Local Impact, Global Reach

PART 2
A Message from the Chancellor

I am proud that the pages of this magazine contain so many stories worth celebrating. Part two of “Local Impact, Global Reach” continues to explore the multitude of ways in which Rutgers–Camden faculty, staff, students, and alumni have embodied excellence in our community and far beyond, making a difference on an international scale.

Rutgers–Camden’s international initiatives remain front-and-center in this issue of the magazine; our cover story dives into the transformative, interdisciplinary partnership that is taking place between our university and Universidad Nacional de Asunción in Paraguay. This is an incredible story in which two institutions of higher learning, located oceans apart and appearing so different on the surface, dig deeper to discover how much they have to learn from each other.

A story highlighting the stellar work of the Walter Rand Institute, which has fought for South Jersey residents’ rights and quality of life for over two decades, demonstrates just how crucial our faculty is to the continued flourishing of our community. Also featured in this issue is the heartrending story of one faculty member’s determined efforts to evacuate her mother from a war-torn home in Ukraine to and ensure a safe stateside reunion.

Our faculty’s research stands out among the pages of this magazine, from one professor’s efforts to increase on-campus diversity in STEM to another’s ingenious efforts to mitigate the world’s water crisis with an unlikely helper: a small African beetle. Our students and alumni also stand tall, from one woman’s quest to make sure figures of Camden’s African American history are remembered, to another making her presence felt in the halls of power at the Department of Homeland Security.

These stories come are the product of an academic year that has seen Rutgers–Camden overcome the adversity of a global pandemic to reach new heights. I continue to stand in awe of the individuals who make our university an unstoppable force in academics, civic engagement, athletics, and so much more. I invite you to join me in celebrating these remarkable people and their stories by reading through the pages of this magazine. I hope you will enjoy getting to know them more deeply and discovering all we have to offer each other.

Antonio D. Tillis, Ph.D.
Chancellor
A Message From the Publisher

Enjoy the latest issue of Rutgers University–Camden Magazine: Local Impact, Global Reach Part II. When the Office of Marketing and Communications published the inaugural digital issue of Rutgers University–Camden Magazine, I knew there were many more stories to tell of our university’s success at the local, national, and international levels. Rutgers–Camden faculty, staff, students, alumni, and community partners contribute so much to our success. It is an honor to share these amazing stories of what they have accomplished thus far. We have added a few new features, including “On Cooper Street” and “Schools Leading the Way” that convey the vibrant atmosphere and unshakeable spirit of our campus!

My team and I are committed to telling these incredible narratives not only in our magazine but also throughout the year. We regularly share research highlights, faculty success stories, and student/alumni achievements at camden.rutgers.edu/news and as part of the Rutgers Today website and email newsletter. Stay tuned for more reporting, topical videos, and other multimedia initiatives spotlighting our faculty’s research and expertise on trending topics, along with the achievements of current and former students.

Additionally, in January 2023, we launched a billboard campaign that continues to elevate the visibility of Rutgers University in Camden across the region. I hope you caught a glimpse of the university’s billboard proudly sitting at the summit of the Ben Franklin Bridge, along with the beautiful, new visual transformation to the Law School bridge, and the pride words that now adorn the Campus Center. Rutgers–Camden also joined in the March Madness of this year’s NCAA Men’s and Women’s Basketball Championships, running television commercials that were seen by over 1.2 million viewers. I invite you to view the 30-second commercial below:

Thank you for your interest in, and support of, Rutgers–Camden. I look forward to sharing more news with you in the weeks and months ahead!

TONI MOONEY SMITH, MSC
Inaugural Vice Chancellor of Marketing and Communications

Rutgers University–Camden Rises in “U.S. News & World Report” Rankings

Rutgers–Camden ranked among the top 70 public universities, top 150 national universities, and top 100 universities for veterans.

#61  Top Public Universities
     Up From #67

#127 National Universities
     Up From #148

#83  Best Colleges for Veterans
     Up From #86

Rutgers–Camden’s doctorate of nursing practice (DNP) and public affairs programs ranked in the top 100 of U.S. News & World Report’s Best Graduate Programs.

#69  Doctor of Nursing Practice (DNP)

#85  Public Affairs Program
Anticipation mounted in the Rutgers–Camden Athletic and Fitness Center as the House Band launched into the final bars of Adele’s “Rolling in the Deep.” It was September 8, the afternoon of the Fall Convocation, and although the event had yet to officially start, members of the campus community could sense they were in for something special. Chancellor Antonio D. Tillis made it his personal mission to bring Convocation to Camden after witnessing its success in New Brunswick and Newark, but not as a mere imitation of those traditions. Chancellor Tillis’ image of Convocation bore the stamp of his visionary leadership and Rutgers–Camden’s singular spirit, both of which were on display during the ceremony.

“Our beloved community is a place where you will always belong—no matter where you have been in life or where you plan to go,” Chancellor Tillis said. The crowd cheered when he urged new students to “go to a Scarlet Raptors basketball, soccer, or baseball game and enjoy a hot dog as you watch us win.”

Chancellor Tillis made a special request of the House Band before he stepped up to the podium: A rendition of Kool & the Gang’s “Celebration,” which captured both the festive atmosphere of the occasion and Chancellor Tillis’s propensity for celebrating faculty, staff, students, and his community. Convocation is just one example of the many traditions he has introduced to Rutgers–Camden, born out of a belief that celebrating success is a key to replicating it.

The university community observed a moment of silence in a solemn, reverent Veterans Day ceremony, and the slate of veteran-focused campus events continued throughout the following week. An annual veterans luncheon was held Tuesday, November 15, in which alumnus and U.S. Marine Corps veteran Mark Bodrog served as the keynote speaker and several students received awards from the Office of Military & Veterans Affairs. A meet-and-greet for active and former servicemembers followed later in the week, along with a community-service event that saw faculty, staff, and students sign cards for military members deployed overseas.

The week-long celebration of veterans was emblematic of Rutgers–Camden’s overall approach to educating and supporting the military community: ambitious in scope and committed to going above and beyond. Most important, the new tradition has educated the campus community about how they can get involved and support veterans in the transition from military service to academic life.

New Traditions, New Energy

Celebrating the Service and Sacrifices of Veterans

In November 2022, Rutgers–Camden observed a week-long celebration of veterans for the second straight year. An extension of the university’s customary Veterans Day activities, the week-long celebration reflected Rutgers–Camden’s position in the top 100 of U.S. News & World Report’s Best Colleges for Veterans rankings. Named New Jersey’s first Purple Heart University in 2016, Rutgers–Camden counts over 400 veterans among its student body and thousands more among faculty, staff, and alumni.
White Coats Signify New Beginnings for Doctorate of Nursing Practice Students

Graduates of the Doctorate of Nursing Practice (DNP) program formally celebrated the beginning of their clinical hours with a white-coat ceremony in September.

“We are creating new traditions,” said Interim Provost Donna Nickitas, former dean of the School of Nursing. “It’s a symbol that sets expectations for students’ personal growth and commitment to make a difference.”

Wearing the iconic symbol of their new profession, Class of 2022 graduates convened with friends and family to mark the culmination of a years-long, intensive program of study. School of Nursing faculty congratulated the cohort for their level of commitment, noting that the sacrifices they had made during their training would continue throughout their careers.

“It’s a message to their families,” said Marie O’Toole, interim dean of the School of Nursing–Camden. “This involves some sacrifice, and that they’ll need to support them.”

Rallying for the Scarlet Raptors

The Rutgers–Camden men’s and women’s basketball teams helped the university tip off a new tradition at the inaugural Scarlet Raptors Rally on February 8. Over 200 attendees packed the Athletic and Fitness Center, enjoying free food and entertainment in a carnival-like atmosphere before the dawn of a new rivalry between Rutgers–Camden and Kean University. Students snagged giveaways, snapped selfies in a university-themed photo booth, and tried their luck for door prizes like a $200 gift card, a Rutgers spirit basket, and even a free reserved parking spot on campus.

Alumnus William Mead CCAS’79 GSC’88, a Vietnam War veteran, performed the national anthem prior to the women’s game. Senior Jalissa Pitts, just the 15th member of Rutgers–Camden women’s basketball’s 1,000-Point Club, led the way for the Scarlet Raptors, racking up 25 points and seven rebounds while playing all 40 minutes of the game.

The men’s contest followed, with even more spectators filling the stands to witness a late-night clash. Sophomore Eric Benjamin led Rutgers–Camden with 17 points, and the team’s leading scorer on the season, senior Cameron Downs, followed close behind with 16 points and four rebounds. Although the Scarlet Raptors lost both games, the event set a winning tone for future editions of the rivalry, as fans went home with prizes, a boost in school spirit, and plenty of lasting memories.
Introducing New Leadership

SANDRA RICHTERMEYER  
Executive Vice Chancellor for Academic Affairs and Provost

Sandra Richtermeyer has been named executive vice chancellor for academic affairs and provost and will enter the role on June 14, 2023. She will oversee the development and implementation of academic programs, ensuring the quality and growth of Rutgers–Camden’s academic enterprise. She will also serve as the top advisor to Chancellor Antonio D. Tillis on academic matters and work in conjunction with the deans to enhance the academic and research reputations of Rutgers–Camden. Richtermeyer brings more than 25 years of higher education experience and more than 12 years in academic leadership in her new role. Prior to joining Rutgers–Camden, Richtermeyer served as the dean of the Manning School of Business at the University of Massachusetts Lowell for the last six years. As dean, she was responsible for one of the nation’s leading business schools, with more than 2,500 undergraduates, 1,500 graduate students, and 77 faculty members. During her tenure, she increased the school’s enrollment and graduation rates while elevating awareness and participation in diversity and inclusion initiatives among faculty, staff, and students. Richtermeyer holds a doctoral degree in accounting and an M.B.A. from the University of Colorado, a master’s degree in information systems from the University of Colorado Denver, and a bachelor’s degree in management information systems and accounting from the University of Wyoming.

JOHN GRIFFIN  
Dean, Faculty of Arts and Sciences

John Griffin, an esteemed higher education leader and scholar, became dean of the Rutgers–Camden Faculty of Arts and Sciences, effective on July 1, 2022. As dean, Griffin leads the growth of Rutgers–Camden’s largest academic unit, which enrolls 2,462 undergraduate and 561 graduate students in 25 bachelor’s degree-granting programs and in 24 master’s and Ph.D. programs. He formerly served as the senior associate provost at Clemson University, where he was also a professor of biology. As a member of Clemson’s leadership team, Griffin played a collaborative role in the development and implementation of the ClemsonForward strategic plan, which includes several key initiatives focused on increasing diversity and inclusion across the campus. He also spearheaded initiatives that led to the reclassification of the university from Carnegie R2 to R1, while reaffirming the university’s commitment to academic excellence and community engagement. Griffin brings to his new role a strong belief in the power of the liberal arts and sciences as the foundational center of a university and the student experience. Griffin earned a bachelor’s degree in biology from the University of North Carolina Wilmington in 1988. He earned a master’s degree in physiology in 1991 and a doctoral degree in physiology in 1993, both from The Ohio State University.

J. ROBERT “BOB” McKEE  
Senior Vice Chancellor for Finance and Administration–Designate

Bob McKee joined Rutgers University in Camden as senior vice chancellor for finance and administration–designate on January 9, 2023. He is now shadowing outgoing Senior Vice Chancellor for Finance and Administration Larry Gaines as part of his transition into the role on August 1, 2023, upon Senior Vice Chancellor Gaines’s retirement. In this capacity, McKee will be responsible for all aspects of budgetary planning, construction of new facilities, and upgrades to existing buildings. He will direct the operations of the budget office, financial services, facilities, human resources, information technology, and the Research Office. He will also work closely with Institutional Planning and Operations on facilities and the Rutgers University Police Department. McKee has more than 25 years of professional experience in accounting, business, finance, and business development in the private sector, government, and higher education. He most recently served as vice president of finance and administration at Antioch College, where he led a transition of business models that increased and diversified the college’s revenue. As an international hands-on leader in emergency response and crisis management, he was deployed on disaster-response teams at the World Trade Center on 9/11, the Columbia Space Shuttle disaster, Hurricane Katrina, and the 2010 Haiti earthquake. He is soon to complete a doctorate in leadership, management, and policy from New Jersey City University. He holds an M.B.A. specializing in higher education from the University of Phoenix and a bachelor’s degree in management from Antioch College.

JOHANNA BOND  
Dean, Rutgers Law School

Johanna Bond was appointed as the inaugural dean of Rutgers Law School’s Camden and Newark campuses, effective July 3, 2023. Bond’s appointment ushers in a new era for Rutgers Law School, which transitioned from a co-dean leadership to a single-leader structure. She will now work with the entire Rutgers Law School community to elevate the school’s national prominence. A New Jersey native, Bond joins Rutgers after serving as the Sydney and Frances Lewis Professor of Law and previously associate dean for academic affairs in the School of Law at Washington and Lee University. She also served as an affiliate faculty member in the Africana Studies and the Women’s, Gender, and Sexuality Studies programs at Washington and Lee. As a tenured professor, Bond’s scholarship focuses on women’s rights in sub-Saharan Africa, women’s rights within the United Nations, and the application of critical race feminism in the context of human rights. Her most recent book, Global Intersectionality and Contemporary Human Rights, is the culmination of more than two decades of scholarship related to intersectionality in global human rights. She is a recipient of the Lewis Prize for Excellence in Legal Scholarship and the Ethan Allen Faculty Award for Scholarship, and was twice named a Fulbright Scholar. She received an L.L.M. from Georgetown University Law Center, a juris doctor from University of Minnesota Law School, a master of arts degree in public policy from the Humphrey School of Public Affairs at the University of Minnesota, and a bachelor of arts degree in political science from Colorado College.
Thomas S. Risch will join the university as vice chancellor for research, effective June 12, 2023. Risch will champion research collaborations within Rutgers–Camden and across Rutgers, as well as with other research institutions, increasing the impact and recognition of the university’s research enterprise. Risch brings more than 20 years of higher education experience to Rutgers–Camden; he currently serves as vice provost for research and technology transfer at Arkansas State University (ASU)—a Carnegie R2 institution—where he is responsible for the strategy and implementation of a highly visible campaign to promote the growth of research funding and scholarly productivity. He is also the executive director of ASU’s Arkansas Biosciences Institute, where he oversees research in various areas, including genomics, radioactive materials, and health sciences. Risch holds a doctoral degree in zoology from Auburn University, a master of science degree in wildlife management from Frostburg State University, and a bachelor of science degree in environmental studies from Stockton State College (now Stockton University).

Kevin Lutz, a 16-year veteran of the Camden County Police Department and former U.S. Marine, was sworn in as Rutgers University–Camden chief of police on August 1. Lutz comes to Rutgers–Camden with a wealth of law enforcement leadership experience, having attained the rank of captain with the Camden County Police Department in 2019. He has established a national reputation as an expert in police reform, working with organizations such as the New Jersey Attorney General’s Office, the U.S. Department of Justice, and the ACLU to promote improved organizational culture, appropriate use of force, and impartiality in modern policing institutions. After four years of service in the U.S. Marines, during which he earned the rank of lance corporal, Lutz joined the Oaklyn Police Department as a patrol officer. He came to Camden in 2006, reaching the ranks of sergeant in 2013 and lieutenant in 2015. In addition to numerous awards for on-duty bravery, heroism, and meritorious service, Lutz amassed a distinguished list of professional certifications and accomplishments related to officer accountability, mental health awareness, refugee services, and prevention of deadly-force incidents.

Daniel Lee was promoted to director of the Rutgers–Camden Wellness Center, where he worked for more than ten years as a part-time psychologist and the lead professional running the center’s Learning Disability Testing and Evaluation program, in conjunction with the university’s offices of Disability Services and Dean of Students. Lee joins Rutgers–Camden full time with more than 25 years experience in supervision, counseling, consulting, wellness, and administration. He has been a sought-after consultant for school districts, nonprofit organizations, and corporations, and brings a breadth of knowledge of Rutgers-Camden students and their lived experiences to his new role. Lee holds a doctorate in clinical psychology from Immaculata University, a post-doctoral certification in school psychology, and a pending master’s degree in clinical psychopharmacology from Fairleigh Dickinson University. He also holds bachelor of science and master of education degrees from Temple University. He served as president of the New Jersey Psychological Association from 2020-2022.

Nyssa Taylor joins Rutgers Law School as the managing staff attorney of the New Jersey Innocence Project (NJIP), which represents incarcerated New Jersey residents who have been wrongly convicted of crimes and seek exoneration. She formerly served as the criminal justice strategic litigation and policy counsel for the American Civil Liberties Union of Pennsylvania, where she developed class-action lawsuits to defend civil liberties and take on systemic injustice. She also wrote reports highlighting issues of statewide importance and provided public testimony before local and state legislative bodies. Taylor also formerly served as the Title IX manager for Rowan University from 2016 through 2017, and for more than a decade as an assistant public defender at the Defender Association of Philadelphia. In 2013, the Defender Association awarded Taylor the Clarence Earl Gideon Award for Outstanding Service, and the Pennsylvania Association of Criminal Defense Lawyers awarded her the Bernard L. Siegel Memorial Award for Service. In addition, Taylor taught trial skills as a trial team coach and adjunct professor at Temple University James E. Beasley School of Law, where she earned her juris doctorate in 2005. She earned her bachelor’s degree from Swarthmore College in 2000.

Charles A. “Chuck” Wright III was named vice president for development and vice chancellor for advancement. Wright will join the Rutgers University Foundation on May 15, 2023, where he will lead the advancement team in Camden and serve on the Executive Leadership Team. With decades of experience in higher education advancement and nonprofit development, Wright is a proven leader with solid relationships in Philadelphia and South Jersey. Most recently, he served as chief development officer for Philabundance, where he drove the Philadelphia-based hunger relief organization to exceed its annual fundraising goal with months to spare in the fiscal year. Throughout his career, Wright has served in leadership roles in higher education fundraising, including at The College of New Jersey, Peirce College, Villanova University, and Widener University. He has been recognized for his contributions to diversity, equity, and inclusion and was honored by the CASE District II Board with the creation of the Charles A. Wright Opportunity and Inclusion Award. Wright holds a bachelor of arts degree in general arts from Villanova University.

Nyssa Taylor joins Rutgers–Camden full time as the lead professional and adjunct professor at Temple University James E. Beasley School of Law, where she earned her juris doctorate in 2005. She earned her bachelor’s degree from Swarthmore College in 2000.

Kevin Lutz
Rutgers–Camden Chief of Police

Charles A. Wright III
Vice President for Development and Vice Chancellor for Advancement

Daniel Lee
Director, Rutgers–Camden Wellness

Nyssa Taylor
New Jersey Innocence Project (NJIP)
Rutgers University–Camden Welcomes New Faculty for 2022-23 Academic Year

Rutgers University–Camden Chancellor Antonio D. Tillis is pleased to extend a warm welcome from the entire Rutgers–Camden community to the educators and scholars joining the faculty. Each of Rutgers–Camden’s four schools has multiple representatives in this year’s class of new faculty. These individuals have become part of the Rutgers–Camden faculty following highly competitive selection processes, in which they demonstrated exceptional standards of scholarship, research, and professional experience.

“This year’s new faculty cohort represents a vastly diverse range of identities, backgrounds, perspectives, and areas of interest,” Chancellor Tillis said. “Through their intellect and quality of work, they have proven they belong at our university, and I wish them immeasurable success on their Rutgers–Camden journeys.”

College of Arts and Sciences

**Valerie Adams-Bass**

Assistant Professor

Valerie Adams-Bass is an assistant professor in the Department of Childhood Studies. She earned her doctorate in interdisciplinary studies from the University of Pennsylvania and her master’s degree in urban education from Temple University. Her research examines how race influences the identity development process, socialization, and academic outcomes of Black children and youth. She is especially interested in how Black adolescents interpret negative media stereotypes and whether the messages presented are internalized or buffered as a result of racial socialization experiences. Adams-Bass has lived and taught in Namibia as a volunteer teacher and served as a Rotary Ambassador Scholar in South Africa, where she participated in a community-based research project with South African youth. She has presented at numerous professional conferences and regularly trains youth development professionals to use culturally relevant practices when working with Black children and youth.

**Brian Corbett**

Assistant Professor

Brian Corbett is an assistant professor in the Department of Biology. He earned his doctorate in neuroscience from Thomas Jefferson University and his bachelor’s degree in biology from The College of New Jersey. His doctoral work focused on how seizure-induced epigenetic mechanisms contribute to memory deficits in a mouse model of Alzheimer’s disease. Upon graduating, he joined the Children’s Hospital of Philadelphia, where he studied the neural networks and molecular mechanisms underlying stress resilience and habituation. For a separate project, Corbett studied how plasticity-related genes and neural circuits regulate stress habituation, the process by which the stress response diminishes following subsequent exposures to the same stressor.

**Eveling Hondros**

Assistant Teaching Professor

Eveling Hondros is an assistant teaching professor in the Department of World Languages and Cultures. She received her master’s degree in teaching Spanish and her bachelor’s degree in Spanish from Rutgers–Camden, where she has served as a lecturer since 2015. She is a certified “trainer of trainers” for The Community Interpreter and is the coordinator of the Spanish for the health professions certificate program at Rutgers–Camden.
Hunter King is an assistant professor in the Department of Physics. He holds a doctorate in physics from the University of Massachusetts Amherst, a master’s degree in physics from Bogazici University in Istanbul, and a bachelor’s degree in physics from the University of Massachusetts Amherst. His research utilizes physics to answer questions related to the evolution of organisms and investigates diverse subjects including the granular physics of bird nests, fluid dynamics of biological fog capture, thermodynamics of sorbent-based vapor harvesting, and dynamics of adhesive underwater contact between soft bodies. He uses optical and mechanical instrumentation and pointed table-top experiments, and collaborates with theory and computation groups, as well as biologists and architects, to approach these interdisciplinary problems. His work has been featured in The New York Times, The Boston Globe, Harvard Magazine, Science, Business Insider, and more.

Randy Mershon is an assistant professor in the Department of Mathematical Sciences. He earned his master’s and bachelor’s degrees in mathematics from Rutgers–Camden. His research focuses on mathematics education, and he returned to Rutgers–Camden in 2019 to serve as a teaching instructor for the Department of Mathematical Sciences.

Lisa Lewis is a professor and senior associate dean for diversity, equity, and inclusion at the School of Nursing–Camden. She earned her doctorate in nursing from the University of Missouri-Columbia, her master’s degree in nursing education from New York University, and her bachelor’s degree in nursing from Syracuse University. An expert in cardiovascular health disparities, she conducts research that lies at the intersection of complex sociocultural factors, treatment adherence, and culturally relevant and gender-appropriate self-management interventions for hypertensive Blacks. She is a fellow of the American Academy of Nursing and the American Heart Association as well as a recipient of the 2019 Christian R. and Mary F. Lindback Award for Distinguished Teaching at the University of Pennsylvania.

Nathaniel Wright is an associate professor in the Department of Policy and Public Administration. He received his doctorate in public administration from the University of Kansas and his master’s and bachelor’s degrees in public administration from Binghamton University. His research portfolio is a diverse nexus of social science and urban studies research, with emphasis on community-based nonprofit organizations and sustainable development. His research centers on the role that social advocacy organizations play in creating sustainable neighborhoods and on issues related to nonprofit performance and accountability. Wright’s work has appeared in leading nonprofit and urban journals such as Nonprofit Voluntary Sector Quarterly, Journal of Urban Affairs, American Review of Public Administration, and Sustainability. He is also coeditor of a book titled “Performance and Public Value in the Hollow State: Assessing Government–Nonprofit Partnerships.”

Joseph Tariman is an associate professor and associate dean for clinical innovation and evidence-based practice at the School of Nursing–Camden. He received his doctorate in nursing science from the University of Washington, his master’s degree in business administration from DePaul University, his master’s degree in nursing from Cebu Doctors’ University, and his bachelor’s degree in nursing from the University of the Visayas. Tariman specializes in myeloma patient care, and his research centers on quality-of-life issues, hematopoietic stem cell transplantation, clinical drug trials, novel therapies, management of treatment-related side effects, cancer survivorship, health maintenance, cancer treatment decision-making, and treatment outcomes measurement. He has an extensive portfolio of publications, lectures, and presentations on myeloma-related topics.
Deirdre Conroy is an assistant teaching professor in the School of Nursing–Camden. She holds a doctorate in nursing practice from Rutgers–Camden, master’s and bachelor’s degrees in nursing from Stockton University, and an associate’s degree in nursing from Cumberland County College. Conroy’s academic interests include teaching and learning for nurses, clinical practices of the advanced practice nurse, and transitioning students to professional practice. Her doctorate work focused on educating providers on evidence-based practices in caring for high-risk, underserved populations. She has over 30 years of experience as a nurse practitioner and educator with clinical expertise in community healthcare.

Thomas Dahan is an assistant teaching professor in the School of Nursing–Camden. He earned his doctorate in public affairs from Rutgers–Camden and his master's degree in teaching, learning and curriculum from Drexel University. His research interests include higher education service-learning and civic engagement as well as college student success. Since 2019, he has served as the treasurer of the American Educational Research Association’s Special Interest Group for Community Engagement and Experiential Learning. Previously, he was the chair of the New Jersey Association for Institutional Research.

Margaret Gray is an associate teaching professor in the School of Nursing–Camden. She received her doctorate in education from the University of Alabama, her master’s degree in nursing from Stockton University, her master’s degree in education from Georgian Court University, and her bachelor’s degree in nursing from the University of Delaware. She is certified as an advanced practice nurse, family nurse practitioner, school nurse, and substance awareness coordinator. An expert in pediatrics and gerontology, Gray has presented her research at professional conferences across the state and country. She has over 15 years of primary-care experience in the southern Ocean County region and maintains an active clinical practice.

Can Kucukgul is an assistant professor of management at Rutgers School of Business–Camden. He received his doctorate in operations management from the University of Texas at Dallas and his master’s degree in industrial engineering and his bachelor’s degree in computer science from Sabanci University. His research lies at the intersection of operations management and marketing, with a particular focus on revenue management applications of online platforms. He is also interested in solving practically relevant problems with consumer privacy concerns. Kucukgul’s research has been published in Management Science. In 2020, he was selected as the Best Ph.D. Student Teacher in the Jindal School of Management at the University of Texas at Dallas.

Tengfei Zhang is an assistant professor of finance in the School of Business–Camden. He received his doctorate in finance from Louisiana State University and his master’s degree in economics as well as his bachelor’s degree in management from Nanjing Agricultural University. His areas of research include empirical asset pricing, machine learning in finance, corporate culture, ESG, analysts, and financial technology. His research has been published in Journal of Financial and Quantitative Analysis, and he served as a postdoctoral research associate in the Centre for Endowment Asset Management at the Judge Business School at the University of Cambridge.
Leonore (Lee) Carpenter is an associate professor at Rutgers Law School in Camden. She earned her juris doctorate from the Temple University Beasley School of Law and her bachelor's degree in American studies from Rutgers University–New Brunswick. Her research—published in outlets such as Georgetown Law Journal and The Journal of Law and Social Change—primarily focuses on the role lawyers can play in creating meaningful social change, exploring legal ethics, public-interest lawyering, and social movements. She is the recipient of the 2018 Philadelphia Bar Association’s Cheryl Ingram Advocate for Justice Award and was included on the National LGBTQ+ Bar Association’s Best LGBTQ+ Attorneys Under 40 list in 2012.

Andrea Johnson is a visiting assistant professor at Rutgers Law School in Camden. She holds a juris doctorate from West Virginia University and a bachelor’s degree in business management from Marshall University. Johnson’s scholarship and teaching interests center on discrimination, bias, and identity, and how their intersections create legal barriers to compliance with civil rights and employment discrimination law. Her research focuses on ways in which individuals’ legal rights are impacted by society’s understanding of changing demographics, particularly culture’s conceptualization of race, ethnicity, “invisible” disability, gender, and sexual orientation. She joins Rutgers Law from West Virginia University College of Law, where she served as the inaugural fellow of the Fitzsimmons Center for Litigation and Advocacy. She also brings practice experience in workplace discrimination and civil rights litigation, as well as experience teaching legal analysis and writing.

Elenore Wade is an assistant professor at Rutgers Law School in Camden. She holds a juris doctorate from The George Washington University Law School. She joined Rutgers Law from the George Washington University Law School, where she was a visiting associate professor and Friedman Fellow in the Prisoner & Reentry Clinic, an intensive litigation clinic where students write and argue motions on behalf of prisoners seeking early release after decades of incarceration. While at George Washington, she also helped develop and teach in a racial justice reading group taught by the clinical faculty. She has prior experience as a staff attorney and Equal Justice Works Fellow at Bread for the City in Washington, D.C., where she focused on healthcare and welfare rights.

Margaret Zhang is a visiting assistant professor and an equity and inclusion fellow at Rutgers Law School in Camden. She earned her juris doctorate from the University of Pennsylvania Carey Law School and a bachelor’s degree in piano performance from the University of Michigan. Her research focuses on best practices for representing and advising employment and education discrimination plaintiffs, with a focus on pregnancy, parenting, and disability. Zhang previously served as the University of Pennsylvania Carey Law School’s interim associate director for equity and inclusion. She also advocated for pregnant and parenting people with the Women’s Law Project in Philadelphia, where she specialized in advancing and protecting pregnancy and lactation rights through individual client counseling and representation, policy advocacy, and community education.
Rutgers–Camden’s partnership with Universidad Nacional de Asunción (UNA) in Paraguay has blossomed due to the hard work of many.

BY DUSTIN PETZOLD
More than 4,500 miles separate Camden, N.J., from Asunción, Paraguay. To an outside observer, it might seem that the two cities—with an ocean, language barrier, and more than 10 hours’ worth of flights between them—share little in common. But Distinguished Professor of Public Policy Gloria Bonilla-Santiago’s eye for possibility and knack for innovation led to a strong bond between Rutgers University–Camden and Universidad Nacional de Asunción (UNA), whose leaders discovered the two institutions had plenty to learn from each other.

Today, the partnership between Rutgers–Camden and UNA is one of close collaboration and scholarly achievement. Back-and-forth trips have been transformative for leaders and faculty members of both universities, with more visits planned for the future. When faculty are not working together in person, long-distance modes of communication remain continuously open and active, with Rutgers–Camden researchers seizing the opportunity to enhance and broaden their scholarship.

Take, for example, David Salas-de la Cruz, associate professor of chemistry and director of the chemistry graduate program. A bilingual native of Puerto Rico, he researches sustainable building materials that can be used to replace the world’s plastics. With UNA, he participated in a study on forest restoration techniques in the small Paraguayan city of Yaguarón. Patrice Mareschal, an associate professor of public policy, contributed to a study on municipal management of ethical, equitable, and transparent elder care in Paraguay. Maureen Donaghy, an associate professor of political science who studies Latin America and developing nations, contributed her expertise to research on improving the retention and graduation rates of Paraguay’s indigenous students.

Each of those studies were published in the April 2022 edition of the Spanish-language journal *Investigaciones y estudios*, a landmark collaboration between Rutgers–Camden and UNA. It was the product of a partnership decades in the making, with Bonilla-Santiago’s bold scholarship and indomitable spirit at its core.
**A Solid Foundation**

**A Child Of the 1950s, Bonilla-Santiago and her family came to the United States from Puerto Rico. Operation Bootstrap—a series of federal initiatives aimed at growing the territory’s participation in industry—enabled her family to build a business through farming, and they traveled back and forth from South Jersey to Florida every six months. Although the family business was highly industrialized, education was at the forefront of Bonilla-Santiago’s upbringing.**

“My father believed education motivates you and is the only way out of poverty,” Bonilla-Santiago said. “He told me that if I worked hard and got good grades, I would go to college.”

Fatherly advice proved correct, and in Sociology 101, she learned about poverty for the first time. Her family had limited resources, but she never knew they were poor. Receiving a bird’s-eye view of poverty and its causes gave rise to an abundance of questions in her mind: Why are there so many gaps between the rich and the poor? What causes discrimination? And, knowing that academics were her path out of poverty, how could she help to transform education so that it could be more accessible to people like her?

Bonilla-Santiago’s interest in education intensified during her postdoctoral studies at Harvard in the 1980s, when she took note of two states that were making inroads in education reform: Michigan and Minnesota. Both were proving the effectiveness of the public charter school model, but with one key difference: Minnesota’s public charters were populated largely by wealthy white students, while Michigan attained success with integration. What was happening in Michigan was precisely the educational model she aimed to establish in Camden.

“In Camden, there was a pipeline from cradle to prison,” said Bonilla-Santiago, speaking of the city’s problems in the 1990s. “There was corruption, a 50 percent poverty rate, and a 45 percent dropout rate in public high schools.”

**From Camden to Paraguay**

**At the Urging Of** Leslie A. Bassett, who was appointed U.S. Ambassador to Paraguay in 2015 and shares Bonilla-Santiago’s New Jersey roots, Bonilla-Santiago applied for a Fulbright Award to do research in Paraguay. In discussions with Bassett, she realized that the educational model that has brought so much opportunity to thousands of K–12 students in Camden could very well do the same for Paraguayan students. But she had to put her hypothesis to the test. Serving as a Fulbright Specialist in Paraguay during the 2017–18 academic year allowed her to do exactly that.

“Like Camden did, Paraguay has a pipeline from cradle to prison and cradle to dropout,” she said. But, she said, in spite of its imperfections, Paraguay has a wealth of strengths and resources from which the Rutgers-Camden community could learn.

Part of Bonilla-Santiago’s goal was to investigate and test how the educational model she had perfected in Camden would translate to Paraguayan students, governmental systems, and culture.

“Three of Paraguay’s assets—its forests, waterfalls, and the largest hydroelectric power plant in the world—give it so much potential,” Bonilla-Santiago said. “Additionally, there is so much untapped Indigenous knowledge. Unfortunately, Paraguay’s university systems are largely the providence of the elite. Black and Indigenous populations are not able to share or contribute to their knowledge. Just as Rutgers University system once lacked diversity in race and class, UNA is experiencing the same lack of access. It is through opening access and closing gaps that educational institutions can reduce inequality.”
Bonilla-Santiago was able to travel back and forth regularly between Camden and Asunción, ensuring that her fellowship would do the maximum good possible for each university. In both locations, she had one foot in K–12 education and the other in higher education—as she has for most of her career.

**Transforming Education**

**BONILLA-SANTIAGO** recognized that more than just great public schools were needed for the Paraguay experiment to become a success. Paraguay also needed to experience a transformation of culture, wherein corruption was rooted out and ethics took hold. To this end, grant funding was used to establish Higher Education Center for Ethics, Equity, and Transparency (HECEET) in Paraguay.

Funded through a $3 million USAID grant, the project developed the country’s first behavior-change program that uses education as a tool to fight corruption. HECEET will spearhead a comprehensive educational training and capacity-building initiative for Paraguay targeted at public, government, legislative officials, young professionals and students, and education leaders. The initiative focuses on strengthening Paraguay’s capacity to build and sustain public structures that are grounded on transparency, ethics, and equity.

Just as Bonilla-Santiago worked to root out Camden’s corruption by making LEAP Academy available to the city’s students, UNA and Rutgers–Camden are acting in tandem to do the same. They are starting a tenure process and coming here to Camden to learn how to set it up and create a more equitable university. Chancellor Tillis has put about $200,000 into the collaboration.

“As we all know, the world is getting smaller and smaller,” Chancellor Tillis said. “The global world is upon us, and international exchanges are important not only for research faculty and our staff, but also to provide even more valuable experiences for our students.”

**ANTONIO D. TILLIS, Chancellor of Rutgers University–Camden**

The first step in putting HECEET’s mission into action was a call-to-action conference attended by 800 stakeholders from Rutgers–Camden and UNA. At this event, 200 ambassadors were trained on principles of democracy and civil society, and in turn were able to provide more training throughout Paraguay. In November 2021, a delegation from UNA traveled to Rutgers–Camden as the project officially got underway.

“Our university is dedicated to making changes, not only for our students, but for our local and national community,” said Zully Vera de Molinas, UNA’s rector (the equivalent of a university president).
A Partnership for the Future

IN JULY 2022, a Rutgers–Camden delegation featuring Chancellor Tillis and Bonilla-Santiago traveled to UNA. Both received honorary degrees from UNA, and the two universities signed a memorandum of understanding that formally cemented the partnership.

“They have been through so much with dictators and are trying to build democracy. We brought six departments together to help them publish for the first time,” Bonilla-Santiago said. “We will also have a yearly academic conference to keep the collaboration going.”

Bonilla-Santiago is already at work on the next phase of the collaboration, which is supported by an additional $4 million USAID grant. A delegation of 15 deans and the UNA rector came to Rutgers–Camden in January 2023; they met with Rutgers–Camden deans to begin learning how to build graduate programs in Paraguay. This phase also includes significant investment in Paraguay’s K–12 pipeline—an effort Bonilla-Santiago will lend her expertise to each step of the way.

“I see myself as a citizen of the world and a scholar of the world,” Bonilla-Santiago said. “Rutgers–Camden has been a critical part of my work; without them, I could not have done this. Rutgers has given me a forum to change and save lives. I’m loving what I’m doing. Do I get tired? Never. Universities are anchors of change, and Rutgers has incredible assets that faculty can utilize to change the world.”
Grace Brannigan has always liked solving puzzles.

In fact, the Rutgers University–Camden researcher said puzzles and their solutions are what science is all about. “I find it very satisfying to organize my understanding of a certain problem and use the power of science to solve it,” said Brannigan, associate professor of physics and director of the Center for Computational and Integrative Biology (CCIB) in the Camden College of Arts and Sciences.

With Brannigan’s boundless curiosity and love of science, she can turn seemingly routine experiences into inquisitive case studies. Taking medicine or a vaccine, for instance, becomes a moment to contemplate the drug’s journey through her body until it gets to the site where it acts on proteins. And doing dishes? That’s a chance to visualize the tiny aggregates that soap molecules create. “It’s the same principle that forms the membranes of cells or the envelope of a virus,” she exclaimed. “It all comes naturally. Most kids are born with a sense of curiosity, but scientists are people who have kept that part of their inner child alive.”

The C4L research team comprises nine scientists trained in computational genomics, evolutionary genomics, computational biophysics, and computational chemistry, who are collaborating on projects focused on the interface between genetics and proteins. Brannigan explained that there is a traditional lack of communication between scientists in these two fields, worsened by the shortcomings of currently available software.

“Even though DNA and proteins are closely linked within cells, these two communities of scientists don’t communicate very often,” said Brannigan, who serves as principal investigator on the project. “They have both produced an exciting but overwhelming amount of vital data. Software is a powerful method for sharing that data and bridging disciplinary divides.”

A principal component of C4L—and a primary reason for the NRT grant, Brannigan explained—is the program’s use of innovative and systematic approaches to develop a diverse group of 25 Ph.D. students over the course of the project, with an additional 15 Ph.D. and 15 master’s degree students expected, in uncommonly high proficiencies in software engineering and artificial intelligence.

This past fall, C4L welcomed the first 11 graduate students to the program, each with their own research project underway. Brannigan is excited to get to work. “It’s amazing to work with my colleagues who are as focused on training the students as developing software,” Brannigan said.

Just as importantly, Brannigan said, graduate students already have that same strong love of science and curiosity that she has, and it’s her job to help them discipline their thinking and scientific approach, without abandoning their curious inner child.

“They are learning to shift the way they think dramatically, but we don’t want them to change the way they feel about science,” Brannigan said. “I will do what I can to help protect their love of science from the challenges they face.”

Brannigan’s own love of science, she recalled, took root at an early age. In fact, her mother was a scientist who studied plant diseases for the U.S. Department of Agriculture. Brannigan, however, was drawn to physics for its dependence on order and consistency. While other sciences required a lot of memorization, she only had to remember several fundamental principles from which everything else followed. “No matter how chaotic my life was outside of the physics classroom, the science we learned inside the classroom was organized and consistent,” she said.
Brannigan also got her first taste of computers in the late 1980s when her father brought one home—a Macintosh 512K—and she made sure that it wound up in her bedroom. The computer soon became a companion, a video game console, a diary, an easel, and a continual source of puzzles. “What’s not to enjoy?” she asked. “My computer did what I told it to do, which felt really powerful as a kid.”

As Brannigan grew older, she thought about becoming a computer programmer, a writer, or a psychologist. She also dabbled in theater and considered becoming an actor. Then it dawned on her: A scientist can do all of those things.

Brannigan would then have a seminal moment during her high school years. She began taking antidepressants and was alarmed and frustrated to find that, although they are widely prescribed, scientists don’t really know how they work. She felt that if people had a better understanding of how the drugs act on proteins in the body, it would be easier to predict which antidepressants would work best for different people. She decided that it was just the right job for physics and its powerful, orderly approach.

“Physics isn’t just the study of black holes or high-energy particles. It’s a set of laws that all of nature has to obey, and that includes proteins,” Brannigan said. “When there is something confusing about proteins—or any other aspect of biology—physics can come to the rescue.”

Brannigan pursued a bachelor’s degree in physics at Reed College in Portland, Ore., with plans to enter a research career. With burgeoning interests in biological systems and physics, she discovered that biophysics—physics applied to biological systems—was a natural fit. Her undergraduate mentor thought she might enjoy studying proteins using computers and arranged an internship at the University of California–San Diego for Brannigan to do just that. “I guess he was right,” she said with a laugh.

Brannigan ran her first computer tests using simulated proteins and never looked back. She recalled that the tests were attempts to simulate the folding process of a certain protein. She watched in awe as the simulation with the protein started out as just a disordered string and folded into helices and other structures—all based on the laws of physics. “It felt very powerful,” she said.

Brannigan subsequently earned a Ph.D. in physics at the University of California–Santa Barbara and did postdoctoral work at the University of Pennsylvania. There, she worked closely with the anesthesiology department on a National Institutes of Health grant to study the side effects of anesthetics. The goal, she explained, was to understand how anesthetics work and to limit side effects. There are still drugs in development today that are informed in part by simulations Brannigan ran.

As her career has progressed, Brannigan has relished the advances in computer technology that have allowed for more complex simulations. Although computer programming is key to her research, she said, she still gets to fulfill her other aspirations—writing and presenting scientific stories; learning the psychology of how people learn, make decisions, and form habits in order to convince her colleagues and students; and standing up in front of a room to connect with a live audience, which is where her theater training comes into play.

Brannigan has never tired of solving puzzles and seeking new collaborations, including one that began where she least expected it: at home. She recalled that she and her husband, a genomicist, began sharing research during the height of the pandemic lockdown.

“We began to talk about our work; in a way, we had to. After all, he was the colleague in my house,” Brannigan said. “I recognized then that exciting collaborations were possible and knew the CCIB was the ideal center to further that engagement.”

The couple ended up partnering on a research project that centers on the connection between gene mutations in protein structures and diseases. Brannigan explained that mutations tend to occur within the body’s oily regions of proteins, which is typical of Mendelian diseases such as Alzheimer’s, Parkinson’s disease, and epilepsy. She and her team sequenced data to predict specific patterns in large strains of proteins in order to identify certain “suspects” of diseases. The researchers published their findings in a recent paper published in the Proceedings of the National Academy of Sciences.

Brannigan likewise never tires of training the next generation of puzzle solvers. “For me, the light bulb went off at an early age, but I see it in my students too,” she said. “It can be pretty enthralling work and, just like me, it’s not hard to get bitten by the bug.”

“Physics isn’t just the study of black holes or high-energy particles. It’s a set of laws that all of nature has to obey, and that includes proteins.”

GRACE BRANNIGAN, associate professor of physics and director of the Center for Computational and Integrative Biology
That biodiversity is increasingly threatened by pollution, habitat loss, increasing urbanization, overexploitation of resources, and climate change.

With the support of a five-year, $925,000 National Science Foundation CAREER grant, Angélica González, associate professor of biology at Rutgers University in Camden, is working to understand the causes and consequences of biodiversity loss.

“There is considerable scientific evidence that the loss of biodiversity will lead to subsequent declines in the functioning and stability of the Earth’s systems and the benefits that people derive from nature,” González said.
González leads the GonzálezLAB for Integrative Ecology at Rutgers–Camden, where her research is aimed at gaining a greater understanding of the underlying mechanisms of biodiversity patterns over time, how biodiversity is being affected by natural and human-induced environmental changes, and the likely ecological consequences of these changes.

“Biodiversity is essential for the functioning and persistence of our planet,” said González. “Biodiversity regulates the life-sustaining cycles needed for fresh water and nutrients, provides climate regulation, and produces the natural resources we rely on every day. Most of the benefits we obtain from nature are dependent on the diversity of species and their abundance within ecosystems.”

Currently, biodiversity is declining worldwide at rates never seen before in human history. Researchers have projected that one million plants and animals are at risk of extinction, many within the next several decades. The last time such a mass extinction event occurred was when the dinosaurs died off more than 65 million years ago. Additionally, research has shown that as much as 40 percent of Earth’s land surfaces are considered degraded. The rate of biodiversity loss is so serious that the World Economic Forum’s 2022 Global Risks Report ranked biodiversity loss as the third most severe threat humanity will face in the next 10 years.

“Biodiversity is being threatened by the increasing human footprint,” said González. “This is not only causing biodiversity loss but is also driving large shifts in the distribution, composition, and abundance of biodiversity. The biodiversity crisis is a major ecological, social, and economic problem.”

The current losses in biodiversity were the focus of a United Nations conference, COP15, held in Montreal in December. At that meeting, nearly 200 countries approved a sweeping agreement to protect 30 percent of the planet’s land and oceans by 2030 and to take a slew of other measures against biodiversity loss. “Although it is ambitious, those targets can be achieved if communities, governments, and scientists take transformative action,” said González. She emphasized the challenge will be implementing the processes needed to achieve the stated targets, as well as monitoring overall progress.

As a Hispanic woman working in ecology, González serves as a role model for other young women and minorities eager to pursue a dream in the sciences. She was the first female tenured professor in the history of the biology department at Rutgers–Camden, as well as the first tenured Latina professor.

According to the International Panel on Climate Change, only 33 percent of the authors of recent IPCC reports were women. The percentage of women inventors for environment-related technologies also remains low at just 13 percent, and the Nature Conservancy reports that less than 30 percent of researchers globally are women.

“I always noticed the lack of representation of female professors and role models,” said González. “This can affect young people’s career choices. Young people could unconsciously develop stereotypical images of STEM as a male-dominated realm.” González recalled finding her first female mentor as she was completing her postdoctoral work, and how inspiring and influential that relationship was for her as a young female scientist.

She encourages women interested in the sciences to have confidence and know that there are opportunities available to them in science and related fields. “I think one of the most important attributes is to have confidence in yourself and your own abilities,” said González. There will always be challenges, rejections, and setbacks, but learn from these and develop resilience. Be perseverant, and do not think that you struggle alone.”

Similarly, when it comes to biodiversity, González notes that it is essential to appreciate that everyday actions have an impact on the health of the planet and affect the ongoing fight to sustain current levels of biodiversity. “We need to understand that we, human beings, are part of the natural world along with the other species,” González said. “The species that coexist with us are part of nature and have the right to be on this planet as much as we do.”
Road Scholars
Rutgers–Camden Partners on World’s Largest Traffic Experiment to Test AI-Equipped Vehicles
Rutgers University–Camden Faculty of Arts and Sciences

n mid-November, 100 vehicles comprised of Nissan Rogues, Toyota RAV4s, and a Cadillac XT5 joined the morning rush hour on a stretch of Interstate 24 in Tennessee. Only this was no ordinary commute; the vehicles were equipped with artificial intelligence (AI)-driven adaptive cruise control and the stretch of highway was newly outfitted to serve as a testbed for intelligent transportation technologies.

The CIRCLES Consortium, comprising Rutgers University–Camden; the University of California, Berkeley; Vanderbilt University; and Temple University, collaborated with Nissan North America, Toyota, GM, and the Tennessee Department of Transportation, to test the effectiveness of an AI-powered cruise control system, designed to increase fuel savings and ease traffic.

The experiment—which ran from Nov. 14 to Nov. 18—aimed to replicate results from an earlier, closed-track study where a single autonomous vehicle smoothed human-caused traffic congestion, leading to a 40 percent fuel savings.

“This is the largest traffic experiment in traffic history with autonomous vehicles on a real highway,” said Benedetto Piccoli, the Joseph and Loretta Lopez Chair Professor of Mathematics at Rutgers–Camden and the university’s lead researcher on the project. “I am very proud of the role played by Rutgers–Camden’s team, ranging from control algorithm development to logistics.”

Rutgers University–Camden Chancellor Antonio D. Tillis applauded Rutgers–Camden’s researchers for their collaborative work on the CIRCLES Consortium. “Their research on autonomous innovation is emblematic of Rutgers–Camden’s mission to partner on initiatives that have a meaningful, real-world impact,” Tillis said. “Their work will ultimately benefit generations to come.”

Piccoli explained that, by trying to influence traffic using a small number of autonomous vehicles, you can smooth “stop-and-go waves” – cycles of accelerating and braking due to intersections or other irregularities – and improve the energy footprint. “These waves cause a lot of problems, including increased fuel consumption and decreased safety,” Piccoli said. “Removing those waves will improve driver experiences and save you a lot of money.”
According to the Rutgers–Camden researcher and his colleagues, even just one vehicle equipped with adaptive cruise control (ACC)—which has the ability to speed up and slow down a vehicle while maintaining a safe distance relative to the vehicle in front of it—could change the driving behavior of up to 20 surrounding cars. This in turn causes a positive ripple effect in day-to-day traffic. Piccoli further noted that if the ACC control affected fuel consumption of each vehicle by even a small percentage, it could make a major difference. “Imagine what the impact would be of reducing the energy of each vehicle by 10 percent multiplied by the entire fleet traveling on I-24,” Piccoli said. “You can imagine the numbers are very big.”

The CIRCLES Consortium researchers increased the scale of the testing and introduced real-world driving conditions to determine whether the improved traffic and fuel-economy outcomes measured in an earlier study continued to hold. The test was conducted on the recently opened I-24 MOTION testbed, the only real-world automotive testing environment of its kind in the world. Stretching for four miles just southeast of downtown Nashville, the smart highway is equipped with 300 4K digital sensors capable of logging 260,000 vehicle-miles of data per day.

The Rutgers–Camden team was particularly instrumental in designing the controllers—a modification of existing automotive cruise control present in many vehicles. The team also spent weeks in Nashville leading up to and during the experiment to facilitate the comprehensive logistical effort. This included helping to prepare the 100 vehicles with the modified cruise control, recruiting drivers, and releasing the vehicles safely in and out of traffic. Piccoli and his colleagues subsequently will spend the following several months analyzing data collected on the autonomous vehicles and their impact on the flow of traffic over the duration of the experiment.

On a personal level, McQuade said, participating in the CIRCLES project allowed him to develop his abilities to solve different types of problems and to manage a team, especially one representing a wide range of disciplines. Just as importantly, he discovered that intensive research could be collaborative and enjoyable. “I am so impressed at the CIRCLES Consortium’s ability to work together and have fun while doing it,” McQuade said.

The CIRCLES Consortium research is supported by the National Science Foundation, as well as by the U.S. Departments of Transportation and the U.S. Department of Energy. Support was also provided by Nissan North America, Toyota North America, and General Motors. In addition to their findings, Benedetto hopes that the OEMs involved in the project will be interested in exploring how their control algorithm can be introduced as a feature in future production. “Perhaps the project will also fuel more interest in partnerships that will bring additional traffic experiments and researchers to the Northeast region,” Piccoli said.

Sean McQuade, a 2019 Ph.D. graduate, and current postdoc of Rutgers–Camden’s Computational and Integrative Biology program, led the Scenarios team, which made key decisions on the experimental setup. This included deciding how often the team put cars on the road, where they entered the roadway, which lanes the cars should drive in, and when the drivers could take breaks. They also planned how the cars would approach the main testbed of highway I-24 in order to maximize the probability that the project goals would be met in live traffic. “This project is challenging because I’m used to solving problems with more constraints and less variability,” McQuade said.

McQuade further noted that years of planning went into the test. However, upon arriving in Nashville and driving the route himself, the team had to make a few changes. This included using a newly constructed intersection—a “diverging diamond on/off ramp” that reduced congestion for cars entering and exiting the highway.

“Imagine what the impact would be of reducing the energy of each vehicle by 10 percent multiplied by the entire fleet traveling on I-24. You can imagine the numbers are very big.”

BENEDETTO PICCOLI, the Joseph and Loretta Lopez Chair Professor of Mathematics
“Our beliefs shape how we view what it means to be in therapy.”

TAMARA NELSON, director of the Resilience, Equity, and Community Health Research Program and assistant professor of psychology at Rutgers–Camden

Breaking Down Mental Blocks: Delivering Crucial Care

BY CAROLINE BROBEIL

Nelson has focused her career on exploring how contextual and cultural factors influence mental health and treatment-seeking behaviors among different racial and ethnic groups. Her interdisciplinary research involves quantitative and qualitative methodologies. “A lot of this work comes from wanting to unpack the how and the why behind attitudes and decisions about mental health care,” Nelson said.

There are multiple reasons why minorities and people of color may choose to forego help when facing behavioral health crises, including the general inaccessibility of mental health services, cultural stigma, a lack of diversity among providers, and an overall lack of awareness. Regardless of the reasons behind it, the result is troubling: The National Alliance on Mental Illness found that more than 60 percent of Black people believe that a mental health condition is a sign of personal weakness, and a recent study by the American Psychiatric Association revealed that among adults with any mental illness, 48 percent of whites received mental health services, compared to only 31 percent of Blacks and Hispanics, and 22 percent of Asians. The APA noted that lack of cultural understanding by health care providers may contribute to underdiagnosis or misdiagnosis of mental illness in people from ethnically diverse populations.

Understanding why people from racially and ethnically diverse populations may not seek mental health treatment and addressing those gaps has become even more important in a post-pandemic world, as more and more people discover that the added stress of the last several years has left them feeling unsettled. The initial conditions of the pandemic led many to feel isolated from the outside world as life locked down; essential workers who could not stay home during the worst of the pandemic often experienced fear and uncertainty.

Fast forward to the current day, when routines and habits seem to be returning to a new normal, even as the threat of COVID-19 still exists. Not surprisingly, an APA report found that about half of U.S. adults surveyed said that the uncertainty of the pandemic has made planning for the future seem problematic, and that stress around decision making is especially tough for young adults and people of color.

In her research, Nelson has examined the degree to which cultural identity and certain social norms affect both a person’s view of mental health and the decision to seek treatment, and why such behavior is a logical and appropriate response for some. In “Association between superwoman schema, depression, and resilience: The mediating role of social isolation and gendered racial centrality,” which was accepted for publication in 2022 in the APA’s Cultural Diversity and Ethnic Minority Psychology journal, Nelson took a focused look at African American women and the “Strong Black Woman” or “Superwoman” narrative, which holds Black women to the framework of being selfless and resilient providers, caregivers, and homemakers in the face of systematic oppression and unyielding difficulties. “Yes, it is an identity – but it is also a coping response to gendered, racialized oppression,” says Nelson.
The challenge is that some of the characteristics of the “Strong Black Woman” narrative are beneficial, even as others may prevent Black women from seeking help when life becomes too overwhelming. “We know that adherence to these characteristics in part is associated with decreased help-seeking attitudes,” Nelson says. “But there is nuance in that. What I found in my own research is that it isn’t clear cut, because some characteristics of the Superwoman schema are associated with resilience, overcoming obstacles, grit, and positive ethnic identity.” In other words, characteristics that can help women of color not just persevere through challenges, but achieve and thrive in many different circumstances.

Attitudes toward seeking help are not the only variable in this equation that can vary for racially and ethnically diverse individuals. The symptoms and how a problem presents itself can be different from traditional expectations as well. For example, the most common indicators used to help identify depression include feeling sad or depressed, irritability, a loss of interest in pleasure, or even thoughts of suicide, all day, every day, for more than two weeks. “In interviews I’ve done for my qualitative work,” noted Nelson, “Black women have told me that they just don’t have time for that because they have to work, they have to provide for and feed their families, and care for their communities, and even though they may acknowledge [their symptoms], ‘I’m still moving,’ ‘I’m still functioning.’” The medical and therapeutic community is beginning to realize it needs to conceptualize some things differently when working with culturally diverse patients, she adds.

Ideally, Nelson would like to see people of racially and ethnically diverse backgrounds seek treatment before a manageable situation becomes a crisis. A key to making this happen is to move beyond the stigma and reframe the experience to align with what it really is – methods and practices based in research designed to address genuine medical concerns. In other words, emphasizes Nelson, “recognizing that psychological treatment is talk therapy, but it also uses science to understand the ways that we treat these conditions.”

Increasing the available pathways to treatment can more directly address the issue. Dr. Daniel Lee, director of the Rutgers–Camden Wellness Center, said that he and his staff have been challenged to think differently when reaching someone is struggling with a mental health issue, including developing ways to increase connection and belonging to promote the construction of healthy relationships. “If they’re not going to ask for help, we have to create opportunities to infuse help and support in a variety of ways,” said Lee.

Partnerships between behavioral health professionals and trusted institutions within minority communities have become one method of reaching out to those who might need help. Movements like The Confess Project or Barbershop Therapy – which trains Black barbers to become mental health advocates – seek to identify individuals experiencing mental distress and connect them to professional care in safe and trusted environments. Programs offered through churches and other traditional community institutions have also found success in breaking down the stigma, and younger generations who have come of age in a time when mental health is more candidly discussed are less afraid of the process. Taken together, these changes are helping to change cultural norms.

“People need to understand it’s not a white thing, it’s not a Black thing – it’s more of a person thing, it’s a human thing.”

TAMARA NELSON
Voice of Reason

Criminologist Dedicates Research to Causes and Consequences of Gun Violence

BY TOM McLAUGHLIN

In early January 2023, the nation looked on in horror as the media reported the unimaginable: a 6-year-old had purposely shot his teacher as she taught her first-grade class at a Virginia elementary school. As people everywhere tried to make sense of the seemingly senseless, reporters turned to a trusted source: Dan Semenza, associate professor of criminal justice in the Rutgers University–Camden College of Arts and Sciences and director of interpersonal violence research for the Rutgers University-based New Jersey Gun Violence Research Center (GVRC).

Not wanting to “pull any punches,” Semenza told The New York Times that eliminating firearms from the home entirely was the safest way to prevent children from using guns. He also noted measures that could be taken to limit gun access, such as storing firearms separately from ammunition or using biometric locks. He also recommended using pediatricians’ offices to educate families on safety measures. It is precisely this no-nonsense, research-based response that has quickly made the Rutgers–Camden researcher a highly sought-after voice of reason in the ever-raging conversation on gun violence.

Both in his role as a researcher and GVRC director, Semenza sees public communication as paramount to moving the discussion forward. Part of the reason the issue of gun violence can be so divisive, he says, is that people don’t understand the basic facts. “My hope is to educate wherever I can so that people understand the full scope of the problem,” Semenza said. “We can then collectively figure out the best solutions moving forward.”
Beyond facts and figures, Semenza understands the issue on a personal level. Born and raised in the small town of Monroe, Conn., he was just preparing to enter graduate school when the Sandy Hook Elementary School shooting took place in Newtown, the next town over.

“I watched that shooting devastate an entire community,” he said. “That affected me deeply.”

Semenza didn’t stop there. As he pursued his graduate studies, he started to recognize how gun violence was destroying families and communities, especially in disadvantaged neighborhoods, every single day throughout the country. He soon dedicated his lifelong scholarship to finding both the causes and consequences of gun violence. “My goal is to create greater knowledge and awareness about these issues in order to provide insight into policy-driven, practical interventions that can reduce gun violence and related health disparities,” he said.

According to Semenza, behind the countless incidences of gun violence every day, one time-tested truth remains the same: More guns equals more gun violence. It’s a fact, he says, that’s been confirmed from the neighborhood to the global levels over decades of academic research, despite “bad science” attempts to discredit it. If there is a gun in the home, Semenza explains, it increases the risk of suicide, homicide, domestic partner incidences, and accidental shootings.

“Anything that distracts from this basic equation is moving away from something that we need to really be focusing on, which is how do you reduce access to guns for people who are going to harm themselves or others,” Semenza told host Tracey Matisak on WHYY’s “Radio Times.”

Semenza’s research backs up the numbers. In one eye-opening study, he and Richard Stansfield, assistant professor of criminal justice at Rutgers–Camden, found a significant link between the concentration of federally licensed firearms dealers in urban counties and intimate partner homicide in the home. The study, published in the September 2019 issue of the journal Preventive Medicine, was one of only a handful of studies ever to examine how access to legal guns through federally licensed firearm dealers in the community is linked to gun violence.

When it comes to solutions, Semenza posits, there are many different approaches to thinking about harm reduction. It’s not a question of an “either/or” solution, but rather a question of which solutions can be combined most effectively. In his view, gun violence should be treated as a solvable public health problem no different than issues related to tobacco, alcohol, and motor vehicle crashes.

“As a country, we’ve had enormous success in reducing the harms of these issues, so we can do the same for guns,” Semenza said. “This doesn’t mean getting rid of firearms but it does mean better regulating them so that they cannot get into the hands of individuals at risk of hurting themselves or others.”

On that front, Semenza is helping to lead a GVRC project, supported by a $1.5 million grant from the U.S. Department of Justice, that teams the research center with Acenda Integrated Health, Life Worth Living, and CureViolence Global to implement a community violence intervention in three rural South Jersey counties. While the program is still in its infancy, Semenza ultimately hopes that its implementation and the accompanying research provides national insight into creating programs that work for gun violence reduction beyond America’s largest cities, where these interventions are typically deployed.

Whenever he sees news of shootings, such as the 6-year-old who shot his teacher, Semenza’s gut reaction is always the same: “It doesn’t have to be this way.” He acknowledges that there is much work to do and none of it will be easy. Nonetheless, gun violence can be controlled.

“None of our peer countries live this way,” Semenza said. “The epidemic of gun violence in the United States exists because of a long series of choices we have and haven’t made over the course of decades. It’s daunting, but there’s no reason to believe we cannot reverse course as long as we have the collective will to do so.”
Humans have long looked to nature to solve some of the most pressing and complex design challenges.

English inventor Percy Shaw patented the road stud in 1934 after he was inspired by the reflective nature of cat eyes. To develop bird-safe glass, German engineering company Arnold Glas observed Orb weaver spiders, who build their webs with ultraviolet silk. As Hunter King, assistant professor in the Department of Physics at Rutgers–Camden, works to solve the country’s growing water scarcity crisis, he’s found his muse in a South African insect no bigger than an almond.

King became interested in biomimicry—the emulation of the models, systems, and elements of nature for the purpose of solving complex human problems—while conducting postdoctoral research at Harvard University. His colleague at the time was studying the fog-harvesting abilities of the Namib desert beetle. His research, which expanded on a popularized wettability (meaning, the ability of a liquid to spread over a surface) theory, did not sit well with King.

“When they cared about wettability of the surface, that implies that heat transfer is important, because you need a cool surface to condense water from vapor. Beetles do this in the morning, after emerging from underground where it’s warmer than outside,” said King, noting that heat transfer occurs only in the direction of decreasing temperature.
With the assistance of 3D-printed spheres (of varying surface textures that resemble the bumps found on the beetle’s wing), a makeshift wind tunnel, and a nebulizer, King is reverse engineering this process to advance his own theory, grounded in physics rather than chemistry. He believes that by altering an object’s shape and texture, it is possible to coax more droplets to collide with, rather than flow around, the object. So far he has found that a sphere with one-millimeter lumps across the surface caught droplets with nearly 2.5 times the efficiency of a smooth sphere with the same surface area.

“It’s basically a filter element,” King said. “For example, you attempt to use your finger to catch fog, the droplets would just go around it. But if your finger had a different shape or texture, maybe it would intercept the water molecules in greater quantity.”

In the Namibian desert and other arid regions around the world, where morning fog is abundant and rainfall is scarce, fog harvesting can be a critical source of water for both humans and wildlife. Leading fog harvesting technology utilizes vertical mesh nets that collect droplets as fog passes through and siphon the water into troughs.

While effective, these nets require a lot of space that may not be available in crowded urban areas. Moreover, with climate change, water droplets in clouds are predicted to shrink, which could mean that mists themselves will get lighter. King’s goal is to figure out how slight variations in shape and texture (rather than fiber diameter and spacing, the parameters studied to improve traditional mesh systems) can filter fog more efficiently under the right wind conditions.

King hopes this research can be used to improve the efficiency of existing mesh systems, and to develop larger installations that utilize building architecture to recreate this effect.

“If you already have some kind of building envelope, by adjusting the shape of that envelope—architectural features on parts of a building—you can change the amount that it’s going to collect fog as it blows by the building,” King said. “In certain geographies where you have a lot of fog blowing across the building, modifying the shape of the flow and certain features on the surface could allow you to collect more. Or, say, in a refugee camp, you’ve got a bunch of tents. Maybe by slightly modifying some features on the surface of the tent, you could induce greater collection of water that would run off in the places you want.”

Of the decades of research that have been done on the Namib beetle, King is one of the few—if not the only—scholar to focus on the flow physics of surface morphology.

“There is a lot of money that’s put into researching the condensation in a system like this by changing the wettability. That, we should stop doing,” he said. “It doesn’t seem to follow from the biological example, it doesn’t seem physically relevant, and usually when you change the hydrophobicity of a surface on a large scale, that involves using a lot of toxic stuff.”

King has found inspiration from other structures in nature, such as the mechanical principles behind bird’s nest construction. The elements of the nest, while durable in nature, merge to create something that’s soft and flexible, yet cohesive enough to withstand disturbances. While the research is still in its beginning phases, he believes these findings could provide a blueprint for designing more shock-absorbent structures, built to withstand earthquakes, hurricanes, tornadoes, and other climate change-induced events.

King also sees great potential in his research on termite mounds, and how the tiny insects have managed to build structures that are efficiently ventilated—a challenge that has eluded the most experienced of human architects. He hopes his findings, which explain how the structures regulate heat, humidity, and respiratory gas exchange, will lead to the creation of sustainable, alternative HVAC solutions.

As we seek to mitigate human stresses on the planet—global warming, resource scarcity, environmental degradation, and more—many of these systems in nature have already found solutions, King said. And they have found them without relying on harmful chemicals or extraordinary energy consumption. The tens of millions of species that inhabit this earth, he said, offer a well of tried-and-tested principles for solving design challenges in a more sustainable way.

“Whenever they have a solution, they’re doing it without the cost of energy we use. The zero-energy idea that we would not necessarily think of...they’re likely to be there. It’s a good place to look.”
The statistics are tough to digest, said Rutgers University–Camden psychologist Charlotte Markey. Among mental health issues, eating disorders are the second deadliest, behind only opioid abuse. And, although much more public attention and research is given to issues around female body image, anywhere between a quarter and a third of eating-disorder patients are boys and men. The most common eating disorder among boys and men is binge eating, characterized by episodes of overeating that are not followed by compensatory behaviors, such as purging, thus making the disorder difficult to detect.

“The majority of these boys and men are unlikely to seek treatment for their eating disorder,” said Markey, a professor of psychology and chair of the Department of Health Sciences. “The fatality rate—already among the highest for any mental-health condition—is higher among men with eating disorders than women.”

But there are answers, and the Rutgers–Camden researcher hopes that males get the message. Markey, the author of three books on body image, has been a frequent media guest and has presented her research virtually at conferences in Ireland and the United Kingdom.

Markey receives messages from parents thanking her for her work and sharing personal anecdotes about how her research has helped them and their children. One popular refrain, she said, is that parents wish they had had that information when they were young. What makes the research so universal, Markey said, is that most people are dissatisfied with their bodies. Body dissatisfaction, in turn, is predictive of eating disorders.

What’s more, Markey said, mental health issues rose significantly over the course of the COVID-19 pandemic. She cites the U.S. Surgeon General’s latest report indicating that the rates of youth anxiety and depression doubled during the first year of the pandemic, with one in four young people suffering from depression and one in five experiencing anxiety. These mood disorders frequently co-occur with eating disorders, which likewise spiked across the pandemic.
“Research suggests a significant increase in hospitalization for, and inquiries about, eating disorder treatment,” Markey said. “And contrary to popular myths, eating disorders don’t affect only teen girls; children of all ages and genders are at risk.”

Markey is especially interested in providing resources for parents. “It’s hard to know how to help and how to say the right thing,” she said. “There is good science on these issues, and I want it to be accessible for kids—and for their parents and caregivers.”

Research shows kids as young as 4 are exhibiting the beginning of body dissatisfaction. In 2000, Markey published a research paper showing that 5-year-old girls were more likely to be concerned with weight than their mothers were. “Kids are actually pretty tuned into these issues at a young age,” Markey said.

So, what is it that many boys see in the mirror? Boys are often concerned about being overweight, Markey explained, but they are even more likely to be concerned about their muscularity—or lack thereof—and height. Boys see social media images and think they should be tall and broad-shouldered with six-pack abs. “That’s just not genetically likely for most boys unless they put a lot of time into going to the gym,” she said. “Even then, these appearance ideals are totally out of reach for most of us.”

This preoccupation with muscularity, Markey continued, is how body dissatisfaction and eating disorders usually go unnoticed among boys. They hit the gym, eat “healthy” foods, and everyone around them thinks they’re just taking care of their health. Internally, however, they harbor discomfort.

“Inside, boys and men may be incredibly upset, discouraged, or dissatisfied with their appearances,” Markey said. “They may watch what they eat or avoid certain foods altogether, or take supplements like protein powders, which are often unsafe for developing bodies.”

While all of this is going on, Markey said, there is a stigma for boys to even appear that they are concerned with their body image. And why wouldn’t they? Society has feminized the topic for decades, she said, and many boys don’t know what body image even refers to.

“They think it’s inherently feminine to consider body image, but it really just asks, ‘Are you comfortable in your own skin?’” Markey said. “How many of us are 100% comfortable? The truth is, not many. But when that discomfort grows strong, there’s almost nothing people won’t do to try to feel better.”

Because of the stigma that boys face, Markey continued, research shows that males are more reluctant to seek mental health and medical help than females. Therefore, boys’ body image concerns go unnoticed by medical professionals who aren’t on the lookout for warning signs. Parents don’t often notice the signs, either.

Charlotte Markey, professor of psychology and chair of the department of health sciences

“I’d be wealthy if I had a dollar for every parent who said, ‘I don’t need to worry about that stuff; I have boys,’” Markey said. “Other parents have asked me why I was even writing a book about body image for boys.”

However, Markey said, it’s the parents who are most likely to figure out that something’s wrong when their boys drastically alter their eating habits, experience large fluctuations in weight, or adopt excessive exercise habits. She hopes her research will provide more information for boys who are afraid to ask questions or seek help. In the end, she hopes that boys will appreciate that they are not alone.

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Patagonia founder Yvon Chouinard sent shockwaves across the internet last year when he announced his decision to forfeit all future profits to fight the climate and crisis. Even for a company with deep roots in the sustainability space, this bold next step in Patagonia’s mission is emblematic of a greater inflection point happening in the corporate social responsibility (CSR) space, stemming from years of social upheaval.

“Corporations have done a lot of self-reflection in terms of how they should be addressing social issues,” said Nathaniel Wright, an associate professor in the Department of Policy and Public Administration at Rutgers–Camden. “They understand that this is what their consumer is looking for.”

Nathaniel Wright, associate professor of public policy and an expert in charitable giving, studies the drivers of charitable behavior, strategic philanthropy, and nonprofit performance and accountability. What’s happening now in the private sector right now, he said, is an expedited version of what has taken place in the nonprofit sector over the past few decades following scandals like the mishandling of 9/11 donations.

“What I see in the nonprofit world is that a lot of Gen Z and millennials, they want to know that if they donate 10 bucks, their donation is actually going toward working hard to create positive change. I don’t think it’s any different in private enterprise,” said Wright. “We’re in the ‘George Floyd era’ in terms of how Gen Z and millennials are really putting pressure on private enterprises to think about how they can adopt a corporate social responsibility model.”

2020 was a watershed year for corporate social responsibility, said Wright. The pandemic, death of George Floyd and ensuing Black Lives Matter movement, a contentious election, and record-breaking number of extreme weather events forced companies to take a stance for the values they espoused, setting the stage for a new era of accountability.

“Individuals want to know that if I buy your product, your values represent what I stand for,” Wright said. “If organizations are not addressing social issues that are important to their consumers, it’s hard for them to be profitable, it’s hard for them to be sustainable.”
While tax-exempt organizations are required to disclose their finances through audited statements each year, disclosure of social responsibility metrics has historically been voluntary. In the absence of any mandated accountability measures, says Wright, younger, more tech-savvy generations began using their investigative tools to expose where brands have undelivered on or contradicted their promises to do good. Their criticism gave rise to a new vernacular that includes words like “greenwashing,” “performative allyship,” and “virtue signaling” to call out companies that fail to commit to their stated values.

“Companies are a lot more visible because of the internet. It’s easy to Google a company and get a sense of what their values are,” said Wright. “Individuals have really taken to social media to point out corporations who don’t walk the talk.”

Today, said Wright, stakeholders such as consumers, investors, employees, and suppliers know that failure to address social and environmental can have significant and wide-ranging impacts on a corporation’s financial performance. In fact, a study by BlackRock found that 81 percent of purpose-driven companies with stronger environmental, social, and governance (ESG) profiles outperformed their counterparts in 2020, despite a market downturn. While CSR activities can vary drastically from company to company, ESG data offers a standardized framework that socially conscious investors can use to screen investments.

“The future of finance goes hand in hand with social responsibility,” said Wright. “As we continue to see how a company’s CSR efforts influence business outcomes and make it more attractive to potential employees, consumers, and investors, it only makes sense that financial viability be measured in the context of these sustainability and ethical concerns.”

CSR is no longer a charitable afterthought or fringe benefit, said Wright, but a deep-seated ethos that permeates every part of its operations, from its supply chain, to hiring practices, representation in marketing, and more. Today’s corporations are expected to not only acknowledge ways in which they have upheld systems of injustice and caused harm to people and the planet, but to use their resources, power, and brand to address those issues, said Wright.

“For example,” said Wright, “instead of joining the board of a major foundation or hospital, corporations are now asking their employees to work with nonprofits serving some of the most distressed communities throughout the country. Here in Camden, Subaru is serious about encouraging their employees to be engaged in the community, to really think about their service, and ensuring they are having a positive impact throughout neighborhoods in Camden.”

The 2021 Deloitte Global Millennial and Gen Z Survey revealed that 44 percent of millennials and 49 percent of Gen Zers have made choices about the types of work they would do—and the organizations they’d be willing to work for—based on their personal values. As Gen Z, continues to gain consumer power and occupy a greater percentage of the workforce, Wright said corporations need to take a hard look at their entire business model and value proposition if they want to remain viable.

“Generational priorities have changed. Baby boomers think very differently about CSR than millennials or Gen Zers, who are a lot more comfortable having these hard conversations about social justice issues and putting pressure on corporations to be intentional about making changes,” he said.

While it’s too soon to tell how this decision will impact Patagonia’s bottom line, a surge of similar pledges from Hobby Lobby, Bank of America, Amazon founder Jeff Bezos, and other influential entities show that other corporations recognize the tide is changing and they too must ride the wave to stay afloat.

“Corporations need to understand that social responsibility impacts the bottom line. If consumers and stakeholders feel a company is not addressing the issues they care about, they will bring their money elsewhere.”

“Corporations need to understand that social responsibility impacts the bottom line. If consumers and stakeholders feel a company is not addressing the issues they care about, they will bring their money elsewhere.”

NATHANIEL WRIGHT, associate professor in the department of policy and public administration
Money Talks

Experts Across Rutgers–Camden Weigh in on Impacts of Inflation

BY TOM McLAUGHLIN, ALINA O’DONNELL AND CAROLINE BROBEIL

Rutgers University–Camden public policy expert Michael Hayes maintains that inflation today is rooted in the substantial increase in the money supply starting in March 2020 – a direct response by Congress and the Federal Reserve to mitigate the negative economic shocks caused by the pandemic. For instance, Congress passed various economic stimulus packages that provided loans to businesses and stimulus checks to households. Meanwhile, the Federal Reserve Bank set the federal funds rate to zero with the goal of stimulating business investment and economic growth. “As a result, the total amount of currency and saving deposits held by the public – commonly referred to as M2 – increased by more than 35% between March 2020 to December 2021,” said Hayes, associate professor of public policy and administration in the College of Arts and Sciences at Rutgers University–Camden.

Unfortunately, Hayes posits, it was impossible for policymakers to know the exact time to end these fiscal and monetary policies. As the economy and society started to open starting in 2021, businesses and households started to dramatically increase their demand for various goods and services, but the supply couldn’t keep up with demand. “As a result, the overall price levels for these goods and services started to rise to historically high levels,” Hayes said.

Initially, Hayes continues, inflation was only impacting the prices of durable goods, such as automobiles, major appliances, and home food purchases. However, since the beginning of 2022, there have been significant price increases for energy, healthcare, and shelter – a sizable portion of the typical household budget. The Federal Reserve Bank now expects the annual growth in consumer prices to come down to about 4% before the end of 2023. “However, this assumes there will be no major supply chain disruptions and no additional geopolitical conflicts in the world,” Hayes said.

Hayes further notes that households in the lowest income group are the most negatively impacted by inflation for at least three reasons. First, the typical low-income household spends all of their disposable income on goods and services, whereas higher income households tend to save a non-trivial amount of their disposable income. Secondly, low-income households have less income to buy items in bulk to take advantage of lower unit prices for bulk purchases. Lastly, low-income households have less access to credit and lower levels of savings to help mitigate the effects of inflation on their household budgets.

Hayes agrees with the Federal Reserve’s actions to increase the federal funds rate to discourage business investment and household spending. The federal funds rate increases the cost of borrowing money, affecting higher mortgage interest rates, credit card interest rates, and corporate bond interest rates, among other things. Businesses will be less likely to hire more workers, which will ease the tightness in the labor market. At the same time, higher saving rates will encourage households to save more of their disposable income in lieu of spending it on goods and services. “These economic decisions by businesses and households will lower the growth in wages and demand for goods and services in the economy,” Hayes said. “With less demand for workers, goods, and services, increases in prices and overall inflation is expected to subside.”

Hayes adds that inflation will likely increase government deficits. For example, federal social security payments will increase by almost 10% this coming fiscal year because the payment amount is indexed for inflation. At the same time, the income thresholds for federal tax brackets will increase because these brackets are adjusted for inflation. This means many households will fall in lower tax brackets that tax income at a lower tax rate. “The federal government will therefore receive less revenue and will have higher expenditures due to inflation,” Hayes said.
Prescribing Solutions: Americans Contend with High Drug Prices

Millions of Americans struggle to afford prescription medications each month due to rising prices, according to the Department of Health and Human Services (HHS). A recent HHS report found that 1,216 drugs saw price increases averaging 31.6 percent (compared to the inflation rate of 8.5 percent) between July 2021 and July 2022.

“Patients have told me they take doses smaller than ordered or have skipped doses entirely to make the medications last longer,” said Jennifer Sipe, a nurse practitioner and clinical associate professor at the Rutgers School of Nursing–Camden. “I have also ordered medications and the patient never filled the prescription due to high costs.”

Sipe attributes this surge to a combination of factors—mergers and acquisitions among drug companies resulting in fewer competitors, “patent extension” tactics by which brand name pharmaceutical companies pay generic manufacturers not to enter the market, and the costly nature of research and development. These factors, she said, have been exacerbated by supply chain issues like raw material shortages, production delays, and workforce deficiencies.

High drug prices disproportionately affect low-income, people of color who are less likely to carry private health insurance yet experience higher rates of conditions like diabetes, heart disease, and cancer, Sipe said. For these patients, the monthly cost of medication—compounded by expenditures like copays, diagnostic testing, medical equipment, and more—can be insurmountable.

While it is far too early to see an impact from the Inflation Reduction Act of 2022—under which pharmaceutical companies that raise the price of their products beyond the rate of inflation are required to pay rebates to Medicare—Sipe is hopeful that this legislation will pave the way for other reform bills that seek to reduce the burden of disease and fight systemic health inequities.

“It is opening the door to something that’s very different in this country, which is negotiation,” Sipe said.

Finding the Balance Between Supply and Demand

“Inflation is simply too much money chasing too few goods and services,” said Andrei Nikiforov, clinical assistant professor with Rutgers School of Business–Camden. But inflation isn’t always a bad thing. “Stable, mild inflation stimulates people to invest in long-term projects to protect their savings and results in extra economic activity,” said Nikiforov. When inflation spikes, however, problems within the economy can surface.

Inflation can be the result of economic circumstances, but it can also be affected by other factors, such as supply chain disruptions, labor shortages, and geopolitical issues.

“The explanation for current inflation is relatively simple,” said Nikiforov. “The Federal Reserve, which is responsible for money supply in the United States, and Congress printed a lot of money to support the American economy during the pandemic, filling consumers’ wallets over and above the usual levels.” He noted that this led to increased demand that could not be met due to restrictions put in place due to the pandemic, and the Russia-Ukraine war exacerbated an already tenuous economic situation.

While the outlook remains uncertain, there is reason to be hopeful that the economy will start to stabilize through 2023. “The consensus right now is that the actions taken by the Federal Reserve – i.e., increasing the interest rate every few months – will lead to a short but mild recession at some point in 2023,” said Nikiforov. “The typical lag time from the implementation of a policy to the real-world effect is 12 to 18 months. Since the Federal Reserve started actively raising interest rates on March 17, 2022, a recession could occur anywhere between March and September of 2023,” he said. But there is a silver lining. “The recession will rebalance the scales between the supply and demand and prepare the economy for the next decade of steady expansion.”
A Daughter’s

Love

Reflections on an Escape from Ukraine

BY CAROLINE BROBEIL
It was early 2022, and Olga Tihonova was living in Mykolaiv, a vibrant city about the size of Atlanta, located in the south of Ukraine near the Black Sea. Tihonova’s daughter is Regina Koury, associate university librarian and director of Rutgers University–Camden’s Paul Robeson Library. An ocean away in New Jersey, Koury would wake up each morning and immediately check the news before calling her mother. The news was never good.

Reports from Mykolaiv showed broken glass and burned-out tanks strewn throughout city streets pockmarked with enormous craters from Russian missiles. Air-raid sirens and intermittent shelling were a constant soundtrack. Artillery fire rattled windows that had yet to break. By early March, as nearly 800 Russian military vehicles advanced toward the city, Mykolaiv’s mayor declared, “The city is ready for war.”
Before the war, mother and daughter enjoyed weekly calls with each other, sharing family news or discussing the latest Russian novel they were reading together. As relations between Russia and Ukraine deteriorated, Koury started to call daily, but Tihonova reassured her daughter that she was safe and there were no signs of war where she lived. “The war was really unexpected,” said Koury. “Right up until war broke out, life was going on. My mom was making plans to do construction on her house; she was taking her cats to the vet. She didn’t even have a current passport.”

Unfortunately, the relative peace of early 2022 would not last long. Because Mykolaiv was a key port along a strategic highway, it quickly became a target in the war. “Our information was limited,” Tihonova recalled later. “We thought it was just Kiev. We didn’t think the war was coming to us.” On the night of February 24, the war did come to Mykolaiv: Russian troops invaded, and the fighting began. “They shelled and bombed, and Russian tanks came right down the central street,” said Tihonova.

While Ukrainian troops were able to stop the advance and push the Russian soldiers out of central Mykolaiv, attacks on the city continued from its outskirts. Over the weeks that followed, critical parts of the city’s infrastructure—the municipal water system, the airports, the hospital, several multi-story residential buildings, and two of the city’s largest universities—were damaged or destroyed. Much of Mykolaiv was in ruins. Tihonova heard stories of residents whose homes had been bombed moving to makeshift shelters just to survive. On one trip into the city center, she saw a bridge that had been completely wiped out. Tihonova tried to maintain a sense of normalcy, but it wasn’t easy. “I could hear the rockets. My cats heard it. The rockets sounded like an airplane.”

Still, even as conditions worsened—transportation was unreliable at best; food and water were becoming harder to find; the sounds of bombing, artillery fire, and air-raid sirens were constant and unyielding—Tihonova was resolute in wanting to stay. Mykolaiv was her home, and she had many beloved pets, including a dog, numerous cats, and several hedgehogs who relied on her for their care. She was also caring for the pets of neighbors who had already fled. “Looking after the animals helped keep everything else in the back of my mind,” she said.

“The breaking point for me was one day when she went to the bank to withdraw some money,” said Koury. After visiting the bank, her mom went to the store to stock up on pet food. Several bus routes were suspended, requiring her to walk for long stretches carrying her groceries, but a determined Tihonova completed her trip safely before the mandatory 7 p.m. curfew. It was only when she returned home that she learned that the very bank she had entered two hours earlier had been bombed, killing two people.

“The rockets went right over her head,” said Koury. “Before that, we felt anger. We felt denial. It was a mixture of feelings. But the rockets flying over your head make it real.”

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REGINA KOURY

Mykolaiv, Ukraine
Escaping the War Zone

Once Tihonova decided she needed to leave, the question for mother and daughter became how. Tihonova got word a bus would help evacuate residents in a few days’ time. Koury emphasized that the situation was urgent, and she should evacuate, even though there wasn’t much time to prepare. “She had three days to pack what she could,” said Koury. “She was a property owner—she left everything. She asked friends and neighbors to care for her pets and left her home in the care of a neighbor as well.”

With just a single bag holding a change of clothes, some personal items, a few photos, and her documents, Tihonova boarded a bus on April 16 and began her 20-hour journey to the safety of Warsaw, Poland. The bus was crowded—people sat in every available seat and in the aisles—and there was only one two-hour break during the trip. Tihonova was fortunate to have a seat, but conditions were tight. There were regions they traveled through that required the passengers to turn off their cell phones for safety, lest the signals give away their location. The group eventually arrived at their destination—the Ptak Warsaw Expo, a center that had been converted into a shelter for refugees fleeing the war. Polish authorities were extremely welcoming and helpful, accepting Tihonova’s documents and helping her to get settled.

In the United States, Koury had been in contact with her attorney to begin the process of bringing her mom from Poland to New Jersey when she received some good news. On April 21, the U.S. government announced the Uniting for Ukraine program, which provides a pathway for Ukrainian citizens to come to the America for a period of two years. “Working with the Immigration and Naturalization Service was easy,” said Koury. “I was able to go online and complete all the paperwork. So, I bought a ticket and flew to Warsaw. I told Mom I was coming.”
At home, Tihonova has been busy making cultural specialties like Russian Napoleon cake, which is made from layers of puff pastry and sweet vanilla custard. Koury also bought her mom a sewing machine, noting, “When I was younger, she would make my clothes. Sewing is her hobby.” Tihonova has been able to keep in touch with some friends who left Ukraine as well as those who stayed behind and are helping to care for her pets.

It’s unclear what the future may hold. Much of Mykolaiv is destroyed, and Tihonova is focused on adjusting to her new life in the United States, so she can’t say if or when she might return. She did say, “I’m happy that the U.S. has not forgotten Ukraine.”

Her daughter hopes she will be open to remaining here. “We have a cat and a dog, so she likes that,” Koury said. “I hope my mom will stay.”

“Mom, I’m Coming” – Mother and Daughter Reunited in Warsaw

Tihonova lived in the shelter for Ukrainian refugees for 16 days before her daughter arrived on May 4 and located her. “When I saw my mom, she looked so tired, so small,” said Koury. “She was exhausted and her eyes looked lost. My mom is a strong person, but she looked terrible.” Koury and her mom went to a hotel to rest, recover, and catch up. While they were there, word came that the U.S. Immigration and Naturalization Service would provide a visa for her mom, allowing them to leave Warsaw and fly to Newark. When they arrived in the United States, Koury said the immigration officials welcomed her mom, telling her, “Don’t worry. Here is your stamp. It’s going to be okay.”

Tihonova has settled into life in New Jersey with her daughter. While she had been to the United States before, she had only seen California, and Koury was eager to share the sights of Philadelphia and New York with her mom. They also visited the Jersey Shore, which reminds both of vacations spent by the Black Sea. “We went to Wildwood’s Dog Park & Beach because my mom loves animals so much,” Koury said. When asked what she thought of it, Tihonova exclaimed, “The beach was marvelous!” Mother and daughter have also discovered New Jersey’s burgeoning winery scene, visiting and sampling the wines at Cedar Rose Winery in Vineland.

Olga Tihonova and Regina Koury settled in her New Jersey home.
Through Rutgers University–Camden’s years of support and guidance, Emanuel Rodriguez secured a prestigious undergraduate research fellowship at Harvard University.

Rodriguez is among 28 undergraduates from across the United States selected to the 2022 cohort of fellows in the prestigious Program for Research in Markets and Organizations (PRIMO) fellowship at Harvard. During the 10-week summer program in Boston, Rodriguez was afforded professional development and networking opportunities, and formed new friendships.

Rodriguez has been involved in Rutgers University–Camden programs for so many years, he considers the campus his home. As a middle school student, Rodriguez got his first taste of college life through the Rutgers Future Scholars (RFS) program, which put him on track to succeed in high school and attend college. Rutgers–Camden is where he learned to value education and to develop interests toward a career path.

For Rodriguez, participating in the program was life changing. “RFS made sure education was always a top priority in my life,” said the Camden native. “Throughout my secondary education, RFS helped me with my classes, with homework, preparing to take the SAT, and in applying to college.”

A senior finance and accounting major in the School of Business–Camden, Rodriguez has maintained a 4.0 GPA throughout his college career, thanks to his campus mentors, including Dr. Justin Deng, an assistant professor of accounting, and the skills he learned from the program beginning at the age of 13. Rodriguez is a member of Omicron Delta Kappa, the national leadership honors society, and Beta Alpha Psi, the International Honors Society for Financial Information.

Rodriguez serves as a campus ambassador, providing tours to new students. He is also the treasurer of the Women’s Student Association and leads workshops for the Rutgers School of Business–Camden’s BizEd Summer Leadership Program for high school students.

The Honors College student developed research skills by serving as a research assistant for Oscar Holmes IV, associate professor of human resources and organizational behavior, and another one of Rodriguez’s mentors. The opportunity led Rodriguez to apply for the research fellowship at Harvard.
From Nigeria to Rutgers–Camden

Growing up in an academic household with both parents as professors, Jochebed Peace Airede felt destined to pursue higher education.

At Rutgers–Camden, Airede, an international student from Nigeria, has succeeded academically and is a leader on campus. She was selected to speak at the university’s inaugural Fall Convocation ceremony to mark the beginning of the academic year, sharing her inspiring story as an international student and her journey to college in the United States.

Airede’s parents sent her to private schools in Nigeria to prepare her to attend college in the United States. In Airede’s final year in high school (called senior secondary school in Nigeria), she applied to ten U.S. colleges and universities but was not accepted. “The rejections felt like a nullification of everything that I was,” said Airede. “With my future uncertain, I started to wonder what my next step would be.”

Airede and her mother soon found Rutgers. Airede’s mother had a dream that included the words, “New Brunswick,” so they decided to use that as a search term when looking for a college. Airede discovered a university in the Canadian province of New Brunswick and applied. She also applied to several other U.S. universities, and while she was waiting to hear from them, her mother found that Rutgers University is located in New Brunswick, N.J. After applying to Rutgers–New Brunswick, Airede saw that Rutgers has two other locations, so she applied and was accepted to all three. She chose to come to South Jersey since Rutgers–Camden offered her a full scholarship.

Excellence Guided by Family, Faith, and Dreams

In Airede’s first year at Rutgers–Camden, the Honors College student took classes remotely from Nigeria due to pandemic restrictions. When she arrived on campus for the first time in August of 2021, Airede found community through campus organizations, such as the Salvation House of Prayer (S.H.O.P.), a faith-based campus group.

“My friends from S.H.O.P. were some of the first people I felt I could truly be myself around,” said Airede. “I didn’t have to conceal my Nigerian accent from them, and we could always find strength in praying about the stresses of college life together.” She met other international students in the dorm and developed friendships with classmates.

Airede later learned that she has an aunt and uncle who live in Williamstown. Her aunt is a Rutgers–Camden alumna, and her uncle works nearby at Cooper Hospital. “I have a family to spend weekends with when the semester becomes stressful, as well as major holidays that might remind me of my family back home,” said Airede.

As a resident assistant in the dorms, Airede is giving back to the campus community. “I wanted to help residents feel at home because I didn’t feel that way at first when I started living on campus,” she said. “I want to help students to feel connected to campus and know that there was someone here to advocate for them.”

A prolific writer who aspires to become an investigative journalist, Airede, now a junior majoring in English, serves as editor for the Undergraduate Review, a student-led Honors College journal that showcases the talents of Rutgers–Camden students. During Airede’s time on campus, she has worked as a teaching assistant for Lee Ann Westman in the “Global Gender Issues” course. “Working with Dr. Westman was a huge stepping stone to my learning that it was possible to collaborate with a professor you respect, but who also respects you,” said Airede. It was Westman who recommended to Airede to apply to speak at Convocation.

Shortly before Convocation in early September, Airede decided to take a last-minute trip to Nigeria to visit her family, which gave her an opportunity to relax and prepare the speech with her mother. “It was a privilege and a gift to work on my speech with my mother, who’s always been one of the greatest champions and editors of my written work,” said Airede. “We planned the outfit that I would wear together, purchasing new dresses whose tie-dye patterns reflected my Nigerian nationality.”

When Airede stepped onto the stage wearing a purple and white tie-dye dress, she displayed pride in her homeland and shared the joys of her new community. “Through Rutgers–Camden, I found my chosen family,” Airede said.
Even though Jason Snyder’s Rutgers University–Camden experience began as a transfer student, Snyder quickly found a welcoming and supportive environment on campus, where they have thrived by forming strong relationships with faculty and fellow students. Snyder, who is now a master’s degree student in psychology, credits the support they received as an undergraduate from mentors and advisors for their academic success.

“The Rutgers community has been incredibly positive,” said Snyder, who earned a bachelor’s degree from Rutgers–Camden in 2021 in the B.A./M.A. accelerated program in psychology. “I have built personal and professional relationships that I hope to maintain for many years.”

STUDENT SUCCESS

Jason Snyder felt at home at Rutgers–Camden from the start, and wants to ensure that future students experience that same immersive sense of community on campus.

The Cherry Hill, N.J., resident expects to complete their master’s degree in the spring, and is conducting research on bias against transgender individuals. Their thesis project explores variances in how people rate and evaluate emotional expressions when told that the person viewed by an interviewee is a cisgender man, transgender man, cisgender woman, or transgender woman.

Along with two fellow graduate psychology students, Snyder is conducting innovative research on the reactions of being misgendered from a transgender and nonbinary perspective to identify any correlations between misgendering and psychological distress. Snyder said prior research has not used gender identity as a factor in trials. The team plans to submit the results to journals for publication.

Snyder’s own experience with being misgendered inspired the research. Before transferring to Rutgers–Camden, Snyder attended a community college, where they didn’t feel accepted.

“Even after emailing professors before the first day of class letting them know that the name that was on the attendance sheet was not the name I went by, and telling them exactly what my pronouns were, I was misgendered often by professors,” Snyder said. “I spoke with a couple of professors after class to remind them of my correct name and pronouns, and the misgendering persisted. It was not until I legally changed my name and was nearly six months into medical transition that I was no longer misgendered on a regular basis.”

After Snyder arrived at Rutgers–Camden as a junior, the university’s inclusive climate allowed them to flourish. For Snyder, a member of Psi Chi (the international honor society in psychology), guidance from friends and faculty mentors provided the support and acceptance they needed to thrive academically. Specifically, the LGBTQ organizations connected Snyder with fellow community members and provided an avenue to develop friendships and a circle of support. “It was definitely a highlight of my time as an undergraduate student,” they added.

Snyder, who is also active in the campus Graduate Student Advisory Council, said their love of the opportunities enjoyed as a Rutgers–Camden undergraduate influenced them to work toward building the same experiences for graduate students. After graduating in May 2023, Snyder plans to pursue a career as a psychology instructor and eventually earn a Ph.D. in the discipline with a goal of teaching at the university level.
Good Chemistry
Student Researcher Breaks Barriers and Gives Back to Her Community

Along the path toward becoming a physician, Abby Morales discovered a passion for research. Morales considered attending medical school, but after she began conducting scientific research in Rutgers University-Camden campus labs, she was hooked.

“I grew very interested in understanding the chemistry behind certain reactions or certain interactions within a system,” said Morales, a Rutgers University in Camden Ph.D. student.

Morales began conducting research in the lab of David Salas-de la Cruz, associate professor of chemistry, during her junior year at LEAP Academy University Charter School as a participant in the American Chemistry Society SEED program. “I didn’t know I’d like it until I tried it,” said Morales, a Camden native who lived in Puerto Rico for several years as a child.

“For me to get to where I am, it started out as a dream,” Morales said.

With Salas-de la Cruz as her mentor, and as a Rutgers-Camden undergraduate and graduate student in chemistry, Morales was able to take on more challenging research supported by NASA’s New Jersey Space Grant Consortium and the National Science Foundation.

Currently, Morales is conducting research in Salas-de la Cruz’s lab to develop sustainable, lightweight, and durable building construction materials using natural substances from plants and animals. The materials could replace wood, concrete, and steel. The materials can be folded and formed for architectural and manufacturing use. As a roofing material, a section of the roof could automatically change its color from black to white, to alter the reflection of light and reduce the absorption of heat to cool the house during a heat wave.

The interdisciplinary project is supported by a five-year National Science Foundation grant involving researchers from Rutgers-Camden, the University of Pennsylvania, Princeton University, and Rowan University. The joint project offers Morales access to specialized equipment on all of the university campuses to expand her experience and learn about other disciplines by collaborating with experts in architectural and structural designs, chemistry, physics, materials science, biochemical and mechanical engineering, computation, and economics.

“Sometimes we have to do analysis by ourselves,” said Morales. “But we can always reach each other through messaging and say, ‘I need a second eye to look at this.’”

Morales enjoys conducting research that can make a difference in protecting the environment in the future. “Knowing that I am attempting to finding answers to today’s problems in advanced manufacturing and hoping to replace petroleum-based materials with renewable bio-friendly ones is exciting,” Morales said.

When Morales needs encouragement, there is a team of faculty and fellow students who are there to support her and tell her to believe in herself.

Morales’s academic success has made her a role model in her Camden community. Teachers, neighbors, and friends ask her to share with fellow Hispanics and first-generation college students how she became a scientist. Salas de-la Cruz believes that with the skills she’s learned at Rutgers-Camden, Morales can work in a lab or a classroom. He thinks she has what it takes to be a university professor one day.

When Morales’ academic work and research schedule slows down, she hopes to give back to the community by mentoring future scientists in Camden city schools, as she was mentored to develop a passion for the sciences.

“An early exposure to graduate research in chemistry and all of the other internships and opportunities I have had the privilege being a part of is what led me to decide my next step,” Morales said. “Early experiences allow you to figure out whether you like that specific track, and to carve your own path.”

Morales understands the importance of diversity and representation in the field; only 7.1% of the chemists in the United States are Hispanic.

“It’s wonderful that I get to do this not only for myself but for others around me,” said Morales, who hopes to work in a government lab one day. “My advice: Don’t be afraid to stand out. You will surprise yourself with how far you will get when you are determined to succeed no matter the odds.”
Making a Difference Through Public Service:

Rutgers–Camden graduate student a “fierce advocate” for immigrant rights

“SERVICE IS MY PASSION,” said Diana Akumu, a graduate student studying public administration at Rutgers–Camden.

Akumu, a native of Asumbi, Kenya, has made an impact on campus and beyond despite being in the United States for just a few years. She came to Rutgers–Camden after having attended law school and working for several years in Nairobi in business and banking. She was familiar with the university because her brother-in-law had attended Rutgers Law School; she came for a tour with her sister in the summer of 2019.

After her visit, she hoped to attend Rutgers–Camden, but COVID-19 had other plans. Pandemic travel restrictions led her to apply to other schools in England and Australia, and she was accepted to and even visited a program in England, but she still hoped to come to Rutgers. “Rutgers ranked higher, it has a strong alumni network, and outstanding faculty. Plus, Angie McGuire, the graduate programs director, was and still is very supportive.” Her persistence to come to New Jersey eventually paid off and Akumu enrolled at Rutgers–Camden last year.

In addition to her coursework, she is participating as an intern in the New Jersey Office of the Secretary of Higher Education (OSHE) under Secretary Brian Bridges. Tasked to the Licensure, Policy, and Legislative Affairs teams, she assists in policy analysis and drafting OSHE broadcasts; she also attends state board meetings and licensure site visits. She finds the work interesting and knows her time there will support her in whatever she chooses to do when she graduates. “The secretary is very supportive of the office’s interns and fellows,” said Akumu. “He regularly checks in with us and gives us career advice.”

Akumu has been active and engaged on campus since she arrived in 2021, serving initially as a resident services coordinator, and now working as a resident assistant for two floors of student housing on the Camden campus. The role requires some patience and the occasional late night, but Akumu wouldn’t trade the chance to support her fellow students for a few extra hours of sleep. “My residents are amazing and make my work a lot easier,” said Akumu. “They are also busy students, mostly law students, or science or business majors. The job can be challenging but very rewarding. Service is my passion.”

She hasn’t decided what she may do after she earns her master’s in public administration, but really enjoys higher education and the policy work she has done through her internship with the state. In the meantime, she is happy to continue thriving and giving back to the Rutgers–Camden community. “It is a small campus, which makes it easy to network with people from different walks of life,” said Akumu. “I have had the opportunity to work with outstanding faculty as a part of my program and I’ve made many new friends. Plus, I get to see my family because they live nearby.”

Rutgers–Camden Student and Ghana Native Finds Inspiration through Mentoring

A college junior helps the community and discovers new passions as a participant in the Rutgers Summer Service Internship.

AS A YOUNG GIRL, AnnMarie Bediako embraced the Ghana Girl Guide motto: “Be Prepared.” The organization, which is very similar to the Girl Scouts, taught her to always do her best and to respect and serve others.

So when the Ghana native was offered the opportunity to mentor the young women of Girls Inc. of Greater Philadelphia and Southern New Jersey, a nonprofit network that works to support girls, she knew it would be a perfect fit. “I had been through it before in a certain way,” Bediako says. “I had enjoyed it and thought it would be nice to do something for somebody. The values just matched mine.”
Leap of Faith:  
From Division I Gymnast to Rutgers–Camden Master’s Student  

POLINA POLIAKOVA came to Rutgers–Camden already owning a lot of Rutgers gear. Although she is a native of Norwich, Great Britain, she spent her undergraduate years at Rutgers–New Brunswick, where she studied psychology and competed on Rutgers’ Division I women’s gymnastics team, receiving multiple accolades; most notably, she was named a 2019 Women’s Collegiate Gymnastics Association Scholastic All American.

After graduating in 2020, Poliakova brought her focused, competitive spirit south to Rutgers–Camden. “I wanted a change of scenery and wanted to prioritize finding a mentor for my master’s thesis,” Poliakova said. “I was fortunate to find Lauren Daniel.” Under Daniel’s guidance, she has been researching child and family sleep hygiene routines and the impact of household chaos on the quality of sleep as the basis for her master’s thesis.

Daniel, an assistant professor of psychology and health sciences with Rutgers–Camden, focuses her research on sleep as a modifiable behavior that can be targeted to improve the health of children and adolescents. Among the projects Daniel is currently working on is the study of how sleep can support cancer and hematopoietic stem cell transplant recovery in pediatric patients at the Children’s Hospital of Philadelphia. Poliakova assists in a variety of different ways, from recruiting patients, to conducting study protocol, assisting in quantitative and qualitative analysis, and assisting with manuscript writing.

The opportunities provided to her through her master’s program at Rutgers–Camden have been meaningful and transformative. “Daniel has been incredibly supportive of me, even helping me present research based on my thesis at the American Psychological Association Conference earlier this year in Minneapolis.”

The Rutgers–Camden junior double majoring in French and psychology was one of 100 students selected to participate in the inaugural year of the Rutgers Summer Service Internship (RSSI) program, an initiative of Rutgers President Jonathan Holloway that provides funding in support of public service opportunities for students.

Bediako was asked to be a program facilitator for girls going into their sophomore year of high school. Tasked with helping them understand and navigate their potential career opportunities, Bediako noticed the girls weren’t very engaged at first. “Being a program facilitator at Girls Inc. was a test of my ability,” she says. “I was always on my toes.”

Undaunted, Bediako put her heart and soul into the internship, encouraging the girls to explore their interests. She says it was especially inspiring to see the girls explore potential opportunities in STEM fields. Those types of careers tend to be lucrative and rewarding, Bediako says, but they are dominated by men. Women make up only 28 percent and minorities make up only 11 percent of those working in STEM.

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Through Girls Inc., she saw other young people willing to break down perceived barriers. “The career exploration helped the girls know that there are so many things you can do,” she says. “You don’t have the limitations that it looks like you have. You can make a way for yourself.”

Her time as a mentor has further shaped what she would like to achieve as well. The experience ignited a new interest in leadership and inspired her to declare a minor in management. Bediako says she’s considering a master’s degree in management or a Ph.D. in organizational psychology after she finishes her bachelor’s degree.

“My RSSI experience was life changing,” she says. “I was able to help contribute to young girls’ dreams. I was a guide to a person’s discovery of their passion, their future, and their profession.”
Transforming Problems into Solutions

The Walter Rand Institute’s 20 Years of Influence in South Jersey

BY TOM MC LAUGHLIN

For more than 20 years, the Senator Walter Rand Institute (WRI) for Public Affairs at Rutgers University-Camden has utilized its collective might to champion sound public policy in South Jersey. Residents seeking more affordable and accessible healthcare, families enjoying increased financial stability, and children receiving social-emotional learning (SEL) support in schools are among the thousands living and working in the region who have benefited directly from WRI’s impact.

Simply put, WRI—named in honor of the late New Jersey Senator Walter Rand, who harbored a deep commitment to South Jersey—has built its legacy on making data actionable.

“We exist to be instrumental in transforming problems into solutions in South Jersey,” said Mavis Asiedu-Frimpong, director of the Institute. “In policy, it can often be difficult to access real-time research, data, and information that supports a targeted, community-engaged, and tailored approach to addressing problems in the community.”
Prior to the Institute’s founding in 2000, Rutgers–New Brunswick and Rutgers–Newark had established a very strong public-policy presence in their respective parts of New Jersey, but Rutgers–Camden had not. Highly motivated faculty were making a demonstrated impact in the region, but their efforts were scattered, without any clear connection to Rutgers–Camden. It was difficult for the university to build equity with community partners, but WRI changed everything.

The fledgling WRI reinforced faculty connections to the community by establishing an external advisory board. The members were instrumental in helping to build support in the New Jersey state legislature. Their efforts resulted in state funding and a matching grant from Rutgers University.

Since its inception, WRI’s mission has been multifaceted. For Rutgers–Camden students, WRI has served as a learning laboratory and training ground for them to hone their research skills. In doing so, the institute builds a pipeline of future practitioners who understand the value of community-focused research and know how to interpret and write about it for public audiences.

WRI’s community-forward agenda has consisted of collaborating with Rutgers–Camden faculty, community-based organizations, foundations, government agencies, and others to evaluate programs and services, and assess community needs in southern New Jersey. Right out of the gate, the institute’s research projects focused on regional economic and social development in southern New Jersey, with a particular emphasis on Camden.

WRI’s longest-running projects include its commitment to community-based public safety and reentry initiatives in Camden. This has included partnering with the Rutgers–Newark-based Police Institute on the Camden Safer Cities Initiative, an effort to make the city safer through a sustained collaboration among the criminal justice community and local leaders from Camden’s faith-based, neighborhood, governmental, and social service organizations. WRI still serves as a facilitator for the initiative’s bimonthly meetings today and provides regular analysis of crime data focused on victims and perpetrators of Camden in order to help at-risk individuals.

Underpinning these and subsequent successes, Asiedu-Frimpong noted, is Rutgers–Camden’s formidable strength as an academic institution that prides itself as a community partner. She noted that, unlike many other universities, Rutgers–Camden is always keeping eyes on issues that surrounding communities are facing.

“You see that community partnership flag flying,” Asiedu-Frimpong said. “There’s a real responsibility and obligation to understand what the issues are, see where we fit in to help solve those problems, and roll up our sleeves to get to work.”

With this institutional backing, WRI’s indelible fingerprint can still be seen across scores of community projects today. Over the last ten years, for instance, WRI conducted an evaluation of the Strengthening Families Initiative. This study, supported by the Pascal Sykes Foundation, showed that families using the Whole Family Approach, which pools social-service organizations in Atlantic, Cumberland, Gloucester, and Salem counties, had more stable social support and increased levels of financial stability during the COVID-19 pandemic and revealed consistent, positive changes in healthy relationships, financial stability, and child well-being over 10 years of implementation. The Strengthening Families initiative now serves as a framework for future whole-family, goal-oriented, community-based social service provision efforts.
WRI has also conducted multiple community health needs assessments over its history, and is currently collaborating with the Inspira Health and AtlantiCare health systems to conduct assessments across Salem, Gloucester, Cumberland, and Atlantic counties. This research highlights community priorities and identifies systematic gaps for the nearly 800,000 residents that live and work across the four counties. This includes an identified lack of affordability, accessibility, and availability of healthcare.

“Community health needs assessments are blueprints for action,” Asiedu-Frimpong said. “Highlighting community needs and priorities can serve as a data point and foundation for policy and practice to follow.”

Among other contributions, WRI captured data to understand the influence of “A New View-Camden”—a Bloomberg Philanthropies Public Art Challenge-funded initiative that brought together the City of Camden, Camden Community Partnership, and the Rutgers–Camden Center for the Arts to transform six former illegal dumping sites into dynamic art spaces. An evaluation found that respondents’ positive views of public services and the City of Camden government and public services increased. Residents and other partners who engaged in the art installations and accompanying community events also expressed pride in the project.

“We were proud to be engaged in a project like that,” Asiedu-Frimpong said. “Illegal dumping is a great concern in Camden, so showing that the impact of the beautification of those spaces on residents, businesses, and the community as a whole was an important achievement for WRI.”

WRI’s recent contributions include a new report, “Seeking Work in South Jersey,” commissioned by the Rowan University/Rutgers–Camden Board of Governors. The report, conducted with the Camden Community Partnership and the John J. Heldrich Center for Workforce Development at Rutgers University, identified an economic opportunity gap for South Jersey and Camden residents with other parts of the state, a mismatch between skills and available jobs, and communication and feedback challenges for job seekers.

In “Community Conversations: Pandemic Perspectives, New Jersey’s COVID-19 Storytelling Project,” WRI analyzed almost 600 personal stories from New Jersey residents collected by the New Jersey YMCA State Alliance (NJYSA) and their partners about the COVID-19 pandemic’s cross-cutting impact. The ongoing study, led by the NJYSA, New Jersey Department of Health, and Healthy New Jersey 2030, attempted to capture history as it happens, reporting mental health issues, such as isolation and stressors; social and economic factors, including challenges related to loss of income and employment; and clinical and healthcare behaviors, such as barriers to health resources.
achievements has been its work evaluating The Clayton Model, an innovative social-emotional learning (SEL) program established in the Clayton Public School District in Gloucester County. The intervention program provided a network of SEL services spanning from individual student support, teacher resources, and classroom strategies, to tools for parents to incorporate SEL strategies in the home.

The program is responsive and agile, meaning that it meets needs of students, but according to the school’s own lesson plans. For instance, Stephanie Chambers, SEL coordinator for Gloucester County Special Services, explains that she leads discussions for groups of three to six 4th- and 5th-grade boys for six to eight weeks on a variety of topics, including family ties, social skills, emotional regulation, and stop and think. After the lessons, Chambers will add a corresponding activity like a game, worksheet, or craft.

WRI found that The Clayton Model reduced behavioral difficulties in students and had a positive impact on their lives. But the research center’s involvement didn’t end there; representatives worked to amplify the program’s merits, even testifying before New Jersey legislators to support an effort to expand the program statewide. That effort would pay off; a bill was passed by legislators and signed by New Jersey Gov. Phil Murphy in May 2021, funding a five-year expansion of The Clayton Model into 30 schools across the state. Today, WRI continues to evaluate the program’s impact on schools, families, and students, including absences, grades, suspensions, and behavior reports.

WRI also continues to leverage its headquarters on the Rutgers–Camden campus to collaborate with faculty—in some instances, providing faculty fellowships—to bring their breadth of knowledge, expertise, and skills to bear on regional problems and to support university initiatives. Its Veterans Serving Veterans collaboration with the School of Nursing–Camden provides supplemental training to nursing students who are veterans to care for fellow veterans in primary care settings.

Asiedu-Frimpong notes that WRI’s collaborations with community partners, agencies, and providers have been a two-way street over its proud 20-plus year history. Sometimes organizations approach WRI for research support, while conversely, WRI seeks out partnerships for projects highlighting gaps in existing research that can benefit South Jersey policymakers or community providers. Either way, WRI makes a lasting impression.

“WRI’s legacy is important,” Asiedu-Frimpong said. “We have shown for more than 20 years that our research and data can be another voice which can prove critical to decision-making processes.”
As Dolly Marshall stands in Lawnside, N.J.’s Mount Peace Cemetery and watches the cars on White Horse Pike, she considers that thousands of people pass by a piece of history each day, yet few of them realize it.

Marshall grew up appreciating cemeteries thanks to the influence of her family, who instilled in her that they were not places to fear, but instead were full of opportunities to learn, honor elders, and preserve memories in danger of getting lost to time. Years later, having discovered her calling as a historical preservationist, she has become a leading voice in the fight to ensure that overlooked figures of Camden’s African American history finally have their stories told.

“I have an affinity for history—I want to know how people got to where they were in life,” Marshall said. “Historical preservation didn’t come to me as a career until later, but my parents taught me to safeguard history and share the stories I’ve learned. I loved learning about city of Camden—my mother’s Camden ancestry goes all the way back to the 1850s. It has always given me a feeling of belonging.”

Marshall is a double major in history and Africana studies in the College of Arts and Sciences. She’s also one of five trustees of Mount Peace Cemetery, which was created by prominent Black citizens of Camden in 1900. One of the trustees’ main responsibilities is to restore and maintain the cemetery, which involves remapping the space, repairing damaged headstones, and locating burial plots.
“Identifying who is buried in unmarked graves is a process, just like anything else,” Marshall said, noting that her research incorporates a mix of burial records, local archives, state archives, and cemetery maps. “If there is no community of descendants nearby, the process mostly relies on records. But once you start making people aware, you will see them reaching out. I round out my research by tracing and talking to these individuals. The descendant community is big, but due to the erasure of African American history, it’s not as easy to readily find them.”

She has found that many people connect to the cause, especially those interested in history or genealogy. “It appeals to a diverse group of people interested in knowing more about themselves and their ancestors: high school students, veterans, retirees, and like-minded historians and preservation groups,” she said. “It becomes more than a cemetery and connects people in so many different capacities.”

Among those who Marshall has been able to connect to the cause are Rutgers-Camden faculty and students themselves. When she enrolled at the university in 2020, she found that faculty members took an interest in her preservation work, and, in some cases, showed up in person to lend their support. Among those was Associate Professor of History Kendra Boyd, who came to Mount Peace Cemetery to help with cleanup efforts.

“It’s wonderful to have people come out and see me in my element,” Marshall said, noting that her participation in the inaugural Chancellor’s Mayoral Internship Program helped her to build her network in local government. One of her colleagues, City of Camden Community Outreach Coordinator Dorri Brown, bonded with Marshall over their shared interest in genealogy, and the two shared a remarkable experience as a result.

“Mrs. Brown told me she was her family’s genealogist, and we connected,” Marshall said, “she’d always known that her great grandfather, a World War I veteran, was buried in Mount Peace Cemetery. She had been looking for his burial location for many years. Most of the cemetery’s burial records were destroyed in the 1960s by a fire, which makes locating every individual plot all the more challenging. When his headstone showed up on FindAGrave.com late last year, she was elated, but we still didn’t know the location.”

During a project guided by Marshall and a dedicated volunteer in 2021, more than 200 graves were relocated from the oldest portion of the cemetery. “After talking with Mrs. Brown, I realized he was one of them. I got to personally take her to the spot where he was buried and brought him back into the present consciousness. Through Dorri, his great granddaughter, he is remembered.”

When asked what advice she would give to an aspiring preservationist, Marshall seemed to reach even deeper into her reserve of energy and enthusiasm.

“You have to have a passion—it’s not a job; it’s a lifestyle,” Marshall said. “You have to be prepared for the fact that it’s going to be different every day.” For someone who thrives on change and variety, though, it’s perfect, she said.

The work of preservationists has been spotlighted on a national stage—most recently through the African American Burial Grounds Preservation Act, a bill pending in the U.S. Senate. But, in Marshall’s view, top-down support can only help so much. The real power of the movement, she says, comes from the people working inside the iron gates of cemeteries at, quite literally, the grassroots level.

“Physically show up to volunteer, come to a service event, and get in the element,” Marshall advised. She pointed out that there are multiple areas for involvement: preservation, conservation, sustainability, and anthropology. “It must start with something you enjoy doing,” she added. “Find a way that you can support the cause, and do it. Because everyone’s story deserves to be told.”
When Kwangwon Lee offers this simple statement, he’s not talking about himself—though he might well be. Lee, an associate professor of biology and program director of undergraduate biology at Rutgers–Camden, is also director of MARC U*STAR, the NIH-funded program on campus that provides training, support, and mentorship to undergraduate students from underrepresented backgrounds.
Specifically, the statement refers to one of the most important takeaways from Lee’s research: the inability among many minority students to picture themselves as scientists in the first place. It’s what Lee and his colleagues want more students of color to be able to say, to themselves and to the world. Removing that barrier of vision, Lee says, will require “changing our culture, so that students feel welcome and can have that STEM identity.”

That’s one conclusion from a highly complex self-study (so called because its focus was on the STEM environment at Rutgers-Camden), “Diversity, Equity and Inclusion in STEM.” The as-yet unpublished study took two years to complete and involved three Rutgers entities: Rutgers–Camden Driving Change—a grassroots group of faculty, staff, and students dedicated to increasing diversity, equity, and inclusion (DEI) across the campus; the Senator Walter Rand Institute for Public Affairs (WRI), an applied research and public service center focused on southern New Jersey; and the Data Equity Group, charged with collecting data to advance DEI. The study’s principal investigator was Ross Whiting, WRI’s associate director, who oversaw two co-investigators and a five-person research team, with Lee providing guidance throughout.

The study, said Lee, is important for its remarkable depth and its goal of looking beyond mere data to determine the barriers to minority engagement in STEM. “There’s a lot of quantitative data out there,” he noted. “What’s unique about this study is its qualitative data, its focus on the nuances that the numbers can’t express.”

The self-study involved developing a series of questions that the research team then posed to 43 participants—22 STEM faculty, staff, and administrators and 21 graduate and undergraduate students enrolled in STEM courses or a STEM degree program. The answers provide a striking window into the forces working against greater inclusion of minorities in STEM and suggest ways to move toward greater equity.
Seeing the Scientist Within

Rutgers–Camden has a diverse student body, with white students making up 42 percent of the population; Black students, 18 percent; Latinx, 18 percent; and Asian, 11 percent. That distribution, however, isn’t represented in the STEM fields, where white students predominate. The inability on the part of minority students to envision themselves as part of the scientific community is one force keeping them from being more involved in STEM.

“We have 50 to 70 percent first-generation students, depending on what year you’re looking at,” Lee says. “So they haven’t been exposed to all these STEM career options.”

Lee noted that family support is extremely important in encouraging students to enter a STEM field. “We need to educate families that a STEM career can offer a secure future,” he said.

Elizabeth Hardy (CCAS ’24), a first-generation student majoring in biology, health sciences, and psychology, is a case in point. Initially, the young African American woman from Highland Park, New Jersey, planned to go into nursing, but while fulfilling her pre-nursing requirements, she took a class in biochemistry, and it sparked a passion for science and scientific research. Then, Terri-Ann Kelly, an assistant professor and one of her mentors in the School of Nursing, posed a life-changing question: If you weren’t going to be paid to work, would you still go into nursing? “It was a huge eye-opener,” Hardy said of Kelly’s question, her answer to which was an emphatic “no.” Not long after, she changed her major, with the intention of getting a Ph.D. in nutritional sciences. Currently, she’s working in the lab run by neuroscientist Nathan Fried, studying the effects of monosodium glutamate, or MSG, on the nervous system of fruit flies.

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Finding Faculty Role Models

Elizabeth Hardy benefitted from the mentorship of Kelly, a faculty member who happens to be Black. And the self-study made clear that a lack of STEM role models in students’ families and communities is a significant factor keeping them from envisioning a future in science. Student respondents expressed the need for greater racial, gender, and LGBTQIA+ representation in faculty and curricula, and faculty acknowledged that this is problematic. “When Black and Latinx students don’t see someone like themselves on the faculty to look up to, that’s a real problem,” Lee noted.

Many faculty respondents observed that, despite an administrative push to hire more racially diverse faculty, accomplishing that aim is still a challenge, in part because of a lack of racial diversity on search committees and the relatively limited number of faculty of color in the STEM fields.

Overcoming a Prior Deficit

One of the significant barriers uncovered in the study, and acknowledged by both students and faculty, was that many minority students come to college ill-prepared for studying science. The researchers attributed this to “pre-university systemic inequalities”—put simply, it means that minority students are much less likely than their white counterparts to have received a strong background in science in middle and high school.

As ways to overcome that lack of preparation, student respondents mentioned the need for more mentoring and academic guidance as well as something called “differentiated teaching”—a personalized approach that takes into account students’ diverse educational backgrounds and abilities. And many faculty felt that they needed greater training and resources to help promote DEI in STEM.

Combatting Financial Disadvantages

Students of color, the study revealed, are often indirectly barred from participating in events—like mixers, talks, and networking opportunities—that would allow them to feel integrated into the campus’s scientific community. That’s because many are working to support themselves and/or their families, or they live off campus and spend part of the day commuting. Students said that those jobs and other off-campus responsibilities also keep them from participating successfully in group work. One solution posited by many respondents was funding to enable students to spend more time on campus and in activities that enhance the pursuit of science and promote a sense of community inclusion.

Moving Forward

Lee acknowledges that the study, rich as it is in details and specifics, is a first step. He’s eager to spread the word about both the study and the Driving Change initiative that helped spawn it. “I really want to have a larger group of faculty and administrators join the grassroots effort,” he says, “and I hope the study can offer guiding principles to how we can intervene to improve our promotion of DEI in STEM education.”
The Teaching Kitchen is one of the many innovative ways that Rutgers University in Camden is personalizing the student experience. Watch the brief video below to see the Teaching Kitchen in action and then read all about how the Teaching Kitchen is making an impact for our students.

Hailey Gould stirred the pan feverishly, the chicken cubes turning a golden brown. “I’ve never made a meal in 10 minutes in my life,” said the nursing major with a laugh. “But I’ll give it a try.”

“Five minutes!” called out Nick Mazza, Rutgers–Camden’s registered dietician.


Gould sprang into action, and then the thought hit her. “I love anything with garlic in it, on it, or around it,” she said. “Time to add my own special touch.”

A Truly Global Kitchen, In the Middle of Campus

The Teaching Kitchen

is one of the many innovative ways that Rutgers University in Camden is personalizing the student experience. Watch the brief video below to see the Teaching Kitchen in action and then read all about how the Teaching Kitchen is making an impact for our students.

As classmates cheered on wildly, Gould and her teammates Nonny Mbathane, a psychology and gender studies major, and Christian De Los Santos, an accounting and management major, were competing in a cooking challenge to mark the Oct. 4 grand opening of the state-of-the-art Teaching Kitchen, located in the Raptor Dining Hall on the main floor of the Campus Center.

The Teaching Kitchen, which looks more like something out of “Top Chef” than the typical university dining hall, is open daily for students to prepare meals and snacks tailored to their own tastes, dietary restrictions, and faith traditions. Classes on nutrition and culinary skills are held every other week, empowering students to plan meals, cook with set ingredients, and experience new cuisines from around the world.

“Forget the mushrooms! I love mushrooms and wanted to use a lot of my favorite spices,” said Mbathane, a vegetarian, sautéed mushrooms, peppers, and cherry tomatoes infused with garlic and creole spices – all picked from the cornucopia of fresh ingredients in the kitchen’s fully stocked pantry.

“The Teaching Kitchen is a place where you can be creative and try new things. I love how it’s open to everyone,” said Gould.

Without a minute to spare, the trio turned in a creative and eclectic winning dish – each student bringing something different to the table – that could only be made possible in Rutgers–Camden’s new, collaborative space.

“How beautiful; it’s like the diversity of our campus represented on a plate,” said Kristin Walker, Rutgers–Camden’s executive director of special initiatives, events and dining.
The novice chefs are among countless Rutgers University–Camden students who are now discovering the joys of cooking and nutrition in the Teaching Kitchen.

“The Teaching Kitchen is one of the many innovative ways that we are personalizing the student experience,” said Rutgers University–Camden Chancellor Antonio D. Tillis. “Students are learning that mealtimes can be healthy, delicious, educational, and made to suit their needs.”

At the sauté station, students can choose from a range of ingredients, including grains, noodles, tofu, proteins, cheeses, and an assortment of vegetables. The cooking station features five flat electric griddles along with a host of condiments and spices. At “Smoothie Paradise,” students can pick from a variety of fruits, vegetables, and yogurts to whip up their favorite concoctions. The waffle station, loaded with toppings like cinnamon, chocolate syrup, and caramel, is the perfect destination for breakfast or dessert.

“We have stocked the pantry with core ingredients but are always open to suggestions for new ingredients that could enhance participation and satisfaction,” said Kathryn DuPlessis, director of dining services for Gourmet Dining at Rutgers–Camden.

The wide assortment of ingredients – staples of culinary traditions spanning the globe – make it evident right away that a great deal of planning and consideration went into representing Rutgers–Camden’s diverse student population. Keeping a listening ear, the dining staff held tabling events and took surveys with students prior to the kitchen’s opening to find out which foods they wanted to see in the kitchen’s pantry.

“Inclusivity is one of our driving focuses,” Mazza said. “We want students to be proud of their cultures and represented, but in their own way. We want them to tell us how their stories should be told.”

Gourmet Dining also regularly updates the culinary and nutrition classes according to seasonality and student feedback, and by regularly introducing new foods, such as a featured superfood of the month.

“We want to ensure that each event has its own feel,” Mazza said. “We are an action dining initiative, not a stand-back-and-watch initiative. It’s all about personalized care and never a one-size-fits-all operation.”

The dining staff is available on an ongoing basis to help suit students create daily meal plans that meet their individual needs and expand healthy, fresh food options. Students also learn how to purchase food for themselves in a healthy and positive way.

“The Teaching Kitchen empowers students to have more options for their own well-being,” said Mary Beth Daisey, associate chancellor for student affairs at Rutgers–Camden. “This is especially important for students with limited ingredient choices in their diet due to food allergens, health needs, or faith traditions.”

Just as importantly, Mazza said, it’s the staff’s privilege and responsibility to show students they can feel “a sense of home.” This includes Rutgers–Camden’s large population of first-generation college students who are growing accustomed to being away from home and unable to draw on shared experiences with family members. With the dining staff offering “a guiding hand,” Mazza said, students can discover a whole new world of culinary possibilities and have a comforting, familiar dish to rely on every day.

“For some people, maybe that’s hummus or other plant-based options,” Mazza said. “Other people might love burgers and fries. Comfort foods mean different things to different people.”

Mbathane said that she loves to cook and looks forward to crafting more vegetarian meals in the culinary classes. Gould, on the other hand, said that she made mental notes on the meal she created for the cooking challenge in the hopes of duplicating it at home. She said that she lives in an off-campus apartment and has limited funds, so she’s excited to expand her culinary skills. “I was pleasantly surprised at my dish,” she said. “I thought, ‘I can do this again!’”

Students looking for recipes can scan QR codes in the Teaching Kitchen’s virtual cookbook. They can also check out the Teaching Kitchen website for tips on creating do-it-yourself dishes such as pasta, omelets, overnight oats, and stir-fries.

With word spreading like wildfire about the Teaching Kitchen, more and more Rutgers–Camden students are now taking meal prep into their own hands. It’s become a common sight to see students cooking shoulder-to-shoulder, exploring the pantry, or stopping by to make a snack before or after class or practice.

While the Teaching Kitchen doors are now open, the dining staff still encourages student feedback. They can reach out via the Talk to Text chat or the Rutgers–Camden mobile app. Classes are limited to five students and are open on a first-come, first-served basis. To register, email Mazza at RUDietitian@gourmetdiningllc.com.

“Spreading the word is only going to make it a greater and more wholesome space,” Mazza said. “It’s an amazing space, but what makes the Teaching Kitchen truly magnificent are the chefs: our Rutgers–Camden students.”
School of Nursing
Elevating Standards of Care Locally, Nationally

These days, the nursing profession needs the kind of care only nurses can give.

Rutgers School of Nursing–Camden took its pulse, assessed needs, and prescribed a holistic treatment plan that supports nurses, strengthens community partnerships, and elevates standards of care across South Jersey and beyond.

“We are committed to developing a robust, resilient, and well-supported workforce that can provide the care our communities need and deserve,” interim School of Nursing Dean Marie O’Toole said.
Over the past year alone, the school expanded direct care efforts for Camden residents, launched an undergraduate research fellowship, and became a nationally designated school of excellence. It also was honored as one of 12 nursing schools nationwide to pilot innovative CPR training.

Under four years of Nickitas’ leadership, the School of Nursing has flourished into a hub of social change that is improving health outcomes in Camden, South Jersey, and beyond. In light of a number of recognitions awarded to the School of Nursing and the National League for Nursing’s declaration of 2022 as the Year of the Nurse Educator, Nickitas reflected on nursing leadership in the 21st century, her vision for advancing health equity, and how she’s building a school designed to educate a more compassionate, culturally competent workforce.

The Nursing Field Shortages

The School of Nursing is addressing the nationwide nursing and instructor shortages on multiple fronts. O’Toole last fall announced the school’s ambitious goal of doubling enrollment in its graduate programs within five years. It has created two new post-master’s programs, and a federally funded regional academy for advanced practice nurses to become educators.

“We are focused on increasing capacity so we can help fill the need for more primary care providers,” said interim Provost Donna Nickitas, who plans to resume her former post as nursing school dean once a new provost is hired. “We’ve created the infrastructure, and now we’re leveraging the impact.”

The pandemic accelerated a shortage in registered nurses and nursing faculty throughout the U.S. In 2021 nearly 92,000 qualified nursing school applications were rejected because of a lack of faculty to teach them, the American Association of Colleges of Nursing reported. A survey last October by the organization put the faculty vacancy rate at nearly 9 percent; the national vacancy rate for registered nurses in 2020 was just shy of 10 percent, according to the 2022 Nursing Data and Analysis Report by the New Jersey Collaborating Center for Nursing.

Expanded Partnerships

The School of Nursing has long had core partnerships with an array of health care institutions, including Cooper University Hospital in Camden, to provide clinical training for students. Last August, the school signed a three-year agreement with AtlantiCare that will open more clinical placements and research opportunities, while widening hiring options for the Atlantic County-based health care system. AtlantiCare is a major health care employer, with more than 6,000 staff at more than 100 locations in South Jersey, including hospitals in Atlantic City and Galloway Township.

“This partnership’s transition-to-practice model provides clinical opportunities for our nursing students, and ultimately potential employees who will already be familiar with AtlantiCare’s practices,” said Cynthia Ayres, the school’s associate dean of graduate programs and advanced nursing practice. “This is just the start of a more robust, comprehensive way of working together.”

AtlantiCare Vice President and Chief Nursing Officer Katherine Birkenstock lauded the enhanced partnership with the School of Nursing. “Together we will offer rich, real-world educational research and clinical experiences to students and graduate nurses,” Birkenstock said. “Through this collaboration and our other academic partnerships, we are committed to evolving nursing careers and health care overall.”
Tuition Incentives

AtlantiCare will place students in clinical settings, providing instructors and tools that measure competencies. The arrangement also is expected to raise the level of evidence-based projects graduate students are required to do. “AtlantiCare can identify quality improvement projects that are meaningful to them” and that can be sustained, Ayres said.

The School of Nursing will offer AtlantiCare employees tuition scholarships to encourage their professional advancement. The school also created a new track of its Doctor of Nursing Practice program, this one focused on health systems for nurses with master’s degrees pursuing careers outside of director patient care. It fulfills an education need identified by AtlantiCare, Ayres noted.

“When managers are better trained, there’s less attrition,” O’Toole said. She expects the AtlantiCare agreement to increase graduate program enrollment, which totaled 134 in fall 2022, by 20 to 30 students the first year.
Preparing More Nursing Educators

The school developed a post-master’s certificate program for nurses to become nursing educators. Instructors are needed both as faculty at nursing schools, and in clinical settings to provide students guidance and evaluate their skills and ensure they meet standards, Ayres said.

An outgrowth of that endeavor is the Clinical Instructor and Preceptor Preparation Academy, created by Clinical Assistant Professor Mary Wunnenberg. She secured a nearly $1 million grant over four years through the federal Health Resources and Services Administration.

“This is going to make a big impact, and it’s wonderful Rutgers–Camden is leading it,” O’Toole said. The goal is to boost the recruitment, retention and education of nurse educators to increase nursing school capacity.

Wunnenberg is developing virtual learning modules, and a residency program through which clinical experts preparing to become nurse preceptors or clinical faculty are mentored by experienced educators. The School of Nursing will partner with its health care facilities in South Jersey the first year, and then expand the academy to include partners elsewhere in New Jersey and in New York, the Virgin Islands and Puerto Rico, all part of Region 2.

High-Tech Training

The School of Nursing has the only certified nursing simulation center in South Jersey, a facility that allows students to practice scenarios they may confront on high-tech mannequins. The school incorporated the Resuscitation Quality Improvement® (RQI) CPR training into the center, one of only 12 nursing schools in the nation to pilot the technique.

Mannequins attached to a computer monitor are always available for nursing students to practice CPR, giving them real-time feedback. Traditional CPR training is done annually. “The training increased students’ confidence,” O’Toole said. “When someone has a cardiac incident, you want to be the best prepared person in the room.”

Encouraging Undergraduate Research

Sophomore Manpreet Rayjma was one of eight students to participate in an undergraduate research fellowship last summer. The experience “definitely made me more aware of the value of research in all aspects of nursing,” the 20-year-old said.

Rayjma said her group of three analyzed surveys of first-year nurses in a residency program at Cooper University Hospital to assess their satisfaction with it. (Another group studied families as caregivers in intensive care units.) Based on the findings, Rayjma said she’s inclined to do a residency when she joins the workforce.

“Nurses need to be able to base their practices on evidence. We emphasize both the art and science of nursing,” O’Toole said.

From left: Sungao Macauley, fellow; Rachael Merrick, fellow; Dr. Shannon Patel, assistant vice president of nursing quality, practice and innovation, Cooper University Health Care; Krystal Lazos, director of nursing quality, practice and innovation, Cooper University Health Care; Dr. Mei Rosemary Fu, professor and senior associate dean for research; Renee Cherfane, nurse residency and professional development manager, Cooper University Health Care; Skyla Mateo, fellow; Dr. Brigitte Cypress, associate professor; Nikola Klimczak, fellow; New Jersey Institute of Technology; Narijs Jaffry, fellow; Samantha Lafferty, fellow; Manpreet Rayjma, fellow.
Supreme Influence

The High Court in Modern America

Rutgers Law

BY DUSTIN PETZOLD
hen a U.S. Supreme Court draft majority opinion striking down abortion rights was leaked in May 2022, Professor Leonore Carpenter of Rutgers School of Law in Camden didn’t panic.

“I presumed it was [Justice Samuel] Alito’s wish list,” Carpenter said. She’d fully expected the justices to redefine a fetus’ viability and shorten the time for getting an abortion in *Dobbs v. Jackson Women’s Health Organization*. Instead, the six-justice conservative supermajority last June overturned the landmark 1973 *Roe v. Wade*. “Overnight, they erased a 50-year-old precedent—and the right to abortion it created,” Carpenter said. “I tend not to be an alarmist when it comes to what the Supreme Court will do, but now, I’m alarmed.”

The nation’s eyes are on the highly partisan Supreme Court, in the midst of its second term. Since October, the court has heard cases that could alter elections, discrimination protections, affirmative action, environmental oversight, Native American law, and immigration enforcement. Carpenter and Rutgers School of Law colleagues Joanne Gottesman, Stacy Hawkins and Margaret Zhang weighed in on recent and pending rulings as well as the highest court’s polarizing influence.

“This is the most activist court in a generation or more,” said Hawkins, vice dean and professor of constitutional and employment law. “Unlike the court of the civil rights era, the current Supreme Court is rolling back basic civil rights. This kind of regressive movement is very dangerous.”

“We’re seeing a conservative court use power to shape law the way they see fit—they are essentially making policy,” said Zhang, a visiting assistant professor.

“People are expressing distrust in the court, as well as in elections. Where will that lead?” asked Gottesman, director of the law school’s Immigrant Justice Clinic.

** Elections **

At stake in *Moore v. Harper* is the right to legally challenge a state legislature’s actions affecting elections, Hawkins said. The Republican-led North Carolina Legislature is using what’s known as the independent state legislature theory to argue that the state’s Supreme Court lacked authority in rejecting a new congressional map the Legislature adopted. The case could have serious repercussions for checks on state legislatures, threatening state courts’ role in preserving voting and electoral rights, Hawkins said.

** Immigration **

Gottesman said she is closely following a challenge to the executive branch’s exercise of prosecutorial discretion. In *United States v. Texas & Louisiana*, the states oppose the Biden administration’s 2021 guidelines for immigration enforcement—prioritizing removal of noncitizens who pose a threat to national security, public safety or border security. “This use of discretion in immigration goes back centuries,” Gottesman said. “The notion that an administration would not be allowed to set priorities for enforcement is hard to imagine.”
Affirmative Action/Race

The court could take two routes in the cases challenging race as a factor in college admissions decision-making: banning its use, or going farther and rejecting diversity as a compelling interest, Hawkins explained.

She expects the court to take the narrower option. Nine states already exclude race in college admissions decision-making. “We can live in that world and still pursue our goals of diversity,” Hawkins said. However, if the court were to reject diversity, that would have widespread ramifications, including in the workplace, she said. “I’m not sure how we all shift gears into that framework.”

Brackeen v. Haaland has the potential to undue the 1978 Indian Child Welfare Act, established to keep Native American children in child welfare and adoption cases with their family or tribe. Opponents contend the law is race-based and in violation of the 14th Amendment’s equal protection clause, but tribal citizenship has historically been viewed as a political affiliation. The case “could completely upend our Indian laws,” Hawkins said.

Discrimination/
LGBTQ Rights

Zhang is watching 303 Creative v. Elenis, which challenges Colorado’s anti-discrimination statute. The case involves a Christian website designer’s refusal to create wedding websites for same-sex couples. The designer contends a violation of her First Amendment right of free speech.

In a case last term, Cummings v. Premier Rehab Keller, P.L.L.C., the court ruled people whose rights are violated under the Affordable Care Act or the Rehabilitation Act cannot seek damages for emotional distress—often the main harm of discrimination, Zhang said. The majority opinion’s rationale relates to the acts’ status as spending clause statutes, those in which recipients of federal monies must adhere to prescribed conditions. “They used a technical, small holding to make it more difficult for people trying to vindicate their civil rights to do so,” said Zhang, an equity and inclusion fellow at Rutgers Law School.
Environment

In its first term, the 6-3 conservative court limited the Environmental Protection Agency’s ability to regulate power plant emissions under the Clean Air Act, hindering climate change initiatives. This term, in Sackett v. EPA, justices are considering limiting federal protection of wetlands and streams. The case involves an Idaho couple blocked from building a home because the EPA contends their property contains wetlands and is subject to regulation under the Clean Water Act.

Over the past five decades, the Clean Water Act and the Clean Air Act significantly reduced pollution. “Reversing these protections is altering our future in ways that cannot be undone,” Hawkins said.

Eroding Trust

“This is a fearlessly ideology-driven court, willing to upend rights people have had for generations,” Carpenter said. Bucking precedent and taking positions “out of step with prevailing attitudes of Americans” are destabilizing the country, she said. “We’re seeing it create chaos.”

Zhang said courts’ credibility suffers when litigants anticipate rulings will be based on ideology and not the facts of their case. “People need to know that they have a fair shot at justice,” she said. Faith in the court has eroded. A Gallup poll last fall put the Supreme Court’s job approval at only 40 percent, and trust in the institution was at an all-time low.

Historically, the court “is never too far ahead of or too far behind public sentiment,” Hawkins noted. She pointed to two unanimous landmark decisions, one in 1967 that struck down laws banning interracial marriage, and the other in 2015 that guarantees same-sex couples the right to wed. In both cases, the law in most states had already achieved the same effect.

Retooling the Court

The Rutgers School of Law professors agreed justices at a minimum should be bound by an ethics code, just as all other federal judges are. Supreme Court justices nominated by both parties have had ethical lapses, Zhang noted.

Retooling of the Supreme Court is needed, but that’s far more complicated.

“The Supreme Court has been turned into a political institution that gets to decide winners and losers,” Hawkins said. “There has to be a mechanism for rebalancing the parties’ influence on the court,” she said. “You don’t want ideological capture of the court.”

Such a fix would likely involve term limits for justices and allowing each president to make a certain number of appointments. But establishing such a system would require support of both major parties. “Without bipartisan buy-in, then you wind up looking like this is political payback,” Carpenter said. “That doesn’t help any institution’s credibility.”

The Supreme Court will likely hand down most of this term’s rulings by mid-June.

“We’re going to see decisions that make conservatives happy and progressives unhappy, but I think there may be some surprises,” Carpenter said.
Doing Business While Doing Good

School of Business Examines Evolution of Corporate Culture

BY CAROLINE BROBEIL

There is a quiet revolution happening in the lagoons and wetlands outside a textile facility in a sunny valley in Rio Nance, Honduras. Fashion and textile manufacturing make up 10 percent of the world’s carbon emissions, use valuable water resources, and release pollution during the manufacturing process. But one textile manufacturer was determined to do it differently. In 2001, Montreal-based Gildan launched a proprietary system that treats the wastewater from its Rio Nance plant using sunlight, gravity, and bacteria. Water funnels through a series of 41 lagoons and wetland areas, emerging fully restored and capable of sustaining life. The many birds, crocodiles, and other wildlife that call the lagoons home are testament to that.

The innovative water treatment system is just one example of the steps corporations have taken as part of their commitment to responsible manufacturing and environmental, social, and governance investing—an approach known as ESG.

This diverse set of topics under the ESG umbrella date to the 1960s, when investors applied certain standards to identify companies that had specific corporate values they wanted to support. ESG has since evolved from a simple list of actions that set a socially responsible company apart from its competitors to a complex set of metrics that provide transparency into a corporation’s actions and their effect on the world.

Both large and small companies are paying close attention to ESG, according to Yuliya Strizhakova, associate professor of marketing at the Rutgers School of Business–Camden. “It’s because of growing consumer concerns around global warming and increased expectations of firms to be environmentally responsible, socially responsible, and committed to social causes, as well as inclusive and diverse in their corporate governance,” she said. Strizhakova and her colleagues found that about 90 percent of the top 100 global brands make statements around environmental sustainability on their websites—and, for statements around ethics and social responsibility, the number is close to 100 percent. “For multinational firms and their global brands,” Strizhakova said, “it is a given that they must implement ESG.”

Companies have also started to appreciate that a robust ESG program can help the bottom line. Jun Guo, associate professor with the School of Business–Camden, pointed out that 20 years ago, only a few companies on the Standard & Poor’s 500 index published ESG reports. That number is growing, Guo said, as more companies have realized ESG is good for business growth.
ESG is undergoing yet another evolution as the world strives to move past COVID-19 and the supply-chain problems that it created. Guo emphasized that implementing a sound ESG strategy can help address supply-chain risks like shortages of new materials, as well as employee safety concerns and labor disputes. Starbucks, for example, disclosed in a 2021 proxy statement how its ESG strategies helped to address some of its supply chain challenges. In spite of higher costs and operating challenges as a result of COVID-19, global supply chain limitations, and store closures, said Guo, Starbucks still saw significant improvements in its financial results.

Strizhakova emphasized that companies should consider the carbon footprint of their supply chain, but also use it as an opportunity to open discussions with suppliers about social values and priorities as well. “I think we are at a major crossroad for supply-chain reevaluation for all firms,” she said. “ESG should be a part of supply-chain considerations, similar to other parts of marketing, and I hope that firms will become more attentive to it.”

While traditional supply-chain drivers like cost, production, and inventory will continue to influence business decisions, other factors tied to ESG may begin to come into play over time because of consumers’ demands, said Kim. “It’s safe to say that corporate ESG investment will grow exponentially for decades to come.”

“**For corporations, socially responsible investing is not an option but has become a must-practice.**”

DR. SUNGSOO KIM, professor, Rutgers School of Business–Camden
That is what it takes, on average, to make one automobile. It’s also the simplest way to explain the complexity of the global supply chain, according to Richard Michelfelder, clinical associate professor of economics and finance at Rutgers School of Business–Camden. “What a supply chain is really meant to do is map or develop a process for a multi-market system,” said Michelfelder.

Essentially, businesses are looking to answer the question of how supply can meet demand. “It is an incredibly complex question because of the seeming infinitude of markets and products out there,” he continued. Referring to the automobile example, he noted, “If you’re looking at 20 to 30 thousand parts, you’re looking at 20 to 30 thousand suppliers. That’s for one product.”

Before March 2020, many Americans didn’t think much about logistics or the global supply chain; but the restrictions and shortages brought about by COVID-19 have changed that. It would be unusual to find any area of modern life that hasn’t been impacted by the current global supply-chain crisis. The issue remains widespread and prevalent in almost every sector of the economy even now, more than two and a half years since the pandemic started. From the shortage in semiconductors (“chips”) for manufacturing, to lumber and other materials for construction, to everyday consumer goods, it seems like almost everything is in short supply.

“There’s no such thing as a pre-COVID economy anymore,” said Michelfelder. “This is something that the modern economy has never experienced.”

Many wonder how everything could have become so bad, so quickly. The globalization of the world’s economy over the past half-century has brought many benefits, including improved efficiency in manufacturing, more competition, and lower production costs. This same global expansion, however, sometimes creates challenges in maintaining a smooth flow of raw materials, parts, supplies, and finished goods. Transportation delays, communication issues, and geopolitical conflicts have all contributed to past supply-chain disruptions.
The pandemic brought two significant changes that further disrupted the flow of goods: Businesses across the globe were forced to operate with limited capacity due to labor shortages, and the demand for durable goods—cars, washing machines, and other goods expected to last a long time—shot up as large portions of the world locked down. Together, this formed a perfect storm, one that continues to affect commerce and daily life.

“Hopefully we’re going to get to a new normal where possibly we may have fewer shortages,” said Michelfelder. “But there is no going back.”

One silver lining was that the initial shock of pandemic shortages forced businesses to prioritize innovation and to move more quickly on changes in distribution that they had been planning. The logjams once seen at American ports have eased, and the time it takes for goods to ship from Asia to the United States has come down from a high of nearly 15 weeks in October 2021. Retailers also have started to see excess inventory, especially in the home goods and outdoor furniture categories; both segments were popular at the height of the pandemic, when many people were stuck at home.

“Companies discovered the weaknesses in their supply chains, and now they’re putting strategies into place to address those issues and prevent disruptions,” said Michelfelder. Investment in robotics and digital control has spiked since March 2020—an indication that companies are investing in technology to cope with the challenges presented by the pandemic.

New issues—including Russia’s invasion of Ukraine, political tensions between the United States and China, and global inflation—are complicating the effort to recover from the supply-chain disruptions. To Michelfelder, those events are indicators that the business world needs to begin thinking differently. “Adverse events are occurring with more frequency, and businesses need to begin to operate comfortably in an unstable environment,” said Michelfelder. “I am hopeful we will reach a new steady state, but it is a long way off.”

The emergence of environmental, social, and governance (ESG) as a corporate value may have an impact in finding long-term solutions for the global supply chain. “Companies are beginning to understand that a lack of ESG policies can lead to risks in their supply chains,” Michelfelder said. “Investors expect that companies will investigate how their suppliers are operating and understand the process.”

One positive result of the challenges of the past several years may be that corporations are shifting their perspective—instead of viewing the supply chain as a simple linear process, they realize it’s an important part of the overall value they offer. But any positive outcomes from COVID innovations or ESG programs won’t happen overnight.

“Anything that creates value will take time,” Michelfelder said. “The key for any company is to keep at it, do it the right way, and make it a part of who they are as an organization.”

“There no such thing as a pre-COVID economy anymore. This is something that the modern economy has never experienced.”

RICH MICHELFELDER
Battling Bias in AI

A researcher from the College of Arts and Sciences explores how artificial intelligence can avoid inequity
As artificial intelligence becomes increasingly embedded in everyday life, concerns have grown around bias in its programming. Many of the tasks performed by AI are simple and innocuous, but as its capabilities expand, so does its potential for wide-ranging impact. Bias can cause artificial intelligence to make decisions that are systematically unfair to particular groups of people, and researchers have found this can cause real harm. Rutgers–Camden researcher Iman Dehzangi, whose most recent article, “A review on deep learning approaches in healthcare systems,” was published in the Journal of Biomedical Informatics, believes institutions must carefully balance the advantages and drawbacks of AI.

“Artificial intelligence and machine learning are poised to create valuable opportunities by automating or accelerating many different tasks and processes,” said Dehzangi, assistant professor of computer science in the Camden College of Arts and Sciences. “One of the challenges, however, is to overcome potential pitfalls such as bias.”

Biased AI can give consistently different outputs for certain groups compared to others. Biased outputs can discriminate based on race, gender, biological sex, nationality, social class, or many other factors. Human beings choose the data that algorithms use, and even if these humans make conscious efforts to eschew bias, it can still be baked into the data they select. Extensive testing and diverse teams can act as effective safeguards, but even with these measures in place, bias can still enter machine-learning processes. AI systems then automate and perpetuate biased models.

“Because machine learning is dependent upon data, if the data is biased or flawed, the patterns discerned by the program and the decisions made as a result will be biased, too,” said Dehzangi, pointing to a common saying in the tech industry: “garbage in, garbage out.” He suggests taking the time to deconstruct and understand the problem looking to be solved, which can help identify potential bias before any technology solution is implemented.

Organizations and corporations have jumped on the opportunity presented by AI and Big Data to automate processes and increase the speed and accuracy of decisions large and small. Market research has found that 84 percent of C-suite executives believe they must leverage artificial intelligence to achieve their growth objectives. Three out of four believe that if they don’t take advantage of AI in the next five years, they risk going out of business entirely.

“There is not a successful business in operation today that is not using AI and machine learning,” said Dehzangi. Whether it is making financial investments in the stock market, facilitating the product development life cycle, or maximizing inventory management, forward-thinking businesses are leveraging this new technology to remain competitive and ahead of the curve. However, if they fail to account for bias in these emerging technologies, they could fall even further behind, remaining mired in the flawed data of the past. Research has revealed that if care is not taken in the design and implementation of AI systems, longstanding social biases can be embedded in the systems’ logic.

When it comes to AI, businesses and other organizations should maintain their enthusiasm about new technology but understand the challenges that come with it. Dehzangi believes potential biases must be addressed as soon as a new technology is adopted, rather than after a problem has already occurred.

“Businesses should look to engage data scientists and other individuals from across the organization as early as possible,” Dehzangi. “It is worth investing the time to understand the process being solved with the technology, to ensure the models accurately reflect the decision-making process and data is weighted properly.”
The birth of college sports predates every recognized professional sports league in America. It’s well known to sports fans (and members of the greater Rutgers University community) that the first college football game took place in 1869 between Rutgers and Princeton University (final score: Rutgers 6, Princeton 4).

While almost every detail surrounding college athletics has changed since that first contest, many of the goals of organized competition remain the same: to promote school spirit among the campus community, provide an outlet for competition, and develop skills like teamwork and perseverance that enhance the character and qualities of athletes and their educational journeys.

Rutgers University–Camden is a member of the NCAA’s Division III, and roughly 250 to 275 athletes don Scarlet Raptor uniforms each year while representing the university in 17 varsity sports. Rutgers–Camden Director of Athletics and Recreational Services Jeff Dean noted that Division III student-athletes enjoy certain benefits that are less available to athletes competing in Division I.

“I think a Division III student-athlete has more of an opportunity to fulfill all of their desires in college,” said Dean, who has led Rutgers–Camden athletics since 2003 and first arrived on campus in 1993 as the head baseball coach. “Our student-athletes get the opportunity to keep participating in a sport they love while pursuing a top-notch education—and they probably have more freedoms than the typical Division I athlete to experience all parts of college life. Most Division I athletes have very regimented schedules that can almost keep them in a bubble, to a certain extent.”

Among the many Rutgers–Camden student-athletes with a strong track record of success on and off the field of competition is men’s soccer player Liam Craver, a Dean’s List student who graduated in 2021 with a bachelor’s degree in marketing and finance. He posted a perfect 4.0 grade-point average every semester as an undergrad; like all athletes who were enrolled in NCAA institutions during the COVID-19 pandemic, Craver received an extra year of athletic eligibility. In his final season for the Scarlet Raptors in 2022, he was one of the team’s captains. Craver is completing Rutgers’s five-year MBA program, with plans to work for a large financial firm in Philadelphia or New York City.
At any level of competition, victory is the ultimate measuring stick. For college athletes, the premier prize is a national championship. Track and field student-athlete Jude Misko is the most recent of Rutgers–Camden’s national champions, having bested all competitors to win the 2021 and 2022 national crowns in the hammer throw.

“Anyone who has ever put on a college-athletic uniform has been in search of a national championship, so to win one has to be the biggest highlight,” said Dean, though he added that deep runs in postseason competition don’t necessarily have to end at the top of the proverbial mountain to be memorable and life-changing. He singled out the 2013 men’s soccer team, which built a 37-match unbeaten streak over the course of the 2012 and 2013 seasons while advancing all the way to the tournament’s final game. “We were fortunate to make the Final Four and to play for a title, and even though we in lost the championship game,” he said, “what an experience it was for our kids to earn a trip all the way to San Antonio and compete on the national stage.”

Every year at a college or university is a new one, with new bonds to form and relationships to build. When Dean was asked what most excites him about the future, he didn’t need long to settle on an answer: “It’s always having that new group of kids that you get to watch grow and develop into adults, right before your eyes, over the next four years. That’s always exciting, and it happens every year.

“Atletics can be the bond that ties an entire campus community together. The logo and colors we wear are a symbol of something bigger than just ourselves. They’re a representation of all of us here at Rutgers–Camden.”

JEFFREY DEAN
**ALUMNI SUCCESS**

**Life’s Challenges Create a Winning Attitude**

BY MAGGIE GRIFFIN

The old saying goes, “What doesn’t kill you makes you stronger.” Ashly Estevez-Perez CCAS ’21 is the living example of what a difference resilience makes. The fact that she was recently appointed by President Biden to the U.S. Department of Homeland Security is all the proof you need. Estevez-Perez is a writer/editor and her work at DHS allows her to see all the components that make up the agency’s efforts to guard America’s security and safety.

“Growing up in Camden, you learn a lot about grit and resilience, said Estevez-Perez. “You learn the stories of entrepreneurs, first-generation immigrants, students, parents and how they got to be where they are today. It helped me see how Camden breeds some of the most resilient, courageous, and hardworking people.”

But Estevez-Perez’s story goes back even further. Her family immigrated from the Dominican Republic when she was young. As her parents struggled to achieve the American Dream, they encouraged her in school and instilled a servant leadership mentality. She learned the value in helping others and imagining the impossible while still trusting she could achieve those dreams, despite the daily challenges she faced.

Upon graduating from Rutgers Law in 2006, she clerked for the Honorable Joseph F. Lisa of the New Jersey Superior Court, Appellate Division. She later joined the prestigious law firm of Montgomery, McCracken, Walker & Rhoads, LLP, where she quickly rose through the ranks, making partner in 2015. Castner has long advocated for diversity and inclusion; after making partner, she wanted others to have the same opportunity.

During her time in private practice, Castner served as a member of the New Jersey Supreme Court Committee on Character and Related to Affordable Housing. Castner also provided pro bono services on other cases related to affordable housing.

During her work at DHS, Estevez-Perez calls on her experiences regularly. “All of my previous roles in internships and workplaces have helped prepare me for my current role,” she said. In particular, “My role with congressman Congressman Donald Norcross’ district office as a district representative helped prepare me. Handling constituent casework and assisting with community outreach especially during the COVID-19 pandemic, you learn to pivot in fast-paced situations and respond both quickly and effectively to the needs of the public. Also, working on legislative projects for the congressman strengthened my critical thinking, writing and overall governmental knowledge.”

With all of these high-profile experiences, if you asked Estevez-Perez to name the single-most important factor in her success, you might be surprised with her response: working in fast food. “During my first two years of undergraduate school, I was a manager at Chick-fil-A®,” she said. “During my time there, I learned some of the most critical skills you will need in any workplace--which are how to work as a team, to always treat people with the utmost respect and to lead by example.”

**An Advocate for Access**

Alumna takes the bench as one of New Jersey’s youngest federal judges

BY CAROLINE BROBEIL

Rutgers School of Law—Camden alumnus Georgette Castner made history in 2022, when she was sworn in as the youngest female District Court judge in the 232-year history of the United States District Court for the District of New Jersey. But for some, that was no surprise, as Castner has long been committed to inclusion, excellence, and public service as hallmarks of her career.

In her questionnaire to the Senate Judiciary Committee, she noted, “As a member of the firm’s Diversity Committee, I am continually working to ensure associates are given opportunities to gain experience, obtain promotions, and increase diversity at the partnership level.”

Castner was appointed by President Joe Biden, recommended by New Jersey Senators Bob Menendez and Cory Booker, and confirmed by the United States Senate to this prestigious lifetime appointment.
Graduate student, Helena Cabezas, and senior, Ingrid Thone have advanced to the status of semifinalist for prestigious Fulbright awards.

Senior Jalissa Pitts, a nursing major, became the 15th player in Rutgers–Camden women’s basketball history to join the 1,000-Point Club.

Teresa Osorio, a graduating senior majoring in biology, was accepted into the prestigious National Science Foundation (NSF) Graduate Research Fellowship Program.

Lavette Ballard CCAS’14, had her art featured on the cover of TIME Magazine’s Feb. 13/ Feb. 20 issue.

Dawn Daly-Mack SBC’89 makes history by becoming the first woman to lead a North Carolina country’s NAACP chapter.

John McGraw CCAS’95, a medallic artist for the United States Mint, designs and sculpts coins and medals that are both rare and widely circulated.

Sydney Johnson CCAS’21 and Kaitlin McGee CCAS’22 and Fulbright semifinalists for teaching assistantships in South Korea and Luxembourg, respectively.

Congratulations Class of 2023!

Rutgers University–Camden is pleased to announce that the commencement ceremonies for the class of 2023 will take place from May 15 through May 17.

Former Camden Mayor, Dana Redd SBC’96, will deliver the Commencement keynote on Monday, May 15.

A FOND FAREWELL TO LARRY GAINES

We celebrate and thank Senior Vice Chancellor Larry Gaines for his service to Rutgers University–Camden as he retires from a distinguished 36-year career.