

EVOLUT®ONS

SEY NEWS OF THE DEPARTMENT OF BIOLOGY

Volume 6, No. 1 Spring 2019

FROM THE DEPARTMENT CHAIR



When I was a college student, the phrase "study abroad" stirred images of trekking

through the Alps or across Asia with a fancy backpack and "Roam" by the B-52's playing in the background. I remember a television campaign with this theme from around that time, but I cannot find any evidence on the web. While catchy and inspiring, the commercial never convinced me that studying abroad was something for me to do. In part, that is because I am an unabashed homebody. However, it is also the case that I could not picture myself in the role of a study abroad student. I was a commuter student from a solidly middle-class background, and my undergraduate institution did little to help me widen my perspective in that way.

Fast-forward two decades, and I had the opportunity to visit Australia this semester to evaluate study abroad locations. I share aspects of the trip focusing on Australia as a destination in a separate article in this newsletter, but here, I want to share my perspective more broadly. First and foremost, study abroad truly is an experience for any member of the TCNJ student body, irrespective of background, and I am impressed by the efforts expended

Alumni Weekend Rekindles Friendships



Biology majors from the Class of 1970 to the Class of 2018 returned to campus in early May on Alumni Weekend to see old friends, new buildings, and their favorite haunts. Posing in front of the STEM Forum are a few of our finest graduates and professors.

by the Center for Global Engagement to provide opportunities for TCNJ students. In addition, I am amazed by the variety of possible experiences. Semester programs? Check. Programs that allow students to use their existing financial aid? Check. Short-term programs for homebodies like me? Check. Programs led by TCNJ faculty? Check. Like any other pursuit, not all students will be interested, but I am proud that TCNJ has made it such that the decision to participate or not is based primarily on interest rather than factors outside the control of our students.

-Keith W. Pecor, Ph.D., Chair

The first weekend in May this year was a big one for The College of New Jersey, as it featured the formal Installation of the 16th President of the College, Dr. Kathryn A. Foster, in addition to the excitement of Alumni Weekend. While more traditional and ceremonial greetings were in order for the Installation, considerably more informal shouts, handshakes and hugs were common as alumni gathered at receptions and other activities over the weekend. Biology-major Over 30 returned to campus, many of whom stopped by to chat with professors at a reception, and to join in the group photo above. We hope to have many more join us next year!

NEWS BRIEFS

Excellence in Biology Awards Presented to Seniors

Fourteen senior biology majors were recognized for their outstanding work and achievement in Biology as the 2019 recipients of the Department's "Excellence in Biology" Awards. The award dinner was held in Ewing at Freddie's Tavern to the delight of students, family members, friends and faculty.

Krystle Vera and Shrey Patel received the Becton-Dickinson & Co. Award for Excellence. with Honorable Mention going to Jacob Veliky. Dennise Cortes received the Joseph Vena Award, with two honorable mentions to Matthew Fertakos and Alizeh Shamshad. The Faculty Award for Excellence was awarded to Namal Seneviratne and Linda Zhang, with Erica Levin receiving the Honorable Mention. Jack Trubiano and Jessica Hwang were awarded the Susan Lapetz Uyhazi Award. And a new award this year, the Rosalind Franklin Award, was presented to Olivia Davis, Evelyn Kulesza, and Adriana Mendizabal. Congratulations to all!

Welcome Elizabeth!

The Biology Dept is pleased to

welcome yet another little one to our extended family! Elizabeth Joan Elliott was born in April and joins proud parents KT and



Drew, and big sister Cecilia. Congratulations and welcome!

Evolutions is published twice yearly by the Department of Biology at The College of New Jersey.

Helen Kull, Editor

Bio Students Garner a Wealth of Honors

The Biology Department is perennially proud of all of its students, and the achievements they attain. This year in particular, though, seems to have a wealth of awards and commendations being made to our students. Thus we are especially pleased to share these additional honors, and to celebrate these extraordinary students.

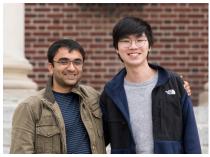


Photo credit: Lauren H. Adams, TCNJ Staff Photographer

Goldwater Scholars — Bio majors Aaron Lee '20 and Avi Shah '21 (above) were recently named as two of 496 students nationwide to earn 2019 Goldwater Scholarships, one of the most prestigious honors for undergraduate science, math and engineering students. Given to sophomores and juniors who show unique promise and plan to pursue research careers, the prize includes up to \$7,500 towards academic expenses. Lee, a research student of Dr. Clement's, is looking to earn a PhD in plant evolutionary biology and to work with large amounts of data to better understand biodiversity. Shah, who did research in Dr. Nayak's lab, is interested in neuroscience, particularly at the cellular level. He hopes to earn a MD/PhD and investigate microneuro-genomics.

NSF Graduate Research
Fellowship— Biology major Ahmed
Mahmoud '19 was one of two TCNJ
seniors to be awarded a Graduate
Research Fellowship by the National
Science Foundation. A researcher in
Dr. Dickinson's lab, Mahmoud will

be attending Weill Cornell Medical College's program in pharmacology, and hopes to pursue a career in drug creation and development. Senior biology major **Adriana Mendizabal** received an Honorable Mention as well.

Phi Beta Kappa and Phi Kapa Phi In March, 24 Bio majors of 78 students campus-wide were invited to become members of Phi Beta Kappa. A similar number of Bio majors were invited to join Phi Kappa Phi. These outstanding students demonstrate a love of learning and a commitment to excellence. Congratulations!

Departmental Honors

Two students chose to engage in advanced research and to



graduate with Departmental Honors in Biology, having done a minimum of three semesters of research, and written and defended a thesis orally in front of a committee. This year, Evelyn Kulesza and Matthew Fertakos, both from Dr. Wendy Clement's lab, successfully presented and defended their honors theses, and are graduating with departmental honors.

Other Prizes— Matthew Fertakos was also awarded the 2019 American Society of Plant Taxonomists' Undergraduate Research Prize. Sai Batchu won Third Prize in the Torrey Botanical Society Undergraduate Student Research Fellowships competition. Congratulations to both young men!

SCHOLARSHIP

Research Presentations

Tri-Beta Convention

Aaron Lee, Namal Seneviratne, and **Bhumi Shah** attended and presented research at the Tri-Beta Northeast District Convention in Bloomsburg, PA on Mar 23 with **Dr. Leeann Thornton**.

Ecology Research Symposium

Dr. Leeann Thornton accompanied three students to the William Paterson Undergraduate Research Symposium in Ecology held in Wayne, NJ on April 6. **Niha Mamillapalli, Reema Shah**, and **Madhav Patel** presented research, and Mr. Patel was awarded a 2nd Place Prize for his presentation.

Lehigh Valley Ecology Symposium

Evan Cruz, Katelyn Hode, Abdul Kazi, Alina Osborn, and Allison Stapel, research students in the lab of Dr. Howard Reinert, attended and presented their research at LVEES (Lehigh Valley Ecology and Evolution Symposium), held at Lafayette College in Easton, PA on April 13.

Mid-Atlantic Ecological Society

Bowie State University was the location for the 2019 Conference of the Mid-Atlantic Chapter of the Ecological Society of America, held in April. Students Lucas Pick, Elena Nattes, Daniela Nattes, Sai Batchu, Claire Paul, Devyani Mishra, and Elizabeth Nemec — attended with Dr. Janet Morrison, and presented the results of current research. Daniela Nattes won 2nd Place for the best student poster.

ASBMB Conference

Dr. Tracy Kress, accompanied by three of her research students, Jessica Kopew, Adriana Mendizabal, and Larry Palfini, as well as her lab technician Michelle Lin, traveled to Orlando FL in April to attend and present original research at the American Society for Biochemistry and Molecular Biology's annual meeting.



Students from Dr. Gary Dickinson's lab attended the 48th international Benthic Ecology Meeting in St. John's, Newfoundland, Canada in April, where they gave seven different presentations on research related to the effects of ocean acidification on organisms.

Experimental Biology Conference

Dr. Jeffery Erickson and research student **Jack Trubiano** traveled to the Experimental Biology Annual Meeting and Conference held in Orlando, FL in April, where they presented research and attended research presentations.

Freshwater Mollusk Conference

San Antonio, TX was the site of this year's Freshwater Mollusk
Conservation Society Conference. Dr.
Curt Elderkin and two of his research students, Erica Levin and Marisa
Pugliese, presented their work at the conference, and attended other talks.

American Transplant Congress

Amar Desai will present research done on transplant markers at Brigham and Women's Hospital, Harvard Medical School, at the American Transplant Congress in Boston in June.

Evolution 2019

Nicole Tineo, a graduating research student in Dr. Clement's lab, will present her capstone thesis at Evolution 2019 in Providence, RI this June, earning a travel award to do so.

James R. Jewett Prize

Dr. Wendy Clement has been awarded the 2019 James R. Jewett Prize of the Arnold Arboretum of Harvard University to do research while on sabbatical during the 2019/2020 academic year. Her work will investigate "Floral and scent evolution in honeysuckles: a trait-driven approach to detecting evolutionary shifts in pollination strategies in *Lonicera* (Caprifoliaceae)."

Publications

Steffel BV, Smith KE, Dickinson GH, Flannery JA, *Baran KA, Rosen MN, McClintock JB, and Aronson RB. Characterization of the exoskeleton of the Antarctic king crab *Paralomis birsteini*. Invertebrate Biology, *in press.* *denotes TCNJ student

Alumni Updates

Gregory Way (Biology '11), recently earned his PhD in Genomics and Computational Biology from the University of Pennsylvania. His work uses machine learning to study cancer. Congratulations!

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MUSE 2019

The 2019 Mentored Undergraduate Summer Experience (MUSE) runs on TCNJ campus June 3—July 26. This year, nine of our labs will be active with research students gaining critical research skills, and contributing to work at TCNJ.



Notes From Down Under

As you might imagine, Australia is a popular destination for students to study abroad. The weather is pleasant. English is spoken. And for biology majors, the unique flora, fauna, and ecosystems are an obvious draw. Visiting "down under" was a bucket list item for me, so you can imagine my excitement at being presented the opportunity to visit Victoria and New South Wales this April as part of a site visit by the Center for Global Engagement. Over the course of a week, our small delegation met with representatives on the campuses of Victoria University, La Trobe University,

University of Melbourne, and University of Newcastle, toured student housing in Melbourne, visited with TCNJ students studying abroad, and participated in study abroad fairs, hoping to lure some Australian students to TCNJ. It was a fantastic trip, and I invite any student interested in studying abroad in Australia to stop by my office for a chat.

~ Dr. Keith Pecor

A napping koala

