Winter 2020

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College of Osteopathic Medicine

NOVA SOUTHEASTERN UNIVERSITY

COM Outlook

WINTER 2020

DR. KIRAN C. PATEL COLLEGE OF OSTEOPATHIC MEDICINE

MISSION: IMPOSSIBLE TAMPA BAY

REGIONAL CAMPUS

★ ★ ★ ★

"Stunningly student-centered."

"Awe-inspiring technology."

"Superb performances by Moss Construction, Baker Barrios, ACAI Associates, and NSU Florida."

"A philanthropic masterpiece by Drs. Patel."

SHARKS DO MORE THAN SURVIVE.
THEY THRIVE.

Sharks are strong, fast, resilient, and adaptable. Their presence enables the entire ecosystem to flourish. At NSU, we appreciate Sharks.

The world needs forces of nature like ***YOU***.

Our distinguished KPCOM alumni are making significant contributions to health care and humanity on many levels. If you have a compelling story about your life or career that you would like to share with the readers of *COM Outlook*, please contact Scott Colton at *scottc@nova.edu*.

NSU Florida
NOVA SOUTHEASTERN UNIVERSITY

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Outlook

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HPD COMmuniqué

Nova Southeastern University's Health Professions Division (NSU-HPD) is in the midst of an exciting phase of ongoing development. However, it is important to remember that an incredible visionary named Morton Terry, D.O., who was the founder of the NSU-HPD, planted the seeds of this evolution.

He believed that health care was going to become increasingly scrutinized by the people of this nation. He also saw that health care was going to evolve into a collegial and collaborative professional venture in both the private and public sectors.

Why am I bringing this topic up at this time? We recently opened the Tampa Bay Regional Campus in Clearwater, Florida, which is one of the most highly advanced instructive sites in the United States. The first cohort of students began attending classes in August 2019 at this campus, which offers the most progressive pedagogy and technology possible.

The Tampa Bay Regional Campus houses an additional site for NSU's Dr. Kiran C. Patel College of Osteopathic Medicine, which is the original school of the Health Professions Division. We also have the Dr. Pallavi Patel College of Health Care Sciences and the Ron and Kathy Assaf College of Nursing represented at this facility. These colleges stand alongside each other, not as separate programs or separate schools, but as collaborative and collegial health education entities.

This is exactly what Dr. Terry envisioned many years ago. He always said that health professionals, such as physicians, pharmacists, optometrists, dentists, nurses, and physician assistants, needed to work together as a cohesive team. He also said that in order for us to respect each other, we needed to learn together.

Fortunately, that philosophy is on full display at the Health Professions Division. This attitude extends to the NSU campuses in Fort Lauderdale/Davie, Fort Myers, Jacksonville, Miami, Miramar, Orlando, and Palm Beach, as well as at our Puerto Rico Regional Campus and the new Tampa Bay Regional Campus. Dr. Terry's view, which became my mantra when I succeeded him as HPD chancellor, was that we must always respect one another.

As I mentioned, we are not just a specific school or a specific program. We are One NSU. That was Dr. Terry's belief, and we have carried his vision forward since he passed away in 2004.

Congratulations to everyone who has participated in our growth and success. Thanks to the commitment of so many dedicated and talented people, NSU-HPD's future is brighter than ever.

Frederick Lippman, R.Ph., Ed.D.
Chancellor, Special Projects
Health Professions Division

DEAN'S Message

The past few months have been landmark ones for the KPCOM. We opened the Tampa Bay Regional Campus with about 150 new osteopathic medical students, and we had a spectacular ribbon-cutting event replete with congressional representation, Tampa Bay region physicians, and visitors from around the world.

This activity was hailed as impossible—to build a 311,000-square-foot building, recruit faculty members, and pass accreditation in 18 months. I want to highlight and congratulate everyone at the KPCOM who put their efforts, knowledge, and tremendous talents to this task. These are the KPCOM heroes.

The team was led by Guy Nehrenz, Ed.D., M.A., RRT, senior associate dean of administration and collegiate advancement (accreditation team chair), and Janet Hamstra, Ed.D., assistant dean of osteopathic graduate medical education (accreditation team vice chair).

Others pivotal to the process included

- **Kenneth Johnson**, D.O., executive associate dean (Tampa Bay Regional Campus)
- **Phyllis Filker**, D.M.D., M.P.H., associate dean of undergraduate, graduate, and community education
- **Mark Sandhouse**, D.O., M.S., associate dean of osteopathic medical education
- **Margaret Wilkinson**, Ph.D., M.A., associate dean of osteopathic preclinical education
- **Hilda De Gaetano**, D.O., M.S., senior assistant dean of preclinical education
- **Paula Anderson-Worts**, D.O., M.P.H., assistant dean of faculty and alumni affairs
- **Cyril Blavo**, D.O., M.S., M.P.H. & T.M., assistant dean of osteopathic preclinical education (Tampa Bay Regional Campus)
- **Delia Harper-Celestine**, Ed.D., M.P.H., assistant dean of student affairs
- **James Howell**, M.D., M.P.H., assistant dean of professional relations
- **Jennifer Jordan**, Ed.D., M.S., assistant dean of medical education
- **Jill Wallace-Ross**, D.O., M.S., assistant dean of osteopathic clinical education
- **Alfredo Rehbein**, M.B.A., executive director of finance and administration
- **Kelly Duke**, M.S., director of administrative services
- **Elizabeth Oviawe**, Ph.D., Ed.S., M.S.B.I., M.M.I.S., M.Sc., director of the Division of Institutional Technology
- **Odessa Pemberton**, M.B.A., employee services consultant I
- **Denise Raof**, executive assistant to the dean
- **Nancy Roussell**, assistant to senior associate dean of osteopathic medical education

I would also like to thank all the KPCOM department chairs and faculty and staff members. These people worked days, evenings, and weekends to assure deadlines were met, reports were complete, and rewrites were thorough.

The greatest reward for me as dean is to work with this team. They are kind and driven visionaries who saw the goal, came together, and took the prize. These colleagues are the backbone of our college. These are the people who make our college innovative and great. This is my team. This is the KPCOM.

Elaine M. Wallace, D.O., M.S.[4]
Dean
Dr. Kiran C. Patel College of Osteopathic Medicine

MISSION: POSSIBLE

Tampa Bay Ribbon Cutting Commemorates Ambitious Achievement

Thanks to the hard work and perseverance of a passionate group of believers, what was initially deemed a mission impossible turned out to be supremely possible.

On September 14, Nova Southeastern University (NSU) and Drs. Kiran C. and Pallavi Patel, M.D.s, proudly unveiled the new, 311,000-square-foot Tampa Bay Regional Campus in Clearwater, Florida, at a festive ribbon-cutting ceremony that attracted more than 500 attendees. The new campus was made possible through a $230-million donation from the Patels to NSU—$80 million in gifts and a $150-million investment in real estate and facilities.

"We are immensely proud of this beautiful and state-of-the-art campus—a true Herculean effort by Moss, Baker Barrios, ACAI, all of our contractors, and of course, our dedicated NSU team," said George L. Hanbury II, Ph.D., NSU president and CEO. "However, none of this would have been possible without Drs. Patel and the generous contributions of their time, their talent, and their fortune."

NSU has been providing a wide range of educational programs in the Tampa Bay area since 1991. The Tampa Bay Regional Campus offers a broader curriculum and will house approximately 2,000 students and 125 faculty and staff members when it is fully occupied. The campus is also home to several educational programs, including serving as an additional site for the Dr. Kiran C. Patel College of Osteopathic Medicine (KPCOM), which welcomed its first class of about 150 students in August.

"Dr. Kiran C. Patel has been a great philanthropist. He has donated money to the KPCOM for scholarships, as well as provided monies to build the Tampa Bay Regional Campus. Dr. Patel also shares the values of osteopathic medicine—to serve the underserved in a more efficient and humane manner," said the KPCOM's dean, Elaine M. Wallace, D.O., M.S.[4]

"Additionally, he has provided funding for more than 30 students to learn rural medicine in India and is actively involved in the development of a graduate medical education institute to serve NSU," she added. "His kindness and vision are a force that is humbling to be around. We cannot fully express our thanks."

NSU's Tampa Bay Regional Campus also provides a home for the Ron and Kathy Assaf College of Nursing, the Dr. Pallavi Patel College of Health Care Sciences, the College of Psychology, and the Abraham S. Fischler College of Education and School of Criminal Justice programs in the Tampa Bay area. Programs in cardiovascular sonography and speech-language communication disorders are available, as are master's degree programs in anesthesia, clinical mental health counseling, criminal justice, developmental disabilities, family nurse practitioner, psychiatric mental health, school counseling, speech-language pathology, and national security affairs.

"It is more important than ever to advance the current state of health care. I believe that NSU is the future of multidisciplinary medical education," Dr. Kiran C. Patel explained. "Together, we will be able to capitalize on an opportunity that will be beneficial to millions of human lives—many right here in Florida—and so many others around the globe." □

Dr. Kiran C. Patel, M.D., addresses the audience at the ribbon-cutting ceremony.

NSU Tampa Bay Regional Campus students participate in the milestone event.

Top: The Patels and George L. Hanbury enjoy a moment of levity.

Bottom: Dr. Pallavi Patel, M.D., (orange jacket) listens to the speeches with her family.

From left: Jill Wallace-Ross, D.O., M.S., assistant dean of osteopathic clinical education; Elaine M. Wallace; Paula Anderson-Worts, D.O., M.P.H., assistant dean of faculty and alumni affairs; and Janet Hamstra, Ed.D., M.S., assistant dean of graduate medical education

From left: Irving Rosenbaum, D.P.A., Ed.D., M.P.A., vice president for operations, Health Professions Division; Frederick Lippman, R.Ph., Ed.D., chancellor/special projects, Health Professions Division; Harry K. Moon, M.D., NSU executive vice president and chief operating officer; Pallavi Patel; Kiran C. Patel; George L. Hanbury; Elaine M. Wallace; Stanley H. Wilson, Ed.D., PT, CEAS, dean of the Dr. Pallavi Patel College of Health Care Sciences; Marcella M. Rutherford, Ph.D., M.B.A., M.S.N., R.N., dean of the Ron and Kathy Assaf College of Nursing; and Karen S. Grosby, Ed.D., dean of the College of Psychology

Tampa Bay Ingenuity

NEW CAMPUS INCORPORATES NOVEL DESIGN PRINCIPLES

BY SCOTT COLTON, B.A., APR

When the various decision makers involved in the construction of Nova Southeastern University's (NSU's) Tampa Bay Regional Campus in Clearwater, Florida, met to discuss the bold undertaking, much thought went into creating each aspect of the 311,000-square-foot education complex. This contemplative approach was especially true when it came to constructing a campus that incorporated distinctive design principles.

Visitors are greeted by floor-to-ceiling windows on every floor that maximize views of serene waters. Glass markers are used to note formulas and ideas in study rooms overlooking the courtyard. Below, a group of students initiates a quick game of touch football while others stroll past. Inside, students crisscross on their way to the gym, café, and class. The atmosphere is both relaxed and energy-charged, exactly as the architects hoped it would be.

Indoors and out, examples abound of how the architects incorporated biophilic design into the new campus. Biophilic design reinforces appreciation of one's environmental surroundings while creating a productive and healthy environment. Elements include natural lighting and ventilation, as well as natural landscape features. Research shows that people who study or work in these more natural environments tend to experience decreased stress, enhanced creativity, and accelerated recovery from illness.

According to the architect's project description, three overarching principles were incorporated—prospect, refuge, and mystery. To fulfill the prospect ideal, the complex was built to provide "unimpeded view over distance for surveillance and planning." The idea of refuge introduced spaces that allow for "withdrawal from intense conditions or the main flow of activity in which the individual is protected from behind and overhead." The element of mystery was achieved through "partially obscured views or other sensory devices

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Three design aspects were incorporated to provide the optimal educational environment—prospect, refuge, and mystery.

A feature art installation pays homage to Tampa; the Courtney Campbell Bridge; NSU's new facility in Clearwater, Florida; and the life native to the Tampa Bay area. The artwork further expresses themes related to community, connectedness, conservation, health and wellness, and research.

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that entice the individual to travel deeper into the environment."

A Haven for Students

The campus, which officially opened in August, is earning rave reviews from KPCOM students and faculty and staff members alike regarding everything from the classrooms and labs to the technology and aesthetic charms of the building and grounds.

Tying into the themes of prospect, refuge, and mystery, the campus also features a nature trail for those seeking escape and personal reflection, meditation/relaxation rooms, a unique third-floor stairs study area, and a two-story fitness center. It also houses some of the most progressive classrooms, labs, and technology, all of which were designed to prepare and produce the best osteopathic graduates possible.

"It's inevitable that we will be one of the most exciting medical hubs in the world," said Kenneth Johnson, D.O., FACOOG, executive associate dean of the additional site for the Dr. Kiran C. Patel College of Osteopathic Medicine (KPCOM) at the Tampa Bay Regional Campus. "That's really the vision."

In terms of KPCOM-specific amenities, the campus features a 7,840-square-foot osteopathic principles and practice lab, as well as two large lecture rooms that each seat 250 students. A research lab with a seating capacity of 20 and a 3-D virtual lab that can fit 120 students are also central features. Additionally, KPCOM students benefit from the following facilities.

- 3-D printing research lab
- 3-D virtual lab (104-seat capacity)
- 18 small-group learning rooms
- 11 standardized patient exam rooms
- emergency medical services classroom (30-seat capacity)
- histology lab (96-seat capacity)
- leisure-space room outfitted with various lounge seating options, a pool table, a foosball table, and a ping-pong table, as well as a small kitchen area where students can store food in refrigerators
- robotics lab with 14 exam rooms
- team-based learning room (102-seat capacity)
- virtual reality research and development lab
- virtual tech-collaboration room (56-seat capacity)

"Osteopathic medicine has a long and colorful history in the United States that has allowed the graduation of holistic physicians who consider the minds, bodies, and spirits of their patients," said Elaine M. Wallace, D.O., M.S.[4], who has served as KPCOM dean since February 2015. "To have an additional campus producing about 150 more attuned and kind physicians is not only a benefit for Florida, but also for our country."

Curriculum Overhaul and Technology Upgrades

The additional KPCOM site at the Tampa Bay Regional Campus is just one of the many exciting changes that have been unveiled from a college-specific perspective.

While the new campus was being planned and constructed, a curriculum overhaul and technology enhancements were being implemented at both campuses. (See related technology article on page 14 for details.)

"This year's freshman class has the benefit of a reordered curriculum. This curriculum has truncated the basic 'Basic Sciences' into four months and entwined the remainder of the basic sciences into clinical sciences. This will allow students to learn information in a context (e.g., cardia physiology in cardiac medicine and pathology of the renal system in renal medicine). There will also be more patient-contact opportunities in both years one and two to help students 'put a face' on the disease processes they are learning," Wallace said.

"The addition of BodyViz technology allows anatomy and histology to be taught in a digitalized fashion, while the addition of the Lecturio system of board review within the curriculum helps students think of information in a board-review style as part of their studies," she added. "All of this is accompanied by the addition of updated robotic instruction in everything from cardiac arrest to labor and delivery."

The KPCOM has come a long way since it became the 15th U.S. osteopathic medical school in 1979 and graduated its inaugural class of 35 students in 1985. The college, which currently offers nine academic degree programs

Indoors and out, examples abound of how the architects incorporated progressive design principles into the new campus.

and seven graduate certificate programs, is poised to become one of the largest osteopathic medical schools in the nation with the additional KPCOM site in Tampa Bay.

"The KPCOM program at the Tampa Bay Regional Campus came together as a result of all of us at the KPCOM's Fort Lauderdale/Davie Campus who have been dedicated to this task for two years. This includes those involved in accreditation, technology, and tele-transmission of lectures to those involved in the hiring and credentialing of a new faculty, to name just a few," Wallace said. "Everyone at the KPCOM pulled together and created a product of which we all are very proud." □

HOLOGRAMS AND ROBOTICS

Technology Overhaul Augments Student Learning

BY SCOTT COLTON, B.A., APR

Thanks to the generosity of the Patel Family Foundation, students at both the Fort Lauderdale/Davie and Tampa Bay Regional campuses are benefiting from a major technological revamp that is allowing them to learn in exciting new ways.

For example, KPCOM students now learn dissection techniques by working with a 3-D virtual cadaver, although they can participate in optional human cadaver labs. Learning opportunities are also enhanced via forthcoming holographic videoconferencing, the multifaceted use of interactive simulated manikins, virtual reality, and 3-D printing.

In today's society, technological advances occur daily—and at warp-speed frequency—which explains why the KPCOM is constantly on the hunt for ways to keep its curriculum as current as possible. "In the past, medical education was mostly limited to PowerPoint presentations and confined to the status-quo lab experience, which limits students' engagement and retention," said Elizabeth Oviawe, Ph.D., Ed.S., M.S.B.I., M.M.I.S., M.Sc., director of the KPCOM's Division of Institutional Technology.

"Over the years, simulation experiences that incorporate the use of high-fidelity manikins and human patients who act as real patients through role-play have helped improve students' learning; however, there are still some limitations," she added. "The introduction of immersive-learning technology in the use of 3-D virtual reality (VR), augmented reality, and mixed-reality holographic experiences—blended with high-fidelity manikins and role-play patients—is bringing the didactic experience to life."

Virtual Cadavers and Microscopes

When the fall 2019 semester commenced, KPCOM students were introduced to BodyViz—a 3-D virtual cadaver-MRI/CT virtualization technology. BodyViz uses high-end performance gaming laptops, a stereoscopic 3-D projector, 3-D glasses, and a Microsoft Xbox One, so students can not only perform virtual dissections, but also render MRI and CT data and reference modules that let them observe joint movements or see structures not visible in real-life cadavers.

Below is an overview of additional technologies that have been, or soon will be, implemented at both campuses.

Panasonic 3-D Multiview Anatomy is a multilayered, 3-D dissection of anatomy images that makes it easier for students to understand the geographic relationship inside the body. It includes transparent interlayer overlay; a multilayer dissection; and high-resolution 3-D images viewed through 3-D glasses.

Biolucida is a virtual microscopy technology that simulates the experience of using a microscope. It consists of more than 3,300 virtual microscope slides and enables educators to reach more students and deliver content that is more dynamic.

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First-year KPCOM student Temiloluwa Kowobari gets a crash course in the 3-D Organon virtual reality technology, which is used for immersive gross anatomy training.

HOLOGRAMS AND ROBOTICS

Right: KPCOM students at the Tampa Bay Regional Campus interact with the CAE Lucina childbirth simulator.

Below: Elizabeth Oviawe, director of the KPCOM's Division of Institutional Technology, oversees the intricacies of the cutting-edge equipment at both campuses.

Above: Elaine M. Wallace, D.O., M.S.⁴, KPCOM's dean (right), explores the virtual reality technology with Elizabeth Oviawe.

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Complete Anatomy is an anatomy technology that allows students to explore details of human anatomy in 3-D. It includes an augmented-reality experience that enables students to bring the model into their physical environment.

3-D Organon VR Anatomy features a complete, virtual reality, human anatomy atlas that immerses the students in a personal encounter with the human body like never before.

CAE Lucina is a childbirth simulator that includes a mixed-reality experience via the use of a Microsoft HoloLens headset. This combination of augmented- and virtual-reality technology enables students to immerse themselves in a realistic child delivery experience by interacting with a holographic patient.

VR applications allow full immersion with virtual patient simulation, medical procedures, and empathic training, as well as osteopathic manipulative medicine instruction.

Holographic videoconferencing is a futuristic technology currently being fine-tuned for implementation. It will include a faculty member presenting a lecture from a classroom at one campus (e.g., Fort Lauderdale/Davie) whose holographic avatar will then appear on the holographic podium/stage at the other campus (e.g., Tampa Bay Regional), and vice versa.

Robotics and 3-D Printing

Although virtual-world reality technology has existed at the KPCOM's Fort Lauderdale/Davie Campus for several years, it is consistently being enhanced and expanded. "It all began with my development of a virtual clinic inside a 3-D virtual world learning environment," Oviawe said. "The goal was to create a way for students to practice their clinical skills virtually and reinforce their didactic training through

From left: KPCOM students Temiloluwa Kowobari, Hamzah Mughal, Vera Hapshy, and Emelia Farnsworth engage with the BodyViz virtual cadaver technology as John Roufaiel, M.D., M.S., assistant professor, explains the cardiac CT scan of a living patient in 3-D format.

hands-on application in a fun, highly immersive, and risk-free environment."

According to Oviawe, both campuses have labs equipped with 3-D VR, robotics-manikin, VR research and development, and 3-D printing research technologies that provide "highly immersive teaching and learning experiences that enhance students' engagement and interaction." Both campuses also house a standardized patient lab.

Not surprisingly, student response to these technological implementations has been overwhelmingly favorable. "To cultivate active learning in medical education is to use tools that immerse the learner in a world of self-discovery and interactive challenges. For example, anatomy can be taught more efficiently by applying the benefits afforded by a virtual cadaver. We have the capability to delve into any organ system and get a front-row seat to the physiological phenomenon that have been taught on paper until now," said fourth-year student Karan Thakkar.

"The programs we now use, such as 3-D Organon VR, simplify human anatomy and medical concepts and translate them to be understood by students at any level of training. We're also working on stretching just how far this technology can go," he added. "Our current research focuses on applying current virtual technologies to help students prepare for their clinical skills examinations by simulating patient encounters."

Third-year student Santroy Samuels concurred with Thakkar's assessment, adding, "The ability to be completely immersed in a virtual program where you can see, touch, and interact with the patient blew me away," he said. "The fact that there are clinical scenarios where I can triage and treat a patient while getting symptomatic feedback was amazing. I have yet to meet a student who wasn't blown away by their first encounter with this technology."

Another technology that has been incorporated at both campuses is 3-D printing, which is an inexpensive way to replicate various objects, tools, and body organs. "3-D printing allows you to create a model or realistic tool that can be used by patients or for medical education training, which is its main benefit," Oviawe said of this innovative tool.

"For example, students holding a 3-D printing of a human organ gain a better understanding of the concept being taught. The same goes for patients holding a 3-D printing of a particular organ in their hands for illustration before a medical procedure or surgery," added Oviawe, who stressed that 3-D printing research, which is evolving rapidly, is essential in today's medical education paradigm.

It's definitely an exciting time to be a KPCOM student, with multifaceted learning modalities available from both a pedagogical and technological perspective. "Today's students are highly involved in their learning to achieve personal discovery through the use of these cutting-edge technologies that will improve their engagement and retention—and make them better future physicians," Oviawe said.

"The college is at the forefront of leveraging the use of innovative technology for full immersive learning to promote utmost realism and academic excellence," she added. "Our continual efforts in the areas of medical technology innovation and research and development will serve as an incubator to greater exploration in the use and assessment of these technologies for state-of-the-art medical education and delivery." □

Net the Difference

BASKETBALL DREAMS MORPH INTO MEDICAL MOTIVATION

BY SCOTT COLTON, B.A., APR

In 1996, second-year student Alex Nikolic experienced a life-changing event when he saw the basketball film *Space Jam*. Although he never had the slightest interest in sports until that time, the film awakened something in him.

Emboldened by his new pursuit, Nikolic, who was born and raised in Belgrade, Serbia, decided to join his school's basketball team, even though he had never even touched a basketball. After an initial practice session, the coach requested a formal meeting with Nikolic's parents to discuss their son's noticeable lack of skills.

"The coach didn't understand how a seven-year-old, who had never even picked up a basketball in his life, was suddenly participating in his first team practice—although he did recognize my determined character," Nikolic recalled. Despite his lack of experience, Nikolic remained on the team.

Because of his innate talent and unimpeachable work ethic, Nikolic became the best player on his school's team within a few years. As his on-court heroics burgeoned, so did the likelihood of a professional basketball career.

"My father recognized my hard work, dedication, and talent and wanted to support me in my ambition to become a professional player," Nikolic explained. "His only condition was that I acquire a college degree. Because of the European club system, this wasn't achievable, so he suggested that the United States would be the best place to make this happen. Thus, in seventh grade, he took me to a summer basketball camp at the IMG Academy in Bradenton, Florida."

Living the Dream

The sprawling academy, which serves as a boarding school for talented children who display aptitude in sports such as baseball, basketball, soccer, and tennis, proved to be a natural fit given Nikolic's academic and athletic abilities. "After my first week there, the coaches approached my father with a scholarship offer. We both decided that attending high school at the academy would be ideal, so I moved to Bradenton in 2007."

It was a heady time for Nikolic, who lived in a dorm, spent four hours in school each day, and trained for an additional four or five hours when classes ended. "Our team traveled to basketball tournaments all over the United States, and I was able to meet people from all over the world," said Nikolic, who savored his time at the academy.

As he began his junior year, Nikolic's basketball future seemed exceedingly bright. "Due to my playing style and my excellent GPA, several Ivy League schools were already showing interest in recruiting me," he said.

Fate, however, can often be cruel. During one of his practice sessions, Nikolic endured what would become a career-ending injury. "I shattered my L5/S1 disk during a scrimmage and ended up with muscle spasms and minor nerve damage," he said. "I was not aware of how serious the injury was, nor that it was about to completely change my life."

In an instant, Nikolic's life took a dark turn. Dreams of basketball glory and attending an Ivy League college gave way to grueling therapies that did little to alleviate the pain or heal the injury. In the midst of his

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SPALDING
Alex Nikole
Student Physician
NOVA SOUTHEASTERN UNIVERSITY
DO

Net the Difference

Alex Nikolic revels in the beauty of Zion National Park in Springdale, Utah.

Nikolic, top row, far right, celebrates with his teammates after a tournament during his sophomore year.

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physical agony, the IMG Academy withdrew its scholarship, forcing Nikolic to grapple with the unexpected realities of his new, basketball-free life.

"The worst aspect of my injury was not the excruciating, sweat-inducing pain, but what it meant. It took me away from the basketball court and put me in physical therapy, rehabilitation centers, and doctor's offices," he explained. "For the first time in my life, I was out indefinitely. What I found most frustrating was that no doctor could give me even an estimated recovery period."

After more than a year of suffering through conventional therapies, such as physical therapy and painful cortisone shots that yielded no tangible improvements, Nikolic decided to try traditional and complementary therapies. Unfortunately, a series of acupuncture and chiropractic treatments, as well as a visit to a spa in Serbia that offered therapeutic hot springs and medicinal mud, failed to produce the desired results.

"These therapies helped to a certain extent, but none of them were enough to get me back on the basketball court. The biggest lesson I learned was that I was expecting each of these treatments to be the magic pill that would suddenly cure my chronic injury," he said. "After this epiphany, I started taking more control over my own physical and mental health, and that is when I started seeing the greatest results."

Changing the Dream

The next few years were difficult ones for Nikolic, who found himself enmeshed in a web of depression as he suffered an identity crisis related to what his future would entail. "Once I realized I might never be able to play basketball competitively again, let alone on a professional level, I was devastated. I thought it was not fair, as I made many sacrifices and invested enormous energy into my career," he explained.

"Without basketball, I felt lost," he added. "I even tried coaching for a while, but it could never match the intensity of engagement, satisfaction of improvement, fulfillment of winning, or the ecstatic experience of the team spirit."

When he turned 20, Nikolic began the difficult process of looking inward and reinventing himself in the aftermath of his dashed dreams. "This was the first time I went to psychological therapy, even though I was aware of my depression ever since I was injured," he explained.

"I remember sitting in a doctor's office when I was 17 and reading one of the depression posters while waiting to see my physician," he continued. "It had a list of about 10 symptoms, and I was experiencing at least 6 of them. I thought my depression was circumstantial and would go

Nikolic studies for an exam in the Martin and Gail Press Health Professions Division Library.

away once I started playing again. That didn't happen, so I had to find another way."

Because he spent several years working on healing both his body and mind, Nikolic's decision to pursue a medical career developed organically. "Being a patient and suffering from a chronic illness developed a sense of compassion within me for all people who are suffering," he explained. "I started to understand what feeling confused and helpless about your own condition felt like. When this experience was married with my newly developed love for philosophy, my new purpose in life became clear."

Armed with a new outlook, Nikolic attended Florida Atlantic University (FAU) in Boca Raton, earning a bachelor's degree in neuroscience and behavior before matriculating into NSU's Dr. Kiran C. Patel College of Osteopathic Medicine (KPCOM), which was his first choice for several reasons. "I like the osteopathic philosophy, which I always knew was a better fit for me since I embraced the holistic approach in my own healing journey," he said. "Although I never received osteopathic manipulative treatment until I got here, I see how effective it is and wish I had been exposed to it while I was trying to recover from my injury."

The fact that the KPCOM had a dual D.O./M.P.H. program, which most osteopathic programs do not, was another deciding factor. "Aside from starting my own practice down the road, I plan to implement my love for philosophy in the public health realm as well. I also knew that medical school was going to be stressful, so I decided to stay close to my sisters and good friends from FAU, who live in Boca Raton."

Focusing on the Future

Although Nikolic won't graduate from the KPCOM until 2022, he already has a clear vision of what he wants his professional future to look like. "Even before I started medical school, I knew I wanted to become a mind doctor. Consciousness is all we have, as everything we experience must flow through he stream of our awareness," he explained. "I also plan to use my public health training to work on major mental health issues from a population perspective."

Nikolic has dealt with a significant amount of misfortune in his young life. Instead of allowing himself to slide into an ever-deepening depression, however, he searched within himself and sought the help needed to overcome his physical ailments and emotional anguish.

"The emotion of pride rarely arises in my everyday life, but I do feel fortunate that I was able to overcome so much adversity.

Nikolic (in mask) poses with classmates (from left) Morsal Osmani, Shay Ovshayev, Nicolette Natale, and Jackie Nguyen in the NSU Cadaver Lab.

The reason I'm sharing my story is to help and inspire others. Everything I have been through developed my emotional intelligence, healthy coping mechanisms, and a certain type of wisdom with which I navigate through life today," he said.

"Now, I perceive every experience as a 'school' for life. To me, these are just lessons that allow me to learn how to live more authentically, fully, and consciously," he added. "Learning from and finding meaning in suffering, and from every other experience, is the ultimate road to living up to one's own full potential." □

Career Path Clarity

A PASSION FOR PUBLIC HEALTH

BY SCOTT COLTON, B.A., APR

As a child growing up in the genteel city of Charleston, South Carolina, T. Lucas Hollar, Ph.D., pursued a laundry list of interests that included playing sports, immersing himself in the latest local and underground music, exploring the woods, and wading through the nearby marsh.

Hollar, a KPCOM associate professor of public health who is the youngest of three siblings, enjoyed a happy childhood thanks to his parents, especially his mother, Deborah, who "was my advocate and my catalyst to do pretty much everything, particularly sports and art," he recalled. "It was also my mom's doing to put us kids into cotillion classes—a southern rite-of-passage where one learns party etiquette, ballroom dancing, and, since it was Charleston, the shag."

Although socialization and fun were primary themes throughout his childhood, so were other important aspects, such as academic accomplishment. "Dedication to, and success within, school was always expected and reinforced in us," said Hollar, who developed an affinity for soccer. "I was captain of my club teams, captain of the men's varsity team all four years of high school, and captain of my college soccer team as a junior and senior. I even played on South Carolina state teams as part of the U.S. Soccer Olympic Development Program."

Punk Rock Valedictorian

Hollar did well academically during his formative years, but he's the first to admit that schoolwork didn't always take precedence over more fulfilling pursuits. "I actually hated school throughout elementary and middle school," said Hollar, who channeled his eclectic interests into an array of activities beyond soccer, such as painting and music.

"I got into the punk rock scene when I was 14. I played guitar and sang in three bands that released albums in high school, college, and graduate school. I also played trumpet in a punk ska band during high school," Hollar recalled of his artistic pastimes.

"My friends were a motley crew of brilliant, simple, engaged, detached, passionate, ambivalent, conservative, liberal, religious, irreligious, anti-religious, mainstream, and iconoclastic kids," he added. "We had all the makings of what could have been a pretty fantastic coming-of-age movie, including the tragedies of suicide, vehicular deaths, and divorce, including my own parents when I was in high school."

Although some teenagers are laser-focused on the career they want to pursue, Hollar wasn't one of them. "I considered broadcasting and filmmaking when I was in high school, but my pragmatic side suggested there might be more prosperous alternatives that offered a greater likelihood of sufficient earnings," he explained. "A career in politics or psychology also danced around in my mind."

When it came time to pursue his college education, Hollar stayed in South Carolina to attend Erskine College, where he double-majored in psychology and Spanish and graduated as class valedictorian. While at Erskine, Hollar mulled the possibility of a career in industrial/organizational psychology, but his vocational path remained unclear. "I still didn't know what I wanted to be when I grew up," he admitted.

Teacher, Coach, and Ph.D. Student

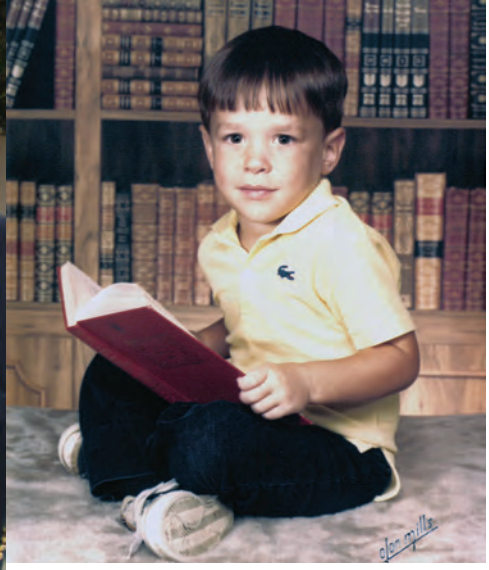
After earning his Bachelor of Arts degree in 2000, Hollar decided to give teaching a shot, spending two years as a Spanish teacher and the department head of foreign languages at Woodmont High School in Greenville, South Carolina. "I also coached men's and women's varsity cross country and men's varsity soccer. It was a rough and tough school desperately in

(continued on page 24)

I am very thankful for the opportunity to contribute to, and be a part of, the mission-driven teaching, scholarly/ research, and service activities of the NSU-KPCOM family.”

—T. LUCAS HOLLAR

T. Lucas Hollar celebrates his FAU graduation with sister Danielle, mother Deborah, and father Herb.



Hollar displays his serious side at age four.

The Hollar family enjoys a fun afternoon at the beach.

(continued from page 22)

need of men to be in the lives of the students attending the school," he said.

Following his teaching stint, Hollar moved to Fort Lauderdale, Florida, to shake up his life and earn a Master of Public Administration from Florida Atlantic University (FAU) in nearby Boca Raton. However, after completing his first year in the program, Hollar was offered a spot in the Ph.D. program. "I was the first person they let into the program without a master's degree," he said.

While he was working on his Ph.D., Hollar contributed to a community-based childhood obesity intervention led by his sister, Danielle Hollar, Ph.D., M.H.A., M.S., which was occurring at six elementary schools in Osceola County, Florida. It would prove to be a pivotal project for several reasons.

"Based on our findings, we were able to secure millions of dollars to roll out the program in several states, engaging thousands of children. It was interesting research, and, intellectually, it was an important topic," Hollar said.

"But, I was particularly moved by the way my sister could become emotional when reflecting on all the work we were doing, as it related to the health, well-being, and day-to-day lives of the children we were serving," he added. "That made quite an impression on me, and it humanized the endeavor in a way I had not felt previously."

Consultant, Husband, and Lone-Star Professor

Based on this epiphany, Hollar revisited his career goals, shifting his focus toward working for a think tank and/or becoming a professor and a consultant.

During this time, another fortuitous life event occurred when a striking woman named Jen walked into the coffee shop Hollar worked at in downtown Fort Lauderdale while he was doing his Ph.D. coursework.

"I met the most amazing part of my life—the part of my life for which I am most thankful—when I met my wife, Jen," he said. "We instantly became best friends, quickly bonding over discussions of ballet, poetry, Camus, and Hemingway across the concrete-poured countertop linking the barista to the customer on the other side."

After a long courtship that lasted more than five years, the couple tied the knot in 2009. "Jen inspires me, thrills me, and makes the world more magical everywhere we go," said Hollar, who is the proud father of six-year-old Elle and three-year-old Dean.

By the time he earned his Ph.D. in December 2008, Hollar was already working as a consultant, a teaching assistant, and an adjunct professor at FAU. Then came an unexpected offer that would lure Hollar westward.

"I was contacted by an acquaintance from a university to which I had forgotten I had applied," he said. "I accepted the job, and right after returning from our honeymoon in August 2009, Jen and I moved to Nacogdoches, Texas, so I could start my position as assistant professor of government at Stephen F. Austin State University."

Hollar's stay in the Lone Star State, however, would prove to be short-lived.

Proud NSU Shark

While working at the Texas-based university, Hollar learned about an available faculty position in the Master of Public Health (M.P.H.) program at NSU's Dr. Kiran C. Patel College of Osteopathic Medicine (KPCOM), which was seeking someone to launch a concentration in health administration. "My background in public administration and policy, along with my public health research experience, made me feel as though I had an opportunity to land a great job that united aspects of my experiences and expertise back in South Florida."

Less than a year after relocating to Texas, Hollar was back in the Sunshine State working as a faculty member in the KPCOM. Since joining the M.P.H. program in July 2010, Hollar has served as the course director for 8 different courses—a number that will climb to 10 by the end of the 2019–2020 academic year.

Hollar currently teaches the Health Policy, Planning, and Management and the Public Health Grant Writing courses. He is also teaching two courses in the college's Bachelor of Science in Public Health program—Policies, Systems, and Environments of Health Care and Disparities in Health.

In addition to teaching within the KPCOM's public health bachelor's and master's degree programs, Hollar has provided guest lectures for the Dr. Pallavi Patel College of Health Care Sciences' Master of Medical Science in Physician Assistant and the H. Wayne Huizenga College of Business and Entrepreneurship's M.B.A. in Complex Health Systems programs.

Even before his nearly decade-long affiliation with the KPCOM, Hollar appreciated the strong engagement NSU has with its constituent communities. "I love the diversity of our students and faculty and staff members," said Hollar, who has been involved with several extramurally funded projects. "It is very rewarding to educate and collaborate with current and aspiring physicians, dentists, nurses, physician assistants, lawyers, business people, and public health professionals who have positive impacts on the communities they serve."

Hollar also acknowledges that many of his KPCOM colleagues have contributed to his professional success. "I am very thankful for the opportunity to contribute to, and be a part of, the mission-driven teaching, scholarly/research, and service activities of the NSU-KPCOM family," he said.

"Through productive collaborations with my colleagues and mentors—especially Drs. Nicole Cook, Cyril Blavo, Rosebud Foster, Kenneth Johnson, Anthony Silvagni, and Elaine Wallace—I am proud of the things I have been able to accomplish as a team player within multiple NSU and KPCOM teams," he concluded. □

FAST FACTS

T. LUCAS HOLLAR, PH.D.

Hometown

- Charleston, South Carolina

Education

- Ph.D. (public administration) from Florida Atlantic University in Boca Raton, Florida

KPCOM Role

- associate professor of public health

Personal

- married to Jen Hollar
- father to Elle, 6, and Dean, 3

Extraordinary Life Experiences

- running with the bulls seven times in Pamplona, Spain, during the festival of San Fermín
- when his wife Jen said "yes"
- playing shows with his band across the United States
- training in Brazilian jujitsu and mixed martial arts, earning a blue belt in Brazilian jujitsu
- being a parent
- winning the National Association of Schools of Public Affairs and Administration Annual Dissertation Award
- hearing other students praise the relevance and application of his work

CURIOUS IN CUBA

International Internship Offers Interesting Insights

"He who studies medicine without books sails an uncharted sea, but he who studies medicine without patients does not go to sea at all."

—WILLIAM OSLER, M.D.

Top left: Yara Khalifa assists in the delivery room.

Top center: KPCOM student Jillian Leibowitz examines a pediatric ophthalmology patient at Arnaldo Milian Castro Hospital in Santa Clara.

Top right: KPCOM student Kellen Creech palpates a male patient.

Bottom: Elaine M. Wallace, D.O., M.S.[4], KPCOM dean, is standing fifth from left with Universidad de Ciencias Médicas de Villa Clara deans, faculty members, and students. KPCOM class of 2022 students are kneeling and sitting in front.

BY BRITTANY MILO, JILLIAN LEIBOWITZ , AND ALLAN BARRAZA

On June 9, 2019, a group of 16 class of 2022 students from the Dr. Kiran C. Patel College of Osteopathic Medicine (KPCOM) traveled to Santa Clara, Cuba, to participate in a weeklong medical internship in collaboration with the Universidad de Ciencias Médicas de Villa Clara. During their stay, the students immersed themselves in the medical knowledge, culture, and daily lives of the Cuban people.

The Cuban medical experience was different from any medical outreach trip the KPCOM has previously coordinated, because it was the first time American students were able to join Cuban medical students and physicians in their work. Each KPCOM student chose a specialty that piqued his or her interest and rotated within that specialty the entire week.

The chosen specialties were dermatology, internal medicine, obstetrics/gynecology (OB/GYN), ophthalmology, otolaryngology, and pediatrics. Each specialty had one to four students per doctor, which allowed for an individualized and educational experience. Elaine M. Wallace, D.O., M.S.[4], KPCOM dean, accompanied the students to Cuba to provide guidance and insight, as did Evelyn Martinez, medical outreach program coordinator, and Eduardo R. Pla-Alvarez, budget analyst II.

MATERNITY HOSPITAL

The four students who participated on the OB/GYN service worked with the department chief and other faculty members at a maternity hospital. Additionally, the students toured the various departments affiliated with prenatal and postnatal care and attended lectures on various OB/GYN topics, as well as exceptional cases.

Pregnant patients in the province of Villa Clara travel to the main hospital to deliver their babies. The students witnessed many deliveries and participated in caring for newborns in the delivery room. One notable case was a baby girl born with a cleft palate. There was total silence in the room, because prenatal tests showed no signs of the congenital deformity.

This was a prime instance where, because of the lack of 3-D ultrasound equipment, the tension in the room was palpable, as the doctor had to communicate this finding with the mother. The interning experience opened the students' eyes to the lack of resources and the remarkable adaptability and resilience Cuban physicians possess in managing their patients.

DERMATOLOGY CLINIC

The two KPCOM students who rotated through the dermatology clinic gained a wealth of knowledge in the specialty when they joined the fifth-year Cuban medical students' lectures to become familiar with the cases being presented in the afternoon clinic. While visiting the clinic, they saw many of the skin microbes they had learned about just a few months prior while completing their first year at the KPCOM.

(continued on page 29)

Yara Khalifa happily poses with the baby she helped deliver.

KPCOM students Tahreem Hashmi and Brittany Milo (in blue scrubs) with physicians from Arnaldo Milian Castro Hospital.

STUDENT PARTICIPANTS

Allan Barraza
Kellen Creech
Azhar Ghumra
Tahreem Hashmi
Snigdha Ila
Yara Khalifa
Jillian Leibowitz
Patrick Mansell
Brittany Milo
Jyoti Nair
Karla Objio
Chamine Robince
Christy Sanchez
Noareen Sheikh
McKenna Tierney
Shannon Varughese

(continued from page 27)

Additionally, the students had a private tour of three separate microbiology departments. They saw how and where all the lab exams take place, as well as what the microbes look like upon testing. On their final day, they scrubbed in with plastic surgeons on two burn cases and observed a skin graft procedure.

OPHTHALMOLOGY EXPERIENCE

Another KPCOM student worked with a Cuban ophthalmologist, assisting with patient examinations in the cataract, glaucoma, and retina specialties. By the end of the week, she was well versed in using a funduscope and a slit lamp in order to make accurate diagnostic conclusions alongside the physician.

She also scrubbed in on two pterygium surgeries. During the surgeries, four conjunctival transplants took place, with the surgeon dictating what she was doing in both Spanish and English. This was an incredible case because, although pterygium is common in tropical countries, it is rarely found in the United States. On other clinic days, the student worked alongside fifth-year Cuban medical students to evaluate emergency patients. Together, they created a working diagnosis to present to the attending physician.

Wallace, the KPCOM's dean, facilitated a group discussion every evening before dinner that provided an opportunity for the students to discuss that day's medical encounters. This gave the group members the ability to learn from each specialty and have a well-rounded educational experience.

Students in Cuba embark on their medical school education directly after graduating high school. It is a six-year program where students begin seeing patients in their first year. The first two years are spent covering the basic sciences, while the successive four years are divided by specialty, and the students learn via lecture and clinical rotations simultaneously.

EMBRACED CULTURE

Aside from the medical experiences, the students indulged in the culture and daily life of the Cuban people. Local motor taxis, which are small motorcycles with large carriages attached to accommodate four to eight people, provided transportation around the city. Interestingly, motor taxis, horses, and bicycles are the predominant methods of transportation in Cuba.

The Cuban students also displayed their hospitality to the KPCOM participants by accompanying them around Santa Clara and introducing them to Cuban food and different styles of dance, as well the country's history.

While conditions in the Cuban hospitals were not what we are used to in the United States, the students were in awe at how resourceful the Cuban physicians were. They found that the Cuban doctors wrote prescriptions for medications that were often difficult to obtain in their country. Therefore, the doctors frequently supplemented the prescription with a detailed natural remedy that was easily accessible, such as chamomile.

Although this was the inaugural collaboration between an American and Cuban medical school, it became apparent that it would not be the last. The bonds that were made, and the knowledge that was shared between the doctors and the students, were truly one of a kind. □

Brittany Milo, Jillian Leibowitz, and Allan Barraza are second-year KPCOM students.

Caribbean Care

Medical Outreach in Jamaica Assists Thousands

BY PAULA ANDERSON-WORTS, D.O., M.P.H.

Nineteen years and more than 80,000 patient encounters later, the Nova Southeastern University Dr. Kiran C. Patel College of Osteopathic Medicine (NSU-KPCOM) Jamaica medical outreach trips continue to service people in need in Kingston and St. Mary, Jamaica. The June 2019 trip offered health professionals and students a vital multidisciplinary opportunity to provide health care to a severely underserved population.

The 119-member team, which handled more than 3,000 patient encounters, consisted of various NSU Health Professions Division faculty members and students from a range of programs, including osteopathic, allopathic, and dental medicine; nursing; occupational and physical therapy; optometry; and pharmacy. For the various health professions students who participated, the experience grants them the opportunity to work collaboratively and gain confidence and skills as they serve people in need.

The tropical sunshine, lush green mountains, blue seas, and beautiful beaches can captivate visitors. For many of the medical students who participated in the trip, however, the experience was memorable for other reasons as well.

"We met many families that were poor, but rich in their spirit and faith. We learned so much and helped so many," said class of 2022 KPCOM student Sri Moturu. "It was the greatest reminder of why I wanted to become a doctor in the first place. I was able to apply the medical knowledge I learned during my first year and collaborate with other health care professionals and peers to treat patients. It also allowed me to see the importance of interprofessional teamwork within the health care profession, and how patients will have better outcomes because of it."

According to second-year KPCOM student Brittany McCord, "The Jamaica trip was such an unforgettable experience. I was a little nervous at first about examining patients without an attending physician looking over my shoulder, but after a few days, I really became comfortable diagnosing and treating patients. I saw various medical conditions and learned how to provide medical care in a resource-limited setting," she explained.

Additionally, McCord appreciated the opportunity to utilize her osteopathic manipulative treatment (OMT) skills and diagnostic talents in an environment where they were so desperately needed. "It was an incredible feeling to immediately alleviate my patient's pain through the use of OMT," she added. "I was also able to counsel and educate my patients on their medical conditions, lifestyle modifications, and medications to improve their health status. It was very rewarding to use what I have been taught in my didactic year and apply it to a unique patient-care setting."

One of the most rewarding aspects of the Jamaica Medical Outreach Program is that it positively impacts the people served, while also enhancing the education of the students providing the service. It is a win-win situation for everyone involved. □

Paula Anderson-Worts is the assistant dean of faculty and alumni affairs.

The interprofessional medical outreach team consisted of faculty members and students from a range of programs, including osteopathic and allopathic medicine, dental medicine, nursing, occupational therapy, optometry, pharmacy, and physical therapy.

"One of my biggest takeaways from the trip is that the little things can be just as important and life changing to people as the big things. It was amazing to make a patient's day by doing a simple ear lavage and having them be able to hear again, or to perform OMT for 30 minutes and see a patient move without pain again. I feel I definitely received more than I gave by participating in this medical outreach trip."

—Ryan Petit, KPCOM class of 2022

Above: Paula Anderson-Worts (green scrubs) examines a pediatric patient with the assistance of several students.

Left: Sheilin Hamid assists a woman in a wheelchair.

First-year students (left to right) Gary Chen, Nazli Morel, Minh N. Van, Dhruti Hirani, and John Major are excited to be inaugural KPCOM class members at the Tampa Bay Regional Campus.

KPCOM Hosts Inaugural Dual-Campus White Coat Ceremonies

The coats were pressed, the cameras were charged, and the wait was over as the Nova Southeastern University Dr. Kiran C. Patel College of Osteopathic Medicine (NSU-KPCOM) hosted two white coat ceremonies in August for the class of 2023 at its Fort Lauderdale/Davie and Tampa Bay Regional campuses. The annual ceremony serves as a symbolic step into the medical profession as the students receive their white coats and recite the Osteopathic Oath.

"Walking up that stage as we heard our names called one by one and receiving our white coats symbolized a lifelong period of hard work and dedication toward one goal," said Joel Davis, a first-year, Tampa Bay Regional Campus student who serves as class president. "One student described her favorite moment as 'the look on my family's faces after I received my coat and going out of the room to meet them before the oath.'"

On August 10, the Fort Lauderdale/Davie Campus welcomed approximately 230 students to the class of 2023 at the KPCOM's 39th annual White Coat Ceremony. The Tampa Bay Regional Campus received its inaugural class of about 150 students at the new, 311,000-square-foot educational complex on August 17. The new campus will meet the growing demands for health care professionals, further establishing NSU's commitment to higher education and the local community.

"As the inaugural class, we know we have the opportunity to forge the path for ourselves and for the students that succeed us," Davis said. "We have the unique opportunity to mold the campus from the inside out. We're ecstatic to have each other as classmates and are confident that we will be able to tackle any challenges when we work together as a cohesive unit."

Because the college now has sites at two NSU campuses, the KPCOM continues to rise as one of the premier osteopathic colleges in the nation and the largest medical school in Florida based on enrollment statistics. □

> **As the inaugural class, we know we have the opportunity to forge the path for ourselves and for the students that succeed us."**
>
> —JOEL DAVIS

LAUGH. CRY. LIVE

Father/Daughter Cancer Diagnoses Build Resilience

BY EMMA C. HALL

"Not so fast," my dad said to me as he delivered his favorite joke's punch line. We nervously laughed as we sat on a bench in the lobby of Johns Hopkins Hospital. We were there to see my endocrinologist oncologist after my thyroid cancer diagnosis. My dad had also been diagnosed with his own cancer just days before, and his condition was worsening daily.

Little did I know then that hospice would come the next week, and that he would not live more than 30 days after he received his diagnosis. Being a veterinarian, he understood that his condition was serious. Sitting on the lobby bench, however, he also understood that the only medicine we both needed at the time was laughter.

I had recently graduated from college with no background or intention to enter the medical profession. Nevertheless, I was about to get one of the most difficult and life-defining lessons.

The next few weeks were a whirlwind and, quite honestly, I don't remember it all. I do, however, remember my last impressions and conversations with my dad. His demeanor had changed to one of peace and acceptance as he quickly deteriorated. And while I was nervous for him and myself, one last talk made me feel at ease, too.

My dad told me to trust in life and to be strong. I was shocked that, as he was dying, he was actually comforting us. If he was scared, he never showed it. If he was in pain, he never displayed it. Years later, I still have that trust, and I have learned to let my inner strength surprise me. This last conversation showed me the meaning of fortitude and that, even in our weakest days, everyone has an inherent resilience to not only persevere, but thrive through some of life's toughest challenges.

Three weeks later, after he had passed away, I sat in the same hospital wearing a cotton gown as the anesthesiologist reviewed my paperwork for surgery. I still remember the physician's calming voice and words of encouragement after I began crying in the middle of his history and physical. I undoubtedly showed little appreciation then, but have reflected greatly upon it since.

> "Medical school is hard—everyone knows that. But remembering your motivation will lighten the pressing burden."
>
> —EMMA C. HALL

Looking back, I am so thankful he was kind and understanding during one of my more vulnerable times. In class, we are lectured on the osteopathic model of thinking and how to keep the whole patient's body, mind, and spirit in our treatment plans. And while few of us have yet to face a hysterical patient in a pre-op gown, the time is undoubtedly approaching where we will all need to garner the compassion and humility to address what may be some of our worst personal fears.

Now, almost seven years later, I am able to return to these memories to find motivation from the strengths and weaknesses I witnessed on both sides of the

Left: Emma C. Hall, top row, second from left, and some of her KPCOM Sigma Sigma Phi peers take a break from studying to volunteer at the Covenant Living of Florida senior facility in Plantation, Florida.

Below: Hall with her parents Megan Gordon-Hall and John Hall

operating room table. Our purpose as people is to bring a certain joy and comfort to each other throughout life, and it is our unique role as physicians to blend this level of humanity into our everyday practices. While I understand we all have our individual motives, and luckily, not everyone has been the patient in this scenario, I encourage all of my colleagues to use your osteopathic training and to think of yourself as the vulnerable one on the exam table.

How would you want to hear of a cancer diagnosis? How would you speak to yourself after hearing bad news? And, most of all, how are you going to encourage optimism, compassion, and lightheartedness in the face of the death that you will inevitably see?

While I choose not to dwell on the past, I do draw strength from these experiences, as they afford me constant reminders of reasons to have gratitude and humility. Medical school is hard. But remembering your motivation will lighten the pressing burden of grades and test scores. For me, whenever I have a hard day, I am reminded of my dad's joke on the lobby bench, and I quickly change my mentality to keep things in perspective. □

Emma C. Hall is a class of 2022 KPCOM student.

"My dad told me to trust in life and to be strong. I was shocked that, as he was dying, he was actually comforting us. If he was scared, he never showed it. If he was in pain, he never displayed it."

—EMMA C. HALL

Fostering Kittens

Labor of Love Provides Unexpected Joys

BY BRITTNI PEACH

It's 5:00 p.m., and I've returned home after spending most of the day in class during my first year in medical school. I open my apartment door to find my cat, Boogey, trying to nap on the couch while two rambunctious kittens playfully paw him, determined to wake him up for playtime.

Distracted by my entrance, they rush over to happily greet me with loud purrs. Having three cats as a medical student—especially two kittens—may seem like a lot. But, these aren't all my cats. Two of them are my foster kittens, Pepperoni and Sausage.

I learned about fostering kittens during my first year as a KPCOM student. If you're unfamiliar with this concept, let me explain. Kittens must be at least eight weeks old, or weigh two pounds, in order to be adopted. If kittens are brought to the shelter prior to this, they are incredibly vulnerable to infection and are too young to be adopted. So, where do they go for the few weeks until they can be adopted? Foster homes.

Foster homes allow them to develop to the appropriate age and weight in a safe environment while they adjust to

Opposite page and above: S'mores and Graham are two of the adorable kittens Brittni Peach has fostered in the past few years.

Left: While fostering her first litter of kittens, Pepperoni and Sausage, for eight weeks, Peach fell in love with Pepperoni (left) and adopted him four days after returning him to the shelter.

human contact. There is always an abundance of kittens in Florida—and a desperate need for foster homes.

Now that you're familiar with the concept of fostering kittens, you may be thinking, "Great, I love kittens." Or you might be consumed with questions regarding time constraints, costs, and questions such as, "Could I do this?"

First, anyone can learn to foster kittens. If you know how to feed and pet a kitten, you're pretty much golden. Second, you're not alone. There's a huge network of kitten fosterers. Third, let me answer some questions you may have and see if I can convince you that you, too, can be a kitten foster parent.

Most shelters will provide free food, litter, a litter box, and free veterinary care. All you have to do is provide the kittens with a home. If you live in a small apartment, don't worry. I fostered kittens in my tiny, one-bedroom apartment. Kittens require very little space. In fact, when they are young, they should be kept in a small, enclosed area. As they grow, you can give them more space to roam.

I acquired the kittens when they were a little more than three weeks old. They had just started eating wet food, but they were still not very mobile. I kept them in my bathroom for two weeks, which gave them plenty of room to roam. This also provided protection to my adult cat, as introducing the kittens to him immediately could have been quite a shock. Two weeks later, as the kittens became more active—and Boogey had finally gotten used to their scent—I allowed them to roam free in the apartment.

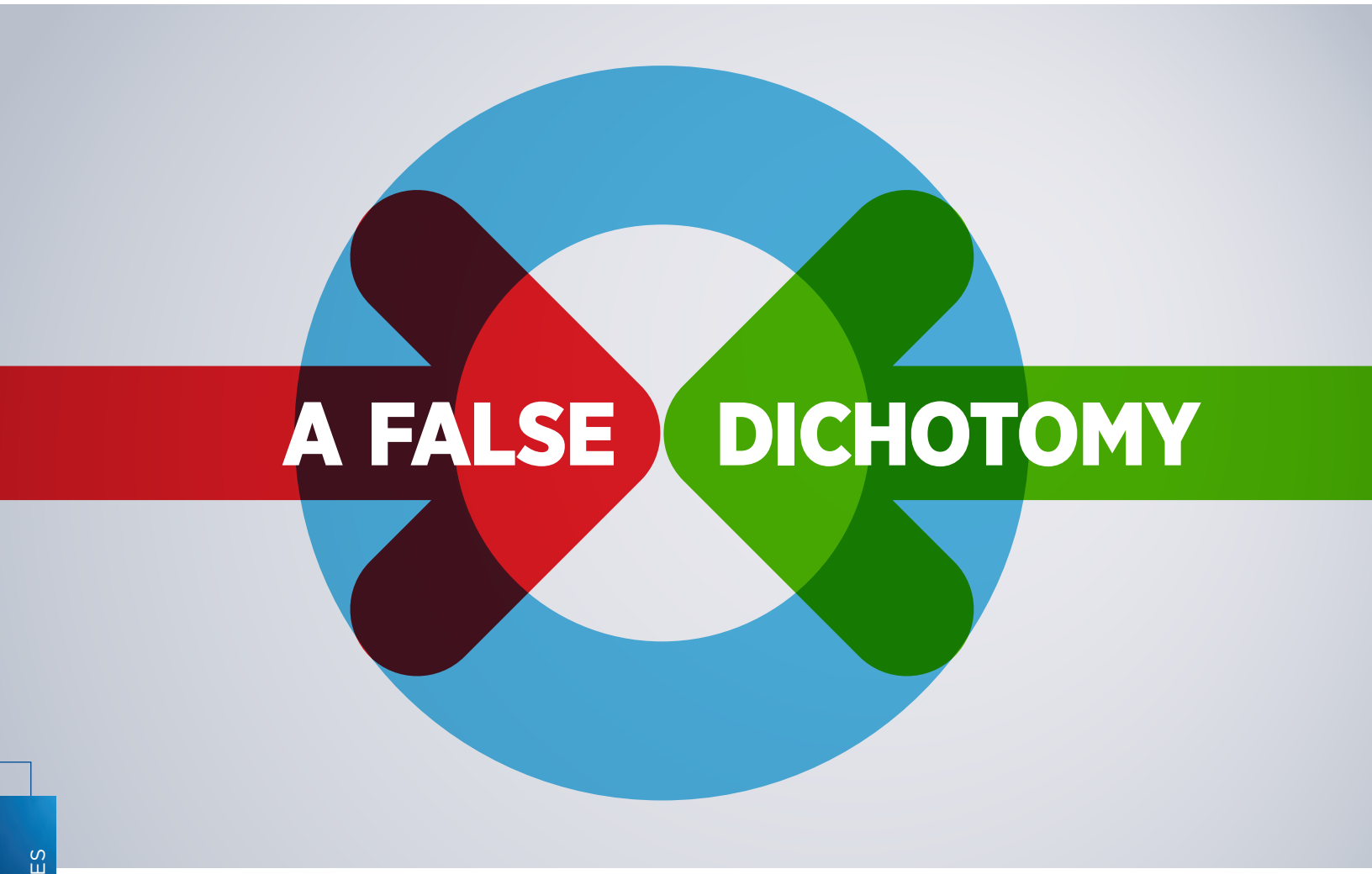
I thought fostering kittens would be difficult while juggling classwork, but they were a blessing and provided welcome relief from the stress of school. Instead of wasting time on social media, I spent my breaks playing with the kittens. My friends even helped by coming over for study sessions at my apartment, so we could socialize with the kittens.

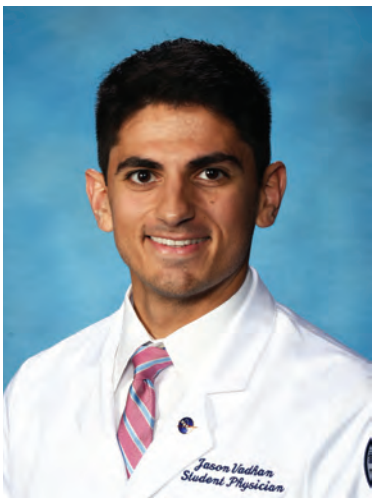
Depending on how young your kittens are, you will likely end up having them for four to eight weeks. Believe me, the weeks will fly by. As a bonus, if you're a medical student, fostering kittens is a great opportunity to earn volunteer hours. If you foster two kittens, you can get up to 26 hours of volunteer time.

After fostering my first litter of kittens for eight weeks, I returned them to the shelter. It was devastating, as I'd grown to love them, but I took comfort in knowing that I'd helped them develop into healthy kittens.

Four days after returning them, I went back and adopted Pepperoni. In the foster world, we call that a "foster fail," but it was a win to me. It truly is a great experience for everyone involved—especially the kittens. □

Brittni Peach is a class of 2020 KPCOM student.





Jason D. Vadhan, Class of 2021

Social Advocacy vs. Basic Science

BY JASON D. VADHAN

On September 12, *The Wall Street Journal* published an op-ed titled "Take Two Aspirin and Call Me by My Pronouns" by Stanley Goldfarb, M.D., a former dean at the Perelman School of Medicine at the University of Pennsylvania, who criticized the integration of social determinants of health care into medical school curricula.

In his editorial, Goldfarb describes these determinates, such as gun violence, the opioid epidemic, and climate change, as nothing more than "tangential" to the current and near-future health care landscape. He also describes such learning objectives as "politicized" curricula that serve little purpose, taking time and resources away from the basics of medical education.

Goldfarb takes his argument one step further, arguing that teaching social components of health care competes for time spent learning basic scientific knowledge. This, he concludes, will result in fewer, less-competent medical specialists in fields of short supply, such as oncology, cardiology, and surgery.

NO NEED TO CHOOSE

I disagree. First, the contention that social issues should not be addressed in medical school lecture halls, and second, the notion that teaching social issues distracts from developing technically skilled, basic science-oriented physicians. Several responses to the editorial—including from current students as well as alumni of the Perelman School of Medicine—criticize the first claim. Therefore, I will focus on the latter.

Goldfarb claims that a student-physician cannot invest time learning social factors that influence health care while also mastering the basic sciences, implying that learning one comes at the cost of understanding the other. Of note, the *Journal of the American Medical Association* conducted a social media survey after the op-ed was published asking if the statement "medical schools should produce physician-scientists, not physician social justice activists," bears any merit. More than 16,000 people voted, and nearly 70 percent disagreed.

I believe we are asking the wrong question. Advocacy and understanding the basic sciences are not mutually exclusive, and such a proposal introduces a false dichotomy. In other words, students should not feel pressured to choose social or basic sciences, because they are inherently and intimately related.

> "If medicine forgets that patients are people, it loses its humanity."
>
> —JASON D. VADHAN

> "Students should not feel pressured to choose social or basic sciences because they are inherently and intimately related."
>
> —JASON D. VADHAN

EACH SUPPORTS THE OTHER

The constructive and longstanding decisions we, as a society, make on social issues rely heavily on thorough, peer-review-supported research. Without the basic sciences and research, there is no scientific foundation for advocacy and policy, and without the corresponding legislation, there is no funding for research that enables us to understand the sciences altogether. Therefore, this begs the question: How could we ignore this pillar of medical care for our patients?

If, as Goldfarb suggests, the time spent learning about social issues did take away from medical students' basic science knowledge, then how does one explain the continuous rise in national board exam scores in recent years, both in basic scientific knowledge and in clinical skill?

In response to recent criticisms, *The Wall Street Journal* editorial board doubled down, claiming, "Patients want an accurate diagnosis, not a lecture on social justice or climate change." This reasoning, however, reduces the patient to a body rather than a person, and if medicine forgets that patients are people, it loses its humanity. □

Jason D. Vadhan is a class of 2021 student.

Caring for a Vulnerable Population

KPCOM RECEIVES $3.5-MILLION GERIATRICS GRANT

Thanks to the efforts of Naushira Pandya, M.D., CMD, FACP, professor and chair of the Department of Geriatrics and project director of the college's South Florida Coastal Geriatric Workforce Enhancement Program, Nova Southeastern University's (NSU's) Dr. Kiran C. Patel College of Osteopathic Medicine received a $3.5-million federal grant to fund a Geriatrics Workforce Enhancement Program (GWEP.) The national GWEP initiative was created to help establish a health care workforce that maximizes patient and family engagement and integrates geriatrics and primary care.

"This program is designed to educate and train the primary care and geriatrics workforce to attend to older adults using an integrated care model," Pandya said. "At NSU, interprofessional collaboration is in our DNA, so this grant will allow us to bring that approach to the area of geriatrics."

According to U.S. Census data, the nation's population age 65 and older is expected to nearly double over the next 3 decades, jumping from 48 million to 88 million by 2050. With that in mind, it's clear that providing for the health care needs of older adults is going to play a prominent role in the nation's future.

Pandya said there is a shortage in trained geriatricians and primary care health providers, as well as other health professionals, who possess adequate training in geriatrics to fill the complex health care needs of older adults. NSU project partners include the Charles E. Schmidt College of Medicine at Florida Atlantic University, graduate medical education programs and primary care sites, and multiple community organizations.

"We want to create a collaborative model where we provide training to those who will be on the frontlines working with older adults," Pandya said. "We want to ensure that all providers have the knowledge, skills, and attitudes to provide whole-person geriatric care for older patients by fostering integration of age-friendly health care principles and practices into clinical sites with increasing community engagement."

The grant, which began on July 1 and is expected to run through June 30, 2024, is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of an award of up to $3.5 million financed from governmental sources. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement by, HRSA, HHS, or the U.S. Government. □

I am confident that promoting the transformation of primary care practices to position them for value-based care and alternative payment models will lead to improved health outcomes for older adults."

—NAUSHIRA PANDYA

Alumni in the News

Peggy M. Benzing, D.O. ('87), opened a new practice called Liberate Physicians of Venice—a medical marijuana consultation office in Venice, Florida. The practice provides detailed consultations and follow-up for patients who can benefit from using medical marijuana. It also helps patients navigate the complicated Medical Marijuana Use Registry and counsels them regarding safe and effective use.

Hara Rosen Berger, D.O. ('11), who completed her internal medicine residency at Mount Sinai Medical Center in Miami Beach and her endocrinology fellowship at the University of Miami, joined Women's Health Partners in Boca Raton, Florida. She will be practicing general endocrinology, with a special emphasis on women's reproductive endocrine issues and thyroid disorders.

Carisa Champion, D.O., J.D., M.P.H. ('16), was appointed as the resident adviser to the American Osteopathic Association Board of Trustees. Additionally, she has been working with the Florida Osteopathic Medical Association (FOMA) to attract residents to serve on FOMA committees.

Emily Chang, D.O. ('03), joined the medical team at the Cass Country Health System in Atlantic, Iowa, in November. Chang, an OB/GYN who completed her residency training at Mercy Hospital and Medical Center in Chicago, Illinois, cares for patients at Atlantic Medical Center and Cass County Memorial Hospital.

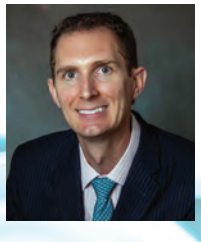
Joanna Drowos, D.O., M.B.A., M.P.H. ('04), was named associate dean for faculty affairs at Florida Atlantic University's Charles E. Schmidt College of Medicine in Boca Raton, Florida, but will also continue to serve as associate chair of the college's Department of Integrated Medical Science.

Ryan Garbalosa, D.O., FACC ('09), was named the Best Cardiologist for 2019 in the inaugural Best of Clarendon awards hosted by *The Sumter Item*, recognizing professionals in Clarendon County, South Carolina. He was also honored as one of the Top 20 Under 40 young professionals in the Sumter-Clarendon-Lee tricounty area. Garbalosa is the medical director of the cardiac rehabilitation and echocardiography departments at McLeod Clarendon Hospital and serves on the Prisma Health Tuomey Hospital Medical Executive Committee.

Michael W. Gray, D.O., FACOS ('88), director of surgery at the Michigan Cosmetic Surgery Center, was named associate clinical professor of surgery at Central Michigan University's College of Medicine. Additionally, Gray recently developed a new surgical technique for abdominoplasty—also known as a tummy tuck, called the Hourglass Tummy Tuck.

Jeffrey S. Grove, D.O., FACOFP ('90), was chosen as a Notable 2019 LGBTQ Executive by *Crain's Chicago Business*. The American Osteopathic Foundation nominated Grove, who is a past president of the Florida Osteopathic Medical Association.

Marlow B. Hernandez, D.O., M.P.H., M.B.A., FACP ('11), was featured in the *Inc.* newsletter in the article "This Doctor Grew 1 Clinic into a Network All Across Florida. Now He Wants to Go Nationwide." The article focuses on Hernandez's successful launch of the primary care network Cano Health, which now consists of 36 clinics throughout Florida.



Shawn Iverson, D.O. ('11), joined Bentz Eye Center in West Palm Beach, Florida, in July as a cornea transplant, cataract, and refractive surgeon. Iverson is one of the few ophthalmologists in South Florida able to perform the ultra-thin, partial thickness cornea transplant known as descemet membrane endothelial keratoplasty.

Daniel F. Leiva, D.O., M.S., ('16), an emergency medicine and wilderness and research fellow at Baystate Medical Center in Springfield, Massachusetts, received a National Heart, Lung, and Blood Institute T32 research training grant. The funding will allow Leiva to derive and validate a simple model, based on readily available patient characteristics and resuscitation process variables independent of patient-specific comorbidities, to predict hospital outcome probabilities for geriatric out-of-hospital cardiac arrest event survivors.

Miguel Loya, D.O. ('10), is serving a two-year term as chief of staff for the Santa Ynez Cottage Hospital in Solvang, California.

Katarina Lindley, D.O., FACOFP ('04), was invited to the White House in Washington, D.C., on June 24 to witness President Donald Trump sign an executive order to improve price and quality transparency in health care. Lindley was invited based on her involvement with the DPC (Direct Primary Care) Action Board of Directors. DPC Action is a nonprofit organization dedicated to promoting and advocating for improved access to affordable health care through independent direct primary care practices.

Alumni in the News

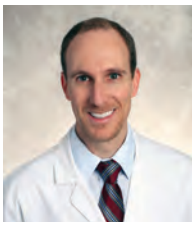
Christopher Mancuso, D.O., M.H.S. ('19), a first-year resident at St. John's Episcopal Hospital in Far Rockaway, New York, had his coauthored article "Smartphones: Dermatologic Impact of the Digital Age" accepted for publication in an upcoming issue of *Cutis*.

Cailin McDeed, D.O. ('16), joined the physician team at Mansfield Health Center in Mansfield, Massachusetts. McDeed, who is board certified in family medicine, enjoys all aspects of primary care and believes in taking a holistic approach when caring for her patients.

Alan Nguyen, D.O. ('18), was selected to serve on the advisory board of the Society for Neurosports, a nonprofit academic society that aims to connect researchers and professionals across academic disciplines who are interested in brain and exercise/sport relationships.

Rebecca Piotrowski, D.O. ('04), a lieutenant colonel in the U.S. Air Force, is the new chief of medicine at Venice Regional Bayfront Health in Venice, Florida. She is also 1 of the 3 founding partners of Island Hospitalist Group, which employs 10 physicians, 10 mid-levels, and 2 administrators. In her current role with the Air Force Reserves, Piotrowski is transitioning into a position to become a trained flight medicine physician.

Robert Savarese, D.O. ('99), published his fourth edition of *OMT Review*. The first edition was released 20 years ago and became the best-selling osteopathic board review book in the United States. The latest edition includes 350-plus online questions for medical students. He also established the largest question bank in osteopathic medicine, with 5,000+ questions covering not just osteopathic manipulative medicine, but all subjects on the first 2 steps of the COMLEX exam.



Brett Scotch, D.O., FAOCO ('99), was included in the *Tampa Bay METRO*'s 2019 Best Doctors List for Surgery and the annual Top Doctor List for Otolaryngology by *Tampa Magazine*.

Wayne Simmons, D.O. ('18), a first-year anesthesiology resident at Oak Hill Hospital in Brooksville, Florida, had his coauthored, peer-reviewed manuscript "Operating Room Emergency Manuals Improve Patient Safety: A Systematic Review," published in the *Cureus Journal of Medical Science*. The review is being translated into Chinese for publication on a prominent anesthesiology website.

Tony L. Weaver, D.O. ('11), was appointed as the new physician-in-practice adviser to the American Osteopathic Association Board of Trustees. Additionally, he presented a lecture on "Breast Reconstruction" as an invited speaker at the Alabama Osteopathic Association's 28th annual Emerald Coast Conference held July 13–17.

Michael C. Weiss, D.O., FAOAO ('86), is the new chief of surgical operations at SpineOne in Lone Tree, Colorado. Weiss, the former chair of the department of surgery at Laser Spine Institute, is board certified in orthopedic surgery and fellowship trained in spine surgery. □

If you have a compelling story about your life or career that you would like to share with the readers of *COM Outlook*, please contact Scott Colton at *scottc@nova.edu*.

In Memoriam

John D. Geake, Jr., D.O. ('93), passed away on June 7 at the age of 72. After graduating from NSU-KPCOM, Geake did his internship and residency training at Wilson Memorial Hospital in Johnson City, New York, before becoming medical director of the Hendry Family Care Center and Hendry Regional Corporate Health in Clewiston, Florida.

On October 25, 1997, Geake and his wife, Ellen, were involved in a serious motorcycle accident. Ellen wasn't severely injured, but her husband became a permanent paraplegic, enduring 14 arduous months of rehabilitation.

Geake, who was a past president of the NSU-KPCOM Alumni Association, overcame life's most difficult challenges without ever losing his intrinsic sense of humor. He also became a vocal advocate for the disabled community in the years after his accident.

Pictured above: In 2010, John Geake received an NSU Distinguished Alumni Achievement Award—the highest honor NSU bestows upon its alumni. The award was presented to Geake by Anthony J. Silvagni, D.O., Pharm.D., M.S., FACOFP dist., FCPP, dean emeritus of the Dr. Kiran C. Patel College of Osteopathic Medicine.

ALUMNI Spotlight

Work hard, follow your passion, always strive for more, say yes to things no matter how crazy they may seem, and dream big."

—JOANNA DROWOS

Finding Your Bliss

Joanna Drowos Finds Fulfillment in Personal, Professional Pursuits

BY SCOTT COLTON, B.A., APR

The life philosophy 2004 alumna Joanna Drowos, D.O., M.P.H., M.B.A., FACOFP, espouses is one that has served her well both personally and professionally.

As a child growing up in in a suburb of Toronto, Canada, Drowos was intuitively drawn to a medical career. "I always knew I would become a physician, because I have always had a love of learning, science, and taking care of others," said Drowos, who is the associate dean for faculty affairs at Florida Atlantic University's Charles E. Schmidt College of Medicine in Boca Raton, Florida.

Because her father was an attorney and her mother was an occupational therapist who took her young daughter on home visits when she cared for her patients, Drowos was surrounded by hard-working professionals who were dedicated to helping others and making a difference. "While I was always internally motivated, my parents encouraged me to work hard in school," she said. "They also gave me the freedom and confidence to pursue any career I wanted."

Another major influence was her dad's younger sister, Ellen, who is a renowned physician in Canada. "She has always been a role model to me," Drowos said. "I remember staying with her as a teenager when she was doing her fellowship in reproductive endocrinology. I watched her gracefully handle patients dealing with very personal and emotional medical issues, which was very inspiring."

Osteopathic Option Proves Appealing

When the time came for Drowos to launch her college career, her family had long since relocated to South Florida, which offered a number of attractive educational opportunities. After earning her Bachelor of Science in Biology and Chemistry/English in 1999 from the University of Miami, Drowos turned her attention to medical school.

Her decision to study at NSU-KPCOM was based on several important factors. "Once I learned about osteopathic medicine and its philosophy, I knew that this was the kind of physician I wanted to become. NSU was appealing, because it allowed me to stay lose to home," she explained.

"In fact, I was able to live at home during medical school, so I had the benefits of home-cooked meals and fewer student loans. NSU also taught me that additional effort leads to additional opportunity," she added. "I was a predoctoral osteopathic principles and practice (OPP) fellow, so I had the opportunity to teach, conduct research, and improve my skills in osteopathic manipulation."

Benchmarking Achievements

In addition to spending an extra year at the college doing the predoctoral fellowship, Drowos engaged in numerous academic and extracurricular activities that endeared her to her fellow students, as well as to the

Top, from left: Drowos poses with John Kelly, Ph.D., FAU president; Phillip M. Boiselle, M.D., dean of FAU's Charles E. Schmidt College of Medicine; and her husband, Bryan.

Above: A future physician ponders her career path.

Opposite page: Drowos and her family visit the Great Wall of China during one of their global adventures. Drowos was in China to teach family medicine through her affiliation with the International Primary Care Educational Alliance.

college's faculty members and administration. In 2003, she earned the KPCOM's Student D.O. of the Year Award—an accolade bestowed on her by her student peers. But that was only the beginning of her award-winning success.

During her KPCOM career, Drowos also earned her M.P.H. degree and received numerous other NSU-specific honors, including the Kenneth Burnell Student Research Award, the Chancellor's Award for Outstanding Public Health Student, and the Government and Public Policy Award. Additionally, she was the proud recipient of the Florida Medical Association's Sanford Mullen Award for Outstanding Community Service. "All of these opportunities have been integral in getting me where I am today," Drowos said."

After graduating from the KPCOM in 2004, Drowos pursued an active postgraduate life that included a one-year, pediatrics-based internship at Palms West Hospital in Loxahatchee, Florida, followed by an additional year in the Palm Beach County Health Department/NSU-KPCOM Preventive Medicine Residency Program.

The ever-ambitious Drowos, who completed her family medicine residency at Broward Health Medical Center in Fort Lauderdale, Florida, also found the fortitude to earn an M.B.A. in health care administration from Florida Atlantic University (FAU) while doing her residency training.

Armed with three degrees and a penchant for making people's lives better, Drowos accepted a position as medical director of the Riviera Beach Health Center, which is part of the network of clinics run by the Palm Beach County Health Department. "I oversaw the clinic operations, cared for our county's vulnerable patients, and assisted with the clinical care through the county's infectious disease programs," she explained. "I was also involved as a faculty member in the county's preventive medicine residency program, which is affiliated with NSU. And I maintain my involvement and teaching role to this day."

Career Course Change

Although she enjoyed her role as medical director of the Riviera Beach Health Center, Drowos's life was moving in a familial direction, which led her to reevaluate her professional future. Married since 2004 to her husband, Bryan, who is the founding member of Drowos Wealth Management Group at Wells Fargo Advisors, the Drowos family was

expanding with the births of Lila and Jackson, who are ages nine and seven, respectively.

"After having my children, I looked for a career that would allow me to continue to advance, while affording me the flexibility to be present in their lives," explained Drowos, who accepted a faculty position at FAU's Charles E. Schmidt College of Medicine in 2011, before the inaugural class began. "Academics can be difficult, because your work is never really done; however, I have the flexibility and autonomy to decide when and how I accomplish tasks," she said.

Like most academic administrators, Drowos wears many professional hats, serving as associate dean for faculty affairs, associate chair of the Department of Integrated Medical Science, associate professor of family medicine, and clerkship director for the college's community and preventive medicine clerkship. "I am very proud of what I've been able to accomplish in such a relatively short time. It has been both a lot of work and a lot of fun," she said.

"I am proud of our college, our curriculum, and our students. We are a small college, with 64 students per class and a small faculty, so it often feels as if we are a family," she added. "Every day is different. I am always learning new skills, and I often have the opportunity to be innovative in how I approach problem-solving with students and faculty members."

Living Her Best Life

Drowos also enjoys indulging her passion for Broadway, thanks to her friendship with 1990 KPCOM alumni Jeffrey S. Grove, D.O., FACOFP, and Michael Jackowitz, D.O., CPT, who are partners in a Broadway company called Witzend Productions. "I am a huge Broadway lover, and my friendships with Michael and Jeffrey have brought me opportunities to produce and invest in Broadway shows," she explained.

"My love of theater started when I was a kid and my grandmother took me to shows. I appreciate the art, storytelling, and connection to the performance that happens with live theater," she added. "I never knew there were opportunities for people like me to be a part of the theater community. However, by making friends and asking to be involved, it is possible to be part of a show that makes it to the Tony Awards—and even wins one."

Although she has worked hard to attain professional success, Drowos says her accomplishments pale in comparison to how proud she is of her family. "My husband is a passionate, successful professional in his own right, all while being incredibly charitable and a leader in our community," she said. "We support one another, celebrate each other's achievements, and succeed together. I am also proud of the way we are raising our children to be good people. They are smart, confident, happy, and kind and will do great things with their lives."

Drowos is clearly living her best life, which is something she gratefully acknowledges. "I never dreamed I would have the opportunities I have to travel the world because of my career, to help build a medical school that shapes future doctors, to give back through community service, to meet so many extraordinary people, and to be a part of the Broadway community," she admitted. "I'm also grateful to my NSU professors and colleagues who helped me become who I am today. I'm truly blessed." □

Calm Amidst Chaos

GREGORY SEMON SAVES LIVES OF MASS-SHOOTING VICTIMS

BY SCOTT COLTON, B.A., APR

What began as a typical shift for Gregory Semon, D.O., FACS, FACOS ('08), a trauma surgeon at Miami Valley Hospital in Dayton, Ohio, quickly escalated into crisis mode in the wake of a bloody mass shooting that occurred during the early-morning hours of August 4, 2019, in the nearby Oregon District of Dayton.

The incident, which injured many and claimed nine innocent lives, would thrust Semon and the Level 1 trauma team he leads into the national spotlight—and result in a visit from the President and First Lady of the United States.

"Our first notification of the mass shooting actually came from one of our surgical residents, who was enjoying a night out with her husband at one of the Oregon District bars. She told us she had heard multiple gunshots being fired. She said people were down on the ground and that everyone was evacuating the area," Semon recalled.

"We were all stunned," he added. "Shortly thereafter, we received notification from Dayton paramedics that they would be bringing multiple victims to our trauma center, located less than a mile from the site of the shootings."

Mobilizing the Trauma Team

Within minutes, 23 frightened victims were brought to the trauma center. Most had sustained gunshot wounds, while others were dealing with injuries suffered after being trampled by those fleeing the scene. Many victims suffered gunshot wounds to the extremities, while others were shot in the torso and head.

"In a mass-casualty event such as this, we had to rapidly identify the most injured patients and provide them with the care they needed," Semon said of the chaotic scene. "Some required emergency surgery, while others needed ongoing care in our intensive care unit. Those who suffered minor injuries were assessed and discharged pretty quickly."

In what turned out to be the most favorable outcome possible, all the victims brought to Miami Valley Hospital survived their injuries thanks to the expert care provided by Semon and his top-notch trauma team. "One of the things I really enjoy about the trauma field is that it is truly a team sport. Any time a trauma alert arrives, we assemble a multidisciplinary team to care for the patients," Semon explained. "As the trauma surgeon, I get to lead a team comprising surgery and emergency medicine residents, medical students, nurses, respiratory therapists, and X-ray technologists to perform life-saving interventions."

Once the patients admitted to the hospital were stabilized, Semon stepped away from his clinical responsibilities to assume his role as trauma liaison to the hospital's Emergency Preparedness Committee. Initially, he was asked to provide a briefing from the hospital's conference room for the local news programs. As news of the tragedy began to go national, however, a citywide press briefing was organized at the incident command center in downtown Dayton.

"I was very proud to stand next to Dayton Mayor Nan Whaley, who updated the press on the incident. I then provided updates on the kinds of injuries we had seen and the care we provided," Semon said. "I soon learned I had just appeared on several national news networks. Fortunately, I have had experience giving interviews to local news outlets several times, but this was certainly on a whole different level. I felt proud to represent our trauma center and give some voice to the victims of this tragedy."

Debriefing Dignitaries

A day later, Semon learned that a number of dignitaries—including President Donald Trump and First Lady Melania Trump—would be visiting the hospital within 48 hours to meet with the victims and interact with the medical team. "I was excited and somewhat nervous about meeting the President, but I felt it was important that he hear from those of us on the front line who care for mass-shooting victims," he explained. "I was able to talk to both the President and the First Lady about my experiences

Semon provides a televised update on the status of the victims and the extent of their injuries.

and my strong beliefs that gun control is a public health problem that requires legislation at the federal level."

Although Semon and his trauma team had never dealt with a mass-casualty crisis of this scale before, they were expertly prepared because of the detailed training they had received. "Preparation is key," he stressed. "We hold both a hospital and a community-wide disaster simulation every year and expect everyone to participate as though it is a real event."

These types of mock drills serve a vital purpose, especially in actual situations where saving a life can come down to a split-second decision. "We are seeing mass-casualty events like these happening more frequently," Semon said. "Everyone who works in health care—no matter what your role—can play a part in preparing for an incident like this. Mass casualties affect everyone from the emergency room to the people in the hospital kitchen."

Taking Time to Reflect

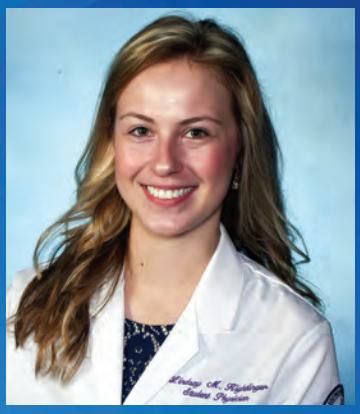
It's been almost 12 years since Semon graduated from Nova Southeastern University's (NSU's) Dr. Kiran C. Patel College of Osteopathic Medicine (KPCOM); however, his admiration for his alma mater burns brightly. "I really have to thank my mentors at NSU-KPCOM and the Broward Health Medical Center who got me interested in trauma surgery early in my medical school years," he explained. "The work is hard, the hours can be long, and the job sometimes thankless. But being able to see how our team came together to care for so many people in a horrific situation like this makes me so proud of my profession." □

The new Sigma Xi chapter at Nova Southeastern University will connect faculty members and students with research opportunities.

KPCOM Students Named as Officers of NSU Sigma Xi Chapter

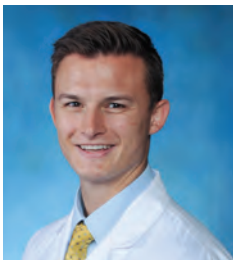
First-year student Avidor Gerstenfeld was elected vice president of NSU's new Sigma Xi Scientific Research Honor Society chapter, while second-year student Allan Barraza was elected student representative. The NSU Sigma Xi chapter, which was installed on September 19, has a three-year plan that includes developing skills students can use to obtain research opportunities and funding, as well as facilitating opportunities for professional development.

Sigma Xi is the world's largest multidisciplinary honor society for scientists and engineers. Its mission is to enhance the health of the research enterprise, foster integrity in science and engineering, and promote the public understanding of science for the purpose of improving the human condition. Sigma Xi chapters can be found at colleges and universities, government laboratories, and industry research centers around the world. More than 200 Nobel Prize winners have been members. □



In Memoriam

Lindsay M. Kightlinger, who had recently completed her first-year as a KPCOM student, passed away on August 22 at the age of 25. According to her obituary, "Lindsay was a free spirit who lived life to the fullest. She always thought of others before herself and had a smile that lit up a room."


Vincent DeMario


Phyllis Filker


Christopher Larrimore


Elizabeth Oviawe


Karan Thakkar

Vincent DeMario

First-year student Vincent DeMario, M.H.S., received the AABB Research Innovation in Scientific Excellence Award at the organization's annual meeting held October 19–22 in San Antonio, Texas, for his first-authored article "Blood Utilization and Mortality for Victims of Gun Violence." He also received the Patient Safety Award at the American Society of Anesthesiologists' annual meeting held October 19–23 in Orlando, Florida, for his coauthored abstract "Health System-Wide Best Practice Advisories Increase Transfusion Guideline Compliance."

Phyllis Filker

Phyllis Filker, D.M.D., M.P.H., who serves as associate dean of undergraduate, graduate, and community education, was named KPCOM Professor of the Year during the NSU 18th annual Faculty Reception held October 3 at the Alvin Sherman Library, Research, and Information Technology Center. The Professor of the Year honor recognizes significant contributions to research, scholarship, and exceptional instruction. Filker provided guidance for the expansion of the college's master's degree programs and was the driving force behind the development of three bachelor's degrees, one postbaccalaureate program, and the acquisition of two grants. She also assisted with the development of both the AIM-High and AIM-Higher camps.

Christopher Larrimore

Christopher Larrimore, M.Sc., class of 2020, received a $5,000 national Blue Ribbon Fellowship to continue work on his research study related to investigating the possible association between the folate pathway via the MTHFR gene and myalgic encephalomyelitis/chronic fatigue syndrome symptoms. The fellowship allows Larrimore to pursue his analysis of the data generated from the national clinical study he designed and completed during his KPCOM predoctoral research fellowship.

Elizabeth Oviawe

Elizabeth Oviawe, Ph.D., Ed.S., M.S.B.I., M.M.I.S., M.Sc., director of the Division of Institutional Technology, received a 2019 American Association of Colleges of Osteopathic Medicine (AACOM) osteopathic institutional research grant in July for her project "Development of an Advanced 3-D Immersive Simulation-Based Application for Enhanced Interprofessional Core Competency and Patient-Centered Care." The AACOM Research Grant Program supports research in osteopathic medical education by providing topic-specific medical education and institutional study grants to qualified applicants from the 35 accredited colleges of osteopathic medicine in the United States.

Karan Thakkar

Fourth-year student Karan Thakkar, M.P.H., received third-place honors in the Illinois College of Emergency Physicians Podcast Competition for his project "The Algo-Rhythm Series: Routine Wound Management and Tetanus Prophylaxis." □

Excellence Honored at Dean's Awards

On June 27, four distinguished faculty and staff members were honored with the annual Dean's Awards, which are selected by Elaine M. Wallace, D.O., M.S.[4], dean of the KPCOM. Hilda M. De Gaetano, D.O., M.S., FACOP, FAAP, senior assistant dean of preclinical education, was named Faculty Member/Administrator of the Year, while Melissa Chamberlain, M.B.A., director of graduate admissions, and Manelle St. Hilaire, M.P.H., director of preclinical education at the Tampa Bay Regional Campus, received the Director/Manager of the Year accolade. Evelyn Martinez, medical outreach program coordinator, was named Coordinator/Staff Member of the Year. □

Clockwise from top left: Melissa Chamberlain, Hilda M. De Gaetano, Manelle St. Hilaire, and Evelyn Martinez.

Third Bachelor's Degree Program Launched

- **Bachelor of Science in Public Health**
- **Bachelor of Science in Human Nutrition**
- **Bachelor of Science in Health and Wellness Coaching**

NEW

NSU-KPCOM received approval to launch its third bachelor's degree program—a Bachelor of Science in Health and Wellness Coaching (HAWC) in partnership with NSU's College of Arts, Humanities, and Social Sciences (CAHSS). The new program, which will begin in fall 2020, also offers students an option for an accelerated Doctor of Osteopathic Medicine degree program, as well as an option for dual admission into the CAHSS's Master of Science in Family Therapy program.

The HAWC program will be offered as a traditional on-site, daytime program at the Fort Lauderdale/Davie Campus. Faculty members from the KPCOM, the CAHSS, the Halmos College of Natural Sciences and Oceanography, and the College of Medical Sciences will teach the courses.

The curriculum will provide opportunities for the HAWC students to participate in global and domestic health outreach initiatives with undergraduate public health, nutrition, family studies, and pre-counseling students. Classroom instruction will be augmented with innovative, community-based, experiential learning opportunities that include the use of contemporary information technology.

Future graduates will attain the skills necessary to provide personalized health solutions for patients and clients in a holistic manner. This includes the ability to assess client lifestyles and family support systems, develop tailored diet and/or wellness plans, create health education materials, conduct health workshops and seminars, build a clinical practice, and apply solution-building strategies to coaching.

"We are very excited about this new bachelor's program, since it will provide a unique pathway for students to enter the Dr. Kiran C. Patel College of Osteopathic Medicine," said Phyllis Filker, D.M.D., M.P.H., associate dean of undergraduate, graduate, and community education. "The HAWC major also provides an opportunity for students not interested in becoming a physician to be a vital part of the health care team." □

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