NSU Florida
Dr. Kiran C. Patel College of Allopathic Medicine
NOVA SOUTHEASTERN UNIVERSITY

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DR KIRAN C. PATEL COLLEGE OF ALLOPATHIC MEDICINE DIVERSITY NEWSLETTER

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Inside This Issue

"When a heterogenous workforce is tasked with caring for an extremely diverse array of patients, the quality of care is significantly better"

Pipeline Programs and their Significance

A pipeline program is essentially an academic enrichment program that usually targets middle through high school students interested in STEM and health-related professions. Medical pipeline programs are designed to provide academic and mentorship support to students who usually are underrepresented in medicine and include but are not limited to minority, low income, and female students. The ultimate goal of such programs is to expand the pipeline of under-represented minority and educationally and economically disadvantaged students in medicine. The Liaison Committee on Medical Education (LCME) considers the development and implementation of pipeline programs as part of its accreditation process. The Medical student diversity standard 8 states, *"Each medical school must develop programs or partnerships aimed at broadening diversity among qualified applicants for medical school admission."* Therefore programmatic efforts that show the development and implementation of these activities through partnerships with the local community are viewed necessary and positively by the LCME, as this is an indication of the institution's commitment to contribute to diversity in medicine.

Medical Pipeline programs are expected to be designed and implemented in collaboration with other institutions in a targeted manner with a focus on making admissions to medical/health professions programs more accessible to potential applicants of underrepresented and socioeconomically disadvantaged backgrounds. The rationale is that aspiring future physicians will be best prepared for medical practice in a diverse society if they learn in an environment characterized by, and supportive of, diversity and inclusion. Data concerning pipeline success comes primarily from schools tracking how many students end up working in the medical/health professions field as well as changes in student demographics within the associated medical schools. Tracking mechanisms usually include longitudinal surveys and use of secondary data from organizations such as the AAMC regarding medical school applications.

The activities in pipeline programs can take many forms including lectures, seminars, workshops, research and shadowing opportunities, short and long term mentorship programs, experiences in anatomy labs, and community outreach.

At NSU MD we currently have three pipeline programs:

- The Journey into Medicine Program established in 2020.
- The Stranahan high school STEM seminar series which was recently started.
- Make an Impact in Law and Medicine (offered in collaboration with the NSU School of Law).

Introducing the Stranahan High School STEM Seminar Series

We have successfully launched the Stranahan High School STEM Seminar Series! The series is offered in collaboration with Stranahan High School's Medical Magnet Program. NSU MD Basic Science Faculty from all six disciplines (Anatomy, Biochemistry, Microbiology, Pathology, Pharmacology, Physiology) provide weekly one-hour interactive seminars that align with the content in the Human Body Systems Instructional Focus Calendar for 10th graders. The program began in January 2021 and runs throughout the academic year.
The program currently has an average of 35 students and the overall goal of the program is to provide students from underrepresented in medicine backgrounds with an opportunity to develop an understanding of the relevance of the basic sciences across multiple health professions. We hope to create a pipeline of interested students into the different health professions and basic medical science careers. The schedule for January-May 2021 is below. A very big thank you to all our faculty who have given their time. A very special thank you to Dr. Samiksha Prasad who has been very instrumental in the organization of the series.

Students in the Stranahan High School STEM Seminar Series

Week	Date	Week Theme	Faculty Name	Seminar Topic
1.	Tuesday, January 12th, 2021	**The Digestive System**	Dr. Chasity O'Malley	Digestion: What happens to food once it's consumed
2.	Friday, January 22 2021		Dr. Anastasia Mashukova	Regulation of Gastrointestinal Function
3.	Wednesday, January 27th 2021		Dr. Samiksha Prasad	Our Gut Microbiome
4.	Friday, February 5th 2021		Dr. Katelyn Carnevale	Digestion of Vitamins and Minerals
5.	Thursday, February 11th 2021	**The Renal and Urinary System**	Dr. Cheryl Purvis Lechnar	The urinary system
6.	Thursday, February 18th 2021		Dr. Wayne Schreier	The Kidney: More Than a Filter
7.	Thursday, February 25th 2021		Dr. Yuri Zagvazdin	How do we know that our kidneys are healthy?
8.	Thursday, March 2nd 2021		Dr. Wrench	The urinary tract infections in adolescents
9.	Thursday, March 12th 2021	**The Exocrine System**	Dr. Powell	Exocrine Pancreatic Insufficiency: An Update
10.	Monday, March 29th 2021	**The Integumentary System**	Dr. Schwartz	Integumentary System Lesions
11.	Friday, April 2nd 2021		Dr. Paul Greenman	Medical Practice and the Integumentary System - Selected Experience vs. Variety
12.	Monday, April 12th 2021	**The Immune System**	Dr. Kelley Davis	The Immune Response to COVID-19
13.	Wednesday, April 21st 2021		Dr. Amanda Chase	Vaccine Awareness: Rebuilding Trust through Communication
14.	Thursday, April 29th 2021	**Biotechnology**	Dr. Kyle Bauckman	Bio-techniques and Molecular Diagnostics
15.	Week of May 3rd – 7th 2021		Dr. Daniel Griffin	Genomics
16.	Week of May 10th – 14th , 2021		Dr. Samiksha Prasad	CRISPR Technology
17.	Week of May 17th – 21st , 2021		Dr. Vladimir Beljanski	Stem Cells
18.	Week of May 24th – 28th , 2021		Dr. Arkene Levy	Pharmaceutical Biotechnology

Make an Impact in Law and Medicine

Dr. Samiksha Prasad, Assistant Professor of Medical Education, NSU MD

Dr. Samiksha Prasad shares her thoughts on the importance of pipeline programs and their impact:

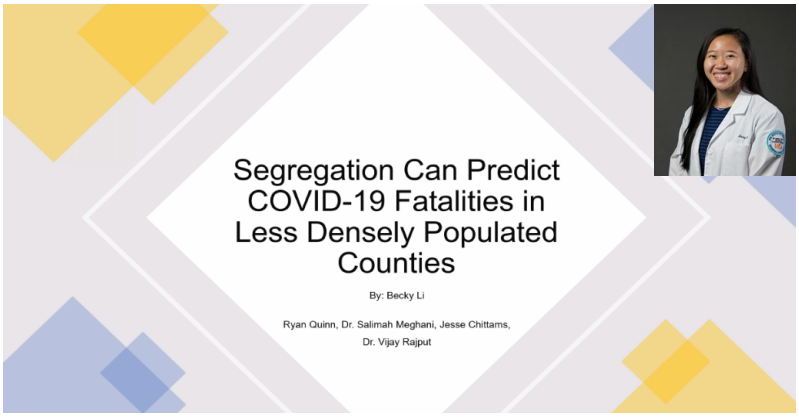
"Over the past five months it has been truly heartwarming to work with the students in the Stranahan STEM seminar series. These students are eager to learn but need that extra push to realize their full potential. They are certainly getting motivation through their interactions with our faculty during these focused seminars. I was equally as impressed by the students in the Make an Impact program, they were engaged and so keen especially during our PBL case. These pipeline programs are valuable in so many ways but most important is the impact they are making on underrepresented students my stimulating their interest in a career in medicine."

We hosted Make an Impact in Law and Medicine on March 5, 2021. This is an annual interdisciplinary program that is hosted in collaboration with the NSU Shepard Broad College of Law and funded through a grant from the Law School Admissions Council (LSAC) to Associate Dean Elena Marty-Nelson and her team (Shepard Broad College of Law). Four high schools were in attendance: Glades, Mater Academy, Somerset North Lauderdale and Somerset Miramar.

The day long program is designed to introduce South Florida high school students from historically underrepresented backgrounds to a wide variety of medical and legal practices. The program aims to empower students to recognize health disparities and to think of ways of addressing legal and medical hurdles through interdisciplinary collaboration. The activities included sessions taught by NSU MD and Shepard Broad College of Law administrators, professors, staff and students. Students participated in activities including a negotiations lab, a condensed Problem Based Learning (PBL) case, a seminar that addresses social determinants of health, panel discussion with physicians from different disciplines, and speed networking with medical and law school students. A special thanks to our NSU MD students, staff and faculty who showed up to talk with eager high schoolers about medical school.

Participating Medical students were: Cathaerina Appadoo, Jacqueline Barbera-Mirza, Kaitlyn Coccuzzo, Michael Durkin, Lexi Frankel, Solina Pierre-Gilles, Soyeon Kim, Laura Molina, Darisel Ventura Rodriguez and Becky Li who present on the impact of COVID-19 in densely populated counties.

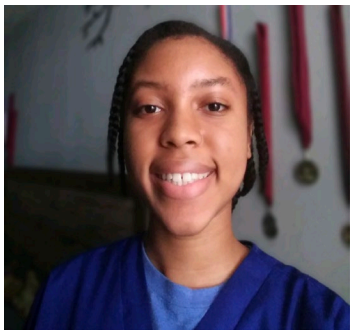
Participating NSU MD Administration, Faculty and Staff were: Mr. Erik Boone, Dr. Kate Carnevale, Miss Susan Collingwood, Dr. Rolando DeLeon, Dr. Yolanda Payne-Jameau, Dr. Andon Placzek, Dr. Samiksha Prasad, Dr. Cheryl Purvis, Dr. Vijay Rajput, Dr. Gary Schwartz, Dr. Sharon Sholiton, Dr. Paula Wales and Dr. Algevis Wrench.



Becky Li, NSU MD Class of 2022, presented on segregation as a predictor of COVID-19 fatalities during the social determinants of health session

Our Stranahan Mentees Speak!!!

Elizabeth Wright, Stranahan High School (Sophomore)



Here is some of what Elizabeth Wright wrote about the stem series: I have enjoyed these seminars from NSU! Based on the ones I have attended, it helped me bolster my understanding of the digestive and renal systems. The very first seminar that I attended was the one on digestion by Dr. O'Malley. It was a great review for what we have been learning so far in class. In her lecture, she discussed the anatomy of the digestive system and the functions of its individual parts, its motility, and the enzymes that assist in the digestion process. My favorite one so far is the Gross Anatomy of the Renal Anatomy by Dr. Cheryl Purvis Lechner. Before the presentation, she wanted to know what field or career the students were interested in pursuing. During her presentation, she used highlights and arrows so students can see more clearly the flow of urine in the kidney and other important processes. I have also learned interesting facts from Dr. Lechner such as testicular congestion. Testicular congestion is when portion of the renal vein is blocked, and blood gets backed up in the testicular vein. Furthermore, in Professor Zagvazdin lecture on the kidneys I learned lots of new terminology such as "polyuria" and "anuria". I also made a connection between the kidneys and my interest in medicine: cardiology. Atherosclerosis is a disease where cholesterol and other lipids builds up in your arteries. This can cause renal artery stenosis which leads to decrease renal blood flow and a lower glomerular filtration rate (GFR). In general, I thank all the professors that took the time to teach us these topics. It was a very enlightening experience!

Here are some excerpts from our survey to the students asking for program feedback:

"I have gotten firsthand teaching from experienced medical professionals. They taught me many fascinating things in the medical field that I will remember to the days of my medical career."

"The greatest benefit I've received from this experience was all the knowledge they passed on. All the new vocabulary, the functions of the system in details and even ways to memorize them. Overall, I feel like I have learned so many things in such few months."

"My greatest benefit from this experience was a look into the world of a medical student. I felt as if I was sitting in an actual university lecture. This makes me even more excited to jump into the medical field."

"The greatest benefit I have received from this experience was getting to learn a lot about the body. For instance the kidney's. They went in depth about the kidneys and provided a lot of information. They also provided activities for the lesson that we went over, and that enhanced our knowledge. I really enjoyed the lectures they provided, they were very helpful."

"The greatest benefit I have received from the NSU Lecture experience was the ability to learn new information and apply it to what was being taught in class. This information helped me on classwork, test, and possibly knowledge for a future career."

Faculty Development

Baylor College of Medicine 2021 Health Equity Research Summit: The Baylor College of Medicine's fourth annual 2021 Center of Excellence in Health Equity, Training and Research (COE) Summer Research Summit will be held Thursday, May 20, 2021.The theme for this year's summit is Strengthening Our Commitment to Racial and Social Justice to Improve Public Health. Our keynote speaker will be David A. Acosta, M.D. the Chief Diversity and Inclusion Officer, Association of American Colleges. Read more and register here: https://www.bcm.edu/about-us/diversity-equity-and-inclusion/health-equity/health-equity-training-research-center/research-summit

Upcoming APHA Webinars: https://www.apha.org/Events-and-Meetings/Webinars

Microaggressions Study from UF: https://pubmed.ncbi.nlm.nih.gov/31161479/

Health Disparities Collaborative Learning Community Resources: https://www.im.org/resources/ume-gme-program-resources/resources-disparities

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