



#### FEATURES

# COVER STORIES Keeping It Real

07

#### Learning on the Ground

Rotations cap an EMSOP education. Students share "aha moments" from months on hospital units, health center pharmacies and elsewhere

14

#### Notes From the Field

In a "roundtable in print," five clinical faculty members share their on-the-job experiences and insights

#### DEPARTMENTS

#### 01 THE SCRIP

The dean on a key EMSOP tenet: There's no substitute for experience

#### 02 VITAL SIGNS/EMSOP NEWS

Thanking Tyler Redelico; honors for EMSOP faculty; students tout pharmacy in NYC; and more

#### 04 REMEMBERING ERNIE MARIO

His name is on the school, but EMSOP's staunchest supporter was genuinely humble — and all about helping others

#### 06 ACTIVE INGREDIENT

Welcoming Darcy Pinkerton, EMSOP's new Director of Development

#### 21 BENCH PRESS

A pioneer in running oncology clinical trials; inhibiting key proteins in cancer; preparing for avian flu

#### 25 ALUMNI & FRIENDS

Mark Peters teaches patient advocacy; an admiral's scholarship; helping the Senate HELP Committee; an alumni reunion draws record numbers



#### 29 NEXTGEN

John Cho is glad he took a roundabout route to pharmacy

#### EXCLAMATION POINT

Managed care leader Saira Jan centers patients in health care. She credits her EMSOP mentors with shaping her approach



#### THE SCRIP

#### You Have to Be There

#### "YOU CAN'T REPLICATE A 500-GRAM NEONATAL PATIENT IN A CLASSROOM."

■ With that observation, Professor Christine Robinson succinctly describes a core EMSOP tenet: There is no substitute for real-world experience. ■ One of our unique strengths is how we embed clinical practice in our program. Our students pursue a wide variety of career paths, but they train here first and foremost as highly skilled clinicians. Beyond an in-depth knowledge of how medications work, they learn to listen patiently to the fears and questions of the people they serve and provide them with information

they can understand and use. 

To get those experiences, they cycle through months-long hospital placements in emergency medicine, pediatric oncology, infectious disease, organ transplantation and other specialties. They teach and mentor our first-years. They work in community pharmacies and health centers and in industry settings. New Jersey offers them a multitude of opportunities because it is densely populated, with great unmet need, and also home to many leading pharmaceutical companies. 

The preceptors in these rotations include our own full- or part-time faculty and are working pharmacists and leaders in pharmacy practice. They serve on national and international boards and committees and conduct on-the-ground research that generates new knowledge in the field. ■ All of these efforts require a high degree of collaboration with physicians, nurses and other healthcare professionals. EMSOP has always been a highly collaborative institution. But 42 years ago, when I joined our faculty, that collaboration was largely a one-way street. Pharmacy was perceived as ancillary to health care, so we



"One of our unique strengths is how we embed clinical practice in our program. Our students pursue a variety of career paths, but they train here as highly skilled clinicians."

knocked on doors to ask for student placements. Today, we regularly field requests from physicians and physician groups who want to work with our students. That's a big win for health care, and it's enormously satisfying for me personally. And it's only taken 42 years. Which reaffirms what our students learn: That in life, as in pharmacy, patience is a virtue.

JOSEPH A. BARONE, PHARMD, FCCP

DEAN AND DISTINGUISHED PROFESSOR

Pharmacy

DEAN AND DISTINGUISHED DEAN FOR PLANNING AND ASSESSMENT

Yolanda Carden SENIOR PROGRAM ADMINISTRATOR

Darcy Pinkerton DIRECTOR OF DEVELOPMENT

CREATIVE TEAM Joe Levine, Editor Nina Ovryn, Art Director Ali Silva, Copy Editor

ALUMNI ASSOCIATION OFFICERS

Tyler Redelico '15

First Vice President

Shivani Gupta '20

Steven Gooen '75

Alison Quinn '94



NEXT LEVEL

#### Mission Accomplished

yler Redelico's goingin goal as EMSOP Alumni Council president was to take the organization to the next level. Redelico '15, who is stepping down this spring after five years in the saddle, has done just that. For starters, the Council's 25 members have been empowered to lead projects close to their hearts. "Before, the president did most of the work, which limited what we could accomplish," says Redelico, who is now one of the directors for AstraZeneca's **Rutgers Industry Fellowship** Program. On Redelico's watch, the Council has stepped up social media outreach, restarted reunions, expanded student support, and increased overall involvement. This momentum has generated even more interest among a range of alums who want to join the Council and support the Association. "It's good to blend experience from different eras and engage today's graduates," Redelico says. To that end, in addition to the Alumni of the Year Award, he hopes the Council will create more alumni awards "to recognize even more of the impact our alums have on both patients and their communities."



### Start Spreading the News

DURING NATIONAL PHARMACY WEEK in October, 100-plus students from EMSOP, Touro University and Long Island University visited the Big Apple. The outing, organized by EMSOP PharmD candidate Shahinda Bahnasy, President of the Rutgers branch of the Academy of Student Pharmacists of the American Pharmacists Association, wound up outside The Today Show, speaking with the show's hosts. Though off-camera, they and their message later received a shout-out on the show. "Pharmacists are first-line responders to any health issues, because we're so much easier to reach than doctors," said PharmD candidate Alexandra Bell, Membership Vice President. "We wanted to make people more aware of the importance of the profession."

BIG NUMBER

**EMSOP** faculty members traveled to South Korea to explore collaboration with leading education institutions there

#### **Chancellor Awards**

EMSOP faculty recognized for their outstanding work



WEI-XING ZONG, Professor, John L. Colaizzi Chair in Pharmacy, Department of Chemical Biology, received the Excellence in Basic Sciences Research Award-Established Investigator



LUCIO R. VOLINO, Clinical Professor and Director of Assessment, Department of Pharmacy Practice & Administration, received the Excellence in Community Service Award



HUMBERTO R. JIMENEZ '03, Clinical Associate Professor, Department of Pharmacy Practice & Administration, received the Excellence in Diversity, Equity and Inclusion Award



TAMARA MINKO, Distinguished Professor and Chair, Department of Pharmaceutics, received the Lifetime Distinguished Achievement Award for Faculty

## Honoring a Loyal Rutgers Son

NIMESH JHAVERI '90 IS A RECIPIENT of the Rutgers Alumni Association's Loyal Sons & Daughters Award, the highest recognition of service to the betterment of Rutgers. Jhaveri served on EMSOP's Pharmacy Advisory **Board and Dean's Leadership Council and** was commencement speaker in 2003 and 2013. He was a member of Rutgers' Board of Trustees as an Alumnus Trustee from 2011 to 2023, became Board Chair in 2022 and was subsequently elected a Trustee Emeritus. Jhaveri also served on the 2019 Presidential Search Committee that resulted in the hiring of Jonathan Holloway.

#### TRIBUTE: ERNIE MARIO

# **Mentor, Friend and Supporter**

Celebrating the life and legacy of Ernest Mario '61 (June 12, 1938 – October 20, 2024)

**rnie Mario** confessed to living a charmed life. His father was a janitor, and his mother cleaned houses. Yet Mario, who passed away in October, became \_ CEO of Glaxo Holdings (now GlaxoSmithKline), board chair of the Duke University Health System, and recipient of professional pharmacy's highest award. At the school that bears his name, Mario gave generously, advised deans and faculty, and bonded with students. Below are tributes and some words from the man himself.

#### Joseph Barone

**Dean and Distinguished Professor** 

hat you saw with Ernie was what you got. He was genuinely humble. One day, he called and said, "Joe, I'm in New Jersey. Can I stop by?" And I said, "Ernie, of course you can stop by; vour name is on the school." He loved our students. Once, when he was on campus, I asked him if he'd talk with our trainees. He said, "Sure, but I've got a four o'clock flight to catch." In the classroom, he said a few words and started answering questions. It got later and later, and I said, "Ernie, what about your flight?" He said, "I'll catch the next one." And students loved him. We were standing in front of his portrait once in the new building. A student does a double take, and within ten

minutes, Ernie was surrounded. Initially, Ernie was skeptical of our PharmD/MD program, but he read the curriculum and funding proposal, and became a big supporter. That was his style - he questioned, he evaluated, and if he agreed with you, he'd say go for it.

#### **Donna Feudo**

**Associate Dean for** Experiential Education & **Clinical Affairs** 

rnie and I came from similar backgrounds, and we hit it off. His dad was a custodian and mine was a mechanic. We both valued our families, hard work and our employees and colleagues. Ernie looked for ways to help people, especially our students. During the pandemic, he made a gift to help students who had no jobs because things had shut down. He was also a convener of people, and if he had an idea, he knew who to



turn to to have it come to fruition. And sometimes, the person was surprised because we often don't recognize the impact we have until someone else says it out loud. Ernie did that. When you were with him, you felt you were the only thing that mattered.

#### Chris Molloy '77

former EMSOP Dean; University Professor; Associate Director, BioPharma Alliances in Oncology, Rutgers Cancer **Institute of New Jersey** 

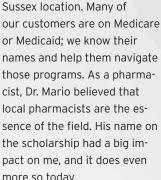
met Ernie when I was interviewing to be dean at EMSOP. I was coming from the pharma-

ceutical industry, and of course, Ernie knew the industry inside out. Later, as we planned the new pharmacy building extension, he worked with me to approach several companies for additional funding. Ernie made many great contributions to pharmacy education and viewed his support for EMSOP as central to his legacy.

#### Chris Racioppo '22

**Ernest J. Mario Endowed** Scholarship recipient

switched careers because I wanted to join the healthcare community and have a direct impact on people. The field experience at EMSOP really prepares you to do that. I interned as a student at ACME supermarkets, and today, I manage our our customers are on Medicare or Medicaid; we know their names and help them navigate those programs. As a pharmacist, Dr. Mario believed that local pharmacists are the essence of the field. His name on the scholarship had a big impact on me, and it does even more so today.





#### **He Said It**

In 2007, Ernest Mario received the Remington Honor Medal, the pharmacy profession's most prestigious award. Below are excerpts from his acceptance speech:

n high school . . . I got a job at the Allwood Pharmacy with the man we called Uncle Mike.... I'd sweep floors, restock the shelves. But I was also watching Uncle Mike: his knowledge, his empathy.... It's been more than 50 years, but one thing has not changed: Community pharmacists are the heart and soul of our profession, the public face of our industry, the place where patients and prescriptions connect.... For more than half of all general practitioners, pharmaceutical reps are the primary source of prescribing information. As an industry guy, I'll defend my sales reps all day long ... but wouldn't it be sensible for doctors to rely even more faithfully on the free and independent expertise that lives right down the street - the community pharmacist?

In a survey the Gallup Organization does every year . . . they ask people which professions [they] trust the most. Year in and year out, pharmacists are at the top of the list. Higher than doctors. Higher than professors. Way higher than business executives like me.

ACTIVE INGREDIENT

# **Directing Development**

Darcy Pinkerton is EMSOP's new fundraising leader

arcy Pinkerton has joined the Rutgers Health team as Director of Development for EMSOP Pinkerton was previously Director of Development for Academic Initiatives at Brown University, her alma mater, where she oversaw the \$10 million Library and \$40 million Environmental Institute fundraising campaigns as part of the University's \$3 billion comprehensive campaign. In her new role, she works with the Dean, faculty and staff to advance EMSOP and Rutgers Health.



**Standard Procedure** 

IN JULY, NEW ACCREDITATION COUNCIL FOR PHARMACY EDUCATION

(ACPE) standards, Standards 2025, take effect for all pharmacy schools. "The revisions reflect changes occurring in healthcare settings so schools can better prepare students to practice in the real world," says Minakshi Lahiri, Assistant Dean for Assessments. The standards prioritize problem-solving, critical thinking, and an innovative mindset in personcentered care, impacting delivery of EMSOP's mandatory core courses, interest-based electives and experiential education in clinical settings.

■ "Some memorization of knowledge in pharmacy education is appropriate, but much of that information is accessible today on tablets and smartphones. The focus now is on developing higher-order thinking skills."

#### **Honored By Their Peers**

These faculty were recognized for outstanding achievements in their fields



#### Joseph Barone,

Dean and Distinguished Professor, received the 2024 Bowl of Hygeia recognizing pharmacists nationwide for personal contributions to a strong, healthy community

#### Shuo Xiao,

Assistant Professor, Pharmacology & Toxicology, received the 2024 Society for the Study of Reproduction New Investigator Award

#### Debra Laskin,

Professor and Chair, Department of Pharmacology & Toxicology, received the Society of Toxicology Distinguished Scholar Award

#### Jun Wang,

Associate Professor of Medicinal Chemistry, received the 2024 ACS Infectious Diseases Young Investigator Award

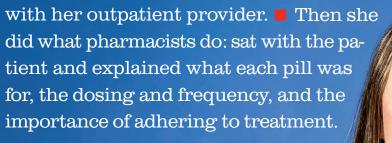


# Learning on the Ground

STUDENT ROTATIONS ARE CRITICAL TO AN EMSOP EDUCATION

By Steve Giegerich Photographs by Bill Cardoni

Last fall, on her pharmacy rotation at Robert Wood Johnson University Hospital Somerset, Victoria Arthus was handed an anxious patient's bag of jumbled medicines. Arthus, who is receiving her PharmD this spring, organized and identified the medications, reviewed the woman's profile, and clarified her medication regimen



# LENDING AN EAR Victoria Arthus

"Sorting through medications might seem insignificant, but the look of relief on [the patient's] face was unbelievable," says Arthus.



through medications might seem insignificant, but the relief on her face was unbelievable," says Arthus, whose preceptor was Nancy Doherty, RWJUH-Somerset Department of Pharmacy, Residency Program Director. Clinical and practical rotations are essential to an EMSOP education, beginning after students' first year of professional study and progressing to immersive externships. "Rotations are when our students first apply classroom learning to real-world situations," says Donna Feudo, Associate Dean for Experiential Education & Clinical Affairs. "Often, the challenges and lessons can't be found in textbooks or lectures. Students learn how pharmacists can bridge the gap between caregivers and patients and enable people to help manage their own care." Here, Arthus and other graduating PharmD students share takeaways from the rotations that marked their passage to professional careers.



#### FINDING HER PATH

# **Allison Kang**

llison Kang was considering several postgraduate paths when she started her rotations. Outpatient care? Inpatient care? Industry? 
"I was very conflicted — I liked them all," says Kang. ■ But it's true that what you're looking for is often right in front of you. Kang had enjoyed mentoring underclassmen, so she signed up for a teaching rotation, in which she lectured and co-taught classes on common conditions, patient counseling methods and over-the-counter medications. 

"I was teaching students who were just a couple years younger than me. Normally, that can be intimidating because they're almost your peers," she says. "But my interactions with them, especially when they asked great questions, made it really fun." Kang, whose preceptor was Lucio Volino, Clinical Professor and Director of Assessment, Pharmacy Practice & Administration, has narrowed her choices regarding future paths. "That rotation really brought out continued on page 28

# Eric Dodgson

aving lost a family member early to cancer, Eric Dodgson always wanted to work in the field of pediatric oncology but worried about how he might feel. "I didn't know if I could handle all the emotions that go with working with very sick children," he says. Guided by Clinical Assistant Professor Molly Siver, a speciaist in clinical pediatric hematology and oncology, Dodgson found joy during his rotation at **Hackensack University** Medical Center in helping kids and their families through the hardest experience of their lives. "I fell in love with the work, whether it was explaining complex medications or just providing another level of comfort," he says. "I already knew that cancer affects entire families. Now I know that I want to be there to support them."



#### NAVIGATING THE GRAY ZONE

# Jessica Yoon

n high school, contemplating possible career paths, Jessica Yoon couldn't decide between laboratory science and applied medicine. Her mother suggested a field that combines both: pharmacy. ■ Flash forward to Yoon's rotation at Hackensack University Medical Center's organ transplant unit, where doctors constantly face a high-stakes decision: Administer too much of a medication to prevent transplant rejection and patients become so immune-compromised that even common infections can lead to serious complications; give too little and rejection can occur. There's a narrow zone where balance is key and pharmacists, with their deep understanding of how drugs work, are essential in determining the precise dosage. ■ For Yoon, whose preceptor was Clinical Associate Professor Michael Wynd, the takeaway felt familiar: "It showed me, again, that in real life, not everything is black and white."







#### EXTENDING A HAND

# Meha Pandejee

hen the ambulatory care team from Cooperman Barnabas Medical Center visits senior citizen facilities, the focus is on generating discussions about well-care and healthy lifestyles. But when Meha Pandejee was approached by a woman suffering from migraines, I was a kid, and I've learned to recognize stressors that bring them on and settle it down on my own," says Pandejee, who did an ambulatory care rotation at Cooperman Barnabas this past fall focusing on community outreach. "If that means taking a break, then, OK, I take a break. ■ "Sometimes you're not supposed to talk about a personal experience, but since we were in a community-based setting, I thought it was okay to share," says Pandejee. She, too, worked with preceptor Lucio Volino, who specializes in ambulatory and community practice. ■ As they bonded in a continued on page 28 >>>

GOING BEYOND THE DATA

## Pamela Karasmilova

uring her rotation at Genmab, a biotechnology company specializing in therapeutic antibodies for cancer and other diseases, Pamela Karasmilova worked on a comprehensive landscape analysis of cancer advocacy organizations for a drug in the company's pipeline. "This task was about understanding the stories, struggles, and hopes of patients and their advocates," she says. ■ Karasmilova's preceptor was Mark Peters '87, Genmab's Senior Director of Patient Advocacy. whose career was shaped by his mother's death from cancer when he was 11 years old. At EMSOP, where he is Adjunct Clinical Associate Professor, Pharmacy Practice & Administration, Peters has created a unique course called Patient Advocacy and Health Policy (see story on page 25). ■ Clearly his message reached continued on page 28



PASSING THE FINAL

# **Hima Dileep**

uring her Acute Care Organ Transplant rotation at Hackensack University Medical Center (HUMC), where she, too, worked with Michael Wynd as her preceptor, Hima Dileep and her fellow students participated in interviews with transplant patients in the hospital and outpatients making follow-up visits about their medications.

Now, at a group seminar at the Transplant Conference (Division of Organ Transplantation at HUMC), they faced a room full of surgeons, nurses, social workers and other members of the multidisciplinary transplant team as they presented research on false positives generated by anti-rejection medications and non-medical substances. ■ The presentation prompted some questions and engaging discussions.

The Organ Transplant Division team chimed in with questions about the information, which will help them better interpret results from pre-transplant continued on page 28 ▶▶▶

LEARNING ON THE GROUND

# **Expanding**the Team

A new hospital rotation recruits EMSOP students

urgeries in the United States increase yearly, including in chronically ill elderly patients on complex medication regimens. Yet studies find that pharmacists, who are best trained to handle hospital medication management and services, are lacking in the perioperative surgical arena.

Gerardo Rodriguez, anesthesiologist and critical care physician, and Associate Professor, Rutgers-Robert Wood Johnson Medical School, has created an anesthesiology rotation for EMSOP students.

"Medicine is a team sport that works when physicians value collaboration with pharmacists, nurses, respiratory therapists and other professionals," says Rodri-

#### TEAM SPORT

"Medicine is a team sport physicians value collabor ... and other professionals. all hospital areas improves

Gerardo Rodriguez, anesthesiologist
 Associate Professor, Rutgers-Robert

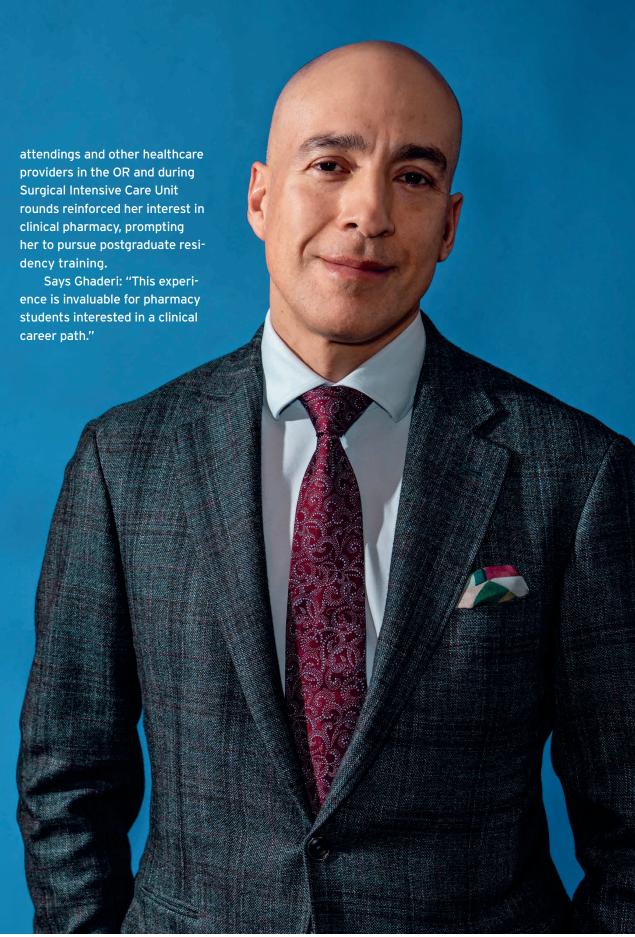
guez. "Pharmacists' presence in all hospital areas improves patients' outcomes. In the ER, pharmacists facilitate adherence to appropriate medication handling and timely administration during adult cardiac life-support events or emergency thrombolytic therapy for ischemic stroke care. In the ICU, they facilitate timely vasoactive infusions or adding new agents for unstable patients. Hospital-wide, they provide essential oversight of electronic medical errors systems."

On rotation with Rodriguez in 2023, Manjeera Jampala '24, now a PGY-1 pharmacy resident at RWJUH, observed adult and pediatric surgical cases, discussed pharmacology with anesthesiology residents, and conducted a quality improvement initiative. After observing a living donor kidney transplant, she pursued a second-year residency in solid organ transplant pharmacy.

For Sara Ghaderi '24, now a PGY-1 Pharmacy Resident at Florida's Baptist Health Boca Raton Regional Hospital, collaborating with anesthesiology residents,

that works when ation with pharmacists [Their] presence in patients' outcomes."

and critical care physician, and Wood Johnson Medical School



# Notes from the Field

As pharmacists play an increasingly important role on the front lines of health care, EMSOP gives students a range of real-world experiences. Below, faculty members Daniel T. Abazia, M. Thomas Batemen, Jr., Megan E. Maroney, Christine A. Robinson and Michael A. Wynd speak with writer Steve Holt about their work in the field.

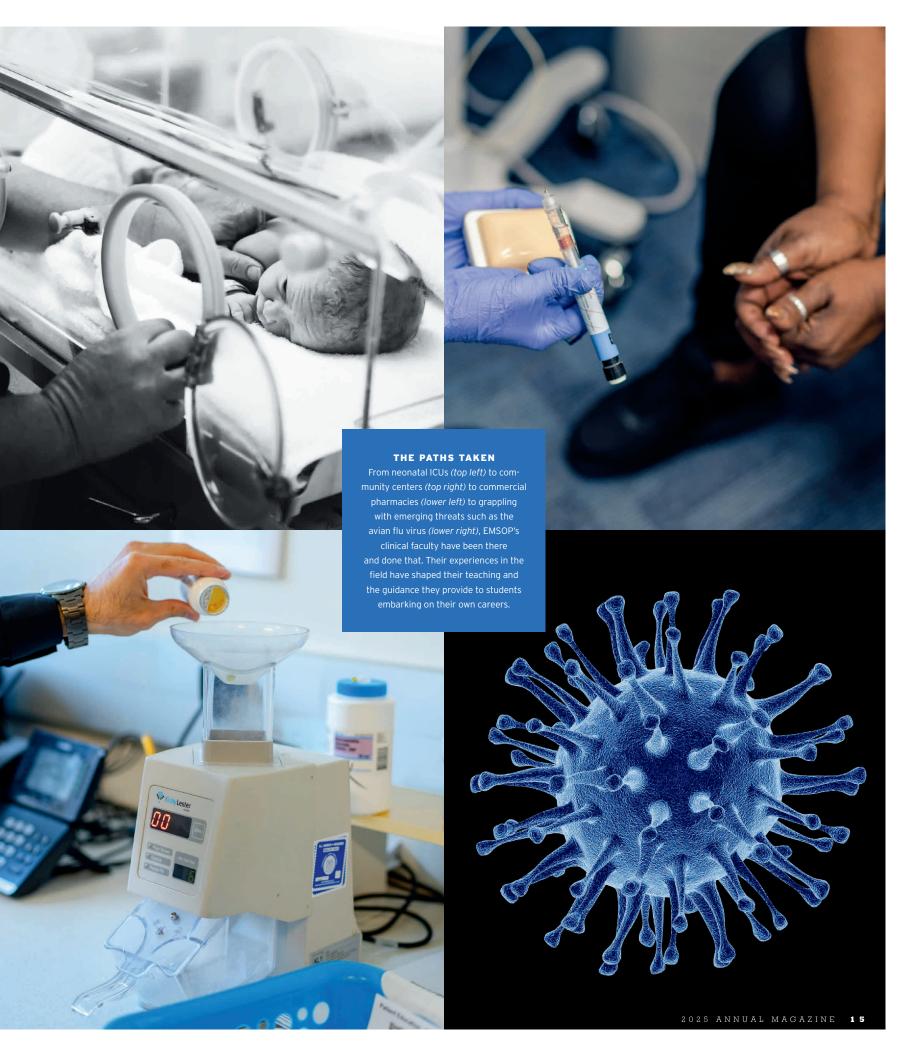


DAN ABAZIA, Clinical Associate Professor, Pharmacy Practice & Administration, EMSOP; Director, Medication-Use Safety & Information Center, RWJBarnabas Health: Before I graduated from EMSOP in 2005, I was fortunate to get a position as a pharmacy technician in a north Jersey hospital. I fell in love with the entire system — the interaction among pharmacists, technicians, nurses and physicians — and that keyed my interest and led me to where I am today. I've since practiced during two pandemics. I was a hospital pharmacy director when the COVID-19 pandemic hit, and earlier in my career, I worked as a pharmacy manager during H1N1, so I know how quickly the wildfire can spread. [See page 23 for more on Abazia's thoughts about preparing for avian flu.]

"I was fortunate to get a position as a pharmacy technician in a north Jersey hospital. I fell in love with the entire system, and that keyed my interest and led me to where I am today."

— DANIEL ABAZIA '05, CLINICAL ASSOCIATE PROFESSOR,
PHARMACY PRACTICE & ADMINISTRATION







"I'd worked in a drugstore throughout high school, and pediatrics had always been my passion, but bedside clinical practice was new to me, and it really drove home the impact a pharmacist can have."

- CHRISTINE ROBINSON '99, CLINICAL ASSOCIATE PROFESSOR, PHARMACY PRACTICE & ADMINISTRATION

TOM BATEMAN, Clinical Assistant Professor, Pharmacy Practice & Administration, EMSOP; Ambulatory Care Specialist, Henry J. Austin Health Center: As a student at the Philadelphia College of Pharmacy, I interned at an independent pharmacy in Philadelphia's Kensington neighborhood. Later, I completed my first APPE [Advanced Pharmacy Practice Experience] rotation in a hospital that served another community in Philadelphia with similar social determinants of health. Those were eve-opening experiences. The hospital system had to do a lot of work to reconcile patients' medications to meet their clinical needs. So, in my practice now, I try to provide a clinical service that helps people organize their medications and provides basic education about their health and their care so that we can keep them safely and comfortably at home with their familes rather than in the hospital.

CHRISTINE ROBINSON, Clinical Associate Professor, Pharmacy Practice & Administration, EMSOP: Pediatrics, Clinical Pharmacist, NICU, Morristown Medical Center: At EMSOP, my Honors Program mentor, Marc Sturgill [Associate Professor, Pharmacy Practice & Administration], enabled me to do a clinical research project with children with cystic fibrosis. I'd worked in a drugstore throughout high school, and pediatrics had always been my passion, but bedside clinical practice was new to me, and it really drove home the impact a pharmacist can have.

Applied research conducted by working pharmacists is increasingly important in improving health care and pharmacy itself. What are examples from your own work?

MEGAN MARONEY, Clinical Associate Professor, Pharmacy Practice & Administration, EMSOP; Psychiatric Clinical Pharmacist, Monmouth Medical Cen**ter:** Most of my research is on quality improvement projects at my practice site. So, for example, we're looking at interventions we can recommend in place of physically restraining psychiatric patients. It's very difficult to do any kind of prospective research with acutely ill psychiatric patients, so we're mainly reviewing charts of patients who were restrained for different reasons — because they were agitated, say, or required a therapeutic hold to receive medication. We're looking for opportunities to adjust treatments or procedures to prevent some of those restraint episodes.









**ROBINSON:** In my work with newborns. I've come across fascinating reports in the literature that early exposure to antibiotics can lead to chronic diseases later in life. That's apparently because antibiotics disrupt the developing microbiome. So, we've scaled back from the days when antibiotics were on the admission orders for everyone. Now, we're very selective in recommending antibiotics to newborns we feel are at a higher risk of infection.

How has your real-world experience shaped your teaching, whether in the classroom or for rotations?

**MARONEY:** Students find psychiatric medication challenging because there are a lot of gray areas. There aren't as many specific treatment algorithms as there are in other practice areas. So, it's important to talk about real patients — "Well, I had one patient that didn't want to take this medication because of this reason." Those practical examples help illustrate these gray-area concepts.

**BATEMAN:** Many of my students want to pursue some sort of clinical pharmacy

WIDE-RANGING IMPACT Top: Clinical faculty members were critically important partners of the EMSOP vaccination center during COVID. Lower left: The thorax of a cystic fibrosis patient. Pharmacy school faculty have contributed to advances in treatment. Lower right: An elderly patient gets a hand from a pharmacist. EMSOP Clinical faculty have worked extensively in communities.

practice, but they may be unaware of all the different care settings. For example, in their APPE year, they might say to me, "Wow! This is such an interesting practice site. I didn't know pharmacists worked in primary care; I thought they only worked in the hospital!" That's where I'm able to share my real-world experiences to help them find their own path.

**ROBINSON:** Introducing students to a neonatal population is really eye-opening to them. I orient them before we go onto the unit, but it's different when we're bedside with a patient, looking at large volume pumps, syringe pumps, all the different access lines. What's the difference between an umbilical catheter. and a peripheral catheter? Pharmacists are essential to ensure appropriate and safe use of all medications, so they need to work with living, breathing premature neonates because you can't replicate a 500-gram patient in a classroom.

MICHAEL WYND, Clinical Associate Professor, Pharmacy Practice & Administration, EMSOP; Solid Organ Transplant Pharmacy Specialist, Hackensack University Medical Center: As a clinician, I'm more in the real world on a day-to-day basis than in the classroom. Sometimes when I'm lecturing, I'll get looks from students — "This can't possibly happen in the real world." Then I use experiences I live every day to say, "Not only does it happen in the real world, but if you guys come on rotation with me, you're going to see it in the real world."

For example, some students don't know we do pancreas transplants. We

do that in only about five percent of our transplant cases, but when it's successful. it's a cure for diabetes. Or students know there are kidney transplants, but they may not know that the new kidney doesn't necessarily go precisely where the failing kidney was.

More significantly, they may not know that people with a lot of exposure to rabbits may be allergic to medication we use in transplants, because the drug is essentially produced in rabbits' blood.

Students' first reaction may be, "That can't be true!" But it is, and we have to be aware of it in clinical practice.

Pharmacists increasingly work closely with other healthcare providers. What has that looked like for you?

**ROBINSON:** I've done some great collaborative projects with the team within the neonatal intensive care unit, looking for safer and better treatment options. In the NICU, we've used gabapentin for visceral hyperalgesia [increased pain sensation in response to gastrointestinal sensory stimulus] and published a case report of our experience to contribute to the scarce literature available for this condition.

**WYND:** A successful transplant entails identifying eligible patients, evaluating them in the clinic, and getting them listed so that, hopefully, they receive a transplant. That requires a robust interdisciplinary team that includes physicians and nurses, and, of course, pharmacists. We're the team's go-to source for information about medications. We also work closely with our outreach coordinators to go into the community, particularly to dialysis centers, to educate patients about their options, including transplant.

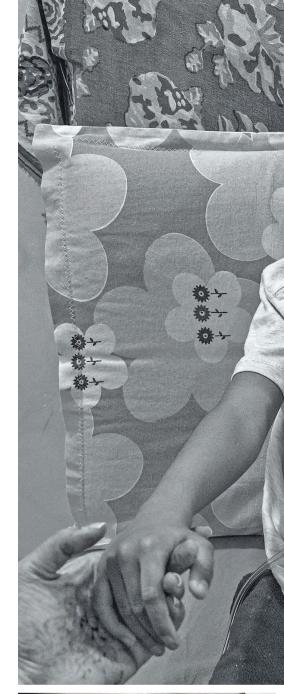
We're also essential to the continuity of care that's unique to the transplant community. We see patients pre-transplant, we take care of them in the hospital and when they're recuperating, and we provide follow-up care. Transplant patients become part of your family and community. We say sometimes that, for both patients and caregivers, getting a transplant is like getting married. For better or for worse, you're connected forever.

**ABAZIA:** I work with the entire RWJ-Barnabas health system in managing its formulary and medication-use policies. I'm also the Director of the Medication-Use Safety and Information Center at RWJBarnabas. We answer drug-related



"Students find psychiatric medication challenging because there are a lot of gray areas. There aren't as many specific treatment algorithms as there are in other practice areas. So, it's important to talk about real patients."

MEGAN MARONEY '09, CLINICAL ASSOCIATE PROFESSOR, PHARMACY PRACTICE & ADMINISTRATION









questions from people throughout Rutgers, RWJBarnabas Health, New Jersey, and as a national resource. For example, there's a little-known syndrome called Alpha-gal, sometimes called red meat allergy, that can cause severe reactions. Because there are a lot of animal-based products in medications, we receive at least one call a day from around the country from consumers, pharmacists or physicians who need assistance in determining which drugs are safe to use. I've also been in contact with CDC researchers who've been working on this issue.

We also work closely with the New Jersey Poison Center. If we hear something unusual about a potential toxin/ poison or some other issue, we can bring it to their attention.

#### How else has the evolving role of the pharmacist benefited patients?

**ROBINSON:** As a pharmacist, part of my job in the hospital is to prevent medication errors. But being a Rutgers faculty member, I'm not there every day, and I don't have someone to cross-cover me. So, I work very closely with our team on Epic [a cloud-based electronic records system] to build a safe system. So that even when I'm not there, it's kind of like Lam.

ON LOCATION Lower left: Hospital pharmacists prevent medical errors, working with clinicians on cloud-based electronic records systems. Top: Nearly 20,000 U.S. children live with cystic fibrosis. Lower right: A drop box for needles used by opioid addicts. Clinical faculty working in low-income communities contend with many social determinants of patients' medical knowledge and behavioral health.



"We see patients pretransplant, we take care of them in the hospital and when they're recuperating, and we provide follow-up care...for both patients and caregivers, getting a transplant is like getting married...you're connected forever."

> - MICHAEL WYND '95, CLINICAL ASSOCIATE PROFESSOR, PHARMACY PRACTICE & ADMINISTRATION

I'm also involved in poison prevention education for a very specialized segment of the community. In one of the elective service projects we do with our students, we go into the daycare facility at Morristown Medical Center and talk to the three-to-five-year-olds about poison prevention in their terms, by means of very interactive games. Getting the word out to children about poison prevention is definitely very different from trying to educate older patient populations.

**MARONEY:** In psychiatric pharmacy, one of the biggest challenges we see is patients' unwillingness to adhere to their medication regimen. It's a complex problem, and we really need to understand it. So, I did clinical research with my mentor [Benjamin Chavez,

#### The Roundtable



#### THE BEST MIX

Patients who undergo transplants require many different medications to prevent their bodies from rejecting new organs. Pharmacists ensure that drug regimens are working as they should, monitor side effects and help natients understand their treatments.

> an EMSOP faculty member from 2005-2010], surveying patients about their experience with medications and what side effects they found to be most troublesome and perceived as the biggest obstacle to taking their medication.

> And I think we are making some progress there, in part because, in the inpatient psychiatric setting, the patients might feel most comfortable talking to the pharmacist. We're not seen as the person who decides whether they can be discharged, so they might be more inclined to open up a little more about their concerns about the medication, and then we can kind of get to the root of maybe why they're not taking it. And also, maybe they have fond memories from earlier in their lives that you go to the community pharmacy, and the pharmacist is the kindly person who is less intimidating.

**BATEMAN:** So many barriers facing the people I serve occur outside of the

"My students might say to me . . . 'I didn't know pharmacists worked in primary care; I thought they only worked in the hospital!' I'm able to share my real-world experiences to help them find their own path."

> - THOMAS BATEMAN, CLINICAL ASSISTANT PROFESSOR, PHARMACY PRACTICE & ADMINISTRATION



health center. It's sad and frustrating that these barriers will persist and continue to make healthcare access more challenging. But at the same time, over the past ten years, I've seen improvements in how our health center is organized. We [the pharmacy department] have worked effectively with leadership and different clinical departments. That has led to more successful patient experiences and outcomes and better provider experiences. For example, my practice site screens people for depression, which is standard practice in primary care. Our clinical departments, such as medical, pharmacy and behavioral health, have created workflows for responding to patients who report these types of symptoms or even thoughts of self-harm. This structure and planning create better experiences for our patients and also help our clinical staff to feel confident in how we respond to challenging clinical scenarios.

EMSOP in the Lab

# More Trials, Fewer Errors

Pat Risse's pharmacokinetic expertise has contributed to the approval of new cancer treatments

sential in the development of new anti-cancer medicines, bringing to bear their specialized knowledge of pharmacokinetics (how drugs move through the body) and understanding of potential safety issues associated with given molecules. Their unique insights on dosing recommendations guide researchers to make key adjustments to their study plans to help ensure success. Yet in 1994, when Pat Devitt Risse joined a clinical research organization (CRO)

that specialized in designing and executing trials globally for companies with oncology products in development, she was the only PharmD among more than 1,000 employees. "Biotech startups would come to us with very cutting-edge products, but to gain the funding to help enable success, it was critical to collect the right data to convince investors," says Risse '85, '93.

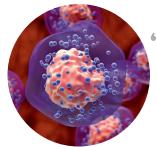
At that time, exciting new targeted therapies were just being developed. Risse had the opportunity to lead the clinical trial effort for one of the first humanized monoclonal antibodies in cancer, and she became enthralled with the incredible impact that the

right targeted therapy could potentially make on the lives of patients. As with many, Risse has



"Biotech startups would come with cuttingedge products, but to gain the funding to help enable success, it was critical to collect the right data to convince investors."

— PAT DEVITT RISSE '85, '93



'The depth of the pharmaceutical expertise you learn at Rutgers fits perfectly with the area of clinical development. EMSOP provides the training to support an expanded role of the pharmacist."

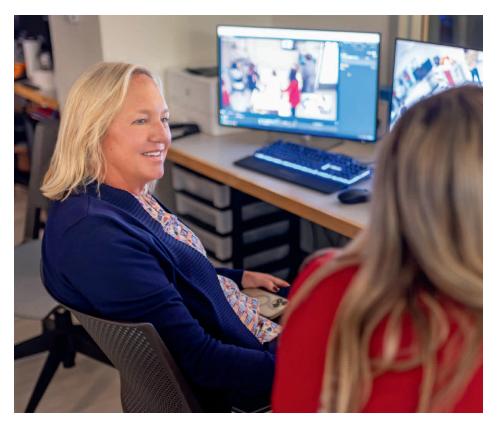
– PAT DEVITT RISSE '85, '93

seen multiple family members and friends struggle with cancer, and the results she observed while working with humanized monoclonal antibodies "ignited an eagerness in me to focus my career on the burgeoning area of developing targeted therapies for patients with cancer."

In 2000, Risse founded her own CRO, ACT Oncology (now Precision Oncology). "I was told by many that starting your own CRO was taking a big risk, but I had the support of a strong network of clients eager to work with teams of committed oncology experts. We had overwhelming repeat and new business, which allowed the growth of the company throughout the vears to be achieved without the need for outside investors. This independence from other invested parties enabled me to follow my own defined business strategies and to hire the right personnel to further add strength of knowledge and talent to the business and our delivery."

That innovative and focused niche approach in the area of oncology drug development, together with her background in pharmacy, enabled Risse to help bring a number of new therapies to patients and earned her a place in the Rutgers Hall of Distinguished Alumni.

"The depth of the pharmaceutical expertise you learn at Rutgers fits perfectly with the area of clinical development," she says. "And EMSOP, in particular, provides the background and



▲ ON TARGET Top left: An illustration of monoclonal antibody therapy for breast cancer. Above: Pat Devitt Risse oversaw worldwide clinical trials for the first marketed gene-based therapy for cancer, which blocks cancer growth signals, preventing cancer cell proliferation. The drug later enabled a friend of Risse's to survive an aggressive form of breast cancer. Risse was inducted into the Rutgers Hall of Distinguished Alumni and named one of New Jersey's 2014 Best 50 Women in Business.

training to support an expanded role of the pharmacist as well as the opportunity to pursue exciting career pathways with contributions to the pharmaceutical area in many diverse ways."

Nevertheless, pharmacists remain underrepresented in the pharmaceutical industry, says Risse, who has generously supported EMSOP. "We're more visible now on the commercial, post-marketing side, but early development remains a missed opportunity where enhanced pharmacist contributions can translate to enhanced outcomes for patients." — Joe Levine

EMSOP in the Lab

# **HE'S ON ALERT**

Readiness is Daniel Abazia's Rx for avian flu

aniel Abazia '05 knows about pandemics. In 2009, then a pharmacist at Community-Health, Abazia assisted in Chicago's swine flu (H1N1) vaccination campaign. In 2020, he was working as a hospital pharmacy director when COVID struck the United States.

"I saw COVID move through the country and

then hit our institution," says Abazia, Clinical Associate Professor, Pharmacy Practice & Administration, and Director of the Rutgers/RWJBarnabas Medication-Use Safety and Information Center. "So, from the perspective of managing a response, day by day, I'm more attuned than most to how quickly the fire can spread."

With a handful of human U.S. avian flu cases to

date, Abazia says the prospect of another pandemic isn't keeping him up at night. "But after seeing the good and not-so-good of our federal, state and local COVID responses, I am concerned we're not paying enough attention. The healthcare community is still feeling COVID burnout."

What's to be done? Practice, Abazia says.

"My brother is in the military, and they're always doing tabletop exercises, training for the unexpected. In health care, we should be asking, 'Okay, what if another COVID does happen? What if avian flu does spread?' If we keep it on the back burner, we'll be playing catch up."

Yet Abazia also preaches patience.

"As we learned with COVID, response to a pandemic can be politically charged, and then misinformation gets circulated.

So, we need to trust in science." — Steve Holt



# "We should be asking, What if another

COVID does happen? What if avian flu does spread?' If we keep it on the back burner, we'll be playing catch up."

- DANIEL ABAZIA '05, CLINICAL ASSOCIATE PROFESSOR, PHARMACY PRACTICE & ADMINISTRATION

## **MANAGED CARING**

Saira Jan is a convener who centers patients in health care

(continued from back cover)

an's approach to managed care, sparked by the three leaders she considers her role models – former EMSOP Dean John L. Colaizzi, current Dean Joseph A. Barone, and Brian Strom, Chan-

cellor of Rutgers
Biomedical and
Health Sciences
and Executive
Vice President
for Health Affairs
– is about creat-

ing interdisciplinary, collaborative models to make health care affordable and accessible.

"Managed care represents population health through data integration and targeted interventions by bringing together hospital providers, pharmacies, pharmaceutical companies and researchers to deliver cost-effective, affordable, member-centric care," she says.

During COVID, when immune-compromised cancer patients couldn't safely travel for chemotherapy infusions, Jan, working with the

### **SAIRA JAN**

(continued from page 23)

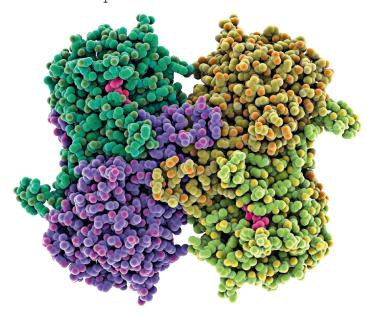
**Rutgers Cancer Institute of** New Jersey and its director, **Steven Libutti, tapped New** Jersey providers and systems to pilot the state's first collaborative home chemotherapy infusion program. **Together with Horizon, EMSOP** and Sanofi, Jan developed and implemented the Shape It Up childhood obesity awareness program, through which **Rutgers PharmD students** have conducted in-person sessions with thousands of students in more than 400 New Jersey schools.

Jan's interdisciplinary approach extends to her leadership of the EMSOPsponsored Roy A. Bowers **Pharmaceutical Confer**ence, which brings together different New Jersey stakeholders to identify healthcare issues, solutions and strategies for execution. The 2024 Bowers Conference focused on the future impact of AI on health care and regenerative medicine.

"Improving health care entails being a leader." savs Ian, who spoke at EMSOP's 2024 convocation. "And being a leader means being a convener. I learned that at EMSOP." — Patricia Lamiell

## The Art of Inhibition

Matthew Moschitto is harnessing the power of a more potent class of medications



(continued from page 1)

rugs called covalent inhibitors, which do form chemical bonds, can be given less frequently, often at lower doses. "The target is now unable to do its job, in terms of causing illness, until the body rebuilds the protein or re-synthesizes it," Moschitto explains. "Because they don't require continual administration, covalent inhibitors can minimize side effects.

reduce hospital visits and lower treatment costs. Covalent inhibitors can bind effectively in shallow binding sites, thus expanding the scope of druggable targets."

Covalent inhibitors such as aspirin and penicillin have long been in use. But today, some cancer therapies are covalent by design, and researchers like Moschitto are working to improve and expand the field.

"Using synthetic organic

chemistry, we're trying to develop methods to make drugs. On the medicinal chemistry side. we're figuring out how to apply those methods to certain important targets and disease areas. The question is: How can we make new bonds that are better, more

BLOCKED SHOT At left: Inhibition of a protein involved in cancer. Matthew Moschitto focuses on covalent inhibitors, drugs that can minimize side effects and expand the scope of druggable targets.

cost-effective and useful in drug discovery?"

The Moschitto lab is looking at chemical groups containing sulfur that can attach to "residues" on a protein. Thus far covalent inhibitors attach

to only a few residues, but "we want to expand the tool kit to other residues that are more abundant."

Moschitto seeks to instill such innovative thinking in his students.

"We teach difficult courses. but students say afterward that they were really helpful. It's important to make things difficult, within reason, because when they run into a problem in their research, they have the tools to solve it." — Steve Holt



"Using synthetic organic chemistry, we're trying to develop methods to make drugs." With medicinal chemistry, "we're figuring out how to apply those methods to certain targets and disease areas."

MATTHEW MOSCHITTO. ASSISTANT PROFESSOR. MEDICINAL CHEMISTRY



# **Patients First**

In an EMSOP course, listening is key to patient advocacy **BY PATRICIA LAMIELL** 

was 11 years old, he lost his mother to cancer. Beyond his profound sense of loss, he remembers "the challenges Dad and Mom faced and the extreme generosity of our local pharmacist and community."

"That's why I've devoted my career to helping cancer patients and their families," says Peters '87, who serves as Senior Director of Patient Advocacy and Professional Relations at Genmab.

Focusing on gathering patient insights is now more critical than ever to bringing new medicines to patients, says Peters, who

is also Adjunct Clinical Associate Professor, Pharmacy Practice & Administration at EMSOP. To instill that outlook in future pharmacists, he has created and coteaches a unique course at EMSOP called Patient Advocacy and Health Policy.

# **20 lives**

"If we can affect 20 students who then affect 20 more lives, we begin to improve the lives of more patients and care partners — and isn't that what it's all about?"

The objective of the course is to help students

better understand how healthcare professionals, patient organizations and policy makers come together to impact patient care. "Today, collaboration is critical to help patients and care partners due to the ever-growing demands on healthcare professionals' time," Peters says. "For some students, this is the first class completely focused on understanding and improving the patient's experience within the broader context of the U.S. healthcare system."

A unique aspect of the course is the participation of patients themselves in the final exam. This past fall, two patients described the positives and challenges they experienced from diagnosis to treatment and beyond. "The students' listening skills are tested for the first hour, and then they answer questions regarding the patient's experience," Peters says. The students are evaluated on their ability to assimilate and apply the knowledge from the class to develop individual-

Photograph by John Emerson 2025 ANNUAL MAGAZINE **2 5** 

#### **Patients First** ALUMNI IN THE FIELD: MARK PETERS

ized approaches to patients' unmet needs.

"Listening is an important skill for all healthcare professionals to develop and refine," says Peters, adding that he has seen too many patients suffer from missed or delayed diagnoses.

Sharp listening is also paramount in helping patients navigate today's tangle of hospitals, pharmacies, insurance companies, and government and policy agencies. Students in Peters' course acquire a working knowledge of that system, including

# *<b>Listening*

is an important skill for all healthcare professionals to develop and refine," says Peters, adding that too many patients suffer from missed or delayed diagnosis.

patient organizations and groups that can offer psychological, financial and social support to patients and families.

As front-line providers, pharmacists are particularly well-positioned to listen to, educate and advocate for patients — especially at inflection points when policies may change, such as when a new president takes office. This year, for example,

pharmacists are educating patients about a new federal law that caps out-of-pocket prescription costs at \$2,000 per year.

Enrollment in Patient Advocacy and Health Policy has grown steadily over five years, with Peters co-teaching with Robert Popovian, PharmD, MS, Chair, Board of Councilors, Mann School of Pharmacy, University of Southern California.

"Affecting even one patient's life is meaningful," says Peters, who is earning a master's degree in public health at Rutgers. "If we can affect 20 students who then affect 20 more lives, we begin to improve the lives of more patients and care partners — and isn't that what it's all about?"



# **Caring By Committee**

IN 2024, FOLLOWING RENEWED congressional attention to Long COVID, the federal government ramped up investment in clinical trials for the condition. ■ Credit the Senate Committee on Health, Education, Labor and Pensions (HELP), where Nimit Jindal '19 is Senior Health Policy Advisor to Senator Bernie Sanders, HELP's ranking Democrat. HELP also combats high drug prices and advocates for equal employment opportunities. ■ "I'm driven to take care of people," Jindal says. "Now I use federal policy to make that happen."

#### **ALUMNI OF DISTINCTION**

# View from the Bridge

A gift that reflects an admiral's vision

om McGinnis '77 created the McGinnis Family Endowed PharmD/MD Scholarship because "an indepth knowledge of medications is so important for any path our pharmacy and medical graduates take." ■ At the U.S. **Public Health Service, Rear Admiral McGinnis** (ret.) led the TRICARE Pharmacy Program serving nearly 10 million beneficiaries of the seven uniformed services. 

"I realized how strong a Rutgers pharmacy education is," says McGinnis, a former Pharmacy Advisory Committee member, the 1994 Alumnus of the Year and 2009 convocation speaker. As a part-time George Washington University Hospital pharmacist, he frequently fielded physicians' calls. "One resident from Harvard said, 'You must think I'm a bad doctor.' I said, 'No, you're one of the best. The bad ones, when not sure, don't call, which delays patients getting their needed medication."











# So Happy Together

EMSOP's in-person reunions are a big draw

OWADAYS, MANY GRADUATES LIVE FAR FROM THE INSTITUTIONS they attended. They rely on remote communications, especially since the pandemic. Holding in-person alumni reunions can be tough — which makes this past fall's EMSOP gathering, with 175 registered guests, all the more impressive. ■ "Last year, we drew about 70 people for a brunch, most of whom were 50-year alumni," says Rich Meadows '70. "This year's was on a Friday evening and included 10and 25-year folks" who are essential in keeping the extended EMSOP network current with the times. "I'm 77, and I'm still pretty spry, but my outlook is based on a very different era," Meadows says. 
This year's event, which spotlighted Alumnus of the Year and longtime EMSOP supporter Ron Mannino '74, may be a tough act to follow, but Meadows is optimistic. "The people who come have a great time. Hopefully, they'll spread the word."

#### ▲ TOGETHER AGAIN

The 2024 reunion bridged eras. Attendees included (top left) students Riya Mankad '26, Katie Zheng '27, Stacey Zhang '26 and Elijah Rich Vito '26; event organizer Richard Meadows '70 (top center) and Linda Gooen '74 (top right). Below right: Alumni Association President Tyler Redelico addresses 1974 graduates, including John Eck, Alieta Eck, John Maiorano, Thomas Bender, Anthony Alexander, Janice Bornemann, Marion Borbely, Linda Gooen, Ronald Mannino, Evan Korzin, Eric Deutchman



# Scouting the Field

s a clinical pharmacist at ShopRite supermarkets, Nina Raps '97 directed a patient with a swollen leg to the hospital, where he underwent a life-saving triple bypass. ■ When 26 Scouts visited EMSOP last winter,

Raps, Pharmacy Field Manager, Experiential Education, told that story to underscore that "pharmacists are the most accessible healthcare providers, providing that kind of help in any 24-hour pharmacy." ■ "Teens are already thinking about careers," says Raps, a 15-year volunteer merit badge counselor. "We need to catch them early."

▲ FUTURE ALUMS? A group of Scouts came to EMSOP last winter to learn about pharmacy. A visit to the Sim Lab highlighted their visit.

## **FOLLOW US**

# **Click Here**

The Alumni Association has stepped up its social media presence.



FACEBOOK: **Rutgers Pharmacy** 

Alumni Association: www.facebook.com/ groups/131808100254142/

> INSTAGRAM: @EMSOPAA

#### LINKEDIN:

Rutgers Pharmacy Alumni Association: www.linkedin.com/ company/rutgers-pharmacyalumni-association/

**Rutgers Ernest Mario School** of Pharmacy: www.linkedin.com/ groups/94517

#### COVER STORY

## Student Rotations

(continued)

**Allison Kang** CONTINUED FROM PAGE 8

my love for teaching even more. But I still love the patient interaction part of ambulatory care. My hope after graduation is to merge the two."



discussion about symptoms and remedies, the woman surprised Pandejee by taking

hold of her hand. ■ "Before long, we were talking about things not even related to migraines," Pandejee recalls. "She probably could have found similar information by searching for it online. I'm so glad that talking to me gave her the human connection that she needed. It was an experience I'll never forget."



Pamela Karasmilova CONTINUED FROM PAGE 11

Karasmilova: "My time at Genmab solidified my ambition to bring life-changing therapies to those who need them most."

Hima Dileep CONTINUED FROM PAGE 12



drug screens, especially those with false-positive findings. ■ "They were treating us as peers,"says Dileep. "We'd come full circle."

# **Better Late:** John Cho

#### LIKE EFFECTIVE

medications, successful careers often take time to develop. ■ John (Eun Sik) Cho, for example, was accepted to EMSOP straight out of high school but instead earned degrees in Earth Sciences at Columbia University and Industrial Hygiene at the University of Michigan before working for a college prep consultancy. There, mentoring high school students seeking their own paths, he realized that his road led back to EMSOP.

Equipped with his unique experiences and skills, Cho '25 is joining Daiichi Sankyo as EMSOP's first-ever Postdoctoral Fellow in Quality Assurance **Good Manufacturing** Practices. He's excited about Daiichi Sankyo's innovative cancer therapies but also, after his circuitous journey, the company's commitment. ■ "The number of long-term employees drew me. They're dedicated to their mission, and so am I."

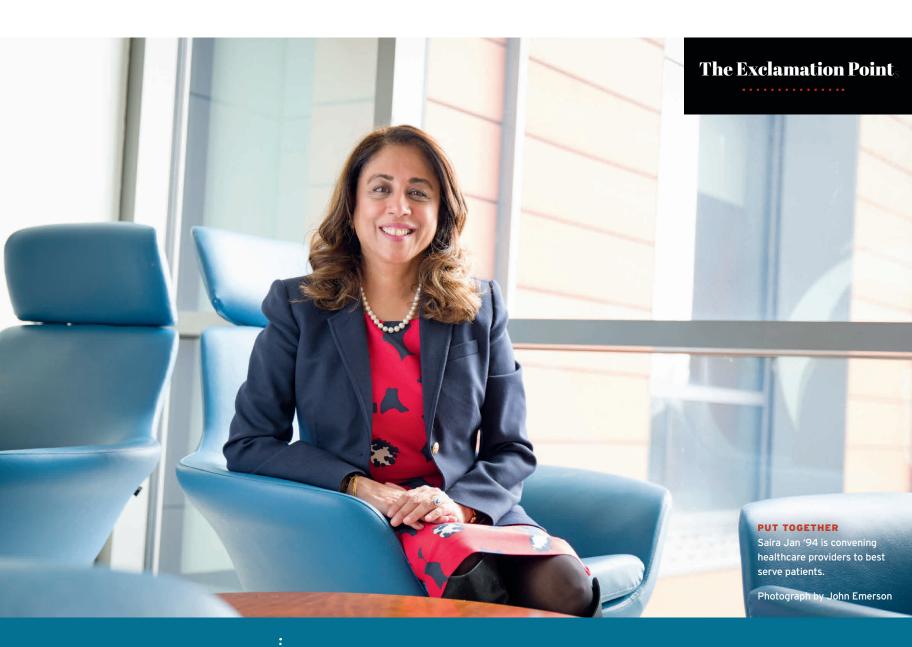
— Steve Giegerich





160 Frelinghuysen Road Piscataway, NJ 08854 848-445-2675 pharmacy.rutgers.edu NONPROFIT ORG
US POSTAGE
PAID

NEW BRUNSWICK
08901
PERMIT #157



# Managed Caring

LONG BEFORE THE CURRENT OPIOID CRISIS, SAIRA JAN was on the front lines of prevention and care. Jan '94, Vice President & Chief Pharmacy Officer at Horizon Blue Cross Blue Shield, has been the insurer's point person on opioid use since the mid-1990s. In 1999, through her joint appointment at EMSOP's pharmacy practice department, Jan (now Professor Emerita) created the Opioid Abuse Toolkit, which has since equipped providers, members and healthcare agencies nationwide to educate and manage patients who require opioids for acute pain or medication-assisted treatment for opioid abuse. (continued on page 23)