When Patricia Van Dalen looked at the motherboards and microprocessors in storage at the University of Miami’s Center for Computational Science (CCS), she didn’t see an electronics graveyard. “I saw a ‘liveyard’ with endless possibility,” recalls the Miami artist. The components are remnants of CCS’s first IBM-built Pegasus supercomputer, disassembled in 2013 to make way for Pegasus 2, which is five times faster than its predecessor. Now the hardware enjoys a second life as part of Data Hall, an art installation that adds color and kinetic energy to CCS’s main office on the sixth floor of Gables One Tower.

Sawsan Khuri, CCS director of engagement and assistant research professor in the Department of Computer Science, recommended Van Dalen for the project, which was installed in August, after taking note of her approach to mapping connections in science and nature. Van Dalen returned to campus October 2 to speak on a panel with fellow artists Nela Ochoa and Xavier Cortada, A.B. ’86, J.D. ’92, M.P.A. ’92, about how science inspires their art. The panel is one of many events that took place on the Coral Gables campus this semester as part of Places & Spaces: Mapping Science, a visualization exhibition that explores the meaning of data and the art of infographics.

The exhibition’s 100 works offer aesthetically masterful visual guides for everything from where our federal tax dollars go, to how all the verses of the Bible relate to one another, to “a global agenda to end poverty.” The collection, says Katy Börner, the curator of Places & Spaces and professor of information science at Indiana University, is intended to “inspire cross-disciplinary discussion on how to best track and communicate human activity and scientific progress on a global scale.”

Börner, who spoke at the UM opening on September 4, pioneered Places & Spaces back in 2005 with 10 visualizations and a grant from the National Science Foundation. It has since traveled the nation, growing to its current and final size of 100.

UM is the first place to display the decade-long project in its entirety. “Much of what my center is doing is developing tools that empower anyone to convert data into insights,” Börner says. “Some of these maps are excellent examples of how you can lift somebody up and let them see a much more global, holistic picture.”

Khuri says the works are inspiring and hopes they will “be a catalyst for creative, innovative data visualization work throughout all UM campuses.”
The World Bank’s Data Group, National Geographic, and the United Nations undertook a partnership in 2005 to raise awareness of the Millennium Development Goals (MDGs) by producing and disseminating a large-format, full-color wall map highlighting progress toward the goals.

CCS, the College of Arts and Sciences, and the School of Communication collaborated to bring Places & Spaces to UM, working closely with the Otto G. Richter Library, which displayed half of the visualizations plus all of the 3-D and interactive elements, and the School of Architecture, which had the remaining 50 works on view at Stanley and Jewell Glasgow Hall, where many of the events related to the exhibit were held. A parallel exhibition at the Richter Library featured maps and diagrams by local talent.

These events and talks by world-renowned visualization designers and researchers continued through December 11, when UM’s Ju Hong Park, assistant professor of architecture, and visualization expert Alberto Cairo were scheduled to speak.

“Our goal is to transform the University of Miami into a major center for data visualization, infographics, and information design in the southern United States,” says Cairo, an assistant professor at the School of Communication and director of the Visualization Program at the CCS. “Places & Spaces will help us achieve this goal.”

Visit visualization.miami.edu for more information.

Tags: center for computational science, Infographics