

SHOWGLOBE

HONORING OUR COVID/HEROES

For nearly two years, our alumni, faculty and students have battled on the front lines of COVID-19. We reflect on their tireless efforts.



IN THIS ISSUE:

COMMUNITY PHARMACY EXPERIENCE DURING THE UNCERTAINTY OF COVID-19 PG 6

INNOVATION, CREATIVITY AND FLEXIBILITY DURING THE PANDEMIC PG 8

9 LESSONS WE LEARNED FROM COVID-19 + TEST YOUR MEDICAL VOCABULARY! PG 18

A Message From the Dean:

The Curse and the Opportunity

There have been many accomplishments of our students, faculty and alumni to celebrate since we published the last Showglobe. We hope to have captured as many as possible in this edition, but I would like to focus on how we have reacted to the black swan event that has influenced our lives the most since 2020.

I think numerous people, particularly during the early stages of the COVID-19 pandemic, contemplated the age-old question of “what is my purpose in life?” Of course, most of us have many roles, be it a pharmacist, educator, researcher, parent/grandparent, friend, spouse, mentor, caregiver, provider, etc. But, is there one that stands out to you as to why you are here at this particular time and place?

Over the past 19 months, due both to the “magic” of Zoom and the opportunity to help with vaccine clinics, I’ve had the pleasure of speaking and working with an incredible number of alumni, students, faculty and other colleagues who were laser-focused on finding ways they could help their fellow citizens. So many pharmacists, pharmacy faculty and students across the country stepped into the fire in numerous ways during the COVID-19 pandemic, often at potentially great personal risks given what was unknown early in 2020. Then again, isn’t that what inspired many to choose our vocation?

I will never be able to capture the breadth of ways our alumni have been there for the public since day one of this challenging moment in human history. Starting with some COVID heroes on our front cover, we tried to pack many examples of your efforts into this edition. At multiple times over the recent past, your altruism and bravery left me in awe. As you read through the pages of this magazine, perhaps these unique stories of bravery, adventure and innovation will make you feel as I do — filled with pride and admiration for how our alumni and faculty have stepped up to help others and at the same time perhaps restoring the perceived importance of our profession in public health.

As both individuals and organizations, our motivation for helping our community is not merely driven by accolades or recognition but more so by knowing we can make a difference in the lives of others. Occasionally, we get an email from an administrator, or better yet, a note from an individual who benefited from our actions. However, it is certainly not common to obtain the national and even international recognition of such

“The purpose of life is not to be happy. It is to be useful, to be honorable, to be compassionate, to have it make some difference that you have lived and lived well.”

—RALPH WALDO EMERSON



▲ Dean William Petros draws a dose of the COVID-19 vaccine into a syringe during one of the WVU Vaccination Clinics.

efforts as we saw for pharmacists in West Virginia during the early months of the vaccine rollout, including becoming the first state, by far, to vaccinate all nursing home residents and the early leader in both utilization and distribution of vaccines for the general population most likely to die from the virus. With every interview, we felt that we were helping a much larger world community by

discussing approaches that led to success in our state that could be translated elsewhere. In addition, these media opportunities have been used to deliver a consistent message: *pharmacists are an essential component of the solution to the pandemic, and collaboration among our profession and with other disciplines is a key to saving more lives.*

So, is COVID-19 both a curse and an opportunity? COVID-19 has been devastating in countless ways, foremost being the unimaginable number of lives lost, including some of our alumni. However, even in the darkest days of this pandemic, we have been given an opportunity to see a bright light shining on the purpose that sustains us all in

this profession: the love of helping others.

Please continue your efforts to safely demonstrate how “Mountaineers Go First” with your impactful actions.

William P. Petros

William Petros, PharmD, FCCP
Dean and Gates Wigner Endowed Chair

◀ **ON THE COVER** The COVID-19 virus uses spikes to attach to human cells. The vaccines administered by our COVID heroes stimulate our bodies to make antibodies to bind specifically to the spikes so they can't attach to our cells and infect us with the virus.

WINTER 2021-2022

ADMINISTRATION

E. Gordon Gee
President, West Virginia University

Clay Marsh

Vice President and Executive Dean,
WVU Health Sciences

William Petros

Dean, School of Pharmacy

DEVELOPMENT AND ALUMNI RELATIONS

Kevin Tephabock

Director of Development
304-293-7731
kevin.tephabock@wvuf.org

Betsy Elswick

Coordinator, School of Pharmacy
Alumni Association, Alumni Relations
304-293-6204
belswick@hsc.wvu.edu

EXECUTIVE EDITOR

Christa Currey

Director of Marketing and
Communications

CONTRIBUTORS

Jann B. Skelton (BSP Pharm, '91),
RPh, MBA, FAPhA
Silver Pennies Consulting

Sophia Darmelio, Graduate
Assistant, WVU Health Sciences

Cassie Rice, Communications
Specialist, WVU Foundation

DESIGN

Little Fish Design Company

PHOTOGRAPHERS

Christa Currey, Brenda Higa,
WVU Photography

EDITORIAL OFFICE

WVU School of Pharmacy
1142 Health Sciences Center North
P.O. Box 9500
Morgantown, WV 26506-9500
pharmacy.hsc.wvu.edu

CHANGE OF ADDRESS

WVU Foundation
P.O. Box 1650
Morgantown, WV 26504-1650
Fax: 304-284-4001
Email: info@wvuf.org
www.give.wvu.edu

The West Virginia University School of Pharmacy magazine, *The Showglobe*, is produced and printed by the School of Pharmacy through the support of the School of Pharmacy Excellence Endowment. All issues are available online at pharmacy.hsc.wvu.edu under the Alumni tab.

CONTENTS

Winter 2021 - 2022

SPECIAL REPORT:

The WVU School of Pharmacy COVID-19 Response

- 02** Forging into the Unknown, the Early Days of COVID-19
- 04** School of Pharmacy Professor Leads COVID-19 Fight on Two Fronts
- 06** Alumnus Shares Community Pharmacy Experience During the Uncertainty of COVID-19
- 08** Innovation, Creativity and Flexibility Support Student Learning During the Pandemic
- 10** Riding the Waves of a Pandemic
- 11** Life Below Zero
- 12** The West Virginia Way
- 14** Mountaineers Go First: School of Pharmacy Combats COVID-19 Pandemic Through Vaccine Clinics
- 17** The Emergence of a Global Pandemic – A Unique Professional Perspective
- 18** 9 Lessons We Learned from COVID-19



Snapshot

▲ The Class of 2024 missed its traditional white coat ceremony in August 2020 due to COVID-19. After a yearlong delay, members gathered for a small ceremony this fall to celebrate their official entry into the pharmacy profession.

ALSO IN THIS ISSUE

20 Faculty News

24 Donors and Scholars

26 School of Pharmacy Events

28 ICYMI: In Case You Missed It

30 Alumni News

30 Class Notes/In Memoriam

Forging into the Unknown, the Early Days of COVID-19

In early 2020, West Virginians kept a close watch on the media – waiting, wondering when COVID-19 would break through the state’s borders. On March 17, Gov. Jim Justice announced that West Virginia’s first SARS-CoV-2 infection was reported in the Eastern Panhandle.

3/17/20



WV'S FIRST
case of
SARS-CoV-2
reported

The School compounded hand sanitizer and donated a variety of

PPE

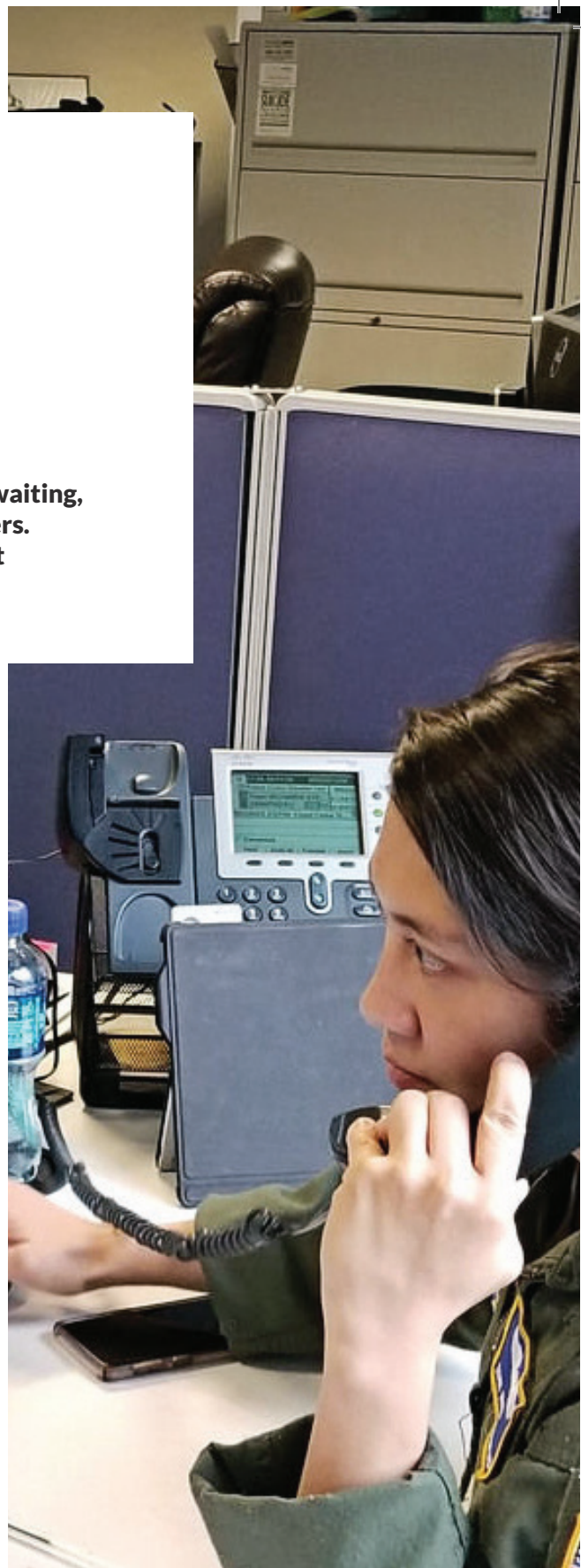


Scan to watch Dean Petros discuss bogus COVID-19 cures.

The next day, West Virginia University announced that it would extend online classes through the rest of the spring semester and send everyone except essential workers home indefinitely.

While many people went home to begin isolating, those working in and studying the pharmacy profession saw the pandemic as a charge to roll up their sleeves and help their fellow humans. Some WVU School of Pharmacy professors, residents and students volunteered their time to administer COVID tests, while other faculty members worked at Ruby Memorial Hospital caring for critically ill patients. Dean William Petros led efforts to compound multiple gallons of hand sanitizer and assisted WVU with regulatory issues during its efforts to manufacture nasal swabs using 3D printers. The School donated safety goggles, exam gloves, surgical masks and nasal samplers for patient testing. In addition, the Dean created a video warning people to stay away from bogus COVID cures on the internet.

The School’s Office of Continuing Education (CE) focused on COVID-related training activities. From May 2020 to October 2021, they held 11 activities with approximately 600 participants. Also, they hosted ten immunization training



DECEMBER 2019

DECEMBER 31, 2019

The People’s Republic of China reports cases of “viral pneumonia” in Wuhan. The World Health Organization (WHO) becomes aware.

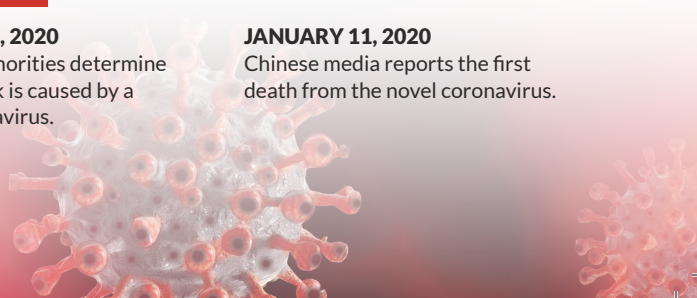
JANUARY 2020

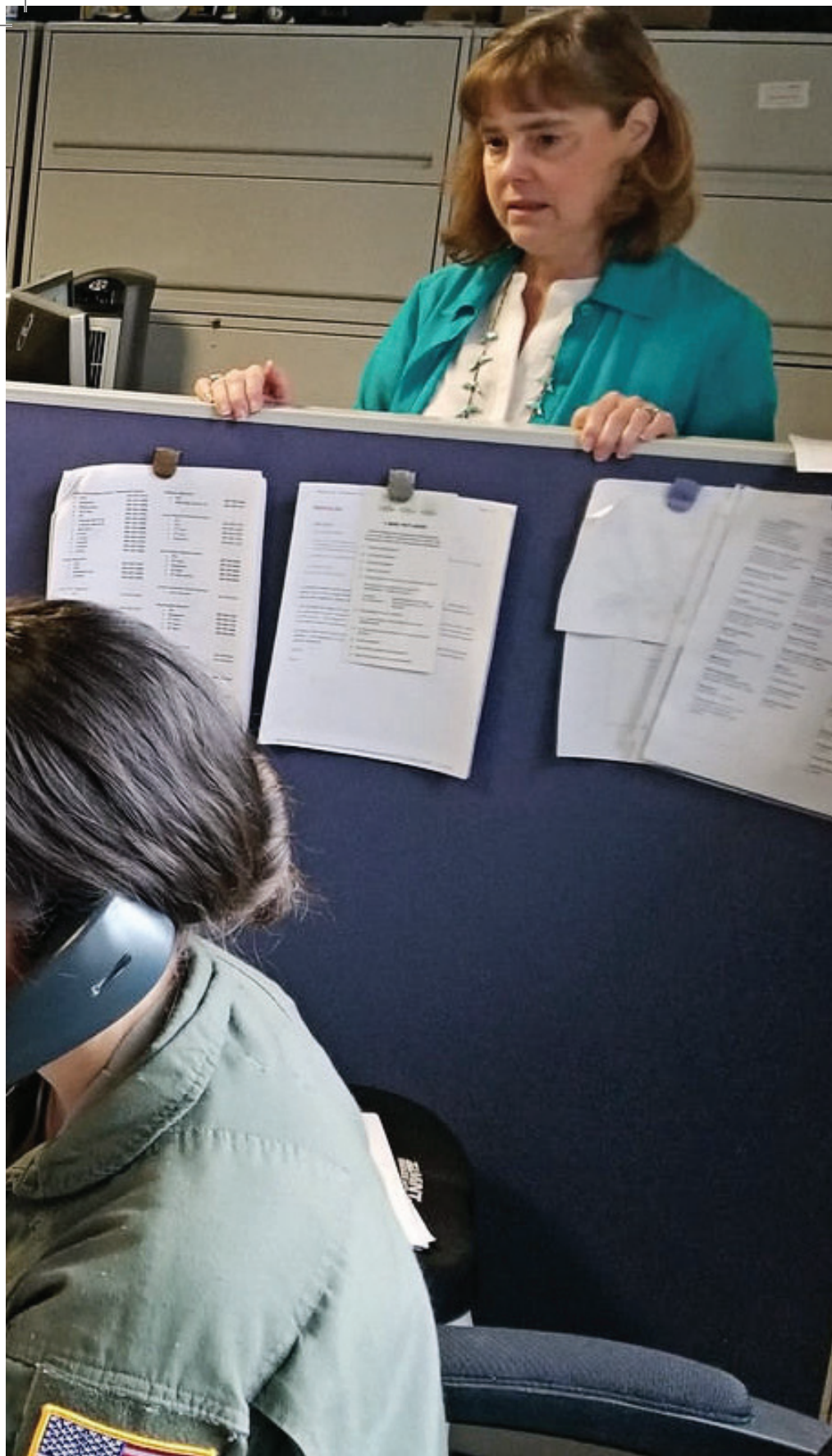
JANUARY 9, 2020

Chinese authorities determine the outbreak is caused by a novel coronavirus.

JANUARY 11, 2020

Chinese media reports the first death from the novel coronavirus.



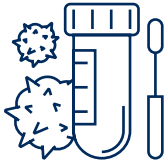


◀ Dr. Scharman observes a Coronavirus Hotline volunteer.

The COVID-19 Hotline has answered almost



65,000
CALLS



Hosted ten immunization training programs, producing

280+
certified immunizers

programs for pharmacists, technicians and students, producing more than 280 certified immunizers.

Clinical Associate Professor Dr. Krista Capehart leveraged the state’s rural pharmacists to assist early in the pandemic. Her actions led to rule changes making it easier for patients to receive chronic medications and safely expanded COVID testing to pharmacies.

Dr. Elizabeth Scharman’s contributions also made a statewide impact. Scharman, a professor of clinical pharmacy, and director of the West Virginia Poison Center, operates the West Virginia Department of Health and Human Resources Coronavirus Hotline. The hotline is a service of WVU located on the University’s Charleston Campus. To date, the Coronavirus Hotline has answered almost 65,000 calls from the general public, healthcare professionals and hospitals across the state. 🙌

JANUARY 13, 2020
The first case of novel coronavirus outside the People’s Republic of China is reported in Thailand.

JANUARY 20, 2020
The CDC announces the first laboratory confirmed case of novel coronavirus in the U.S.

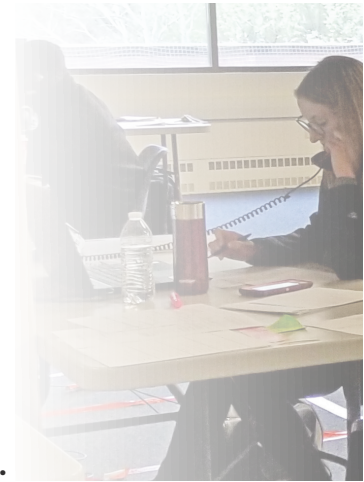
JANUARY 21, 2020
CDC artists Alissa Eckert and Dan Higgins give novel coronavirus “an identity” by designing the iconic red and white virus image.

FEBRUARY 2020

FEBRUARY 11, 2020
WHO announces that the disease caused by the novel coronavirus will be named COVID-19.

School of Pharmacy Professor Leads COVID-19 Fight on Two Fronts

BY JANN B. SKELTON



As COVID-19 began to spread across the U.S., West Virginia was ready to answer the call.

The West Virginia Department of Health and Human Resources (WV DHHR) launched a Coronavirus Hotline utilizing the West Virginia Poison Center to answer questions from the public, healthcare workers, hospitals and other sources.

Since the first call on March 9, 2020, Dr. Elizabeth Scharman, professor of clinical pharmacy at the West Virginia University School of Pharmacy and director of the West Virginia Poison Control Center, has been at the helm. She directs a staff of pharmacists, nurses, doctors, healthcare residents, students and volunteers who answer questions about COVID 24/7. To date, the team has responded to more than 65,000 calls.

Because the COVID landscape shifts constantly, Scharman gathers daily data from the WV DHHR, Centers for Disease Control and Prevention, and recently published literature or studies to assist hotline staff and volunteers in providing callers the most current information.

“Trying to manage the critical needs of our community for so long is the difficult part. And we know this is important and necessary work,” said Scharman. “It’s rewarding to know that I’m part of something that the state needs and that my staff and I have the skill sets to assist our residents.”

The hotline staff is on the front lines when individuals often rely on misinformation and take unapproved and dangerous therapies to try and combat COVID. Early in the pandemic, there was a lot of misuse and unintentional exposure to cleaning and disinfecting products, especially among adults. Most recently, there has been an increase in calls about the unapproved use of the livestock dewormer ivermectin, fueled by misinformation from social media.

“We have had people hospitalized because of side effects related to ivermectin,” said Scharman. “And now we get frequent calls asking how many people have died from ivermectin. It is really challenging because that is not the method to judge the effectiveness of any therapy.” Scharman worries that these individuals are delaying more appropriate and more effective treatments, such as monoclonal antibodies. The latter therapies are about 70% effective, but you must use them early in the disease process for them to have a beneficial effect.

Working with the Coronavirus Hotline provides a direct crossover to Scharman’s other significant COVID-19 related role, overseeing the distribution of monoclonal antibody treatments for COVID to the state’s hospitals and nursing homes. In fall 2020, the Food and Drug Administration authorized monoclonal antibodies for the treatment of COVID, and Scharman stepped up to launch COVID-19 monoclonal antibody infusion clinics in rural hospitals in the state.

COVID-19 monoclonal antibody therapy was initially administered only by intravenous infusion and recommended for COVID-positive patients 12 years of age or older who are at high risk of severe infection. This treatment can reduce the chance of hospitalization and death and has been shown to boost recovery, but time is of the essence as it needs to be administered within ten days of testing positive.

“Trying to manage the critical needs of our community for so long is the difficult part. And we know this is very important and necessary work. It has been rewarding to know that I’m a part of something that the state needs and that my staff and I have the skill sets to be able to assist our residents.”



—DR. ELIZABETH SCHARMAN

MARCH 2020

MARCH 9, 2020

The West Virginia Poison Center, led by Dr. Elizabeth Scharman (SoP) is asked to open a COVID-19 hotline for the state.

MARCH 11, 2020

WHO declares COVID-19 a pandemic.

MARCH 13, 2020

President Donald J. Trump declares a national state of emergency and pharmacies announce plans to assist with COVID-19 testing.

MARCH 15, 2020

U.S. states begin to shutdown to prevent the spread of COVID-19.



The COVID-19 Hotline is staffed by professionals from the West Virginia Poison Control Center, including:



PHARMACISTS
NURSES
PHYSICIANS
HEALTHCARE RESIDENTS
STUDENTS
VOLUNTEERS



The program logistics are very challenging, trying to match the limited allotment of monoclonal antibodies provided by the federal government with the needs of systems in the state. The program manages over 1,000 courses of these medications each week. Juggling the needs of health systems, nursing homes and correctional facilities can be frustrating, particularly when the demand for these therapies exceeds the supply. Health systems and pharmacies across the state have built the infrastructure to respond to patients in need rapidly. Yet, activation of this network was initially delayed due to the shortage of these vital medications.

Unfortunately, misinformation impacts this work, too, with many people refusing vaccination because they were not entirely FDA approved and then relying on access to monoclonal antibodies when they get sick. Like COVID vaccines, monoclonal antibodies are also authorized under emergency use. As Scharman emphasized, "Getting vaccinated is the best option. Right now, we

have plenty of vaccines, so the safer option is to get vaccinated, and then you don't have to worry about whether there will be enough monoclonal antibodies to treat you."

Scharman credits so many partners across the state who have worked together under challenging circumstances. She specifically calls attention to the state's hospital pharmacists, who have spent many hours implementing monoclonal antibody programs at their hospitals.

"It's important to shine a light on health-system pharmacists, who have not only been dealing with managing the crush of COVID-19 therapies for the hospitalized patients but also doing everything possible to structure the outpatient administration of monoclonal antibodies for their communities," said Scharman. "These pharmacists have stepped up and done an amazing job to make this program work in our state." 🙌

MARCH 17, 2020

West Virginia, the last state without a confirmed case of COVID-19, reports its first.



The first human trial of a vaccine to protect against COVID-19 begins in the U.S.

MARCH 18, 2020

West Virginia University announces online classes will be extended through the rest of the spring semester and campuses are closed except for essential employees.

MARCH 26, 2020

Governor Justice names Dr. Clay Marsh, vice president and executive dean for health sciences at WVU, as West Virginia's COVID-19/Coronavirus czar.



▼ TriState Pharmacists served on the front lines to vaccinate vulnerable nursing home patients.

Alumnus Shares Community Pharmacy Experience During the Uncertainty of COVID-19

BY JANN B. SKELTON

In the early days of the pandemic, people isolated in their homes and businesses closed their doors, except for hospitals, grocery stores and pharmacies. J.J. Bernabei (BS Pharm, '89) is one of the heroes who put his health at risk to ensure his patients received the medications they needed to stay healthy.

Bernabei owns Tri-State Medical Group, which includes three independent pharmacies and a medical supply company near West Virginia's northern panhandle. The pharmacies are true community centers and have developed services, including delivery and

compliance packaging, to help meet the specific needs of their patients. Many of these patients are older adults or low-income families and rely on the care they receive from their Tri-State pharmacists.

Bernabei leveraged all 80 of his employees to care for patients, including pharmacists, pharmacy technicians, delivery drivers and administrative staff. First, he focused on implementing safety measures for employees. Masking, temperature screenings and distancing were the obvious first steps. Bernabei strongly believed his employees should feel appreciated for the critical, front-line work they were doing to fight the pandemic, so employees

APRIL 2020

APRIL 2020

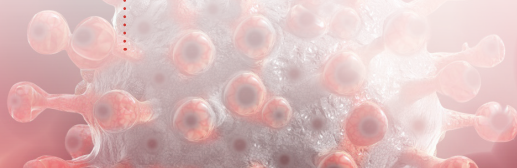
While most research labs were closed down, Dr. Mark McLaughlin's at the SoP was permitted to continue because he was developing antiviral drug derivatives that could be useful against SARS-CoV-2.

APRIL 10, 2020

The U.S. surpasses Italy as the global leader for reported deaths due to COVID-19 (23,036 deaths).

MARCH 29, 2020

Governor and First Lady issue a statement acknowledging the state's first COVID-19 death.



“To be able to reach out and offer the vaccine to these patients in my community, who hadn’t left their homes and were scared to death, was by far the most rewarding experience I’ve had in my pharmacy career.”

—J.J. BERNABEI, RPH



▲ Mr. Bernabei gowned and prepared to provide COVID-19 vaccinations in long-term care facilities.

received champion pay and were awarded bonuses. In addition, the practice offered flexibility to meet the specific situation of individual employees, such as parents with young children who were being homeschooled due to the pandemic.

“The pharmacy staff understood the gravity of the situation, but everybody stayed positive, came to work every day and they felt like they were contributing to getting our community through this trying time,” said Bernabei. “The drive to maintain patient access was strong, and with precautions in place, the pharmacies were able to maintain their regular business hours without ever closing.”

Particularly in the early days of the lockdown, the pharmacies accommodated changes in patient behavior and expectations. Some patients were not comfortable leaving their homes, so the pharmacies mailed medications at no charge. Other patients opted to take advantage of the pharmacies’ delivery services, and drivers often worked until 8:00 p.m. to ensure that people received their medications.

The pharmacies also formed a special COVID-19 team to make sure that community members had access to the COVID vaccines. The group included pharmacists, pharmacy technicians, nurses and volunteers. From the moment vaccines became available, pharmacists and pharmacy technicians worked to immunize long-term care patients. The team also focused on ensuring no doses went to waste, moving to vaccinate the most vulnerable patients from their retail pharmacy locations with leftover doses from the long-term care facilities.

“We were lucky to be in West Virginia and have access to the vaccine sooner than other states. Patients heard on the news that you couldn’t get vaccines anywhere, said Bernabei. “To be able to reach out and offer the vaccine to these patients in my community, who hadn’t left their homes and were scared to death, was by far the most rewarding experience I’ve had in my pharmacy career.”

Currently, the pharmacies offer vaccines in their stores, with the option of curbside service. To date, the Tri-State Medical Group has administered more than 5,000 COVID-19 vaccines.

Although the future challenges are clear, so are the responsibilities and the opportunities. “I’ve got to tell you, we are really good at this now, and we know we can work through anything,” said Bernabei. “I know the quality of our team members, and I know how hard they work. I would put them up against anybody, and they will carry us through whatever happens next. It is a huge opportunity and responsibility for pharmacy, and we’re going to embrace it.” 🙌

MAY 2020

APRIL 19, 2020

Department of Health and Human Services announces pharmacists permitted to provide pediatric vaccinations during the pandemic.

MAY 1, 2020

FDA issues an emergency use authorization for remdesivir for treatment of COVID-19.

MAY 16, 2020

With all PharmD candidates successfully completing experientials, WVU SoP conducts first “virtual” commencement ceremony for PharmD and PhD programs.

MAY 28, 2020

United States’ coronavirus (COVID-19) death toll surpasses 100,000.

Innovation, Creativity and Flexibility Support Student Learning During the Pandemic

BY CHRISTA CURREY AND JANN B. SKELTON

Until March 2020, online learning was an option. However, the onset of the COVID-19 pandemic made it necessary for students and teachers across the country. On March 10, just three days before spring break, West Virginia University President Gordon Gee announced that students would not return to campus following the holiday. Administrators and professors quickly pivoted their teaching and learning experiences into a cyberspace format.

Flipping the curriculum

Associate Dean of Academic Affairs and Educational Innovation for the WVU School of Pharmacy, Dr. Mary Stamatakis, says at the time, her biggest concern was how the School would administer exams. "I explored a few options, but they were not a good fit for us, or they were tedious and expensive. So, we began exploring how we could use Zoom to proctor exams," said Stamatakis. "In some ways, it's the thing of which I'm most proud. I won't say we invented it, but I feel like we were among the early explorers."

Stamatakis and her team of professors and Information Technology (IT) professionals used a mix of new technology and old-school common sense to make their idea work. WVU's IT department determined how to lock down students' browsers while allowing them to use Zoom simultaneously, and SoP faculty worked on exam logistics. "Students log into a password-protected Zoom account in groups of two and three. Each student gives the proctor a 360-degree scan of their room, a look at their desktop and both sides of their scratch paper. Then, they pick up a mirror and show the proctor that there are no sticky notes on their computer screen," says Stamatakis. "Do I think it's 100% foolproof? No. But, overall, I think it worked."

In addition to administering tests online, the faculty adapted quickly to lecturing online. Stamatakis says the creativity born from this experiential period is exciting. Clinical Associate Professor Ashlee McMillan created virtual escape rooms to replace case studies. Students had to solve mini-puzzles that tested their knowledge of a subject to "free themselves." Clinical Professor Gina Baugh reimagined an interprofessional education event that hosts 600 students from different professions. One of the activities included a virtual walk through a hospital room

embedded with errors. Participating students navigated the room virtually and clicked on the mistakes as they found them.

When students returned in a limited capacity for the fall 2020 semester, McMillan and Clinical Assistant Professor Ashleigh Barrickman developed ways to ensure students learned necessary skills while limiting exposure and cross-contamination. "In the past, we did compounding demonstrations live in the room. This year, we created video demonstrations and uploaded them to YouTube so students could watch them before class," says McMillan. "This not only limited exposure, but we discovered it was more efficient." Instead of practicing on each other for point-of-care testing, students practiced self-nasal swabs while their professors evaluated them through a glass window. They practiced throat swabs on mannequins.

Stamatakis says using technology for teaching was not without its challenges. However, preparation and teamwork solved most of them. "Overall, I think our teaching experience worked well. We plan to adopt some of the new learning experiences permanently."

Reaching people through virtual health fairs

COVID limited the ability of student-pharmacists to engage with patients and the public through in-person health fairs, so they got creative. Through a program called Health Flix, interprofessional students created short videos providing easily accessible information on various important health topics. The videos were designed to take the place of health fairs that were canceled because of the pandemic.

From a [song parody video](#) that encourages people to wash their hands for the appropriate amount of time to instructions on how to use [structured breathing, yoga, or baking](#) to help decrease stress levels, students tackled health issues related to



AUGUST 2020

AUGUST 2020

Following COVID-19 testing, WVU SoP students return to a limited in-person class schedule, with the remainder online.

SEPTEMBER 2020

SEPTEMBER 22, 2020

The U.S. COVID-19 death toll surpasses 200,000.

NOVEMBER 2020

NOVEMBER 2020

Dr. Elizabeth Sharman (SoP) designs/implements COVID-19 monoclonal antibody program for West Virginia.

DECEMBER 2020

DECEMBER 11, 2020

The Food and Drug Administration issues an Emergency Use Authorization for the first COVID-19 vaccine.



Scan the QR code to watch one of the student-produced videos, "Effects of Drugs on the Brain."

"We're looking into the future with this device," Baugh says. "Though there is a personal side that is lost, it is still very beneficial to see a device being used that can connect people in the healthcare world to those who wouldn't have the resources to be met in person."

Pivoting to deliver IPPE and APPE experiences

As the pandemic developed, many healthcare organizations that collaborated with the SoP to train student pharmacists were forced to discontinue their teaching rotations to ensure the safety of staff, students and patients. The immediate focus was ensuring that P4 students stayed on track and met their requirements for graduation.

Although shifting to virtual learning activities was challenging, we learned some important lessons. According to Dr. Mark Garofoli, director of experiential learning, "As educators, we learned to think about what we 'could do' as opposed to what we thought we 'couldn't do.' In some ways, the pandemic placed a renewed emphasis on the value of experiential learning, spurred more efficient and effective program implementation and opened the door for the schools to be more strategic about additional advancements that can be made."

The SoP took an "all hands on deck" approach, collaborating with WVU Medicine and engaging clinical faculty to accept additional students. Faculty and preceptors structured rotations virtually, integrating journal clubs, topic discussions, lectures and even clinical rounds through Zoom. Learning outcomes remained the same while the mechanisms to deliver educational content flexed to meet the needs of students and sites. In some settings, telehealth was broadly implemented, allowing students to talk with patients from their homes. In some cases, when opportunities to travel to other states or internationally for rotations were disrupted, the School created new rotations that they did not have before the pandemic. As vaccines became available, WVU community-based and ambulatory care sites and student pharmacists on rotation provided the needed personnel to administer COVID-19 vaccinations across the state.

Some pandemic lessons will likely continue. The pandemic created an openness to change by allowing the School to examine learning and activities and adapt to new ways of operating. The shift to telehealth supported patients, who can often accommodate a virtual visit more effectively. This allows student-pharmacists to meet the patient where they are, creating a comfortable and trusting rapport, regardless of the student's physical location.

Dr. Garofoli shares, "Most importantly, the incredible value of our preceptors was even further amplified! Our success was enabled by our preceptors, who rolled up their sleeves and partnered with us during an unprecedented time." 🙏

the pandemic in fun and creative ways. Videos on over 20 common health topics were created by WVU health sciences students.

Adapting patient simulation to virtual learning

COVID has shaken up college campuses and education courses across the country. At WVU, the Interprofessional Education (IPE) Program leaders and the Simulation Training for Education and Patient Safety (STEPS) Center reimagine patient simulations to continue this critical learning exercise for their students.

WVU's IPE IDEAS (Interdisciplinary Education Apartment Simulation) project provides pharmacy, physical therapy, occupational therapy, physician assistant, public health, nursing and medical students the ability to use their training in a simulated environment. The overall intent of the activity is to foster interprofessional teamwork, communication skills and compassionate care promotion. The simulation experiences also give students a look into a mock patient's home environment and how they might live their daily lives.

However, in-person simulations were canceled during the pandemic, and the format shifted. Adam Hoffman, CHSE and simulation educational specialist; Dr. Gina Baugh, clinical professor; and Amy Summers, IPE program specialist, developed a plan to facilitate distance learning in the IPE events. The answer? A remote-controlled robot.

"Having the robot is a huge advantage," said Baugh. "It enables the students to do the simulation and provides the connectivity needed for it." Since the robot was introduced, there have been multiple IPE simulations, allowing students to engage in tasks such as navigating through a standardized patient's home, completing a patient interview and conducting a home assessment.

DECEMBER 12, 2020

The Advisory Committee on Immunization Practices recommends that healthcare professionals, residents of long-term care facilities and select others be offered the COVI-19 vaccine first in the initial phases of the vaccination program.

DECEMBER 13, 2020

Dr. Krista Capehart (SoP) finishes design of an innovative statewide plan for vaccination of nursing homes/long-term care facilities using local pharmacies.

COVID-19 Response

Riding the Waves of a Pandemic

BY JANN B. SKELTON

Dr. Kristina Holley (PharmD, '11) never thought her clinical training in the emergency department and as a board-certified critical care pharmacist would put her in the crosshairs of a pandemic.

As a clinical pharmacy specialist at St. Joseph Medical Center in Bellingham, Washington, Holley was on the front lines of the unknown in early 2020.

"When everything first hit, I think we were waiting for the other shoe to drop," said Holley. "The hospital got quiet, and it was a little eerie how slow we were because everyone knew something was coming — we just weren't certain what it was."

The first COVID-19 case in the country was in Everett, Washington, a community just across the border from where Holley lived. St. Joseph Medical Center began preparing for the worst, shifting scheduled procedures and planning how to flex staff and limited resources, such as medications and personal protective equipment. Holley said the facility hobbled through the summer of 2020, riding the peaks and valleys of the virus throughout the fall, and has been operating at surge levels ever since.

Fast forward 18 months; healthcare professionals may feel more comfortable handling COVID, but patient outcomes are not improving. "The rate that we are admitting patients is the thing disturbing me most right now," said Holley. "And how much younger and sicker these patients are than in previous waves."

Why is this happening? First, the Delta variant was more transmissible and created a higher viral load. Holley says most of her older patients are vaccinated, so the virus is finding younger and relatively healthy hosts. Although she has seen some breakthrough cases, there is no question that her critically ill patients are unvaccinated. She also sees the trajectory of the disease changing, with patients not responding as successfully to approved treatments, which requires more intubations and long-term supportive care.

This pace and the constant uncertainty are challenging. The virus continues to evolve while patients are not consistently adopting preventive measures, such as masking and vaccination. "I don't think people appreciate just how tired healthcare



Dr. Kristina Holley preparing to care for COVID-19 patients at her hospital's ICU.

"Intensivists, nurses and pharmacists have had to work under unprecedented conditions to develop patient protocols and manage dwindling staffing. These professionals have also been a mutual support system to one another." —DR. KRISTINA HOLLEY (PHARM.D, '11)


professionals are," said Holley. "The system is overwhelmed, and there is no real end in sight."

Holley admits that it is often difficult to find the silver lining moments, but she takes meaningful comfort from the camaraderie with her colleagues in the intensive care unit. Intensivists, nurses and pharmacists have had to work under unprecedented conditions to develop patient protocols and manage dwindling staffing. The degree of patient loss can be excruciating sometimes. These professionals have also been a mutual support system to one another — a safe place to voice frustrations and fears because they are living it too. The advice Holley has for others is that "things are tough to predict. The only thing that I know for sure is that we'll keep fighting the good fight and keep doing what we've been doing for the past year and a half." 🦋

DECEMBER 15, 2020

Within hours of COVID-19 vaccine arrival in West Virginia, first nursing home patients (here and nationwide) are immunized in Morgantown by WVU SoP faculty, as covered via CBS News. Dr. Krista Capehart (SoP) vaccinates the West Virginia Governor and pandemic leadership team via a livestreamed event.

DECEMBER 17, 2020

 **National/international media appearance by SoP faculty and alumni:**
Dr. Betsy Elswick on CBS

DECEMBER 28, 2020

West Virginia becomes the first state in the nation to vaccinate all nursing home residents, well before many states even started.



pharmacist, one medical doctor and two nurses who travel by plane, sled and snowmobile to deliver and administer vaccines to villages where residents are largely cut off from the rest of the world.

“It’s challenging getting the vaccines up here to begin with and then getting it out to the villages brings on a whole new set of challenges and logistics,” Dean said. “Time is of the utmost importance.”

Dean and her team cared for residents of 11 villages in northwest Alaska. COVID-19 vaccine delivery, storage and handling requirements have made it challenging, but together, the four healthcare providers traveled hundreds of miles to multiple villages to deliver 65 vaccinations this winter and are continuing to give vaccines.

“The farthest village we traveled to was about an hour and a half away,” Dean said. “We would have to take several modes of transportation to get to these villages — first taking a car to the airport, a plane and then we would get picked up by sled that was pulled by a snowmobile.”

Due to the conditions Dean and her team experienced, there were many logistical issues they had to consider. They had to think creatively to ensure the vaccines were equipped for subzero temperatures. Their efforts were put to the test when the team completed a home visit to a 92-year-old who could not get to the vaccine site.

“I had to figure out how to craft a storage system for our nurse to carry the vaccine with her and make sure it was at a stable temperature,” Dean said. She created a storage container using an old lunchbox and protective envelope for the nurse to carry and successfully administer the vaccine to the patient.

“Some of the villages have been hit pretty hard by the pandemic,” Dean said. “It’s been quite challenging. We have a phenomenal group of pharmacists who work together as a team to come up with solutions.”

Being part of an all-female team delivering COVID-19 vaccines has been impactful and empowering for Dean. Many people do not have access to healthcare in remote areas, so “being able to provide care in isolation and those conditions has been amazing,” Dean said.

She chose Alaska for her residency because of the three pharmacists who created the program, including Dean’s residency program director, Dr. Freddy Kaniki; clinical coordinator, Dr. Jonathan Redlinski; and chief pharmacist, Dr. Denzel Mann. During her last year of school, she had the opportunity to go to Nome, Alaska, for a rotation and she fell in love with it.

“I was really involved throughout my four years with the WVU School of Pharmacy and that really helped prepare me for my work as a pharmacist now,” Dean said. “Throughout

school, they taught us to go above and beyond for our patients and that is what I try to implement as a pharmacist now to provide the most optimal care for my patients.

“You never know what each day will bring you. We have a whole new set of logistical challenges that we face every day, which allows me to be creative. That is what I love most about this job.” 🦋

Life Below Zero:

WVU Pharmacy alumna delivers COVID-19 vaccines to patients in remote Alaskan villages

BY SOPHIA DARMELIO

West Virginia University School of Pharmacy alumna Meredith Dean (PharmD, '20) is part of an all-female team delivering and administering COVID-19 vaccines to people living in the most remote areas of Alaska.

Dean is a post-graduate year one (PGY-1) pharmacy resident at Maniilaq Association in Kotzebue, Alaska. Her team includes one

JANUARY 2021

JANUARY 7, 2021

Dr. Krista Capehart (SoP) designs/ implements vaccination program for all primary and secondary school employees in West Virginia.

DECEMBER 30, 2020

WVU SoP initiates first of what will be over 45 COVID-19 vaccine clinics, starting with elderly WVU employees.

JANUARY 7, 2021

National/international media appearance by SoP faculty and alumni:
Dr. Gretchen Garofoli on NPR

JANUARY 11, 2021

National/international media appearance by SoP faculty and alumni:
Dr. Krista Capehart on NPR



THE West Virginia WAY

BY CHRISTA CURREY

On a Friday evening in December 2020, Dr. Krista Capehart received a call from West Virginia’s pandemic leadership. “They said, we have a call with representatives from Operation Warp Speed tomorrow, and we want you to tell them we’re going to do this the West Virginia way,” recalled Dr. Capehart.

West Virginia was days away from receiving its first doses of the COVID-19 vaccine. Operation Warp Speed, a public-private partnership initiated by the federal government, planned to distribute the vaccines to nursing homes and long-term care facilities by utilizing two national pharmacy chains. However, the national rollout wouldn’t start for at least two weeks from the vaccine’s availability, and COVID deaths among the state’s elderly population were rising.

“The governor wanted to get the vaccines administered quickly,” said Capehart, clinical associate professor and director of the Wigner Institute for Advanced Pharmacy Practice, Education, and Research, as well as director of professional and regulatory affairs at the state’s Board of Pharmacy. “I got on the conference call with representatives from Operation Warp Speed the next morning and explained that we wanted to utilize all pharmacies in West Virginia, including independents. They didn’t tell us we couldn’t, so we proceeded.” West Virginia was the only state in the U.S. that didn’t follow the federal pathway.

THE PLAN

Dr. Capehart began working on COVID-19 vaccine planning in August 2020, and she became a member of the West Virginia Joint Interagency Task Force (JIATF) in November 2020. The group included representatives from the West Virginia Department of Health and Human Resources (DHHR), local health departments, community health clinics, hospitals, the West Virginia National Guard, the West Virginia Health Care Association, the West Virginia Department of Education and the West Virginia Board of Pharmacy, as well as other groups that would come and go when needed for implementation.

Dr. Capehart and her colleagues knew that a COVID-19 vaccine was forthcoming, and they began meeting weekly for

preemptive planning. They brainstormed about what supplies to order and how they would distribute the vaccines. A plan was already coming together in Charleston before Washington released its strategy.

“I’ve noticed throughout the pandemic and vaccination process that West Virginia pharmacists were more involved early on with public health as a sector compared to other states,” said Dr. Capehart. “Pharmacy was already at the table with the department of health, and I think that set us up for success because people already recognized what pharmacists could provide in terms of patient care.”

The JIATF looked to Dr. Capehart as the pharmacy representative of the group to get the ball rolling. She used her knowledge and skills in multiple areas to lay the groundwork for the rollout. In her role with the Board of Pharmacy, she guided pharmacists to expand patient care under emergency use and offered seminars to answer regulatory and prescribing questions.

Dr. Capehart called upon her network of health professionals and pharmacy contacts to build an army of vaccinators to cover the nursing home and long-term care facilities. First, she and Chief Executive Director of the West Virginia Health Care Association Marty Wright determined a list of facilities. Then she called pharmacies near those sites to ask for help with the rollout. In some cases, nursing homes and long-term care facilities already had a pharmacy they worked with, but all pharmacies were eligible to participate.

Call by call, Wright and Dr. Capehart made lifesaving connections for 214 facilities. The West Virginia National Guard delivered the vaccines to each pharmacy partner, ensuring proper temperature and storage procedures. The pharmacies worked with each facility to schedule and vaccinate the patients at each nursing home.

“Marty and I worked hard to partner nursing homes with pharmacies in their area. If the nursing home didn’t have a preference, we used a participating pharmacy that was

JANUARY 14, 2021



National/international media appearance by SoP faculty and alumni:

Dr. Meredith Dean on GMA

JANUARY 15, 2021



National/international media appearance by SoP faculty and alumni:

Dr. Gretchen Garofoli on ABC

JANUARY 21, 2021



National/international media appearance by SoP faculty and alumni:

Dr. Krista Capehart on NBC

JANUARY 24, 2021



National/international media appearance by SoP faculty and alumni:

Dr. Gretchen Garofoli on BBC

geographically closest to them,” said Dr. Capehart. “By the time our vaccines were on the ground, we already had pharmacists prepared to grab doses and get to work putting shots in arms.”

THE EXPERIENCE

Together, pharmacists, nursing home staff, volunteers and the West Virginia National Guard finished vaccinating workers and residents of all 214 facilities in 15 days. Even more impressive, they completed both doses for all facilities before some states started offering the vaccine. “In the first six to eight weeks of 2021, we saw a significant decrease in nursing home deaths,” said Dr. Capehart. “This was one of the most rewarding things to see because it validated that we were making an impact. The teams created and moved mountains to care for this most vulnerable population while demonstrating the amazing care pharmacists can provide.”

Another priority was vaccinating the state’s teachers and K-12 employees. The process was slightly different than the one used for nursing homes and long-term care facilities because the plan utilized the state’s school-based health centers and health departments to administer vaccinations, in addition to all of the pharmacy partners. Each county had a vaccination partner. Capehart worked closely with the West Virginia State Board of Education to select one high school for each county as a vaccine clinic location. “We didn’t micromanage it. We let the counties pick their day and time,” said Capehart. “Then we went back three or four weeks later and did the second doses. It was truly a team effort.”

Capehart says vaccinating coal miners in the state’s remote areas was a gratifying experience. “We were driving three hours plus — one way — to get to where we were going,” said Capehart. “We had reached a point where patients were no longer coming to us for the vaccine. We needed to go to them and meet them where they were.” Capehart had crucial conversations with residents about the importance of getting vaccinated. Not just to protect themselves, but to protect their loved ones and their neighbors.

“We had some experiences where we would meet people who were unsure about getting the vaccine, but they would hang around and watch others get it,” said Capehart. “Then, they would talk to people who received their vaccine. After I talked with them, they would come back to the clinic and get vaccinated the next day. That was rewarding.”

THE MEDIA

West Virginia caught the nation and the world by surprise with its successful COVID-19 rollout. Major news organizations, from NBC News to BBC World News, wanted to know how a small, rural state known for finishing last in most health-related rankings could be first in one of the most critical vaccination efforts in recent history.

While Dr. Capehart was busy organizing clinics and putting shots into arms, she had one more important job to do — spokesperson for the West Virginia vaccine rollout. From December 2020 well into the spring of 2021, newspaper editors, radio and television producers and podcast hosts contacted Dr. Capehart daily to share the story behind West Virginia’s success. Although she knew it was important to share our story to help other states in the U.S. and cities worldwide, she admits the attention was overwhelming at times.

“I like to do my thing and keep going. Doing an interview with Dr. Sanjay Gupta (chief medical correspondent for CNN) and answering calls from NBC producers, that’s not the world I typically function in,” said Capehart. “I’m a mom of two who makes things for the high school band — that’s where I’m comfortable.”

THE FUTURE

While COVID-19 vaccinations are still the focus of Dr. Capehart’s work, she’s always looking for more ways to help patients in her community. Recently, she trained pharmacists across the state to administer monoclonal antibodies to COVID-19 patients. Monoclonal antibodies are laboratory-produced molecules that act as substitute antibodies that can restore, enhance or mimic the immune system’s attack on cells. Research shows they can block the virus that causes COVID-19 from attaching to human cells, making it more difficult for the virus to reproduce and cause harm. The treatment is performed intravenously or by subcutaneous injection and is effective for patients diagnosed with COVID-19 who have not developed severe symptoms. Initially, the therapy was performed in hospitals. Dr. Elizabeth Scharman, clinical professor in the School of Pharmacy and director of the West Virginia Coronavirus Hotline, helped lead this effort in West Virginia. By working closely with Dr. Scharman, Dr. Capehart helped expand treatment options by registering 21 pharmacies to prescribe and administer monoclonal antibodies. 🦋



“I’ve noticed throughout the pandemic and vaccination process that West Virginia pharmacists were more involved early on with public health [...] compared to other states.”

—DR. KRISTA CAPEHART

JANUARY 27, 2021

West Virginia continues to lead the country by administering >80% of vaccine doses received compared to 55% national average.



National/international media appearance by SoP faculty and alumni: Dr. Krista Capehart on CNN

FEBRUARY 2021

FEBRUARY 1, 2021

National/international media appearance by SoP faculty and alumni: Ken and Tally Reed on ABC

MARCH 2021

MARCH 7, 2021

Given the aggressive vaccination of elderly, COVID-19 death rates in-state fell 88% from a January 10 high, compared to a 46% decline nationwide.

MOUNTAINEERS GO FIRST:

School of Pharmacy combats COVID-19 pandemic through vaccine clinics BY SOPHIA DARMELIO

In true Mountaineer fashion, West Virginia University School of Pharmacy faculty and students led the way with a series of COVID-19 vaccination clinics in response to the pandemic. They focused on three populations: long-term care facilities, WVU employees and students and the surrounding community.

While Dr. Krista Capehart led the statewide vaccination effort, Dr. Gretchen Garofoli, clinical associate professor in the School of Pharmacy, organized the COVID-19 vaccine rollout at nursing homes and long-term care facilities in the Morgantown area. She worked with regional independent community pharmacies that had relationships with local long-term care facilities. The West Virginia National Guard delivered the vaccines to ensure they arrived at each location safely and efficiently.

“Giving vaccines in the early stages of the rollout was very emotional because, at that point, we had been dealing with the pandemic for nine months,” Dr. Garofoli said. “It was a beacon of hope, a step in the right direction to getting through this pandemic.”

Dr. Garofoli and a team of colleagues vaccinated residents and employees at Sundale Nursing Home on December 15, 2020. She says it was an experience she’ll never forget.

“When we walked into the nursing home, people started clapping,” said Dr. Garofoli. “It was exhilarating and emotional to be a small part of history. The nursing home residents were very excited — you could see them smiling with their eyes.”

Dr. Betsy Elswick, clinical associate professor, helped to organize the vaccination clinic at Sundale. She says it was the highlight of her pharmacy career.

“To think that we quite literally had the “tools” to stop a pandemic

in our hands was overwhelmingly emotional,” said Dr. Elswick.

“The atmosphere was simply electric and joyful. Amidst the voices excited to receive their first doses were the sounds of one of the nursing home residents playing Christmas carols on the piano, rejoicing that COVID-19 vaccines could save their lives and other lives like theirs. The only way I can describe it is a feeling of hope.”

The COVID-19 vaccine rollout at Sundale Nursing Home was the lead story on the CBS Evening News later that night. It was the first of many regional, national and international news stories featuring School of Pharmacy faculty and alumni.

“There is a sense of pride that West Virginia was highlighted nationally for its COVID-19 vaccination efforts,” said Dr. Garofoli. “We were leading the way during a pandemic and other states, even countries, were looking to us for advice.”

In addition to vaccinating at the long-term care facilities, the School of Pharmacy was charged with facilitating all COVID-19 vaccination clinics held for faculty, staff, students of WVU and community members. Gates Wigner Endowed Chair and School of Pharmacy Dean Dr. William Petros was the administrative director for the WVU vaccination clinics held at the University’s Student Recreation Center.

At the clinics, vaccines were first administered to anyone involved in direct patient care and essential workers. Based on vaccine allotment, vaccines were then given to those over 65 years of age and progressed through the age ranges of faculty, staff and health discipline students. Vaccine administration eventually opened to the public when availability increased.

The purpose of the clinics was to administer vaccinations

“WEST VIRGINIA WAS HIGHLIGHTED NATIONALLY FOR ITS COVID-19 VACCINATION EFFORTS. WE WERE LEADING THE WAY DURING A PANDEMIC AND OTHER STATES, EVEN COUNTRIES, WERE LOOKING TO US FOR ADVICE.”

—DR. GRETCHEN GAROFOLI

APRIL 2021

APRIL 20, 2021

National/international media appearance by SoP faculty and alumni:
Dr. Krista Capehart on CBS

APRIL 28, 2021

Largest WVU COVID-19 vaccine clinic day, with approximately 2,000 doses given.

MAY 2021

MAY 16, 2021

WVU SoP in-person commencement for PharmD and PhD programs at Mountaineer Field.

MARCH 9, 2021

National/international media appearance by SoP faculty and alumni:
Dr. Drew Massey on CNN

BY THE NUMBERS

WVU COVID-19 Vaccination Clinics/COVID-19 Vaccination Clinics at Nursing Homes and Long-Term Care Facilities in the Morgantown Area

Time frame: December 2020 - September 2021

Number of clinics:

47 WVU
+ 69 Nursing home and long-term care facilities in Morgantown area

Total number of doses given at all clinics:

17,092

WVU School of Pharmacy faculty and students volunteered approximately

2,000

hours to the WVU clinics



Our students administered thousands of vaccines in addition to the WVU clinic through their internships and volunteer opportunities.

COVID-19 Response

to WVU faculty, staff, students and community members while incorporating Health Sciences students as volunteers.

“It was important to hold these vaccine clinics because we wanted to help people get out of this pandemic and do it in the safest and quickest way possible,” said Dean Petros. “We had students, faculty, staff and alumni volunteering at these clinics. I think some would say this was the highlight of their professional careers because they knew they were making a meaningful impact and likely saving lives.”

Volunteers gave a total of 17,092 doses among the 47 WVU Vaccination Clinics and 69 clinics in long-term care facilities and nursing homes from December 2020 through September 2021.

“I could not be more pleased of the faculty, staff, and students of the School of Pharmacy for their selfless efforts to facilitate these clinics from day one,” said Dean Petros. “The vast majority of our employees were volunteering their time in addition to fulfilling their regular jobs as clinicians, teachers and researchers.”

The Pharmacy students were able to benefit and learn a lot from this experience, explained Petros. Students were involved with registration, vaccination, post administration observation and vaccine dose preparation while working closely with faculty. Faculty and students contributed approximately 2,000 hours to the clinics.

“People go into the healthcare profession because they want to help people,” said Dean Petros. “I think this is something that the faculty, staff and student volunteers will remember for years and how they had a hand in getting us out of the pandemic.

“As our mantra says, Mountaineers Go First, and COVID-19 vaccine rollout was truly an example of this.” 🦋

- ▶ **TOP:** 2020-2021 Pharmacy Resident Lauren Maly (left), Clinical Associate Professor Betsy Elswick (right) and Assistant Professor Heather Johnson (back-left) prepare to vaccinate residents and staff at the Sundale Nursing Home in Morgantown. **BOTTOM:** WVU students getting vaccinated at one of the WVU Clinics held in the University’s Recreation Center.



NEWS ORGANIZATIONS/PODCASTS THAT INTERVIEWED OUR EXPERT FACULTY AND ALUMNI FOR COVID-19 VACCINE-RELATED INFORMATION



ABC News // APhA Pharmacy Today // BBC World News // *CBS Evening News // CNN Podcast with Dr. Sanjay Gupta
 KDKA TV (Pittsburgh) // McKnight’s Long-Term Care News // MetroNews Talkline (West Virginia-statewide) // *NBC News // *NPR
 SLATE // The Atlanta Journal-Constitution // The Debrief with Major Garret // The Dominion Post newspaper (Morgantown)
 The New York Times // The Parkersburg News and Sentinel (Parkersburg, WV) // The Political Pharmacist Podcast // Daily Mail (UK)
 WAJR (Morgantown) // Washington Examiner (Washington, D.C.) // WBOY TV (Clarksburg, WV) // WBRC TV (Birmingham, AL)
 WCHS TV (Charleston, WV) // WDTV TV (Bridgeport, WV) // West Virginia Metro News (Appeared twice) (Charleston, WV)
 West Virginia Public Broadcasting (West Virginia-statewide) // WSAZ TV (Charleston/Huntington) // WOWK TV (Charleston/Huntington)

**Indicates multiple stories from the same organization.*

WINTER 2021-2022

JULY 2021

JULY 27, 2021

The first case of the delta variant is discovered in the U.S.

AUGUST 2021

AUGUST 16, 2021

WVU SoP starts fall semester with regular in-person courses.

SEPTEMBER 2021

SEPTEMBER 2021

With over 80% of faculty/staff/students vaccinated, WVU COVID-19 infection rates at only 2-3% despite delta variant.

OCTOBER 2021

OCTOBER 6, 2021

WV Poison Center COVID-19 hotline takes its 65,000th call.

The Emergence of a Global Pandemic – A Unique Professional Perspective



BY JANN B. SKELTON

Dr. Kent Hunter (BS Pharm, '84) credits his experiences in a wide variety of pharmacy careers for his current role with Pfizer, a global biopharmaceutical company, where he has contributed since 2000. Dr. Hunter works in the vaccines division.

Initially, he functioned in a blended role of outcomes research and medical liaison, working to support the uptake of new adult guidance for pneumococcal vaccines. “It was a whole different world back then,” said Hunter, “Now the work that I do is front and center with the COVID-19 pandemic.”

Hunter says his work during the pandemic has been gratifying. His early efforts focused on meeting the general needs of the public. Then, his focus shifted as Pfizer began working with others to research a new vaccine platform to combat the deadly virus. “We did not know if the mRNA work would be successful, but when the genomic code for the virus was identified, we were hopeful,” said Hunter.

Hunter says working in the vaccines medical division as the pandemic unfolded was a unique experience. “To have the world united — simultaneously developing technologies to prevent the virus, test for the virus, and treat the virus was inspiring,” said Hunter. “Even early in the vaccine development process, we were called on to answer questions from researchers, concerned practitioners and organized healthcare delivery systems. We found ourselves in a place where we were working to be responsive and educate as much as we could, but the vaccines were still in development, so the information we could provide was limited.”

While the broader society struggled with COVID vaccine misinformation and disinformation, some healthcare professionals had similar concerns. If the practitioners weren't confident in the vaccine, it would be even more challenging to have effective conversations with their patients. According to Hunter, “Vaccine hesitancy has been around since the smallpox vaccine was developed. We knew early on in the pandemic that there would be a need for new educational programs to support vaccine confidence,” said Hunter. “It was important for healthcare practitioners to feel confident with this new information so they could be confident in their patient interactions.”

Following emergency use authorization, Hunter and his team supported scheduling and logistics challenges. The Pfizer vaccine had specific storage requirements, and there were differences in administration timing for the second vaccine doses between the different mRNA vaccines. The company quickly developed daily training programs for healthcare professionals who were administering the vaccine. The medical affairs team had to be flexible, adjusting to the changing questions and concerns. Initially, questions centered around the science behind mRNA vaccines. As more data were collected, people had questions about the clinical

study results. When the first vaccines were administered, people wanted to know about the proper use and storage of the vaccine. Hunter's experience as a front-line community-based pharmacist informed these conversations.

Hunter used his clinical experience to volunteer at vaccine clinics in his community as part of the West Virginia Responder Emergency Deployment Information (WV REDI). The WV REDI Program within the Center for Threat Preparedness of the West Virginia Department of Health and Human Resources facilitates health and medical response through identification, credentialing and deployment of West Virginians willing to serve in an emergency. His assignments centered around vaccine dose preparation, but other healthcare volunteers relied upon his vaccine knowledge. “It was an emotional day for me to see folks coming into the vaccination clinic. They were thankful for the opportunity to take a vaccine to help them continue to be healthy, and they were smiling ear-to-ear,” said Hunter. “I was so happy to use my professional skills to help, and I certainly gained more from those volunteer experiences than I gave!”

This initial volunteer work focused on people who wanted the vaccine and were genuinely grateful to have access. Now, people who have yet to be vaccinated are resistant for reasons ranging from legitimate fear to political convictions. Some people are hesitant because they feel corners were cut during the vaccine development process. Hunter explained, “The perspective is different because we lived through it and watched the process unfold in real-time. The reality is that the steps in the process ran concurrently because of the global risk and the resources invested in development,” said Hunter. “Normally, steps are implemented sequentially, primarily to minimize costs if something doesn't work as planned.” The manufacturing process also started early, before EUA approval, a financial risk that usually would not be taken. Had the vaccine not received EUA approval, then the produced vaccine would have been unusable. Ultimately, the application of decades-old mRNA technology was leveraged to provide much-needed hope in this pandemic.

“It's been fascinating to live through this because sometimes it seems like the pandemic started yesterday, and other days it seems like ten years ago,” said Hunter. “As tragic as this experience has been, as a pharmacist in my medical vaccines role, it has been fascinating to see how this pandemic has unfolded and impacted the entire world. When I was in pharmacy school, I didn't even like studying infectious diseases. My COVID-19 volunteer experience gave me a different perspective. Being able to apply my skills in real-life settings has been extremely gratifying.” 🦋

OCTOBER 19, 2021

Following a spike in infections from the delta variant, J.W. Ruby Memorial Hospital records 17 COVID-related deaths in one weekend.

OCTOBER 29, 2021

The FDA authorizes emergency use of the Pfizer-BioNTech COVID-19 vaccine for children ages 5 - 11.

NOVEMBER 2021

NOVEMBER 24, 2021

The WHO reports a new COVID variant, known as omicron.

DECEMBER 2021

DECEMBER 13, 2021

The U.S. is on the cusp of 800,000 deaths from COVID-19.



LESSONS WE LEARNED FROM COVID-19

BY SOPHIA DARMELIO

The COVID-19 pandemic has dramatically changed our lives in every way. It altered how we work, learn and socialize. It shone a light on pharmacist accessibility and widened the door for technology in healthcare. Dr. William Petros, Gates Wigner Dean of the West Virginia University School of Pharmacy, provides his thoughts on some of the lessons COVID-19 has taught us so far.



Recover at your own pace and allow others to do the same.

Everyone experienced COVID differently, and some people are more traumatized than others. We tend to forget those people who were more isolated or truly quarantined. Some people who came to the WVU Vaccine Clinic in December and early January had not been out of their homes in nine months. One patient said it was the first time someone had touched him since February [2020]. Just like everyone's experience with COVID was different, so is their recovery – and we should be sensitive to that.



Rediscover what is most important to you.

Before COVID, most of us lived hectic lives, often with little quality time for friends, family and beloved hobbies. Mandatory stay-at-home orders compelled us to focus on what's most important in our lives and how to make that time more meaningful. Don't forget this feeling as you return to pre-COVID daily activities and work.



Quality time is our most valuable asset.

If Zoom meetings and online learning taught us anything, it is this. If we can find ways to be creative and interactive from a distance, we can do the same in person. In my opinion, online meetings and classes highlighted the need to focus more on quality than delivery. We shouldn't just lecture to students; we need to do more active learning. Similarly, with staff and faculty meetings, we should meet with purpose and interact more often.



It's a small world, after all.

When the epidemic forced us to find alternate ways to communicate face to face, video communication software like Zoom and Google Meet showed us how easy it is to connect with anyone, anywhere at any time. Pre-COVID, busy schedules and travel were often a logistical challenge for bringing guest speakers to Morgantown. Video technology opened our eyes to other opportunities and ways of interacting with people from distant places in a relatively easy manner.

▶ AT RIGHT: Wearable technology like watches can provide patient monitoring and medication management.

5

Pharmacists *really do* wear capes.

When our communities shut down during the early days of the pandemic, pharmacies were the only establishments open other than grocery stores. One of the most significant changes COVID had on pharmacy is it highlighted the importance of the pharmacist in public health and public policy. As pharmacists, we know the importance of public health, but when the average person couldn't walk into a physician's office or a health clinic, and the pharmacy was the only place to go for healthcare other than the hospital, that's pretty significant in my mind. Suppose the pharmacy was the central place to go for testing, vaccinations, etc. It provides a whole new light on what the importance of a pharmacy is as a place, but more importantly, the pharmacist in healthcare.

6

We are headed **Back to the Future of technology.**

Tele-pharmacy and biometrics are nothing new. However, I believe the pandemic will accelerate their use. Given the ability to communicate electronically, I think it will increase our ability to reach out to shut-ins and hopefully better manage their care. As for biometrics, we now have watches and rings, which can store vital health information for our medical providers. For example, as pharmacists, we might use patient data to determine if someone complies with their medications or how well they are tolerating them.

7

Science still matters.

Pre-COVID, it seemed like less and less of the public believed that science mattered and that evidence-based medicine was essential. Take a look at dietary supplements. A large number of people take them, yet there is very little data to support their claims. So, people use these products, and it doesn't take much to convince them, and they think, well, it's not going to hurt me. Well, maybe, maybe not. But, I believe what COVID has taught the general public is that science does matter. Evidence-based medicine does matter, and we have a way of going through a process to determine if something works, and there is a system to determine that, not just, I tried it, and I think it's going to work.

8

Follow the data.

Medicine changes all the time, and the general public doesn't think of that – or maybe they don't want to. How many times have you heard that it's OK to eat margarine? Now you shouldn't eat it. You react to the knowledge you have at the time and what's known at the time. As with almost anything medical, there isn't a black and white line. It's grey, and it moves. It moved a lot during the pandemic. Last year, about this time, we didn't know if COVID was spread by hand or by respiratory. We were making hand sanitizer by the gallons. Now we know it doesn't spread by hands – hardly at all. It's all respiratory but was it appropriate to take the precautions we did at the time? Absolutely! Because what if? So, hopefully, the general public realizes that medicine evolves, and we can only react to what data we have at present.

9

We expanded our medical vocabulary.

It's fascinating that the general public now uses medical terms that pre-COVID only medical professionals and certain patients used. The shortlist includes PCR test, monoclonal antibodies, mRNA vaccine, PPE, contact tracing, flattening the curve, R naught and genomic sequencing.



Flip to the inside back cover to test your knowledge and see if you can match the correct word with the correct definition.

New Faces in the School of Pharmacy



Dr. Mohammad Al-Mamun is an assistant professor in the School's Pharmaceutical Systems and Policies Department. He received his PhD in computing and information sciences from the University of Northumbria at Newcastle, UK. Before joining WVU in April 2021, Dr. Al-Mamun worked as part of the Health Outcomes Data Science faculty in the College of Pharmacy at the University of Rhode Island. He completed two postdoctoral fellowships in Epidemiology of Microbial Diseases in the Department of Population Medicine and Diagnostic Sciences at Cornell University and the Yale University School of Public Health. Dr. Al-Mamun is a health data scientist specializing in health outcomes, data science and epidemiology. He brings interdisciplinary research experiences to build mathematical modeling and health data science tools (predictive models, machine learning) to understand disease dynamics at individual and population levels. His research provides cutting-edge methods and tools to interpret and address the research questions related to health outcomes, big data and epidemiological surveillance systems.



Dr. Sharan Bobbala is an assistant professor in the School's Pharmaceutical Sciences Department. Dr. Bobbala obtained his PhD in pharmaceutical sciences from the University of Otago, New Zealand, and his BSP Pharm and MPharm (Industrial Pharmacy) from Kakatiya University, India. Dr. Bobbala was a postdoctoral fellow in the Nano-Immunoengineering Lab at Northwestern University before joining WVU in August 2021. Dr. Bobbala's research interests are nanobiomaterials, novel drug delivery systems, theranostics and single-shot vaccine systems. Dr. Bobbala established successful national and international collaborations with interdisciplinary scientists, including 2016 Nobel laureate in chemistry Sir Fraser Stoddart at Northwestern University. Dr. Bobbala was awarded the prestigious University of Otago Doctoral Scholarship in 2012, Northwestern Postdoctoral Professional Development Awards (2018 and 2019) and The H Foundation Postdoctoral Award in 2020.



Dr. Heather A. Johnson is an assistant professor of clinical pharmacy and family medicine at WVU. She came to the School in late September 2020. Dr. Johnson completed her undergraduate and pharmacy education at the University of Pittsburgh before going on to residency training at the Ohio State University College of Pharmacy and the general internal medicine clinics. Following her residency, Dr. Johnson practiced as an ambulatory care clinical specialist at WVU Medicine and then transitioned into her current role. Her practice site is a family medicine patient-centered medical home that also serves as a training site for a family medicine residency program. She particularly enjoys serving in interdisciplinary clinics, including diabetes, weight management, asthma/COPD, polypharmacy and geriatrics. Dr. Johnson co-coordinates the ambulatory care course and teaches in autoimmune diseases. She precepts IPPE and APPE student pharmacists, pharmacy residents and pharmacy fellows. Her research areas of interest are the scholarship of teaching and learning, women's health, and expanding clinical pharmacy services. Dr. Johnson is an active member of the American Pharmacists Association.

100%

of WVU School of Pharmacy graduates surveyed in May 2021 **strongly agreed** that faculty, administrators and staff served as **positive role models** for students.





Dr. Khalid Kamal (PhD, '05) is a professor and chairs the WVU School of Pharmacy's Pharmaceutical Systems and Policy Department. He has a BSPHarm and MPharm in Pharmacology from Bombay College of Pharmacy, Mumbai, India. He received his PhD in Health Outcomes Research from the WVU School of Pharmacy. Before joining the SoP in July 2020, Dr. Kamal was a faculty member at Duquesne University's School of Pharmacy for 15 years. His primary research and teaching interests are pharmacoconomics, patient-reported outcomes research, research methods and improving quality of care using real-world data sources such as electronic medical records and specialty pharmacy data. Dr. Kamal has yielded over 70 peer-reviewed publications and three research-based book chapters. He has disseminated his work via 130 research presentations at national and international meetings. His awards include the 2010 Duquesne University School of Pharmacy Faculty Award for outstanding contributions in teaching, research and service and the top poster award at the 2015 Annual Meeting and Expo of the National Association of Specialty Pharmacy. He received second prize in the student research presentation category at the 2014 annual meeting of the Drug Information Association, best paper award at the 2010 annual meeting of the Academy of Managed Care Pharmacy, and the 2006 Association of Rheumatology Health Professionals Graduate Student Award. Dr. Kamal served as the chair of the Faculty Advisory Council within the International Society for Pharmacoconomics and Outcomes Research (ISPOR) from (2019-2023). He also serves on ISPOR's Health Science Policy Council, which advises the society on critical scientific research and research policy issues in health economics outcomes research.



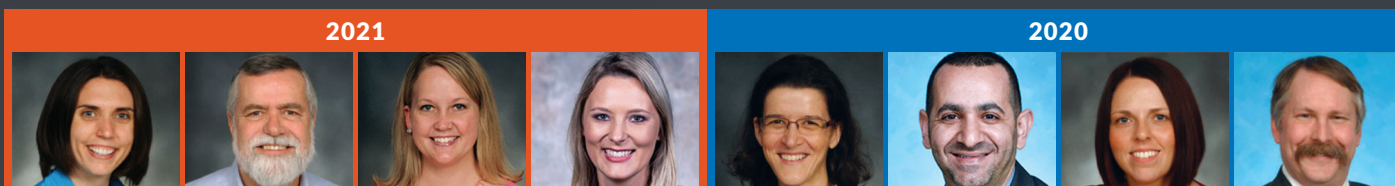
Dr. Sabina Nduaguba is an assistant professor in the School's Pharmaceutical Outcomes and Policy Department, a joint faculty position with WVU Cancer Institute. Dr. Nduaguba joined the School in October 2021. She obtained a BSPHarm and MPharm in clinical pharmacy at the University of Lagos, Nigeria. She also earned her master's and PhD in health outcomes research at the University of Texas at Austin. Before joining WVU, Dr. Nduaguba completed a postdoctoral fellowship at the University of Florida on applying advanced epidemiologic methods in research design and real-world evidence generation. Dr. Nduaguba's research focuses on cancer prevention and control through smoking cessation and health disparities among people with HIV and cancer. Her current emphasis is on applying pharmacogenetics in metabolism-informed smoking cessation treatment and addressing disparities in lung cancer treatment. She collaborates with the HIV and cancer groups of the Global Burden of Disease, Injuries, and Risk Factors Study (GBD).

WVU School of Pharmacy Outstanding Teachers of the Year

Each spring the West Virginia University School of Pharmacy announces Outstanding Teachers of the Year. Students from each class year vote to determine who receives the award. The winners are announced at the School's Scholarship and Awards Ceremony in May. Here are the 2021 Outstanding Teachers of the Year.

P1
P2
P3
P4

	2021	2020
	Drs. Ashlee McMillan and Pat Callery (tie)	Marina Galvez
	Dr. Ashleigh Barrickman	Ahmad Hanif
	Dr. Ashleigh Barrickman	Lena Maynor
	Dr. Cassandra Simpkins	Chris Terpening

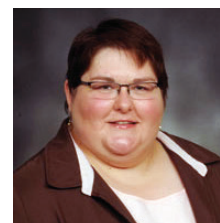


Faculty Updates

Dr. Krista Capehart, associate professor of clinical pharmacy and director of the Wigner Institute for Advanced Pharmacy Practice, Education and Research, received several awards. The American Pharmacists Association (APhA) named Dr. Capehart as the Individual Practitioner National winner. Dr. Capehart earned this honor for her leadership as the architect for West Virginia's COVID-19 vaccine rollout. The accolade is one of APhA's Immunization Champion Awards. This category recognizes individuals and organizations within the pharmacy profession who have made extraordinary contributions towards improved vaccination rates within their communities. On Women Pharmacist Day 2020, the Pharmacist Moms Group announced that Dr. Capehart was the Woman Pharmacist of the Year. The American Pharmacists Academy of Pharmacy Practice and Management selected Capehart as a 2021 Fellow. The Academy recognized her as a "driving force" behind the West Virginia provider status bill. In May 2021, Capehart was honored as the Ohio-Marshall County Pharmacists Pharmacist of the Year for her efforts in advocacy, regulation and COVID-19 vaccine rollout. In October 2021, the Department of the Army presented her with the Civilian Award for Humanitarian Service for her outstanding performance during the Joint Taskforce COVID-19 response. And, she was part of an interprofessional team that received the 2021 George E. Thibault Nexus Award. At this year's West Virginia Pharmacists Association Annual Convention, Capehart was presented with the 2021 Bowl of Hygeia Award. It is presented annually by participating pharmacy associations in each of the 50 states, the District of Columbia and Puerto Rico. The recipients are selected by their respective associations for their outstanding record of community service. In November, Capehart received the APhA's Hubert H. Humphrey Award, which recognizes members who have made significant government and legislative service contributions.

Dr. Gina Baugh, professor of clinical pharmacy and director of introductory pharmacy practice experiences, is part of an interprofessional team that won the 2021 Vice President's Go First Award. The award was for Interprofessional Education Apartment Simulation, which includes students from all Health Sciences Center schools working together to help standardized patients with their at-home healthcare plan. The award is presented yearly to a team of faculty, staff or a team of faculty and staff that has demonstrated positive outcomes and enhanced the missions of the HSC through the implementation of innovations or quality improvement measures. In addition, Baugh was part of another interprofessional team that received the 2021 George E. Thibault Nexus Award, which celebrates exemplary interprofessional collaboration in the United States and those who are thinking and acting differently where practice and education connect in health systems.

Jenn Clutter, program coordinator in the WVU School of Pharmacy, is a 2020 recipient of the Nicholas Evans Faculty Advising Excellence Award. Each year the WVU Academic Advising Council at the direction of the Provost's Office selects the honorees. The award recognizes outstanding advising and mentoring provided by faculty and professional advisors. Dr. Nicholas Evans was a lifelong proponent and exemplar of undergraduate advising at WVU. In addition, Clutter was named co-chair of the University's Academic Advising Council. The Academic Advising Council is a multidisciplinary committee that provides professional development support for academic advisers across the WVU System. Clutter has served WVU for more than 25 years and currently advises incoming students to the School of Pharmacy.



Faculty and Staff Receive 2020 Values Recognition

The WVU Values Awards Program began in 2017 to commemorate the University's 150th anniversary by recognizing faculty and staff who help bring WVU's mission to life through their daily work. Senior leaders awarded 150 commemorative coins in 2017 to faculty and staff who go above and beyond to make the University community a better place by living its core values of service, curiosity, respect, accountability and appreciation. This year's School of Pharmacy Values Coin recipients are:

Dr. Marina Galvez, a teaching associate professor of pharmaceutical sciences, is one of five WVU faculty members named a 2021 Foundation Outstanding Teacher of the Year. Dr. Galvez was recognized for her outstanding teaching effectiveness and commitment to lifelong learning. She is honored for her dedication to the improvement of pharmacogenomic education, exceptional individualized instruction for different types of learners to promote a growth mindset and her encouragement of students and faculty colleagues to be lifelong learners. The committee also noted her incorporation of active-learning activities and cultural awareness and her multidisciplinary approach to the development of new courses. In addition, Galvez received the 2021 Vice President's Outstanding Achievement in Teaching Award. This award recognizes faculty for outstanding achievement in advancing the teaching mission of the Health Sciences Center.

Dr. Gretchen Garofoli, an associate professor of clinical pharmacy, received the 2020 James Beal Award from the West Virginia Pharmacists Association. The award is given in recognition of meritorious services performed in furthering the interests of the profession of pharmacy in the state of West Virginia. In addition, Garofoli was selected as a 2022 APHA Fellow.



Dr. Mark Garofoli, director of experiential learning and clinical assistant professor, was a guest

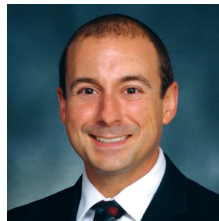
speaker for the 2021 fall TEDxWVU series, "If Not US, Who?" His presentation, "Mis en Scene A Cinematic Story of Pain, Addiction, and You" was in September at the Gladys G. Davis Theatre in the Canady Creative Arts Center. Use your phone to scan this QR code if you would like to watch Dr. Garofoli's presentation.

Dr. William Petros received the 2021 James H. Beal Award presented by the West Virginia Pharmacists Association. The Beal Award is deemed the highest honor that can be given to a member of the WVPA. Also, he received the 2020 Pharmacist of the Year Award from The Ohio-Marshall County Pharmacist Association.

Dr. Elizabeth Scharman and her staff were recognized by WBOY-TV as Healthcare Heroes for their work on the West Virginia COVID-19 Hotline.

Dr. Ginger Scott is the 2020 recipient of the William L. Blockstein Award of Merit. The prestigious honor presented by the Accreditation Council for Pharmacy Education is for outstanding and/or sustained achievement and quality performance in the field of continuing pharmacy education. The award cognizes continuing pharmacy education to aid in the development of good pharmacy practice and improvement of patient care. Dr. Scott is a professor in the School's Pharmaceutical Systems and Policy Department and director of continuing education.

Dr. Jon Weitholter was elected as a Fellow of the American College of Clinical Pharmacy (ACCP) in fall 2020. Fellowship in the college recognizes and rewards the highest levels of excellence in the practice and science of clinical pharmacy. The awarding of Fellow status is the highest honor the college can bestow on its members. Dr. Weitholter also serves as chair of ACCP's Adult Medicine Practice Research Network. He is an associate professor of clinical pharmacy.



Gina Baugh
Director of Introductory Pharmacy Practice Experiences and Clinical Professor of Pharmacy

Marina Galvez
Teaching Associate Professor of Pharmaceutical Sciences

Mark Garofoli
Director of Experiential Learning and Clinical Assistant Professor of Pharmacy

Martha Summers
Program Specialist, Office of Experiential Learning

Carol Zizzi
Assistant Director of Experiential Learning

Donor Profile

Alum's \$100K gift Boosts WVU School of Pharmacy Scholarship

BY CASSIE RICE

West Virginia University School of Pharmacy students with a passion for community pharmacy will benefit from a \$100,000 scholarship gift.

Jim Smith recently contributed an additional \$100,000 to bolster his namesake scholarship fund. The scholarship is awarded annually to a pharmacy student with demonstrated financial need who plans to practice community pharmacy.

Smith's gifts to the James F. Smith Scholarship fund and the School of Pharmacy Annual Scholarship fund have provided support for more than 40 students to date.

"Similar to his leadership in the pharmacy profession, Jim has made an enormous impact on students by his scholarships," William Petros, Gates Wigner Dean of the School of Pharmacy, stated. "He is truly an inspiration to both our students as well as alumni."

Smith, of Cary, North Carolina, earned his bachelor's degree in pharmacy from WVU in 1971. He practiced eight years as a community pharmacist before moving into management and leadership roles for Thrift Drug, Eckerd and CVS. He later served as CEO for National Medical Health Card Systems Inc. and QoL Meds LLC before retiring in 2015. He continued to serve as a board member for a private equity company until 2020.

He credits support from his wife, Judy, and the strong educational foundation laid by the WVU School of Pharmacy for much of his success.

"Pharmacy gives you such a nice background and such a great way of thinking things through, because a lot of logic applies in all your classes," Smith said. "It gave me a great way to further my career in what I wanted to do. Without that strong foundation and many experiences, I could never have succeeded as a CEO of two different companies."

Smith is one of eight children, most of whom pursued careers in healthcare and/or science. His father, a physician who managed Veterans Affairs hospitals, passed away when he was in high school. The resulting financial challenges forced Smith to rely on scholarships, loans and other financial aid to pay for his education.

"I always said that if I was able to, I would try to pay it back," he said. "Back when I went to school, I don't even remember what I paid, but it wasn't anything close to what the kids have to pay today. I thought setting up and giving to a scholarship would be the best way to pay it back."

Maxwell DeNora, of Rochester, New York, is among the students to benefit from Smith's scholarship gifts. Following his graduation from the SoP in 2021, DeNora accepted a managed care pharmacy residency at Anthem.

"It was really special to be awarded this scholarship," DeNora said. "Not only did this scholarship provide me financial support, it gave me a sense of what it means to be a WVU student and, soon,

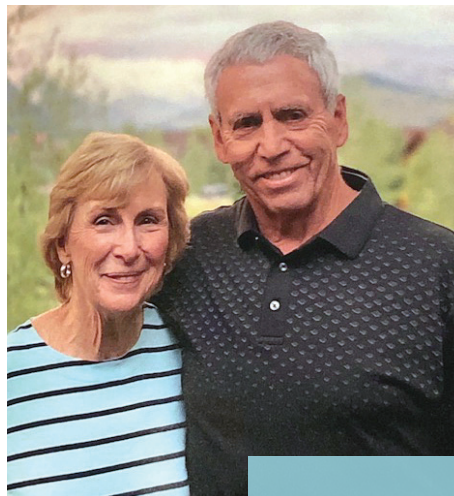
alumnus. The sense of community here inspires me to someday give back to students in the future."

Community is important to Smith, who said his career was always rooted in community pharmacy. He found great satisfaction in getting to know patients, nurturing a relationship with them and building trust. He hopes to cultivate that same spirit among the next generation of School of Pharmacy alumni.

"There's really a uniqueness in having that customer or patient right in front of you and talking to them," Smith said. "I wanted to

find students who wanted to do that and help them ... hopefully, when they get to the point further in their career where their loans are paid back, they'll look back and say, 'You know, someone helped me, and they'll do it, too.'"

Smith's gift was made in conjunction with WVU Day of Giving. The 24-hour online fundraising event is organized by the WVU Foundation, the nonprofit organization that receives and administers private donations on behalf of the University. This year's event, held on March 3, raised \$11.9 million to benefit WVU from over 5,000 donors.



▲ Jim and Judy Smith

"Pharmacy gives you such a nice background and such a great way of thinking things through ... Without that strong foundation and many experiences, I could never have succeeded as a CEO of two different companies."

—JIM SMITH

Smith's contribution also bolsters efforts by the Foundation to provide scholarship support for students in need via "We Are Stronger Together," a special fundraising initiative launched to assist those affected by the COVID-19 pandemic with educational expenses.

Since the initial gift, Jim and Judy have contributed an additional \$300,000+ to further enhance the endowment. For more information on giving to the School of Pharmacy, please contact Kevin Tephabock at Ktephabock@wvuf.org or 304.282.5575. 🙏

2021 Scholarship Recipients

The Anido Family Pharmacy Scholarship
Taylor Maynard

The Nancy Teeman Anido Memorial Scholarship
Joseph Garan

The Louis A. Barker PhD APPE Rural Rotation Scholarships
Amina Channel
Tyler Flint

The Bernabei Independent Pharmacy Scholarship
Molly Swartzmiller

The Thomas L. and Mary M. Biery Scholarship
Marianna Kibak

The Honorable Larry Border Memorial Scholarship
Tyler Lawrentz

The Tom and Ben Carson Pharmacy Scholarship
Jacquelyn Corley

The Pat and Jim Chase Pharmacy Endowed Scholarships
Alexander Davis
Marianna Kibak

The Michael P. Clay Scholarships
Katie Burns
Nikayla Croce
Maryam Maghareh

The Clutter-Rhoades Scholarship
Alese Photiadis

The Roger S. Cole Memorial Pharmacy Scholarships
Gianna Antinone
Nicole Lewis
Alyssa Wallace

The D. Stephen Crawford Pharmacy Scholarship
Shaylee Gunzenhauser

The CVS Caremark Charitable Trust Scholarships
Joshua Hilty
Jenna Kwiatkoski
Julia Salamy

The Ann Dinardi Scholarships
April Castro
Jordan Wood

The Don E. Eaglehouse RPH Pharmacy Scholarship
Hunter Moody

The Exley Memorial Scholarship
Colby Acri

The Fruth Scholarships
Alexander Davis
Jessica Moyer
Ally Peterso

The Herbert Gottlieb Memorial Pharmacy Scholarship
Chase Lang

The Anthony S. and Mary D. Guido Family Scholarships
Noah Hall
Allison Morris

The Nona Fay and CM Hamlett Scholarship
Ryan Archer

The Joseph and Edna Hudachek Family Scholarships
Shawn Humphreys
Alexandra Weaver

The Art Jackowitz AMEN Award (Advise, Mentor, Empower, Nurture)
Sarah Snider

The Arthur I. and Linda M. Jackowitz Endowed Scholarships
Emily Bowman
Taylor Jones

The Ralph S. Johnson Scholarship
Gillian Lutz
Megan Maurer

The Harold M. Johnston School of Pharmacy Scholarships
Rebecca Arthur
Brookelyn Bowers
Kim Le
Taylor Szoke

The Steven C. Judy Memorial Scholarships
Logan Cox
Danny Stanley
Nicole Virtue

The Justice-Lindstrom Pharmacy Compounding Award
Isaac Pringle

The Leading Change in Pharmacy Scholarships
Brooke Kielkowski
Seneca Williams

The Dr. Carl J. Malanga Pharmacy Endowed Scholarships
Conner Kelly
Brooke Kielkowski

The James A. Mauro Family Memorial Scholarship
Ryan Vilain

The Kline McMann Family Pharmacy Scholarship
Sabrina Burtner

The Merck Awards
Awarded for the highest GPA in the Pharmaceutical Sciences Component of the Curriculum
Emily Bowman
Taylor Jones

The Miller Advocacy Scholarship
Taylor Thompson

The Rebecca Smith Monti Memorial Scholarship
Chance Walters

The Linda Anne Newman Pharmacy Scholarship
Samantha Hines

The Ohio-Marshall County Pharmacists Association Scholarship
Ashley Van Camp

The Mary Ann Pavlick and Helen Pavlech Scholarship
Lindsay Hoke

The Romeo and Elizabeth M. Rega Memorial Scholarship
Courtney Glascock

The Rite Aid James Kyle Harman Memorial Scholarships
Annie Logan
Taylor Talkington
Andrea Weaver

The Edward W. Rockis Memorial Scholarships
Courtney Bunner
Mackenzie Walker

The Sidney A. and Gwen S. Rosenbluth Pharmacy Scholarship
Miranda Moser

The Robert and Stephany Ruffolo School of Pharmacy Scholarship
Joy Apopa

The Robert and Stephany Ruffolo School of Pharmacy Graduate Fellowship
Mariana Farcas

The Harry D. Schiff Scholarship
Courtney Rutter

The School of Pharmacy Annual Achievement Scholarship
Colby Acri
Lauren Bazelak
Yohanna Berhanu
Alaina Bulfa
Bailey Coleman
Claire Daniels
Morgan Neville
Amy Yeung

The School of Pharmacy Centennial Class Scholarship
Ashleigh Gaudet

The Jack H. Smith Family Pharmacy Scholarship
Clara Lukomski

The James F. Smith Scholarships
Elizabeth Conforti
Evan Flohr
Amy Lusk
Elizabeth Rightnour

The Southern Appalachian Pharmacists Association Scholarship
Rebecca Arthur

The Gerald L. Sprowls Pharmacy Scholarships
Adam Dunn
Michelle Grose

The Robert E. Stitzel Graduate Student Awards
Tasneem Arsiwala
Daniella Munezero

The Kenneth Stollings Memorial Scholarship
Zachary Cook

The Charles Stump Memorial and Marvin C. Wilson Community Service Award
Emery Smith

The Terry Taylor and Ellen Burchett Taylor Pharmacy Scholarship
Troy Boughner

The Edward A. Toompas Memorial Scholarship
Samantha Hines

The George A. and Lurania K. Topakas Pharmacy Scholarships
Sabrina Burtner
Maria Dimou
Isaac Flohr
Olivia Murray
Alese Photiadis
Trenton Pongsugree
Dixie Shahan
Taylor Talkington
Andrea Weaver
Lindsay Williams

The Autumn Grace Trent Memorial Scholarship
Isaac Pringle

The Irvin and Benita VanMeter Pharmacy Scholarships
Kiersten Parsons
Levi Rose

The Frank W. Vigneault Memorial Scholarships
Sara Ayers
Autumn Fogle
Olivia Fortune
Kailey Smith
Jacqueline Turner
Jayna Urey

The Walgreens Diversity and Inclusion Excellence Scholarship
Seo Lin Park

The Walgreens Multilingual Scholarship
Firaol Amente

The West Virginia University Alumni Association Loyalty Permanent Endowment Scholarships
Wyatt Kincell
Alexandra Weaver

The West Virginia University School of Pharmacy Alumni Association Leadership Scholarship
Brandon Harvey

The West Virginia University School of Pharmacy Dean's Leadership Scholarships
Yohanna Berhanu
Hunter Curry
Raven Powers
Emily Rose
Tyler Stercho
Lainey Vargo
James Wyland

The Whitten Family Scholarship
Andrew Kraich

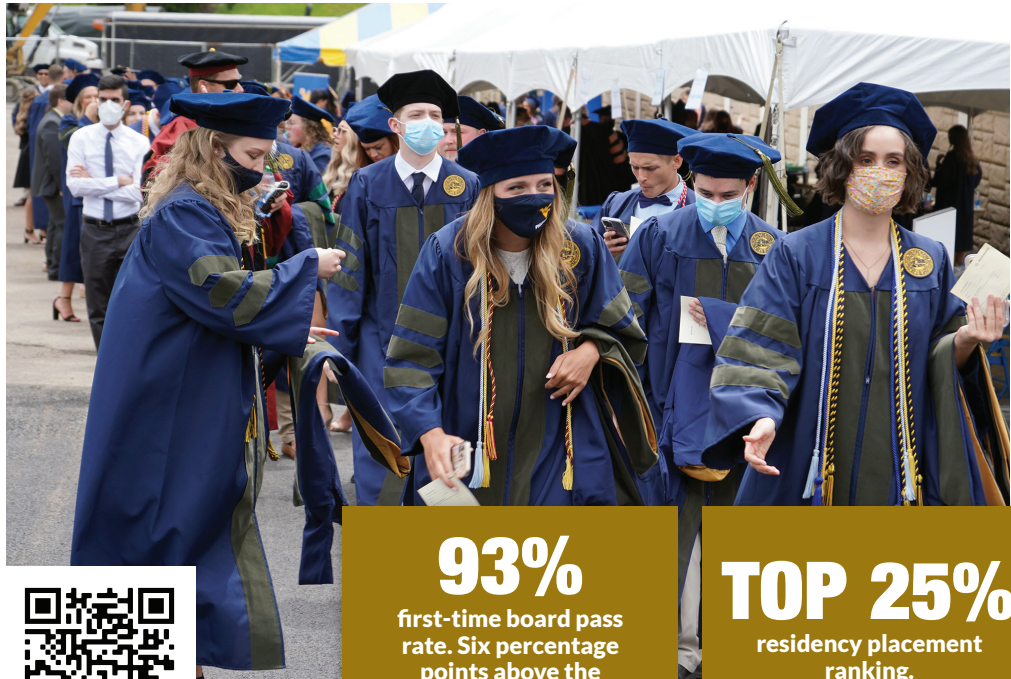
The John and Edna Witten Scholarship
Taylor Thompson

The School of Pharmacy Graduate Student Outstanding Achievement Award
Tasneem Arsiwala

The School of Pharmacy Graduate Student Research Awards
Nazneen Shaikh
Samuel Sprowls

May 2021 Commencement

Milan Puskar Stadium was the backdrop for all May 2021 commencement ceremonies. The School of Pharmacy joined the four other Health Sciences schools, Nursing, Dentistry, Public Health and Medicine, as well as the College of Law, for a combined ceremony on Sunday, May 16. Ninety doctoral and PharmD candidates walked across the stage to receive their diplomas. Some graduates were from the Class of 2020, whose members were invited to return for the in-person experience. All commencement ceremonies in 2020 were virtual due to COVID-19. The University followed all CDC guidelines for this year's ceremony, including mandatory masks and social distancing. [View the day in photos here by scanning the QR code.](#)



93%

first-time board pass rate. Six percentage points above the national average.

TOP 25%

residency placement ranking.



Alumna Talks Future of Pharmacy Post-COVID During Virtual Luzzi Lecture

Karla Miller (PharmD, '02) was the keynote speaker for the 2021 Louis A. Luzzi Lecture held in March. Dr. Miller is the chief patient safety officer for HCA Healthcare in Nashville, Tennessee. During her virtual presentation, "Rising to the Occasion, The Future of Pharmacy," Dr. Miller spoke about how pharmacists positively impacted patient care during the pandemic, gave examples of how pharmacists rose to the occasion and laid the groundwork for what the future of pharmacy might look like. She told viewers that "Pharmacies have adapted to the crisis in ways that outlast



the disease." For example, increasing scope of practice with an emphasis on expanding vaccinations, maintaining an online presence in marketing and communications, continuing and expanding telehealth services and maintaining curbside and home delivery service. The Luzzi Lectureship is named after former Dean Dr. Louis A. Luzzi. The purpose of the lecture is to give students insight into leadership in pharmacy by featuring alumni who have fashioned unique careers and have made significant contributions to the pharmacy profession.



The Class of 2024 and 2025 Receive White Coats at Separate Ceremonies

The West Virginia University School of Pharmacy held two white coat ceremonies in fall 2021. In August, the Class of 2025 welcomed 57 new students, and in October, members of the Class of 2024 got to have the in-person ceremony they missed last year. The white coat ceremony signifies a student's entry into pharmacy school and a commitment to be future healthcare professionals. Dr. William Petros, Dean and Gates Wigner Endowed Chair in the School of Pharmacy, addressed each group. Dr. Tara Whetsel led the Pledge of Professionalism for the Class of 2025, and Dr.

Amber Chiaplinski (PharmD, '08) spoke on behalf of the School's Alumni Association. Dr. Heather Johnson led the pledge for the Class of 2024, and Dr. Betsy Elswick spoke on behalf of the Alumni Association. Loved ones, faculty, staff, alumni, student-pharmacists and friends donate the white coats each year. A note of encouragement from the sponsor is placed in the pocket of each one. If you are interested in sponsoring a white coat for a future ceremony, contact the School's Director of Development, Kevin Tephabock, at kevin.tephabock@wvuf.org.

Bowl of Hygeia, Class of 2022

Third-year student pharmacists at the WVU School of Pharmacy marked their transition from theory to practice during the 2021 Bowl of Hygeia Ceremony. The event was held in person at the Okey Patteson Auditorium on Monday, April 26. Speakers included Professor and Associate Dean for Admissions and Student Affairs Dr. Mary Euler, Class of 2021 President Dr. Benjamin Perry, Dean and Gates Wigner Endowed Chair William "Bill" Petros and Keynote Speaker Scott Knoer, executive vice president and chief executive officer of the American Pharmacists Association. Each PharmD candidate was called to the stage and presented with a unique lapel pin to commemorate the special

occasion. Class of 2022 student adviser Dr. Ashleigh Barrickman presented the pins that will identify them as WVU School of Pharmacy members wherever they go during their experiential rotations.



◀ Dr. Scott Knoer and Dean William Petros break for a photo before the ceremony begins.



ICYMI: In Case You Missed It


When we have exciting news 🎉, social media is the fastest, most efficient way to share it with you!

We encourage you to join us on Facebook, Twitter, Instagram and LinkedIn. Who knows, 🤖 maybe you'll find that long-lost classmate you were wondering about. Here is the kind of content we share on social media:


- Upcoming School-sponsored events
- Alumni and student profiles
- Faculty and student news
- Industry-related news


If you haven't checked out our social feeds recently, to the right is a sample of what you've been missing:

Follow the School of Pharmacy on social media to stay in the know about upcoming events and important news.

▶  [WVUPharmacy](#)

 [@WVUPharmacy](#)

 [WVU School of Pharmacy](#)

 [WVU School of Pharmacy](#)



▲ A pharmacist draws a COVID-19 vaccine. WVU Photography.

West Virginia Legislature passes Provider Status Bill

In March 2020, the West Virginia Legislature voted to pass Senate Bill 787, which allows pharmacists to be reimbursed for some of the services they provide. The bill sets up Pharmacy Provider Status throughout West Virginia and serves as a model for other states to follow. Gov. Jim Justice signed the bill on March 28, and it went into effect in June 2020. Each of the state's schools of pharmacy (WVU, Marshall and University of Charleston) played a role in the passage of Bill 787. Dr. Krista Capehart led the WVU School of Pharmacy's advocacy team. Dean William Petros said, "Krista's hard work and determination will pave the way for current and future pharmacists in West Virginia and the nation."



WVU recognizes SoP graduate student organization for third consecutive year

The West Virginia University Professional Society for Health Economics and Outcomes Research (ISPOR) Student Chapter celebrated another successful year. The WVU Office of Student Engagement and Leadership recognized the group with the 2020-2021 Outstanding Graduate Student Organization award. ISPOR's faculty director is Dr. Traci Lemasters, an assistant professor in the School's Health Services and Outcomes Research Program. This marks the third consecutive year that the organization has earned this honor.

WVU Mountaineer Mascot pharmacy and alumnus father unite to support flu vaccine awareness



▶ Mascot and father get flu shot: P3 student-pharmacist Dixie Shahan administers a flu shot to WVU Mountaineer Mascot Colson Glover as his father, Greg, a 1993 SoP graduate, observes. Photo by Tyler Mertins.

Mountaineer Mascot Colson Glover and his father Greg Glover (BS Pharm, '89) teamed up at the Health Sciences Center in October to acknowledge the importance of flu vaccines. The awareness campaign was organized by the WVU student chapter of the American Pharmacists Association. Colson Glover said the vaccine was painless and extremely important to get during a year like this when COVID-19 is still prevalent. His father Mark has worked in retail pharmacy for 32 years. He is a vaccinator and encourages everyone to get vaccines. Drs. Gretchen Garofoli and Betsy Elswick were there to promote vaccine education.

Student pharmacy organization shines on national stage

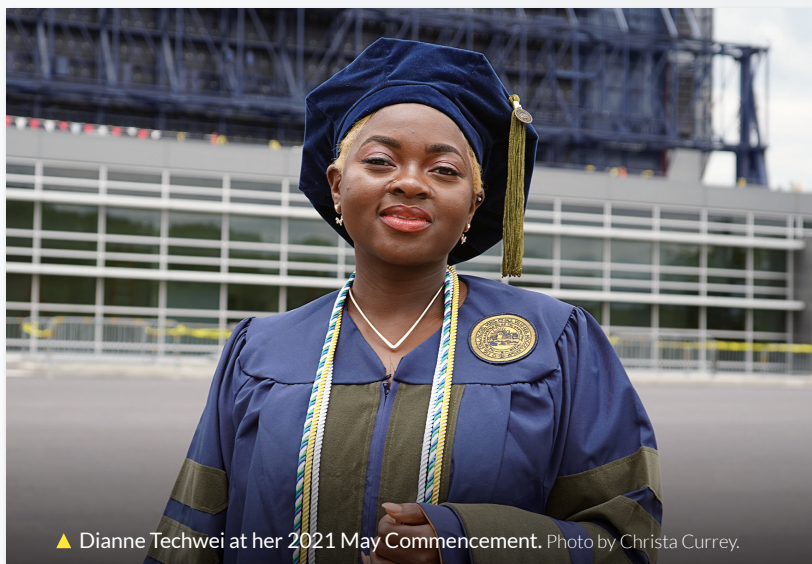


The West Virginia University American Pharmacist Association-Academy of Student Pharmacists (APhA-ASP) Chapter received many accolades at the national organization's annual (virtual) meeting. The WVU chapter of ASP earned four national awards and two regional awards, including the Chapter Achievement Award for Division AAA, Operation Diabetes National Award, Women's Health Campaign Outstanding National Chapter and second runner-up for the Generation Rx National Award. Regionally, ASP was the Operation Immunization and OTC Medication Safety Award Winners for Region 2.



Giving it our best shot

West Virginia University and the West Virginia Vaccine Administration, Collaboration, and Support Team are recipients of the 2021 George E. Thibault Nexus Award for the "Giving It Our Best Shot!" COVID-19 vaccination effort. The initiative, a partnership among the National Guard, the Department of Health and Human Resources and the Higher Education Policy Commission, resulted in more than 1,000 health professional students across the state training and enrolling to help with vaccine clinics. Their roles included assisting those with mobility issues, registration, administering the vaccine and post-monitoring after vaccination. The George E. Thibault Nexus Award celebrates exemplary interprofessional collaboration in the United States and those who are thinking and acting differently where practice and education connect in health systems. WVU School of Pharmacy student-pharmacists and faculty members were part of the team, including Drs. Gina Baugh, Krista Capehart and Gretchen Garofoli.



▲ Dianne Techwei at her 2021 May Commencement. Photo by Christa Currey.

WVU student-pharmacist receives prestigious award from U.S. Public Health Services

Dianne Techwei (PharmD, '21) received the 2020 U.S. Public Health Services (USPHS) Excellence in Public Health Pharmacy Award. This prestigious award recognizes pharmacy students who have made significant contributions to public health by promoting wellness and healthy communities. Techwei, a native of Silver Spring, Maryland, was among 80 students nationwide to receive this award. As a student-pharmacist, Techwei co-chaired a medication supply drive that benefitted more than 32,000 Cameroon refugees and provided malaria testing and medication dispensing to more than 500 citizens in Cape Coast Ghana. She also administered point-of-care testing to more than 100 international students and their families during an International Street Festival and educated more than 120 West Virginia middle school students about mental health and coping strategies at a school health fair. The award was presented by the Pharmacist Professional Advisory Committee of the USPHS — a team of highly qualified healthcare professionals charged with public health leadership and clinical service within the federal government and passionate about serving the underserved.

A Message from School of Pharmacy Alumni Association President

I am grateful for the opportunity to address you as the WVU School of Pharmacy Alumni Association president and to attest to the pride I have for our profession. We all know how real the struggle and sacrifices have been adjusting to living in a pandemic, not only for our personal lives but for our professional lives, as well. However, watching you all step up to meet the challenge and provide the best possible care for patients in such ambiguous times will undoubtedly be a hallmark of my career. I am honored to be a part of a profession that makes decisions for rapidly changing therapies and approaches to treatments for a novel disease. I am amazed at the volume at which our pharmacists, interns and technicians can reach out to the public to offer life-saving vaccines. Regardless of the setting you practice in and with the new challenges presented, you all continue to provide

optimal care, precept the next generation of pharmacists and serve as a role model in your community.

2021 has not been a normal year of celebrations and tailgates, but we hope to gather again soon safely. We have begun planning for our “regathering” reunion and invite you to save the dates June 24 and 25, 2022, for country roads to lead you home to Morgantown. At this time, we will catch up on recognizing all the reunion classes from 2020 and 2021 and the current five-year reunion class years for 2022.

I wish you all a safe and healthy holiday season and look forward to celebrating in person next year. Let’s Go, Mountaineers!



Amber (Price) Chiplinski
WVU School of Pharmacy, Class of 2008



REGATHERING REUNION

June 24 and 25, 2022
Details coming soon!

Class Notes

1950s

Charles Davis ('57) of Drakes Branch, Virginia retired from the pharmacy profession.

1970s

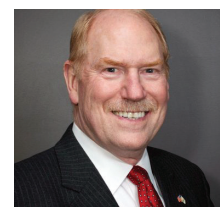
Christopher Brown ('75) of Greencastle, Pennsylvania retired from the pharmacy profession.

Pharmacy Alumnus Honored During WVU Homecoming



Among them was School of Pharmacy alumnus Drew Massey (PharmD;02). Dr. Massey is the recipient of this year’s James R. McCartney Community Service Award. As director of pharmacy operations and clinical services at Fruth Pharmacy, Dr. Massey has served his community in unique ways. He created interactive tools to teach children about medical safety, developed free and accessible personal drug disposal systems and educated residents about opioids using the innovative DEA 360 strategy. In 2020, Massey established a partnership with the West Virginia National Guard and the Joint Inter-Agency Task Force to enact safeguard initiatives for pharmacists to help reduce the spread of COVID-19. In addition, he spent countless evenings after-hours traveling to immunize in nursing homes and rural communities.

Eight WVU alumni who embody the Mountaineer Values of Service, Curiosity, Respect, Accountability and Appreciation were honored during halftime of the 2021 Homecoming football game against Texas Tech.



Thomas Menighan ('74) is the assistant dean for community engagement at the West Virginia University School of Pharmacy. Dean William Petros

appointed him to the role in fall 2020. Menighan, a former CEO and executive director of the American Pharmacists Association (APhA), assists the School of Pharmacy leadership with enhancing its mission, consistent with the University’s land-grant status.

Rumsey Oats ('76) of Xenia, Ohio, is retired from the pharmacy profession.

Michael Podgurski ('72) is currently a consultant in the pharmacy profession focusing on regulatory compliance, pharmacy automation and pharmacy operations. He is the owner of Podgurski Consulting, LLC in Oldsmar, Florida.

1980s

Lori (Richmond) Kiddy ('85) is a pharmacist per diem at Giant Food in Millsboro, Delaware.

In Memoriam

1990s

Thomas Hoffman ('91) is the pharmacy manager at CVS in Athens, Ohio.



Sunil Prabhu ('96) was named dean of the Western University College of Pharmacy on July 1, 2021. Dr. Prabhu celebrated 25

years at Western University in Pomona, California, this year. He earned his Bachelor of Pharmacy degree from the Birla Institute of Technology, India, and his PhD in Pharmaceutics from West Virginia University.

2000s

David Amtower ('03) is a pharmacy informaticist at the Veteran's Health Administration in Asheville, North Carolina.



Megan Dillaman ('12) received the 40 Under 40 in Cancer award for 2020. The award recognizes contributions made in the field of cancer

by emerging leaders who are under 40. In addition, Dillaman was recognized by the Hematology/Oncology Pharmacy Association (HOPA) with the 2020 New Practitioner Award. HOPA presents the New Practitioner Award annually to members who are early in their careers and have made a notable contribution to developing or supporting clinical hematology/oncology pharmacy services.

Alishia Edmonds ('12) is the chief pharmacist at the U.S. Public Health Service Bureau of Prisons in Alderson, West Virginia.

Katie Kacmarik ('12) is the recipient of the West Virginia Pharmacists Association 2021 Distinguished Young Pharmacist Award.



Brian Lawson ('08) assumed the role of associate executive director of the Board of Pharmacy Specialties (BPS), effective March 4, 2021. Lawson

will serve as the no. 2 administrative leader reporting to the BPS executive

director in this position. He is responsible for all aspects of professional affairs activities and expanded external affairs initiatives. He will develop and maintain active engagement with pharmacy and healthcare stakeholders who promote the value of pharmacist board certification.

Brianne (Lykins) Fairchild ('03) is the associate chief pharmacist at the Virginia Medical Center in Beckley, West Virginia.

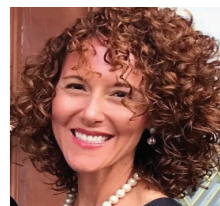
Erin Marcom ('12) is a clinical staff pharmacist at Charleston Area Medical Center (CAMC) in Charleston, West Virginia.

Mark Painter ('14) is a clinical staff pharmacist at Charleston Area Medical Center (CAMC) in Charleston, West Virginia.



Kara Piechowski ('14) is the 2021 recipient of the Pharmacy Times Next-Generation Pharmacists Award, Health Systems Pharmacist category.

Melissa (Latocha) Rinehart ('03) is a pharmacy quality specialist at WVU Medicine.



Kristin Sobota ('06) was installed as trustee of the Ohio Pharmacists Association (OPA), representing District 3. The association

announced the news at its 143rd annual conference in April 2021.

Bethany (Lowe) Shelbourne ('02) is a pharmacist at Anne Arundel Medical Center in Annapolis, Maryland.

The WVU School of Pharmacy wishes to acknowledge our alumni who have recently passed away.

1950s

James W. Fredlock ('51)
Joseph Monti, Jr. ('59)
Randall L. Sheetz ('51)
Dr. Charles I. Shelton ('54)
Frederick F. Wildemann ('56)

1960s

Ronald V. Browning ('67)
Carl R. Gellner, Jr. ('63)
Douglas L. Gill, Sr. ('66)
Samuel Isabella, Jr. ('62)
John G. Miller ('68)
Mathew A. Voulgarakis ('67)

1970s

William H. Bryan ('71)
Dr. Jon M. Furbee ('73)
John M. Lawson ('73)
Thomas A. McNeely ('75)
Stephen D. Meredith ('79)

1980s

Jack L. Brady ('83)
Christal D. Carlson ('83) Gerald
L. Evans ('80)
John W. Frye, Jr. ('86)
Marisa L. Magda ('81)
Bruce D. Pfalzgraf ('85)

1990s

Susan K. Guthrie ('90)
Michael J. Kovack, Jr. ('95) John
A. Latocha, II ('98)

2000s

Dr. Bradley D. Lough, II ('07)



We'd like to hear from you.

Do you have news to feature in Class Notes? Stay connected by submitting your information online: pharmacy.hsc.wvu.edu/alumni/alumni-update-news-form/.



Meet Titan



What's the difference between a service dog and a visitation therapy dog?

A visitation therapy dog wears a blue vest, which means they can give and receive attention. At West Virginia University, they are only permitted public access to dog-friendly places and WVU property. Service dogs are **intended** to serve one owner and perform specific tasks. Service dogs are **allowed** to go anywhere their human can go. Service dogs wear red vests and should not be touched by strangers without permission from the handler.

WVU School of Pharmacy Adds *Four-legged Friend to Staff*

BY CHRISTA CURREY

The next time you visit West Virginia University's School of Pharmacy, you might hear the faint sound of a squeaky toy. That's because Titan, the School's new visitation therapy dog, loves them!

Titan, named for his large size, is a Labrador retriever, Great Pyrenees and poodle mix. His owner, Associate Professor of Clinical Pharmacy Ashlee McMillan (PharmD, '09), says don't let his size intimidate you.

"He is a gentle giant weighing in at 95 lb," said McMillan. "He can do many tricks, but a more unique skill he possesses is 'anxiety alert' where he notices when people exhibit signs of anxiousness, such as shaking legs and hand wringing. He'll put his paw on them to distract them, which is super sweet."

Titan, who'll be four in January, was born in the Hearts of Gold Program through WVU. The program is a service dog training organization that trains canines for veterans to help with psychiatric and mobility disabilities. McMillan and her family have fostered dogs via the organization and have had Titan in

their home since January. Eventually, program organizers decided that Titan would make a better visitation therapy dog than a service dog, so McMillan got the incredible opportunity to adopt Titan to serve the School of Pharmacy.

"Many students struggle with stress and other factors that affect their mental health," said McMillan. "Titan brightens everyone's day. Students come to the Pharmacy Skills Development Center to see him when they need a mental health break or simply want to be comforted."

Titan comes to work with McMillan and stays in the School's Pharmacy Skills Development Center. You can typically find him there on Mondays, Tuesdays and Thursdays. If you see him, be prepared to provide a belly rub, bum scratch or ear rub — those are his favorite forms of attention. 🐾

TIME TO TEST YOUR MEDICAL VOCABULARY

COVID-19 EDITION

It's fascinating that the general public now uses medical terms that pre-COVID only medical professionals and certain patients used. Test your knowledge and see if you can match the correct word with the correct definition.

1. PPE

A. Manufactured proteins that, once injected, act like antibodies we make on our own if exposed to a foreign biologic substance.

2. FLATTENING THE CURVE

B. A diagnostic test that determines if you are infected by analyzing a sample to see if it contains genetic material from the virus.

3. MONOCLONAL ANTIBODIES

C. Molecules that carry the genetic information needed for the body to make proteins.

4. COVID PCR TEST

D. Protective clothing, helmets, gloves, face shields, goggles, facemasks and/or respirators or other equipment designed to protect the wearer from injury or the spread of infection or illness.

5. mRNA

E. Public health workers talk with people to determine who may be at risk for contracting diseases such as COVID based on a known positive case and that person's potential close contacts.

6. CONTACT TRACING

F. A mechanism to facilitate the availability and use of medical countermeasures, including vaccines, during public health emergencies.


7. EUA

G. To spread out the rate of infection so as to not overwhelm the healthcare system and infrastructure.

WVU is an EEO/Affirmative Action Employer — Minority/Female/Disability/Veteran. The WVU Board of Governors is the governing body of WVU. The Higher Education Policy Commission in West Virginia is responsible for developing, establishing and overseeing the implementation of a public policy agenda for the state's four year colleges and universities. WVU is accredited by the Higher Learning Commission. Many WVU programs hold specialized accreditation.

AS WE KICK OFF A NEW YEAR, LET'S MAKE A COMMITMENT TO

Stay in Touch!

 **Need to change your address? Maybe you want to tell us about your new job, special award or exciting retirement plans!**

Share your news with us.

<https://pharmacy.hsc.wvu.edu/alumni/alumni-update-news-form/>



Did you recently have a baby or one on the way?

Email christa.currey@hsc.wvu.edu.



Is this the year you plan to join the School of Pharmacy Alumni Association?

Visit <https://pharmacy.hsc.wvu.edu/alumni/membership/> or email Dr. Betsy Elswick at belswick@hsc.wvu.edu.



For the latest School news and events, please check out our social media pages. We are available on Facebook, Twitter, Instagram and LinkedIn.

