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Mount Mercy Students Experience Cutting Edge Technology

Twenty four students from Mount Mercy Academy's Health and Science Academy and Health Care Career Club had the experience of a lifetime recently. The students visited the Jacobs Institute and were able to practice and learn about cutting edge technology.

Emily Lewandowski, a senior from East Aurora, is planning on a career in medicine. "I was blown away by the technological innovation and collaboration between different departments at the Jacobs Institute (JI). From 3D printed vasculature to simulated Cath labs, the technology was state of the art. I was also incredibly impressed by the set up of the JI and that so many different aspects of the Buffalo health system collaborate in one complex. Seeing Gates Vascular Institute, the University at Buffalo and Buffalo General Hospital interwoven in the JI seemed incredibly efficient," Lewandowski remarked.

Buffalo resident Julia Acosta, a senior, "was most impressed by fact that we have such a world-class institution right in Buffalo. It was crazy to think that the future of medicine and medical technology is being crafted right in our own city."

The Jacobs Institute's mission is "to accelerate the development of next-generation technologies through collisions of physicians, engineers, entrepreneurs and industry. " The Jacobs Institute is located in the Medical Corridor and "provides industry with access to leading neurovascular, interventional cardiology, electrophysiology and vascular surgeons and boasts the latest hands-on learning tools."

The students received a tour of Jacobs Institute and had the opportunity to listen to and talk with a graduate student about her path to biomedical engineering. Lewandowski was appreciative of the opportunities the trip provided her. "I believe this trip allowed me to see the other side of medicine - research. I usually picture myself in patient encounters, however I learned there is a whole other side of medicine that is just as important as patient care. This trip allowed me to meet some medical professionals, such as a biomechanical engineer. It is very likely I will be working with in my future," Lewandowski stated.

Sophomore Evelyn Nowak of Orchard Park is thinking of a career in physical therapy. She found the trip to be educational and enlightening. "This field trip has deepened my love for helping people in the medical field. I would love to one day, through physical therapy, work with people who have suffered from heart attacks, strokes, and vascular damage," Nowak commented.

Senior Alexis Sandor of Buffalo is also planning a career in medicine. She hopes to become a Doctor of Osteopathic Medicine and found the visit to be invaluable. "I will definitely consider working with the Jacobs Institute in the future and will always keep them in mind. I think that the implementations they are making are incredible and will cause surgery to become much more minimally invasive than it already is today. It also made me think more carefully about studying medical engineering because it certainly is an up-and-coming field. We need more women engineers and I think combining that with the medical field is very interesting," Sandor said.

Although the students valued and appreciated the opportunity to tour the facility and speak with those involved in the medical profession, the definite highlight of the trip was the opportunity to see and hold the 3D-Printed Vascular Flow Models and use the Advanced Patient-Specific, Catheterization Simulator Lab. They used both models and mannequins to practice.

Sandor commented, "To think that those exact same devices that I was viewing and holding during the tour were also being used in surgeries just a floor below me was astonishing. "

Mount Mercy Academy President Margaret M. Cronin accompanied the girls on the field trip. “It was impressive to view the facilities and to have our students receive the fantastic opportunity to view the latest technologies and then have the chance to use some of them. It was also rewarding when the speaker mentioned that the winners of 42 North Competition held incubator space in the facility. The speaker asked our students if they were familiar with the competition and they responded ‘yes, we attended all the presentations at Shea’s Buffalo. The speaker was impressed with the experiences our students have been afforded,” Cronin remarked.

“Visiting Jacobs Institute has made me want to learn more about the Buffalo Niagara Medical Campus, and about all of the technology centering biomedical engineering. I never realized that such amazing medical technologies are being created, so it has inspired me to learn more about the future of medicine,” Acosta stated.

Jacobs Institute hopes to improve the treatment of vascular disease in Western New York by providing hands on experiences for engineers and physicians and to help provide support for the University of Buffalo Medical School as well as Buffalo General Hospital.





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