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<sup>1</sup>Chicago Medical School at Rosalind Franklin University of Medicine and Science (CMS)

In underserved and lower-resource areas, students are often not informed about or supported in their pursuit of healthcare careers. These are just some of the central reasons that contribute to significantly lower medical school matriculation rates for African American and Latinx students.

Chicago Medical School (CMS) is a community based medical school surrounded by a diverse community. *In answer to the need to create a path to healthcare careers, academic medical colleges and hospitals are offering programs designed to improve health literacy and open education pathways for young students.*

## BACKGROUND

This project has two goals:

- Partnership with North Chicago Community Partners (NCCP) to encourage STEM for 4<sup>th</sup> graders at AJ Katzenmaier Academy (North Chicago School District)
- Leadership Development for **Minority** medical students and a student from a rural area

Parent/Guardian/Teacher Session – You ....Make a Difference Two sessions.

- Panel of CMS faculty Experts
- Executive Medical Student staff

**MINI MEDICAL SCHOOL**  
A free virtual program for North Chicago 4th graders, led by Chicago Medical School students, designed to inspire children to pursue a career in the healthcare profession.

The program will develop leadership skills among our underrepresented in medicine medical students while:

- Introducing youth to medical careers
- Helping 4th graders learn the importance of preventing and treating disease
- Giving them the skills and tools that will encourage them to pursue healthcare careers.

Each day revolves around a specific body system and features:

- Introductory lecture
- Anatomy activity
- Scientific experiment
- Mini lecture stations
- Nutrition component

All CMS students are invited to volunteer to be teachers for the program, which is held virtually over the course of five Saturdays in January-March, 2022:

- January 8 - Orientation
- January 29 - Skin, Bones, and Muscles
- February 12 - Pulmonary
- March 12 - Neurology/Mental Health
- March 19 - Family Sharing and Graduation

Participants will receive their own white coat and participate in a white coat ceremony to officially enroll them into the program. There will also be a graduation ceremony upon completion.

Available to 4th graders from AJ Katzenmaier Academy (North Chicago School District)  
CMS MI & MD Executive Committee:

David Oversen-Sanchez  
Favour Oladipupo  
Juan Medina-Echevirra  
Jessica Moreno

Stefane Joachin  
Victor Alejandro Barragan  
Joseph Ramenapp

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## APPROACH

Executive committee entirely consisted of students underrepresented in medicine (4 Latinx, 2 Black and 1 from underserved rural area from October 2021 to April 2022).

The curriculum was obtained from Rush Medical School. Virtual MMS was planned due to lack of COVID vaccinations for the young students.

The executive team then provided science-based extracurricular enrichment opportunities for 4<sup>th</sup> grade students from medically underserved areas to encourage and nurture interest in pursuing health care careers.

Each experience focused on a specific human body systems to expose students and their parents/guardians and teachers to increase awareness of health care issues. Each session incorporated a real life scenario and nutrition information.

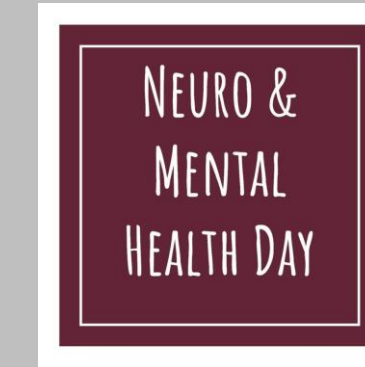
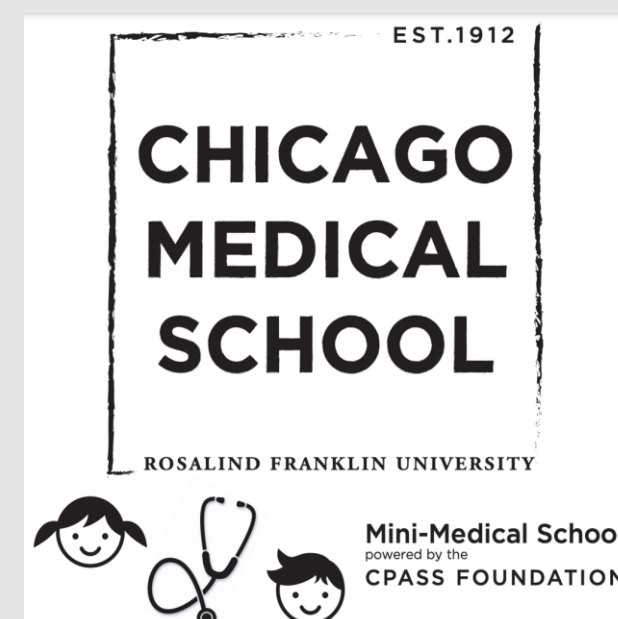
Sessions: I. Orientation and White Coat Ceremony; II. Musculoskeletal; III. Cardiovascular; IV. Gastrointestinal (GI); V. Mental Health; VI. Graduation Celebration.



## RESULTS

**High participation for students. Pre and post testing completed by putting note takers in the break out rooms. Post class evaluations were collected from the student volunteers which asked about their experiences. Pre and Post test questions asked questions like what do you know about Strokes.**

- Created connections with an established local education support organization, North Chicago Community Partners. (NCCP)
- Regular meetings were held between CMS staff, the Medical Student Executive and NCCP for planning, execution and assessment of the program.
- 25 students were enrolled and campaigned for their classmates to join.
- Feedback of pre and post questions from participants is being collected.
- Next steps: expand of parent, guardian, teacher program underway.



## CONCLUSION

Access to care in a community depends on the availability of trained healthcare professionals. Health professionals are in high demand, but often, especially in underserved and lower-resource areas, students are not well informed about or supported in their pursuit of healthcare careers. Students from underrepresented or low-income communities may not have the prerequisites or skills needed to do well in college math and science and may lack the self-confidence to go into a field that generally, does not reflect their background. The MMS offers science exposure to 4th graders currently excited, inquisitive and developmentally curious.

A secondary benefit is the exposure of siblings and parents/guardians to medical health concerns such as stroke, and solutions such as CPR, sodium intake, and nutritional guides. Teacher parent/guardian component is an integral part of building a support system for these students. This is one solution to increasing curiosity in STEM offering mentors to a community in need of resources available. Ultimately our medical students were engaged and learned about working in the community and communicating to a cultural enriched group of people..

## REFERENCES

Holden, L., Rumala, B., Carson, P., & Siegel, E. (2014). Promoting careers in health care for urban youth: What students, parents and educators can teach us. Information services & use, 34(3-4), 355–366. <https://doi.org/10.3233/ISU-140761>.

Weiner, Stacy, Pre-Premed: Pipeline Efforts Steer Elementary School Students Into Medicine, AAMC News-Insights, January 8, 2018.

Supervisors/Mentors: Archana Chatterjee, MD/PhD, Dean of Chicago Medical School, and Nutan Vaidya, MD, Vice Dean for Faculty Affairs and Equity, Chicago Medical School

**Abstract:** 2022 ELAM Institutional Action Project – Mini-Medical School of Chicago Medical School

**Project Title:** Engaging Elementary School Students, their Parents/Guardians, and Teachers in a Program to Encourage Medical School Aspirations of Student from Populations Underrepresented in Medicine

**Name and Institution:** Mildred MG Olivier, MD - Chicago Medical School

**Collaborators and Mentors:** Archana Chatterjee, MD, PhD; Nutan Vaidya, MD

**Topic Category:** Research

**Background, Significance of project:** In underserved and lower-resource areas, students are often not informed about or supported in their pursuit of healthcare careers. They may lack the self-confidence to go into a field that generally does not reflect their background. Parents may not be able to help their child navigate a supportive educational path. Schools and teachers struggle to put together programs supportive of the health care field, and lack the science and math resources to provide students a strong background in these subjects.<sup>1</sup> *In answer to the need to create a path to healthcare careers, academic medical colleges and hospitals are offering programs designed to improve health literacy and open education pathways for young students.* This project addresses these concerns through two goals: 1. Work with community partners to encourage STEM for elementary school students (4<sup>th</sup> graders). 2. Leadership Development for Minority Medical Students in Health Literacy by fostering community engagement. As one issue is addressed so is the other.

**Methods/Approach/Evaluation Strategy:** CMS met with North Chicago Community Partners (NCCP). 25 4<sup>th</sup> graders were identified to join sessions starting in January 2022. IT between the two schools was coordinated for smooth delivery. The curriculum initially developed by Rush Medical Center powered by CPASS Foundation. Rush Medical Center was key in allowing us to use their materials and update them according to our population. An executive group of 7 medical students presented interactive science experiences designed with the interests of the students in mind. The medical education components focused on: I. Orientation and White Coat Ceremony; II. Musculoskeletal; III. Cardiovascular; IV. Gastrointestinal; V. Mental Health; VI. Graduation. Pre and Post test questions were given to the students for the 4 science sessions and will be tabulated for research purposes. Launch of Parent/Guardian and Teacher Academy post graduation allowed for cohort to ask questions of the CMS faculty and CMS medical Students in two additional sessions.

**Outcomes/Results:** We created connections with an established local education support organization, North Chicago Community Partners. Regular meetings were held between CMS staff, the Medical Student Executive team and NCCP for planning, execution and assessment of the program. 25 students were enrolled. Feedback from participants is being collected. Planning for next year is underway.

**Discussion:** The MMS was a wonderful success. The executive committee learned how to get things done and set goals. Parents and students looked forward to the sessions each week. Further education as to the times of the classes were reintegrated with the NCCP partners and emails. Initially, we planned to enter 30 students into the program and we found that the students were enrolling their classmates into the program with enthusiasm. Parents are reaching out to see when the next sessions will start.

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<sup>1</sup> Holden, L., Rumala, B., Carson, P., & Siegel, E. (2014). Promoting careers in health care for urban youth: What students, parents and educators can teach us. *Information services & use*, 34(3-4), 355–366. <https://doi.org/10.3233/ISU-140761>

<sup>2</sup>ibid.