

October 2019

SGA Rounds

Student Government Association Newsletter

NSU Dr. Kiran C. Patel College of Osteopathic Medicine

Letter from the Editor in Chief

By OMS-III Jackleen Glodener, SGA Administrator of Public Affairs



Hello all and welcome back to NSU-KPCOM. I would like to briefly thank Brandon Hanai, our previous *SGA Rounds* editor in chief, and Scott Colton, our HPD director of medical communications and public relations, for their efforts in publishing *SGA Rounds*.

This year, I will continue our tradition of publishing student work in *SGA Rounds*. I hope that, together, we will foster a platform in which all medical students feel comfortable sharing their creative sides.

To the first-year students, I say welcome. Soon, you may experience the toughest, yet most rewarding, years of your life. Your first year of medical school is the time to learn how you study most effectively and how to balance your personal life with academics. If you ever feel that you are struggling, do not hesitate to reach out. You will be met with kindness within our NSU community.

To the second-year students, welcome back and congrats on finishing your summer semester. I hope you continue to succeed in your studies and pave your own path through second year. Build a strong medical foundation you can be proud of and reach out to your upperclassmen if you need advice. Remember to celebrate after every integrated exam and finals week.

To my fellow third years, look how far we have come. As we transition from sitting all day to standing all day, our chronic back pain serves as a constant reminder of our hard work and sacrifice. I have a feeling this year will fly by just like the last two. And always

remember—"Copyright (c) UWorld. Please do not save, print, cut, copy, or paste anything while a test is active."

To the fourth-year students applying to residency this year, I hope you match into the program of your dreams. In a few short months, each of you will finally graduate and fulfill your aspirations to become a physician. We are so excited for you.

This edition of *SGA Rounds* features several great pieces from our osteopathic medical students. First- and second-year students, be sure to heed third-year student Rajeev Herekar's advice as he shares his secrets for conquering these tough academic years. OMS-II Bhargavi Madhu shares a poem titled "Alopecia Areata," while OMS-III Alex Wilson shares a personal story and OMS-III Divy Mehra shares an op-ed about anti-vaccine ideology.

OMS-II Thomas Clem shares his reflections on anatomy lab, while second-year students Prachi Singh and Shivanie Ramdin write about their medical outreach both in India and in Fort Lauderdale's Women In Distress shelter. Additionally, OMS-II Yara Khalifa shares insights from her recent medical outreach trip to Cuba, and OMS-II Jyothi Kakuturu discusses why she decided to spend her summer break cleaning up a park in Maryland.

If you have any questions, or would like to learn how you can submit information to *SGA Rounds*, please contact me at jg2947@mynsu.nova.edu. Your voice will be heard.



Memorable Moment: A Heart in My Hands

By OMS-II Thomas Clem



Take a moment. Have you every stopped to think about life? Not philosophically, but in a true physical sense. One day, during my first year of medical school, I went into anatomy lab begrudgingly. I have generally enjoyed my time exploring the inner workings of the human body, but on that particular day, the lab felt inconvenient.

I had a large exam the next day, and though I had devoted countless hours to the material, I still felt the incessant pres-

sure of the need to study become increasingly unbearable. I wanted to be reviewing in a quiet place, not bombarded by the intoxicating stench of formaldehyde. I unenthusiastically donned the gown, double-gloved, put on my safety goggles, gathered my kit, and entered the lab.

We had already carefully dissected through much of the body, but on schedule for the day was the thorax. The rib cage was clipped off with shears, the lungs systematically removed, and then came the heart. I remember the pericardium was a milky color and thicker than I expected it would be. After careful incisions and reflecting the pericardium, for the first time in my life, I saw a human heart. My stress faded, my exam became mute, and I was immediately entranced.

I had already seen many muscles and organs in the lab, but this was different. This required a superior reverence. I slowly cut obliquely across the aorta, superior vena cava, and pulmonary trunk. I respectfully raised the heart and excised it from the body. For the first time ever, this heart was separated from its body.

As I held the heart in my hands, I did not want to put it down. Through death, it was life in my hands.

Aside from medical history I know nothing about her, not even her name. But from that day on, I felt, and still feel, intimately attached to the donor of that body. As I examined the physical details of the superficial arteries and veins, I couldn't help but wonder what this heart allowed her to see. Did it ever love? Was it ever broken?

As I pondered in the moment, I glanced down to see that her toenails had been painted bright pink. I am certain she was much loved. I doubt that at any point of her life she imagined a young medical student grasping her heart in his hands, but I suppose it's funny where life takes us, or perhaps death.

In those moments where life slows down and a memory is made, I wonder if she ever thought of her heart, of the miraculous anatomy of life. I never had until that day. As I held her heart, I could feel the beating of my own. Take a moment. Feel your heart beating. Feel life.



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The Exercise Dilemma

By OMS-II Shivanie Ramdin, M.P.H., and OMS-II Prachi Singh



As future osteopathic physicians, we aspire to provide quality and holistic care to our patients. To efficiently do this, we must assess all aspects of our patients' lives. This includes helping them set and reach their goals. We share this belief and bonded over our desire to do something to help the women in our community.

After reaching out to the Women In Distress shelter in Fort Lauderdale, we learned that several women had pushed for the shelter's administration to create an exercise program. After the administrators created the Sweat It Out! program, they found that no one was attending.

Evidently, the women wanted to participate in the program, but they simply did not have any exercise clothes to wear. We organized an on-campus workout gear drive in the Health Professions Division throughout the 2018–2019 academic year, where more than 400 items were donated by students and faculty members, including clothing, workout gear, and equipment. The residents at Women In Distress were finally able to participate in the program they fought to create and work toward achieving their health goals through Sweat It Out!

It becomes easy and routine to tell our patients to eat healthy, exercise, and engage in other healthy activities, but we need to remember to assess for the many barriers that exist in our patients' lives. We should remember that change is not easy, and our roles as health care professionals and patient advocates include helping our patients overcome those barriers.

As we continue in our careers, we should remember that the majority of our patients will need a little help in reaching their health-related goals. That is where we, the osteopathic physicians, come in.



Didactic Dissection

By OMS-III Rajeev Herekar



“Personally, it has been important to reflect on boards season to completely move on from it. My study group and I started in December, studied for thousands of hours over seven months—and it ended in one day. This abrupt culmination snatched away the source of my motivation for the past year.” –Rajeev Herekar

Much like listeria, I find myself tumbling into third year. The transition to the clinical setting has been akin to my experience as a freshman on my undergrad tennis team, but with less involuntary drinking.

We’re on the bottom of the totem pole, and we’ve gone from knowing everything to knowing nothing. Not to mention our utter lack of usefulness in important decision-making. And it feels great. To be (temporarily) out from under the shadow of exams, to be with real patients who aren’t grading your feigned empathy, and to see firsthand how health care facilities operate.

Personally, it has been important to reflect on boards season—appropriately initialed “BS”—to completely move on from it. My study group and I started in December, studied for thousands of hours over seven months—and it ended in one day. This abrupt culmination snatched away the source of my motivation for the past year.

The feeling reminded me of what we learned about postpartum blues, but with an infant whose health status I had to wait four weeks to hear. It took a while to transition back to real life as the incessant inner voice queuing up tasks slowly abated. Eventually, the section of my brain once occupied with the boards specter faded away and was replaced with a desire to reconnect with friends and family.

Having rushed into my first rotation three days after taking COMLEX, there hadn’t been much time to debrief about what went right and what didn’t. After asking myself some questions and discussing them with classmates, it became apparent that there were certain pieces of information we wished we had known earlier. I believe one of the defining virtues

of KPCOM students is the willingness to share ideas and resources.

We work well together, and, as a result, help increase one another’s scores. In this vein, I’d like to share some of the strategies I’ve learned through experience and advice I’ve gotten from the classes above in hopes that we live up to the “pay it forward” mentality.

Below are tidbits I believe are worth sharing, both for first- and second-year students pushing through exams, and for general success as a medical student. I tried to include only the less orthodox ones to avoid being redundant with general knowledge, but mainstream ideas snuck in as well. These are merely suggestions to research individually and try in small doses. Obviously, not all listed items will be suitable for everyone.

GENERAL TIPS

Do aerobic exercise or high-intensity interval training at least once a week to improve memory, cognition, eye-tracking, and to attenuate negative effects of sleep deficits possibly related to increased BDNF and improved blood glucose control.^{3,6,7,11,12,13}

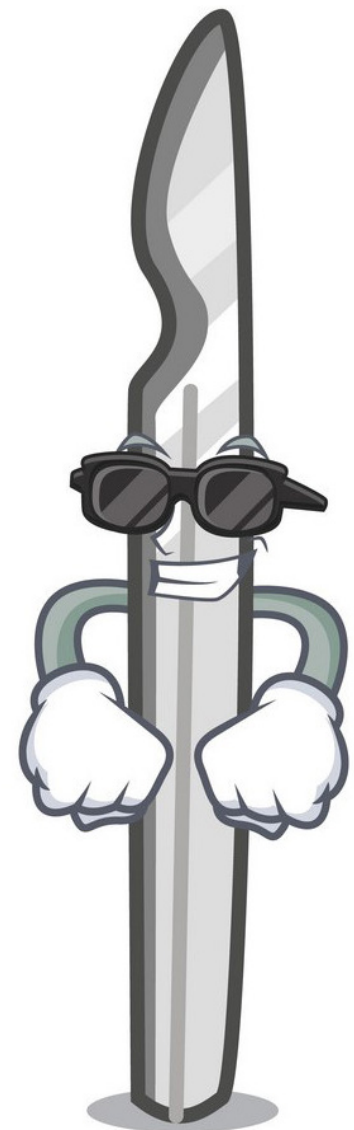
Meditate right before practice blocks for 10 to 30 minutes a day to improve focus and memory. Symptoms of anxiety, depression, and insomnia may improve as well.^{2,15} Using apps, such as Ten Percent Happier (specifically Concentration 101), Headspace, and Waking Up are great options.

Get a laptop stand (Amazon). Weekly OA decompression in the OPP Lab will no longer be so necessary.

Ditch (or reduce) old-school coffee. **Caffeine* pills** hit harder, plus save time and money. Accept that GERD is a part of medical school life.

Try L-theanine* on top of caffeine to mitigate jitters and for synergistic nootropic effects.⁹

Dissolvable, quick-release melatonin* will put you to sleep, but watch out for early



morning awakenings and grogginess. Use it sparingly on particularly difficult nights.

Take vitamin D* as soon as you wake up and treat it like a “burst of sunlight” to help with mood, cognition, and sleep. As many as 70 percent of U.S. adults are vitamin D deficient.^{1,4,5,8,10} Even the Florida sun doesn’t penetrate the HPD/law library windows enough to generate the necessary levels for optimal function in most people.

*Two third-party resources, Labdoor and Examine, are useful to ensure that supplements are safe, effective, and actually do what the companies claim they do. Again, I am not advocating anyone blindly use the above supplements. They are simply options to try under the right circumstances.

BOARD-SPECIFIC TIPS

Start one year prior to exam day. It is never too early to start. This cannot be emphasized enough.

Form a small group and check up with each other at least once a week. Take practice exams and the real thing with the same group.

Get a mouse for your laptop and highlight while studying, especially during Uworld blocks.

Do boards sections right before the corresponding NSU blocks.

Watch videos multiple times on 2x rather than on 1x fewer times. You’ll never get every detail, especially on the first try.

Scan the bottom of the question, then read the top, then the middle. Oftentimes, they’re just asking a small detail, such as the side effect of a drug.

Send/post all the helpful documents/resources you come across; the karma tends to come back around in a huge way.

Finally, **enjoy it.** This seems like an impossible task, but it’s the last time you will be together as one big group working toward a common goal. You’ll learn a lot about your work ethic, ability to handle stress, and mental fortitude. Mainly, you learn you had more of each than you thought.

It can also be fun, in a masochistic kind of way, competing with nearly every medical student in the country. There is nothing like the camaraderie that develops in the final sprint (or limp) to the didactic finish line. After the score comes back, whether you’re happy, sad, or in-between, turn to your friends. The best part about NSU is the other students.

I’ll end with this. “I’ll tell you how I feel about school, Jerry. It’s a waste of time. Bunch of people runnin’ around bumpin’ into each other, got a guy up front says ‘2+2’, and the people in the back say 4.’ Then the bell rings and they give you a carton of milk and a piece of paper that says you can go take a dump or somethin’. I mean, it’s not a place for smart people, Jerry. I know that’s not a popular opinion, but that’s my two cents on the issue.” –Rick Sanchez, *Rick and Morty* “Pilot”

Let’s prove the smartest man in the universe wrong.

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One Country, Two Worlds

By OMS-II Prachi Singh and OMS-II Shivanie Ramdin, M.P.H.



Although India is an industrial country, more than 50 percent of its population lives in rural areas where access to basic health care is a luxury. Last year, we embarked on different journeys through India, each covering a different location and field with the same goal—to increase health outcomes through greater access to care.

Prachi Singh

In December 2018, I participated in a service trip led by NSU-KPCOM to the Ahwa, Dang District in Gujarat, which is one of the most economically distressed regions in the country. Over the five-and-a-half clinic days, my classmates and I served more than 1,000 patients from the Dang District and neighboring areas.

Although tiring, we had an experience of a lifetime that would stay with us as we journey through life as physicians. We volunteered at a hospital that not only provides quality health care service, but serves as an institution to train and house future health care providers, ensuring that the demand for health care professionals is met in Ahwa once the students depart.

This practice, along with NSU's yearly trip to the area, aims to reduce the short-term impact associated with voluntourism—the



act or practice of doing volunteer work as needed in the community where one is vacationing—thus creating a continuity of long-term care for the residents of Ahwa.

Shivanie Ramdin

On the other hand, I had a completely different experience. In February 2018, I set out for a two-month internship with the

Foundation for International Medical Relief of Children (FIMRC) in Kodaikanal, Tamil Nadu, India. Kodaikanal is burdened with high rates of malnutrition among children five years and younger and poor access to health care.

I conducted a research project that aimed to evaluate growth trends among children in the FIMRC program, and to assist with other public health initiatives, such as building chimneys in the children's homes to decrease rates of respiratory illnesses and educating parents on road safety and summer safety to decrease the rates of injuries and illnesses seen in this community.

I also distributed feminine hygiene pads to young women to prevent them from dropping out of school. At the conclusion of my project, I assisted in developing new treatment and program protocols that help underweight children reach their healthy weight range before they leave the program. This was done without adding any extra financial burden to the organization or the families.

Final Thoughts

These experiences represent two very important perspectives of health care—traditional medicine and public health. As osteopathic medical students, it is important to consider all the factors that impact a person's well-being, and when we apply both traditional medicine and public health components, we give ourselves a better chance of optimizing care.

This is particularly important for international outreach trips. With increases in voluntourism, many communities are not gaining any tangible benefits from these service trips as we would expect or hope. We should always remember that treating a patient holistically involves thinking outside the box and incorporating various fields of health care. Only then can we establish stable services and programs that will provide long-lasting impacts.



A female medical professional, likely a nurse or doctor, is shown in a hospital setting. She is wearing green scrubs, a green surgical cap, and a green face mask. She is holding a newborn baby wrapped in a white blanket. The background shows a hospital room with medical equipment and a tiled wall. The text "MY PERSPECTIVE Medical Outreach in Cuba" is overlaid on the image.

MY PERSPECTIVE Medical Outreach in Cuba

By OMS-II Yara Khalifa

“At first glance, Cuba is a small, poor country. When you look deeper, however, there is a sense of resiliency and pride ingrained in the culture that has affected all aspects of its society. The colorful murals around Santa Clara and the hospital exemplified the sense of determination Cubans hold dear.” –Yara Khalifa

In June 2019, I had the opportunity to visit Cuba as part of a KPCOM educational experience. I have participated in medical outreach trips before, but this one was very different.

I chose to rotate in the OB-GYN department at Gineco-Obstetrico Mariana Grajales hospital and was greeted by a worldly physician, José Marrero, M.D. During my stay, I was able to enjoy the music, food, and dance of Cuba while experiencing the country’s health care system.

I learned how Cubans are able to have a higher life expectancy than the U.S. population and have lower infant mortality, while spending half as much of its gross domestic product. Particular paradigms of the Cuban medical system have pushed it to be more efficient and cost-effective without compromising care.

At first glance, Cuba is a small, poor country. When you look deeper, however, there is a sense of resiliency and pride ingrained in the culture that has affected all aspects of its society. The colorful murals around Santa Clara and the hospital exemplified the sense of determination Cubans hold dear.

Marrero further echoed the sentiment of pride when he talked about Cuba’s health care system. Although it comes with its own set of issues, Marrero loved that he could practice his craft with no restrictions. There was no insurance company to go through—just him and the patient due to Cuba’s policy of offering free, universal health care to its citizens.

Although there are numerous financial constraints, Cuban doctors still manage to ensure effective care. Marrero expressed that these hardships have only made him

grow as a physician by pushing him to be a more resourceful problem solver.

When American cars were barred from coming to Cuba, the people thought of a creative solution, and the classic Cuban car emerged. Under similar budget duress, Cuban physicians, hospitals, and medical device companies became innovative to meet the growing health care demand. In addition, a new sector of the health care industry boomed—International Health Care Services. Cuban doctors offered their help to areas struck with disaster in exchange for diplomatic relations with the country they aided.

With the help of regular citizens, government, doctors, and public health professionals, Cuba formed a six-layered approach to medical care focused on community-centered primary care. The thinking behind the concept was that if disease could be prevented, then it would be more cost-effective than dealing with future health-related issues.

Every town in Cuba has a polyclinic that services a region, as well as multiple mini polyclinics in each neighborhood along with a specific doctor who is responsible for every person in that area. The doctor does yearly checkups and home visits.

In fact, every Cuban is no more than 600 yards from a physician. This means physicians know their patients, where they live, their families, and occupations in a more intimate way. This approach fosters trust, patient-doctor relationship longevity, and a more holistic approach to treatment.

In contrast to the U.S. system, which spends a penny per dollar on public health funding, Cuba integrates public health into its health care system. The hospital we rotated at had a public health professional who monitored the safety and cleanliness of the facilities, population health statistics, as well as clusters of related cases.

In fact, when multiple people were burned by hot milk, public health and medical professionals did an inquiry and





found that improper gas stove use led to the burns. They proceeded to educate the public on how to handle the stove properly, and the problem was fixed. Cuba has tackled other issues by joining its public

health and medical teams, including blocking transplacental transmission of HIV and syphilis, ensuring a 98 percent vaccination rate against 12 major diseases, and having the first and only meningitis B vaccine.

Cuba's health care system primarily focuses on two demographics: women and children. This is especially unique given that the United States has the highest maternal and child mortality statistics in the developed world, with a significant disparity in communities of color.

Cuba ensures prenatal vitamins, meals, and free delivery in hospitals and clinics. In addition, the Cuban government pays 100 percent of all child fees in the first year and 50 percent in the second year. These factors have played a role in the fact that child mortality is at 6 deaths

per 1,000, compared to 7 deaths per 1,000 in the United States. That may be a subtle difference; however, the United States spends twice as much on health care and is one of the wealthiest and most developed nations in the world.

Because of Cuba's fixation on maternal and child health, middle-aged men have become a vulnerable population. Due to cultural practices, tobacco and alcohol usage is rampant in this patient demographic. Consequently, liver cirrhosis and lung disease are prevalent.

Pride is fundamental to the Cuban culture—pride in country, freedom, and health care. Cuba has infiltrated the ranks of developed nations in terms of health care standards. Who would have thought that one single belief could change the entire system?



Fervent Wish: No Changes Overnight

By OMS-III Alex Wilson



It's 5:00 a.m. Start moving along, Alex, you've got a long morning of pre-rounding ahead consisting of coffee, username, password, patient list, overnight vitals, morning lab results, imaging reports, and medication reviews. I fold my papers and place them in my pocket, ready to head off to the floors. I repeat six of these, starting anew between each patient as I await my attending's arrival.

Every morning, hospitalists across the globe practice the same ritual. Most will relish the steady healing of their patients under the care of the floor nurses. "No changes overnight"—music to a practitioner's ears. Others will find their patients' conditions in continued decline, flustered by the slow creep of death.

Today's ritual is different. Roughly 1,200 miles away, in a community hospital in Akron, Ohio, someone's morning begins as mine does. Among their list of patients is a familiar name. It's my grandmother.

Today begins her fourth day in the hospital fighting bacteremia. At her defense comes a continuous barrage of fluids and antibiotics. But, she isn't well. Her body is frail, her immune system compromised. Her vital signs likely haven't improved overnight. Her morning labs hold the key to her prognosis. What is the serum lactate level? When will she need vasopressors? Intellectualization is a powerful coping mechanism.

In a local Florida neighborhood, someone's morning starts differently. They prepare for work, eat breakfast, and depart on

their morning commute. They aren't headed to the hospital for rounds, but they share the same humanity. The name of their loved one lies among those on my patient list. Like me, their mind begins to wander. "Will they be okay? What do the doctors think will happen?"

As an outsider, they have no choice but to invest their hope in the enigma that is modern medicine. Years ago, before medical school, I was more like them. Medicine was a mysterious entity only understood by those who committed their lives to it. Today, the entity is largely demystified. Today, I understand the literature that guides our diagnoses and treatments. The responsibility to heal that had once fallen in the hands of others now falls squarely in mine.

My grandmother will be the first loved one I'll lose since I started medical school. She will be the first person I lose while understanding exactly what is happening to her health. Unfortunately, this is something we all will face. We all will watch as our naiveté slips away, soon realizing we have lost a coping mechanism in the process. We will lose the option to defer our hope to physicians, because we will soon become them.

Being new to medicine further complicates this. It is impossible to stop rehearsing the pathology behind my grandmother's illness. Her condition runs through my head over and over and over, albeit constantly interrupted by a younger me. Her prognosis is clearly poor, but my lack of experience tells me I can't rule out a full recovery.

Being a student means being caught somewhere in the void between ineptitude and expertise, both sides locked in a constant struggle for control. One side looks to empirical evidence for guidance; the other seeks to ignore it in defense of false hope. It feels too early for this sort of cognitive dissonance, though it probably always will.

The path to becoming a physician is perhaps the most trying of any profession. As I follow my grandmother's status in the hospital, I am reminded of the extent that medicine permeates one's personal life. Physicians cannot simply return to normalcy when they hang up their coats at the end of the day. Our family and friends at home share the same anatomy and physiology as the patients on our lists and are prone to the same diseases.

My pre-rounding is finished, so I have a moment to spare before my attending arrives. My phone rings. It's my uncle, who told me he would speak to grandma's charge nurse this morning. I answer, completely unprepared for any news. I pray for no changes overnight.



Pictured are Jyothi Kakuturu and Karl Van Neste, Muddy Branch Park Alliance volunteer coordinator and board of directors' member.

Doing My Share for a Cleaner Earth

By OMS-II Jyothi Kakuturu

I decided to spend my summer break volunteering at my local park in Maryland. The biggest motivating factor behind this was my love and deep concern about the environment, perhaps at times exceeding my love for medicine. But, we must realize, as I did prior to starting medical school, how closely related and intertwined both medicine and the environment are. More so, how the environment has, and will continue to, affect human health in the coming years.

Although the damaging effects of our environment are now more tangible than ever, trying to fight this crisis can be very overwhelming. Where do I even start? What do I do? How can I change? How do I spread awareness?

Living only a few miles away from Washington, D.C., I had many opportunities to immerse myself in areas of politics, interest groups, and environmental protection agencies. Though these options seemed appealing, I knew I wanted to do something at a community level. Looking around my neighborhood with its beautiful parks served as inspiration for choosing to donate my time at Muddy Branch Park, where volunteers, many with full-time jobs, decided to come together to clean up the park and study its trail usage.

It was a very interesting project, as we not only strived to clean the park, but also studied and quantified how many utilized the trails for walks, jogs, exercise, and/or mindfulness. We found it amazing to see people from all walks of life and pets (including horses) utilize this publicly funded park for bettering their minds, bodies, and souls.

Unfortunately, it was quite disturbing to see how much daily trash was found all along the trails and park-access roads. Viewed from afar, the unpicked litter is evident but seemed minor in scale. But after 5 minutes of collecting from a 10-square-yard area, I could easily fill a 5-gallon bucket with assorted litter. We picked up a variety of the usual leftover plastic and glass, along with tires, car parts, fishing hooks, and syringes.

As we cleared the area, we found more plastic buried deep beneath covered in soil. They say, “litter begets litter,” and seeing it firsthand disturbed me deeply. Many of these items can be dangerous to wildlife, pets, and to little kids who explore the parks. They can also clog storm drains and runoff into main water systems like rivers and oceans.

We must be uncomfortable to be labeled as a “throw-away culture” where our economy runs by excessive production of disposable items and overconsumption. What happened to the good old

American stewardship where we protected and extracted every morsel of use from the products we owned?

The results of our greedy consumerism and social-media obsessed society have been deteriorating our environment for decades—and on such a massive scale that cannot be accurately measured by scientists yet. Documentary filmmaker Ken Burns shows the splendor of our parks in his PBS series *America’s Best Idea*, yet daily littering in all of our national parks is reported as the most common problem faced by park rangers.

We learn in class how a disease can manifest through nurture (lifestyle), nature (genetics), or both. According to Scott Kahan, M.D., a specialist in preventive and obesity medicine, “Genes load the gun, environment pulls the trigger.” Environment here could mean lifestyle. For example, if a genetically predisposed diabetic doesn’t monitor his or her lifestyle, the person can most definitely be diagnosed with diabetes.

But, how often do we think of “environment” in a larger scale? Have we ever thought about how microplastic pollution, greenhouse gases, deforestation, chemical spills, and other pollutants can destroy our health? As there is little established research regarding current environmental health problems and ways to solve them, public health problems arising from it will become challenging to physicians in the coming years.

Tackling this crisis must begin at an individual level and set good examples for our patients and younger generations. We must strive to change by making simple modifications to our lives. This includes using reusable bags, packing food and drinks in reusable containers, pouches, and bottles, and eating locally sourced food—preferably more fruits and vegetables while making wise and necessary purchases. Being mindful of the trash we throw out is more important, as we must dispose of items in the right way, ensuring they don’t end up littering our beautiful world.

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Anti-Vaccine Ideology and Political Groupthink: A Detrimental Combination



By OMS-III Divy Mehra

In the first six months of 2019, nationwide measles cases totaled upwards of 1,000 for the first time in more than 25 years. Outbreaks led to declarations of public health emergencies in the state of Washington, New York City, and Rockland County, New York. Several public health officials have attributed the rise in measles incidences to increasing and growing pockets of unvaccinated individuals, including parents who choose not to vaccinate their children.⁶

Prior to the 1963 release of a measles vaccine, nearly all children contracted measles by the age of 15, with an annual incidence of 3 to 4 million cases in the United States. Following the widespread availability of the measles vaccine, as well as the implementation of school vaccination mandates, measles was declared eradicated from the United States in the year 2000 by the Centers for Disease Control and Prevention.^{1,5}

There is overwhelming scientific and clinical evidence supporting the safety and efficacy of the measles vaccine on individual-level and population-level scales.⁵ If that's the case, why are so many parents turning a blind eye to this critical public health issue? And why now?

The truth is that despite a pushback from the medical community, many topics in health care have come to the forefront of political debate and are likewise being subjected to influence from conspiracy think tanks and political partisanship. The rapid spread of this anti-vaccine sentiment can be attributed, in part, to the spread of misinformation through social media and other online sources.^{2,3} It is vital to pay attention to this complex and nuanced issue, as the success of vaccines in American society rests upon the participation of everyone, not just the most educated among us.

In a 2015 Politico article, Adam Lerner details the following excerpt focusing on a future presidential candidate and practicing ophthalmologist's opinion on the role

of vaccinations in the country today. "Sen. Rand Paul doubled down Monday on his earlier comments that vaccines should be 'voluntary,' telling CNBC...he has 'heard of many tragic cases of walking, talking, normal children who wound up with profound mental disorders after vaccines,' though he was sure to note that he wasn't arguing vaccines are a bad idea."

This sentiment has been echoed by several public figures, adding fuel to a seemingly growing national anti-vaxxer coalition.⁴ Despite being a fully trained physician, Senator Paul has established a public stance that certainly undermines the concept of "herd immunity"—the resistance to spread of a contagious disease if a sufficiently high proportion of individuals are immune to the disease, such as through vaccination.

The danger lies in the cultural effects on a society that has become more divided and tribal than ever before now that the anti-vaxxer movement in the United States has found somewhat of a home in political dialogue. Riding on the human tendency to be influenced more by personal anecdotes than scientific fact, as well as a general lack of medical literacy, this movement has created an increased level of distrust in vaccinations.³

When politicians, celebrities, and other community leaders fail to renounce this misinformation, such as by accepting "alternative" immunization schedules, it legitimizes the narrative that there is, in fact, validity to the anti-vaxxer claims.

As health care professionals, it is critical that we remain aligned with evidence-guided, humanistic care that remains focused on the physician-patient relationship. As in any patient interaction, this includes refraining from shaming or using patronizing dialogue during discussion of vaccines with those that hold contending viewpoints. In order to form a unified front to tackle the issue of decreased vaccination rates in the United States, we

must encourage the participation of everyone, including those that currently stand against the evidence-based recommendations for immunizations.

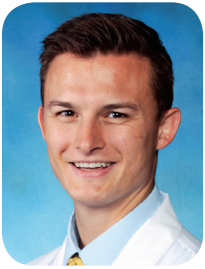
Despite the disheartening, anti-science rhetoric in the country, it is important to keep in mind that the majority of the community is *not* anti-vaccination. They are, often, concerned patients or parents who want to make the right medical decision for themselves and their families. Educating the public clearly and definitively will allow people to understand the importance of vaccination, rather than believe in the rhetoric of self-serving public figures and groups.

Simply put, an educated, responsibly guided citizen is more likely to make appropriate health decisions and is less likely to believe false claims linking vaccines to unsubstantiated, detrimental health effects. Therefore, we must make efforts to exclude the vaccination debate from the influences of political tribalism and approach the issue with the strategy and nuance it deserves.

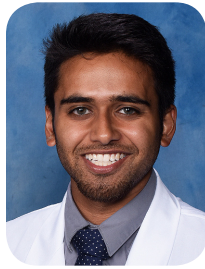
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KPCOM Student Achievements



DeMario



Desai



Forbes



Jaghab



Krolick



Larrimore

OMS-I **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."

OMS-IV **Tej Desai** authored the article "Successful Treatment of Complicated Benign Prostatic Hyperplasia in a Diabetic Patient with Water Vapor Thermal Therapy and Urethral Stenting," which will be published in an upcoming issue of *Urology Case Reports*.

OMS-III **Jessica Forbes**, along with second-year students **Katelyn Krolick**, **Samantha Rubin**, and **Adithi Vemuri**, coauthored the article "Skin Tissue Dielectric Constant in Women with High Body Fat Content," which was published in the September issue of *Skin Research*

and *Technology*. Harvey Mayrovitz, Ph.D., professor of physiology in the College of Medical Sciences, also served as a coauthor.

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 (ME/CFS) symptoms. He also accepted an invitation from the *Journal of the American Osteopathic Association* to become a manuscript peer reviewer for the publication and was named as editor of *EC Clinical & Medical Case Reports*. Additionally, Larrimore served as lead author, with third-year student **Annmarie Jaghab** as coauthor, of the article "A Rare Case of Breast Implant Associated Diffuse Large B-Cell Lymphoma," which was published in the October issue of *Case Reports in Oncological Medicine*. The article focuses on the sixth person in the United States to develop a rare form of breast cancer associated with breast implants.

Hamzah Mughal, class of 2023, was accepted into the National Health Service Corps (NHSC) Scholarship Program. NHSC scholars receive three benefits in exchange for providing primary care service in one its designated Health Professional Shortage Areas—full coverage of the scholar's tuition for as many years designated in his/her contract; a monthly stipend to aid with living expenses; and reimbursement of the student's other reasonable costs, such as required materials, lab fees, etc. Student physicians who are awarded this scholarship must pursue a residency program in any of the primary care fields designated by the NHSC.

Milee Patel, class of 2020, published the abstracts "Inhaling Fumes: A Rare Case of Nitrous Oxide-Induced Lichtheim's Disease Causing Acute Paralysis" and "A Real Page Turner: A Look at Parsonage Turner Syndrome and its Rare Diagnosis" in the September issue of the *Journal of Neurology and Experimental Neuroscience*. Additionally, both cases were presented at the Neurological Disorders Summit held July 18–20 in Los Angeles, California.



Mughal



M. Patel



P. Patel



Pourmandi

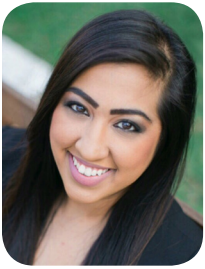


Perez



Rubin

KPCOM Student Achievements



Shaikh



Vemuri



Wawrzyniak



Zambrano

Fourth-year students **Puja Patel** and **Mohammad Pourmandi** coauthored the article “Primary Amyloidosis of the Bladder Mimicking Probable Malignancy: A Case Report,” which was published in volume 26 of *Urology Case Reports* (<https://doi.org/10.1016/j.eucr.2019.100944>). They also presented their case report at the American College of Physicians Internal Medicine Meeting’s National Competition held April 2019 in Philadelphia, Pennsylvania.

Melanie Perez, class of 2022, served as lead author of the article “Genetic Predisposition for Myalgic Encephalomyelitis/Chronic Fatigue Syndrome: A Pilot Study,” which was published in the pediatric neurology section of *Frontiers in Pediatrics*. The article can be accessed at doi.org/10.3389/fped.2019.00206. Perez coauthored the article with 2019 alumna Kelly Hilton, D.O., and 2018 alumna Kristina Gemayel, D.O.

Saamia Shaikh, J.D., class of 2020, coauthored two articles that were published in the *International Journal of*

Surgery Case Reports: “Life-Threatening Hemoperitoneum Secondary to Rupture of a Uterineleiomyoma: A Case Report and Review of the Literature” and “Subclavian Artery Avulsion Following Blunt Trauma: A Case Report and Literature Review.”

Third-year student **Nick Wawrzyniak**, M.S., coauthored the article “Effects of Exercise Preconditioning and HSP72 on Diaphragm Muscle Function During Mechanical Ventilation,” which was published in the August issue of the *Journal of Cachexia, Sarcopenia and Muscle*.

Regina Zambrano, class of 2021, was the recipient of a \$1,500 American Osteopathic Foundation (AOF) Welch Scholar grant, which provides monetary support to help defray costs during a student’s osteopathic medical education. Recipients are chosen because of their outstanding academic achievement, participation in extracurricular activities, strong commitment toward osteopathic medicine, and financial need.

Student Duo Named as Officers of NSU Sigma Xi Chapter

OMS-I **Avidor Gerstenfeld** was elected vice president of NSU’s new Sigma Xi Scientific Research Honor Society chapter, while OMS-II **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.



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



Hair No More: Alopecia Areata

By OMS-I Bhargavi Madhu

*I feel betrayed as they leave me
Fluttering to the ground, ignoring my pleas
Like leaves, falling without a sound
From the sanctity of their tree, my precious scalp
At first, it was a happy answer
Doctors diagnosed it as alopecia, not cancer!
The culprit instead was my white blood cells
Made an enemy out of my hair follicles,
oh what a living hell.
Curse my autoimmunity.
I spent my days hiding my scalp in secrecy
Under wigs, scarves and even caps
But no matter what I did, I couldn't hide the facts.
I mean, it's not like I underwent chemotherapy!
So, I searched and tried every silly little remedy.
But in the end, it didn't matter, as I embraced
my condition as a part of me
I will live my life, bald and free!*

Fort Lauderdale/Davie Campus



Tampa Bay Regional Campus



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