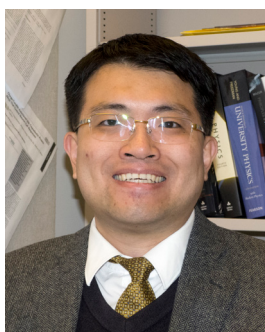
Susan Ng speaks to students about her journey in science

Faculty Promotions

CSM is proud to announce the promotion of four faculty members to Associate Professor.



Mark Hickman
Bioinformatics



Xiao Hu
Physics &
Astronomy



Lark Perez
Chemistry &
Biochemistry



Bethany Raiff
Psychology

Rowan NSF Grant Supports Students' Research in Singapore

Courtesy of Pat Quigley, Rowan University Public Relations

Five physics students from four universities in the region, including two from Rowan University, will spend 10 weeks in Singapore this summer through a program coordinated by Dr. Michael Lim, a professor of physics at Rowan.

The National Science Foundation-International Research Experiences for Students program awarded Lim a \$243,756 grant for his project "Philadelphia-Singapore Optics Research Experience for Undergraduates," which runs from 2016 until 2019. The grant funds round-trip transportation and housing in Southeast Asia, where students will conduct research at Nanyang Technological University (NTU), more than 9,500 miles from home.

Working under NTU professors, Rainer Dumke and Claus-Dieter Ohl, the students from four local universities, including Rowan, will join students and postdocs from Austria, Azerbaijan, China, France, Germany, India, Indonesia, Iran, Italy, Malaysia, Mexico, Myanmar, the Netherlands, Poland, Singapore, and Vietnam. Some of the students will conduct research on experimental atomic physics, studying quantum information processing that could someday make more powerful computing devices for applications from encryption to drug design. Other students will study the fluid dynamics of bubble genesis, oscillation, and interactions, which can impact biomedical applications such as the treatment of cataracts and kidney stones.

Lim and Dumke first worked together in 2000 at the National Institute of Standards and Technology-Gaithersburg, in the atomic physics lab of 1997 Physics Nobel Laureate Dr. William Phillips. They have been periodic collaborators since Lim's 2009-10 sabbatical, when he spent a year as a visiting professor at NTU, exploring possible new platforms for quantum information processing. Lim said taking students with him to NTU was always a goal, but that the expense previously prohibited student travel.

The program also includes an industrial mini-project supported by Edmund Optics, Inc., which has its world headquarters in Barrington, New Jersey, and its flagship production facility in Singapore.

A former Rowan student of Lim's, Lucas Willis, helped arrange the industrial mini-internship at Edmund Optics, where he holds the position of optical research scientist. Willis is based in Barrington and is involved in technical operations at Edmund's manufacturing facility in Singapore.

Lim said this is a critical time in American history to champion equitable higher education, free and open scientific inquiry, and friendly cooperation with other societies and cultures.

"Our initiative promotes these goals by providing Philadelphia-area physics majors the opportunity to work and learn in research groups at the forefront of experimental atomic physics and fluid dynamics," Lim said. "To my knowledge, this is the first time in our region there has been an optics consortium to support international physics research for undergraduates." Physics department chairpersons at Rowan University, Rutgers University-Camden, Delaware State University, the University of Delaware, Bryn Mawr College and Temple University were invited to nominate eligible undergraduate students as the first step of the application process.

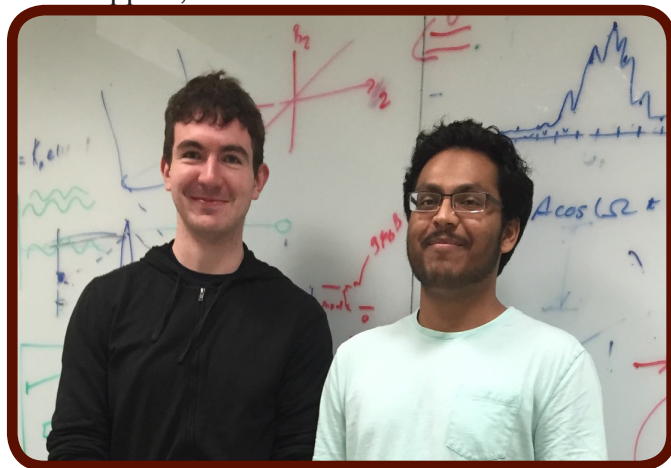
The successful Rowan University applicants, who also receive \$5,000 in travel support, are:

- John Griffin, 20, a junior physics major from Brick, New Jersey, who hopes to work at a university as a professor studying optics and atomic physics. He will be part of the experimental atomic physics team in Singapore. At Rowan, he has worked as a research assistant for two professors, has been a learning assistant in the department and a resident assistant. Griffin also serves on the executive boards of Rowan's Residence Hall Association and National Residence Hall Honorary Society.

- Rahi Patel, 21, a junior physics major from Williamstown, New Jersey, will work in the fluid dynamics lab. Patel, who hopes to attend graduate school for astrophysics and teach and conduct research at a university, said, "This opportunity will provide me with research experience in a field of physics that I have not previously explored. I am greatly looking forward to expanding my research horizons as I look to attending graduate school and beyond."

Noted the dean of Rowan's College of Science & Mathematics, Dr. Karen Magee-Sauer, "This opportunity is simply a life-changing experience for this group of students. Of course they will be learning a lot of physics during their stay, but the experience of living and learning abroad will have significant impact on students' personal growth, intercultural development and ultimate career path. Each student will return home a different person and I hope share experiences back in his or her home classrooms.

Dr. Lim's exceptional work in bringing this international experience to Philadelphia area college students is core to Rowan's mission."



John Griffin and Rahi Patel

CSM Honors Seniors at Annual Dean's Awards Dinner

On April 18th, over 70 students, faculty and guests gathered in the Eynon Ballroom to celebrate a group of CSM/SHP's most accomplished seniors. Special guests included Dr. Barbara Chamberlain from the Board of Trustees, Provost Jim Newell, Chris D'Angelo, Director of Alumni Engagement, and the keynote speaker, CSM alumnus, Dr. Michael Coletta, in his second year of residency in Emergency Medicine at Cooper University Hospital.

Dean Karen Magee-Sauer, opened the night with heartfelt congratulations. "Parents, friends, and guests of our distinguished award winners – be proud. The students honored here tonight embraced opportunities at Rowan and with these opportunities they truly excelled."

The event featured a dinner followed by Dr. Coletta's keynote address. In his address, Coletta shared lessons he learned on his way to medical school that he hoped would help the graduating seniors. Perhaps one of the most profound was his first.

"I always wanted to be a doctor, just like my dad. However, as I was entering college, I was around a lot of doctors who steered me away from the profession, so I came in as a chemical engineer. I

knew almost immediately I wasn't where I was supposed to be and realized I needed to follow my passion - helping people. So I switched my major to biochemistry and started on the pre-med track."

Coletta's advice to "follow your passion" is already apparent in all the winners, who distinguished themselves by developing new research methods, tutoring peers, publishing articles in journals, and so much more. The awardees included: Samuel MacLeon (Bioinformatics), Kasey O'Leary (Biochemistry), Victoria Kuhnel (Biological Sciences), William Neuhaus (Chemistry), Nicholas Weintraut (Computer Science), Natalie Spissell (Health & Exercise Science), Kara Ott (Liberal Studies: Math/Science), Alexander Drumm (Mathematics), Monica Sherrie Boggan (Nursing), Abraham Hakim (Office of Health Professions), Sean Zimmerman (Physics & Astronomy) and Andrew Gerber (Psychology).

In addition to the CSM Senior Awards, the event recognized Ian Bakanas, a senior Chemistry major, who won the 2017 Rowan University Award for Excellence in Undergraduate Research. For this Univer-

sity-wide award, Bakanas was honored for his development of several new reaction methods creating pharmaceutically-relevant molecules and alternative "green" conditions for classical reactions. His work has led to two co-authored peer-review publications as well as numerous regional and national presentations.

Dean Magee-Sauer concluded the event with final congratulations and reminded the awardees that "although they might not know it, they all have become a new benchmark for student achievement. Please do not forget to keep in touch. We can't wait to see where your careers take you!"



Dean Magee-Sauer commends students on accomplishments



Dr. Coletta tells his story about becoming an ER doctor



The 2017 DOSA Award Winners

Seventh Straight Perfect Year for Athletic Training Students

For the seventh straight year, 100% of the Athletic Training students passed their Board of Certification Exam on the first attempt. The Board of Certification is the national exam that enables students to practice Athletic Training as a health care profession. The national average for first time pass rate is about 82%. No other program in the State has a first time pass rate of 100% for seven consecutive years.

“Through the hard work of faculty, preceptors and students, we truly believe we have the best Athletic Training Program in the State,” commented Dr. Robert Stern, chair of the Health and Exercise Science department. “The BOC pass rate has become a tradition amongst students, thus they work very hard to pass this exam and to develop into competent Athletic Trainers.”

Rowan Chapter of the Minority Association of Premedical Students Picks Up Three Honors

The Rowan Chapter of the Minority Association of Premedical Students (MAPS) recently won three awards. They were named the Student National Medical Association Regional Chapter of the Year. This award is given to chapters who demonstrate outstanding leadership, service and overall initiative. Rowan MAPS received this honor and was named the best chapter overall of Region IX, which is comprised of all MAPS chapters in New York and New Jersey. They were also awarded the Regional Chapter of the Year for Community Service. Similarly, this award is given to a chapter that shows an exemplary commitment to their communities.

Rowan MAPS members have fed the homeless, volunteered as medical translators for the uninsured population of Camden, and tutored urban children at the local Camden library, among many others. Finally, they received the Excellence in Diversity - Group Project by Students Award from Rowan University's Senate Diversity Committee. This award recognizes outstanding contributions, commitment and service exhibited in the areas of diversity, social justice, consciousness-raising and inclusion at Rowan.

Defrates Earns Goldwater Scholarship; Dautle Receives Honorable Mention

Kelsey Defrates, '18 won the Goldwater Scholarship, the most prestigious award given to undergraduates in STEM who are interested in pursuing graduate studies and research. Defrates is a junior B.S. Biomedical Engineering major, Mathematics minor, and Bantivoglio Honors concentration and continues to diligently

work in the lab and pursue her dream of becoming a research professor while furthering the field of biomaterials. She

credits her success to her mentors, Drs. Timothy Vaden (Department of Chemistry & Biochemistry) and Xiao Hu (Department of Physics & Astronomy/Department of Biomedical & Translational Sciences), who motivated her to apply for the award and to become so involved in research.

Savanna Dautle, '19 was named an honorable mention. The sophomore B.S. Chemical Engineering and B.A. Mathematics double major and Bantivoglio Honors concentration hopes that this recognition will help her to pursue her interest in having a career in research. Dautle still has two years at Rowan, but in the future would like to attend graduate school and become a professor at a research institution.

Tursi Receives Fulbright Study Grant

Amanda Tursi, '17 (B.S. Bioinformatics major, Bantivoglio Honors concentration) will travel to Finland on a Fulbright Study Grant to study bioinformatics. The Fulbright Scholar award is an American scholarship program of competitive, merit-based grants for international educational exchange for students. She applied both to become a better bioinformatician and to engage with other cultures. She remains very excited to have received the status of Fulbright Scholar and is eager to live and study in Finland.

Rothlauf Heading to Harvard; On Fulbright Waitlist

In the fall of 2017 Paul Rothlauf, '17 (B.S. Biological Sciences, Bantivoglio Honors concentration) will attend graduate school at Harvard University for its Ph.D. Program in Virology. He is also on the waitlist for the Fulbright Study Grant program in Scotland. Rothlauf feels humbled to be recognized by such outstanding faculty for accomplishments in his coursework and research at Rowan University. He has no doubt that his success at Rowan will translate into more success in graduate school and beyond because of how well Rowan CSM has prepared and supported him.

Drumm and Sullivan Earn Perfect Scores on Math Field Test

Mathematics majors Alexander Drumm, '17 and Kyle Sullivan, '17 posted perfect scores on the Math Major Field Test (MFT). The MFT in Mathematics, first administered in 1989, assesses mastery of concepts, principles and knowledge by graduating Mathematics students. The MFT consists of 50 questions, some of which may be grouped in sets and based on such materials as diagrams and graphs. The questions are drawn from the courses of study most commonly offered as part of an undergraduate mathematics curriculum.

Rowan School of Health Professions News and Notes

Rowan Student Travels to North Sea for Summer Research

Junior Callan Tweedie (B.S. Biological Sciences, Bantivoglio Honors concentration, German Minor), will travel to Warnemünde, Germany, a small town just off of the North Sea, this summer for a research program funded by German Academic Exchange Service (DAAD) Research Internships in Science and Engineering (RISE). Tweedie is 1 of 300 students selected nationwide for the program. RISE interns are matched with doctoral students whom they assist and who serve as mentors.

Tweedie will be living on a boat in the North Sea that functions as a marine science center and will be studying seals that live just around the boat. The research will involve cognitive ecology research, involving the spatial orientation capabilities of the harbor seals when traveling with the goal of learning the mechanism for this travel. Tweedie looks towards a career in veterinary medicine.

Rowan's PhysTEC Earns Induction into The 5+ Club

The Physics Teacher Education Coalition (PhysTEC) recently announced that Rowan University was inducted into "The 5+ Club," a group of institutions that has graduated five or more physics teachers in a given year. This is the second year that Rowan has received the award. The great majority of institutions graduate fewer than two physics teachers a year, and the most common number of graduates is zero. In its 2014 report, the American Association for Employment in Education found that the teacher shortage in physics is number one among 59 education fields. Rowan is one of nine institutions recognized for the 2015-16 year.

CSM and Henry M. Rowan College of Engineering Hosts Research Showcase and Networking Event

Rowan's CSM and Henry M. Rowan College of Engineering (RCOE) hosted a Research Showcase and Networking Event in March. The showcase featured presentations from 16 professors in CSM, RCOE, Cooper Medical School at Rowan University and the Rowan School of Osteopathic Medicine. The showcase was designed for presenters to find collaborators or partners in biomedical and biostatistical research. Also in attendance was Dana Vanderwall, Ph.D. from Bristol-Myers Squibb representing collaboration opportunities with the pharmaceutical company.

Ten new externally funded projects were awarded since December 2016

Elena Bresani (Research Associate, Psychology)

"Consumer Guide to Adolescent Substance Abuse Treatment in the State of Utah," (Subcontract from Treatment Research Institute)

JoAnne Bullard (Instructor, Health & Exercise Science)

"PROF Academy: A Model to Enhance Overall Well-Being, Mental Health Practices and Professional Development Among Division III Student Athletes as They Transition from PROF to Professional," (National Collegiate Athletic Association)

Jeffrey Hettinger (Professor, Physics & Astronomy/BTS)

"Johnson Matthey Materials Characterization," (Johnson Matthey)

Xiao Hu (Assistant Professor, Physics & Astronomy/BTS)

"Flexible Protein Sensor Materials for Controlled Drug Delivery and Release," (New Jersey Health Foundation, Inc.)

Jennifer Kay (Professor, Computer Science)

"ACM-W igniteCS," (Google Inc.)

Thomas Keck (Assistant Professor, Chemistry & Biochemistry/BTS)

"Abuse liability and anti-addiction potential of the atypical mu opioid receptor agonist IBNtxA," (National Institutes of Health)

Kimberly Kirby (Professor, Psychology)

"TRI PTRC Subcontract," (Subcontract Supplement from Treatment Research Institute)

Karen Magee-Sauer (Dean and Professor, Physics & Astronomy)

"NASA NJSG 2017 Rowan University College of Science & Mathematics Summer Research Program for Undergraduates," (Subcontract from Rutgers, The State University of New Jersey) and

"NASA NJSG 2017 Rowan University Physics Summer Research Program for Undergraduates," (Subcontract from Rutgers, The State University of New Jersey)

Lark Perez (Assistant Professor, Chemistry & Biochemistry)

"Formulating Broad-Spectrum Antibiotics to be Pathogen-Specific," (New Jersey Health Foundation, Inc.)

Rowan a Silver Sponsor of Philadelphia Science Festival

Rowan University was one of two universities (University of Pennsylvania) that was a silver sponsor for the 2017 Philadelphia Science Festival. Rowan hosted Family Science Sunday and a City Wide Star Party on campus. Rowan also had six exhibits at the Science Festival Carnival on Penns Landing.



Scenes From Commencement 2017

Over 1,000 students crossed the stage during two commencements ceremonies for the College of Science & Mathematics (5/11/17) and School of Health Professions (5/12/17).



CSM student scholarships and program initiatives are made possible by the generosity of individuals and corporations. Please consider a gift and join us in delivering the highest quality education to our students.

www.rowan.edu/csm/giving

Homecoming 2017 Saturday, October 18

“PROFhistoric”

Registration Opens July 5th

alumni.rowan.edu

The Scope

Spring 2017	
Karen Magee-Sauer	Dean
Peter Rattigan	Associate Dean
Suzanne Bausch	Associate Dean
Eve Sledjeski	Assistant Dean
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