



# iEXCEL

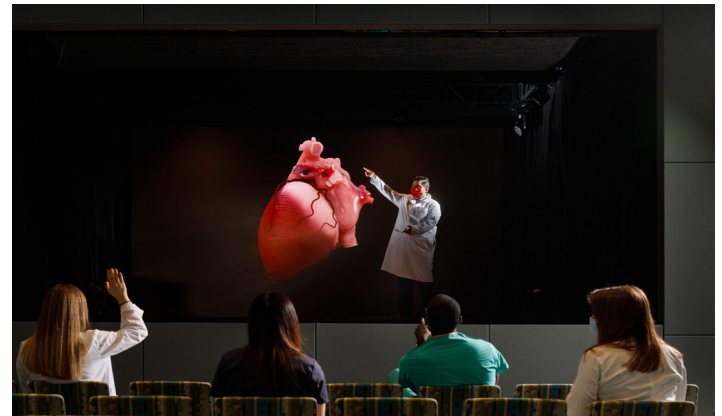
Improving human performance and effectiveness in health care

Davis Global Center Visualization & Simulation Technology



## An Infinity Wall

The atrium features a 23-foot-tall Infinity Wall, the largest Crystal LED wall in the western hemisphere. This wall stimulates innovation in teaching, learning and research as a versatile tool for video, digital assets, cutting-edge presentations and more.



## Clarkson Regional Health Services Holographic Theatre

In bringing learning to life, iEXCEL utilizes the first holographic theatre in any academic institution in the world. Using the latest in Direct View LED displays, theatre productions transform learning via lectures and presentations as immersive holographic 3D content.



## Home Instead Helix

Connected to UNMC campuses throughout Nebraska, large interactive touchwalls facilitate group collaboration and experiential learning. The largest installation is the Home Instead Helix, a 20-foot wide, 280-degree curved environment comprised of 30 interactive panels.



## Laser CAVE - 5

The Laser CAVE is a first-of-its-kind laserilluminated, five-sided fully immersive space. The visual fidelity and high pixel density creates a "full-body" experience for users involving sight, sound, physical movement and interaction. Over 70 million pixels surround the user within this 10 feet by 10 feet by 10 feet space.

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## 3D Workbenches

3D Workbenches are self-contained units that combine augmented and virtual reality (AR/VR) for individuals or small groups. Experiential learning with 3D visuals, infrared eye tracking and haptic feedback facilitate kinesthetic immersion. The compact size and ease of use promotes self-directed learning for students to practice at their own pace.



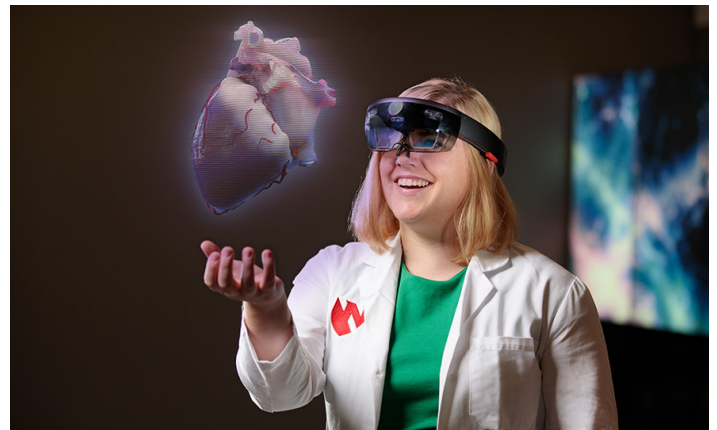
## 3D CADWalls

The 3D CADWalls are active three-dimensional displays coupled with motion capture technology to allow for a variety of experiences for learners. The large screen size and 3D effect allows groups of students to simultaneously experience content together, while infrared tracking facilitates precise interactions for single users.



## Advanced Clinical & Surgical Simulation

The design of the Davis Global Center replicates the entire healthcare system. Human patient simulators, task trainers, virtual reality simulators and standardized patients are all utilized to create experiential hands-on training sessions. The facility is a certified Society of American Gastrointestinal and Endoscopic Surgeons (SAGES) testing center complete with FLS, FES and FUSE testing capabilities.



## Augmented Reality (AR) & Virtual Reality (VR)

Learners are able to visualize complex concepts and simulate healthcare scenarios using a variety of head mounted displays (HMD) with augmented reality (AR), virtual reality (VR) and mixed reality. The iEXCEL visualization team collaborates with faculty, students and clinicians to create realistic, high-fidelity content for these emerging platforms.

