

Benefactor

Winter 2009

Ideas and Ingenuity to Converge at Huang Center

BY MONIQUE JOHNSON

Jen-Hsun Huang, MS '92, knows the power of a great idea. The year after graduating from Stanford's School of Engineering, he turned a great idea into NVIDIA, a company whose leading-edge visual computing technologies are transforming industries—from film production and video games to energy exploration and medical imaging. Today, Huang continues to invest in the potential of inventive ideas.

He and his wife, Lori, have committed \$30 million to help Stanford construct a modern and environmentally sustainable campus engineering center. Given the university's record of translating discoveries into breakthrough applications, Huang is confident that their gift will benefit not only students and faculty, but also society at large.

"The School of Engineering is a major source of intellectual energy for Silicon Valley and beyond," he says. "I am proud to help the school build a headquarters that embodies its plans for the future—a place that encourages people to come together to create the next generation of knowledge and technology."

The Jen-Hsun Huang School of Engineering Center is designed as a cross-disciplinary hub where researchers will tap engineering, technology, and entrepreneurship resources to solve complex problems in energy, environmental sustainability, and human health. With construction well under way on the 130,000-square-foot building, the center will be the place to turn ideas into reality when it opens in 2010.

The building's signature four-story rotunda will house a large conference center, a café, and a nearly "bookless" library—a vital digital resource for the entire Stanford community. On the ground floor, research workshops and visualization labs will provide diverse spaces for students to imagine, design, prototype, and share their ideas. By immersing themselves in the creative and team-based aspects of engineering, they will accrue the experience to become 21st-century leaders in their fields.

"As we've strived to build a culture of collaboration and innovation, we've realized the need for a physical center to focus that aspiration," says James Plummer, the Frederick Emmons Terman Dean and John M. Fluke Professor in Electrical Engineering. "We're grateful to Jen-Hsun for making this a reality."

The Huang Center will serve as a focal point of Stanford's nascent Science and Engineering Quad (SEQ), just west of the university's Main Quad, and will adjoin the Jerry Yang and Akiko Yamazaki Environment and Energy Building. Future centers for nanoscale science and technology and for bioengineering and chemical engineering education and research will complete the SEQ configuration. Shared laboratory space will connect the buildings, accelerating knowledge flow and facilitating interdisciplinary projects.

SEQ promises to enhance the collaborative landscape, creating even more opportunities for partnerships like the one between Stanford and Huang's company. NVIDIA is a founding member of the university's pioneering parallel computing project, the Pervasive Parallelism Lab. It also contributes to the Folding@home distributed computing project, which leverages the horsepower of graphics processing units and more than two million computers worldwide to simulate the biological process of protein folding, more than 140 times faster than traditional computing. Through this complex exercise, investigators hope to uncover cures for diseases such as Alzheimer's and Parkinson's. It's the very type of venture the Huang Center will inevitably spawn.

"The Huang Engineering Center will be a nexus for problem-solving work on campus and a gathering place for students, thought leaders, and industry partners from all over the world," says Plummer. ■

This story is adapted from an article that originally appeared in Stanford Report.



The Jen-Hsun Huang School of Engineering Center, like all Science and Engineering Quad buildings, will incorporate stringent energy- and water-saving features in keeping with Stanford's commitment to environmentally sustainable design and construction.

RENDERING: Courtesy of BOORA Architects



Lori and Jen-Hsun Huang, MS '92, and their children, Spencer (left) and Madison (right). Jen-Hsun Huang is a member of the School of Engineering's Advisory Council. PHOTO: John Todd