MCSSL Settles Into New Building

This summer the Munsell Color Science Laboratory family of faculty, staff and students moved into it’s new home. We are now located on the south side of the campus in our own building appropriately called the Color Science building. The building formerly known as the link building was gutted and remodeled to accommodate MCSSL research and educational needs. This building has one floor and one main hallway and it is perfect for us.

In our new space the faculty, staff and visiting scientists offices line the hallway. Adjacent to the staff offices, is the Franc Grum Color Science Learning Center, the research laboratories and the graduate student office which are joined by a common mail room, ping-pong room and small kitchen.

This new space configuration was designed to allow the MCSSL group to continue thriving with its family-like attitude. It affords students, faculty and staff the opportunity to interact conveniently and comfortably about their research, assignments or just to have casual conversation.

As you may know, we are honoring Dr. Franc Grum by designing a state-of-the-art seminar and teaching laboratory in his name. The plans for the learning center are underway and it will be the heart of our grand opening celebration in the near future.

http://www.cis.rit.edu/mcsl/about/fgcslc.htm

The MCSSL faculty and staff are back to working on their regular responsibilities and students taking classes, but each week progress is being made toward our finished show-place that MCSSL envisioned. Here are more pictures of the new MCSSL space. We hope you will be able to join us for the celebration when it is announced.

www.cis.rit.edu/mcsl
The digital camera has significantly changed how museums archive their collections for print and posterity. But while film has fallen by the wayside in museum photography, the quality of the new digital archives may have suffered in the transition.

Rochester Institute of Technology has won a $164,000 grant from the Andrew W. Mellon Foundation to benchmark and improve the quality of art imaging in American museums. The 15-month project will “document current practices, develop new testing procedures to quantify quality, and increase the scientific level of American museum imaging professionals,” says Roy Berns, the Hunter Professor in the Chester F. Carlson Center for Imaging Science at RIT. The grant period is from June 2003 through September 2004.

“RIT is taking the lead on this,” says Franziska Frey, assistant professor in RIT’s School of Print Media. “No one has comprehensively looked at the quality being produced in the museums.”

Co-investigators Berns and Frey are documenting the workflow museums use to digitally photograph paintings and sculptures.

The workflow is the process that begins with removing an object from an archive and taking it to the photo studios in a museum, lighting the object, shooting a picture, loading the digital image into a computer program, and putting the image into different uses, Frey says.

“We wanted to find out the exact steps that are happening,” she says. “We want to look at if from a technical point of view.”

Frey thinks the time is right for a study of this nature since museums have been using digital imaging for a few years and have established distinct workflows.

Frey and Berns developed and administered a questionnaire about art-imaging practices to museums to get an overview of current practices. The survey will elicit information about specific hardware and software, calibration, viewing environment, file format, image storage, and other aspects of the process. Five museums will be chosen for in-depth case studies and on-site visits.

“The goal is to improve the quality of the practices in the United States,” Berns says. “I think the whole idea of documenting cultural heritage is very important, and this will, hopefully, lead to improved practices.”

The transition from film to digital has left the onus on the photographer to get the printing right. With film, Frey explains, an intermediate person handled prepress details, which are now the responsibility of the photographer.

“And if that isn’t done right, later on you don’t have the quality you would need,” Frey says. “In the museum environment money is always a problem. You want to get things done the right way. You don’t want to have to redo them.”

Berns and Frey will develop new test procedures by compiling current standards, test targets and practices, and by soliciting input and feedback from museums, sensor and camera manufacturers, and organizations that develop standards for digital cameras, such as the American National Standards Institute, the International Organization for Standardization and the National Information Standards Organization.

The procedures and targets will be tested at RIT’s Munsell Color Science Laboratory (MCSL) using camera systems representative of those used at the museums surveyed. These cameras are part of another project, also supported by the Mellon Foundation, aimed at building novel spectral-based imaging systems for the National Gallery of Art, Washington and the Museum of Modern Art, New York.

“We are extremely pleased that the Mellon Foundation continues to look to RIT to provide leadership in color and imaging science of cultural heritage,” Berns says.

Field tests at the museums will provide further information for refining the process. By the end of the project, a series of test procedures and targets will be available to museums. Working with Berns and Frey are graduate student Erin Murphy and MCSL staff scientists Mitchell Rosen and Lawrence Taplin.

Berns and Frey will publish their findings and hold a workshop at RIT to share their results with participants from the camera manufacture, museum and scientific communities.

-S. Gawlowicz, University News, RIT.

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**CIC Cactus Pen**

Who Knew?

At the 11th Color Imaging Conference in November MCSL graduate student, Yongda Chen received the first ever cactus pen. He was awarded 2nd place in a three-way-tie for the poster session. The title of his spotlight presentation is: *A multi-Ink Color-Separation Algorithm Maximizing Color Constancy.* Yongda poses below with his cactus pen. Congratulations Yongda!