MSPACE

Simplify Technology and Extend Your Reach.

Located just outside Chicago, IL, the Spine Master's Institute (SMI) is the North American Spinal Society's (NASS) most technologically advanced spine education facility. Spine specialists worldwide visit SMI to improve their proficiency in hands-on surgical techniques and injection procedures, and keep abreast of the latest medical and physical spinal treatments. **When NASS needed to upgrade technologies in a new facility, they looked to MSpace.**

The Situation

As NASS planned to move to a new location, they looked to MSpace to collaborate and design a state-of-the-art facility that could provide a setting for dynamic, hands-on educational courses for up to 2,000 doctors, and serve as a worldwide center for industry research and advocacy.

The Solution

MSpace engineered a ground-up custom-built audiovisual solution to compliment the needs and functionalities set forth by NASS, encompassing their vision of training and collaboration.

The Technology

This finished project features such technology solutions as:

- Automatic camera tracking
- Simultaneous live and on-demand recordings of video, audio and computer images from multiple rooms
- Digital signage
- Complete system control via touch-panels for complete room functionality
- Audio-visual systems integration in a laboratory, auditorium, conference rooms and a corridor museum

"With the help of MSpace, we have a state-of-the-art AV infrastructure that is second to none."

Eric Muehlbauer, Executive Director, North American Spine Society

The Bio Skills Lab is truly a one-of-a-kind environment. (Shown above and above left.) There are 13 ceiling-mounted LCD displays amid the multiple work station area, allowing students and doctors to view procedures that the training doctors conduct. The doctor can send images of his or her computer to all monitors for a step-by-step process. The doctor can also send an image of themselves doing the procedure or an image sent from a scope. Multiple camera angles ensure the right image is being sent. The doctor may also choose to annotate over video to re-enforce a particular point of interest. (CONTINUES...)

"MSpace provided a cost effective, technology forward solution that enabled NASS to streamline the audiovisual process."

Brad Repsold, Senior Manager of Information Technology, North American Spine Society

The State-of-the-Art Auditorium acts as a multi-faceted collaborative training area. The presenter will have full room control via a touch-panel located at the podium. A secondary touch-panel is located in the control booth overlooking the audience and stage. The room features dual screens and vivid projectors manufactured by Christie Digital. Each screen is capable of showing any of the multiple media inputs from high resolution document cameras, laptops, dedicated PC's, DVD/VCR, TV, video feeds from the Bio Skills room as well as camera feeds from within the room itself. In addition to the microphones and audio re-enforcement for the presenter, there are two additional mic inputs on the stage for panel discussions and microphones are located throughout the audience seating area.

The design integrates a robust camera tracking system by Vaddio. Users can control and switch between multiple cameras and camera angles via a joystick. In addition, there is automatic camera tracking which will detect motion and follow the presenter seamlessly as he or she moves back and forth across the stage. If a student has a question, he or she can hit their 'push to talk' microphone that will automatically position a camera to the selected area. When they let go, the camera will resume following the presenter.

"NASS wanted the best in AV integration. The quality of work we were able to achieve has formed an on-going mutually successful relationship."

Ross Denne, MSpace

The Conference Rooms feature flat-screen wall-mounted LCD displays for presentations and meetings. The boardroom is a step up in design, featuring a 61" display. A touch-panel allows users to control PC presentations, DVD/ VCR, TV, room audio and room lighting as well as view video feeds such as training presentations and procedures in the Bio Skills room.

The Corridor Museum features networked LCD displays on the wall. This enables NASS to broadcast content specifically related to multiple aspects of the Society's work, history, vision and future. Users have remote flexibility to control and send different images to these displays.

The Break Room is a multi-purpose area. Users can simply have meetings, presentations, training or can go further and conduct and record classes. There is a high quality 3CCD camera that records the video in the room. The camera is controlled via touch-panel control or set in automatic mode, which switches camera presets when a user walks into a designated area and is sensed by the IR motion sensor located in the ceiling. The portable touch-panel controls lights, shades, computer presentations, DVD/ VCR, TV, room audio, camera control and recording.

Mediasite

One technology that sets this design apart is the ability to record, archive, stream and view live and on-demand content from multiple rooms. MSpace integrated a product called Mediasite from Sonic Foundry. NASS has a specific requirement to capture all media content throughout the building for distribution and training. The Mediasite product is able to simultaneously capture a video feed from the cameras and a high resolution feed from other inputs such as a computer or document camera along with the associated audio and process both images into a one screen recording. This content then can be archived, distributed, edited, and streamed. This type of collaboration and distance learning will put NASS ahead of the curve for effective and efficient training procedures while saving time, effort and travel which is especially important with the clientele NASS supports.

Where's Your MSPACE **?**