

Marquette High School Leaders Tour OSF Innovation Center in Peoria

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(August 1, 2019/Peoria, IL) – Faculty in the STEM area (Science, Technology, Engineering, and Math) and other leaders at [Marquette Catholic High School](#) in Alton toured the [Jump Trading Simulation and Education Center](#) in Peoria today, to see the future of health care engineering and related technology. Jump, is considered the largest, free-standing simulation and health care engineering center in the world. It's used to train medical students and professionals as well as to build, test, and research innovations that will improve patient care and reduce health care costs.

Marquette faculty members and board member **David Bartosiak** toured Simulation Labs at Jump which replicate every kind of clinical space from the ambulance to surgical suites and patient rooms. Each space has state-of-the-art medical devices and technology including high-tech manikins that can simulate human functions and responses.

Teachers also toured the Innovation labs that support work in human factors and health care systems engineering and device design and analysis – work being done in partnership with the [University of Illinois College of Medicine in Peoria](#) (UICOMP) and other colleges within the entire U of I system. The tour highlighted the need for students from the creative arts who can assist with Medical Visualization – needed to support Augmented Reality and Virtual Reality used for training and surgery planning.

OSF HealthCare Saint Anthony's Health Center President and CEO **Ajay Pathak** arranged the tour for leaders at the Catholic high school that includes a new, 10,000 square foot STEM Center with three labs and four classrooms.

"It's important to find out how we can introduce options early to students in Alton and the Riverbend and give them the tools and access to understand different careers and fields in health care, according to Pathak. "It is really vital when we think about continuing to serve our community as we all age and our health care needs increase and continue to grow." Pathak says Marquette High School is an important community partner and the tour will be the start of discussions about ways to collaborate around curriculum and bring tools to faculty to advance their goals in preparing students for future careers.

School board member Bartosiak, who also volunteers as chief financial officer at Marquette H.S., was blown away by technology that allowed him to walk through the inside of a heart. **John Walters**, who leads Marquette's Science Department declared, "Miraculous!" as Bartosiak shared his experience. The board member is convinced [Virtual and Augmented Reality](#) needs to be introduced into Marquette's STEM curriculum. Bartosiak envisions consolidating lessons for engineering and biology students using a new 3D printer purchased last year. He suggests, engineering students could create models of organs that biology students would dissect to learn more about the distinct interior features.

Walters was also inspired to consider other cross-curricular programming that could include pairing Science and Art students. He had a bit of an "ah hah" moment when he donned the interactive Virtual Reality goggles and experienced how the VR Lab employs gaming theory to teach surgical and interventional competencies via self-directed training.

"This automatically is an avenue for more interest," said Walters. "Let's face it, so many of these kids grew up on this sort of thing so this makes our job much easier and I think it benefits our students. It's a good educational tool in terms of stimulating interest and from there, the sky's the limit."

Marquette Catholic High School has long had a reputation for producing students who excel in the STEAM fields. For example, Marquette's Advanced Placement (AP) Chemistry, Physics and Calculus scores are annually above national and state averages. According to school administrators, 99% of all students attend college and annually, Marquette graduates students who go on to become medical doctors, researchers, health professionals, scientists and engineers.

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Two Photos: Group from left to right: Michele Sands, Marquette H.S. Engineering Teacher, Felecia Huebener, OSF Saint Anthony's Physician Liaison and Business Development Director, Barb Snyders, Marquette H.S. Academic Dean, Ajay Pathak, OSF Saint Anthony's Health Center President and CEO, David Barkosiak, Marquette H.S. Board Member and CFO, John Walters, Science Department Chair.

Photo 2: Marquette High School Science Department Chair John Walters dons Virtual Reality headset and controllers to experience the immersive technology used to train and in some cases prepare for complex surgeries.