



Carnegie Mellon

Volume 1, Issue 1 Summer 2004

# SEER BULLETIN

## Inside this issue:

Meet Lowell Steinbrenner	2
Research	2
Education	2
2004 Seed Funding	3
SEER Staff	3
Upcoming Events	4

## Steinbrenner Institute for Environmental Education and Research Established April 2, 2004

The Steinbrenner Institute for Environmental Education and Research (SEER) was established in April 2004 to promote and build upon Carnegie Mellon's distinguished track record in research, education and outreach related to environmental sustainability. Thanks to the generous contribution of Trustee Lowell Steinbrenner and his wife, Jan, a strategic thrust of the university is being realized.

SEER is a university-wide effort that will enhance existing initiatives and provide coordinating support in order to realize even greater synergies and opportunities. SEER's initial focus will be centered on two critical environmental themes:

- Energy and the environment; including electricity and energy for transportation: Energy production has significant environmental impacts, both locally and globally. Carnegie Mellon should help lead developments providing improved energy efficiency, cleaner energy production and related goals.
- Urban infrastructure in both developed and developing regions: Infrastructure here includes the built and natural environment in urban regions, encompassing airsheds, buildings, energy usage, transport, water, wastewater and solid waste.

Information about SEER and campus wide environmental activities will be maintained at [www.cmu.edu/environment](http://www.cmu.edu/environment).

*Sustainability is the biggest challenge of the 21st century....at Carnegie Mellon, we are capable, motivated and positioned to make a global difference.*

***"Because of social, economic and political circumstances, we undoubtedly will have to radically change our habits with regard to our natural resources," said Steinbrenner, a member of the university's environmental strategic planning subcommittee and former chairman of Contours, Ltd.***



New House dormitory is silver LEED (Leadership in Energy & Environmental Design) certified.



Pittsburgh Particulate Supersite



Carnegie Mellon uses 8% wind power for electricity

## Meet Lowell Steinbrenner

Lowell Steinbrenner is the retired Chairman of Contours, Ltd., a specialty steel company he co-founded in 1970 in Orrville, Ohio. Contours manufactures cold rolled and cold drawn steel shape and flat wire and is now the leading US producer of these products. He began his career in the steel industry in Pittsburgh in 1955 with Jones and Laughlin Steel Corp. and later managed Armetco, Inc. in Wooster, Ohio and Philadelphia Steel and Wire in Philadelphia, PA before starting Contours. Steinbrenner received a bachelor's degree and a master's degree in metallurgical engineering from Carnegie Mellon in 1955 and 1960. He holds a master's degree in theological studies from Harvard where he majored in comparative religion. He was a member of the University Professors program at Boston University where he studied and did research in international development, and he has participated in economic development projects in Africa and Asia. Steinbrenner served in the Ohio Senate from 1982 to 1985. Currently, he serves on several advisory boards and public affairs councils.



Lowell Steinbrenner

## Research: Overview of E&E Activities at CMU

The existing environment and energy (E&E) activities on campus are extensive. Research and outreach is occurring in all colleges, from engineering to arts and humanities, and in 10 centers, from the Green Design Institute to the Studio for Creative Inquiry. The domestic and international topic areas are extensive, including: agriculture, air pollution, ethics environmental literacy, global warming, infrastructure, land use planning, pollution prevention, public policy, remediation and water, renewable energy and transportation energy. Additionally, the campus-wide Green Practices Committee is helping to assure that future campus developments, related to grounds, buildings and vehicles, embrace the concepts of sustainable development. The following centers will be featured in subsequent issues of the newsletter.

- Brownfields Center
- Center for International Corporate Responsibility
- Center for the Human Dimension and Global Change
- Carnegie Mellon Electricity Industry Center
- Institute for the Green Oxidation of Chemistry
- Center for Building Performance and Diagnostics
- Center for the Advancement of Applied Ethics
- Center for the Study and Improvement of Regulation
- Green Design Institute
- Studio for Creative Inquiry

## Education: Environment Across the Curriculum Initiative & Luce Education Program

It is a hope of Lowell Steinbrenner that all graduates of Carnegie Mellon are environmental stewards. New programs at Carnegie Mellon are taking the initial steps to meet that goal. 'Environment Across the Curriculum' (EAC) is working to assure that environmental awareness and conscience becomes a basic tenant of the learning experience for all graduates of Carnegie Mellon—regardless of their major course of study. For the upcoming school year, more than 2 dozen professors will introduce environmental modules into courses offered across all colleges at both the undergraduate and graduate levels.

The "greening of undergraduate education" initiative is becoming wildly popular for both professors and students. In the Spring 2004 semester, nearly 300 freshmen and sophomores were introduced to environmental issues without having to register for an 'environmental' course. Thanks to the support of the Henry Luce Foundation, we have initially developed 8 sections in 6 early education courses: art interdisciplinary, civil and environmental engineering, architecture, design, art and English. To date, 12 courses are confirmed for next year. These courses will be highlighted in subsequent newsletters. But in the meantime, please learn more about the courses at:

[www.cmu.edu/education/greening](http://www.cmu.edu/education/greening)

***"To change the ways the world thinks and acts about the environment, through our educational and research methods and results, through the issues we raise, and through the outcomes we produce. Sustainability is the great 21st century environmental challenge." - Carnegie Mellon Trustee Committee on the Environmental Strategic Plan 2002***

## 2004 Seed Funding Recipients

In addition to serving as a point of contact to the outside community, the Steinbrenner Institute also provides seed funding for new projects at Carnegie Mellon. The 2004 recipients include the following:

- Architecture (Megan Snyder, MS student): Green Roof Performance Experiment
- Student Affairs (M. Shernell Smith): New House Environmental Programming
- Public Relations (Chriss Swaney): Society of Environmental Journalists Conference Booklet
- Green Practices Committee (Barb Kviz and Dave Dzombak): Baseline Environmental Assessment for Carnegie Mellon
- Environment Across the Curriculum (Cliff Davidson and Indira Nair): Sustainable Environmental Modules for an Environment Across the Curriculum Program
- Architecture (Ramesh Krishnamurti, Kristen Kurland, Luis Rico-Guiterrez): Curriculum Development for a New Class in Advanced Visualization of Urban Systems and Infrastructures
- Green Design Institute & Civil and Environmental Eng. (Bill Morrow): Expanded Transportation and Infrastructure Cost Estimation of Cellulosic Ethanol for Light Duty Transportation
- Green Practices (Barb Kviz): Southwestern Pennsylvania Household Hazardous Waste Collection Program



L to R: Bill Morrow, Seed funding recipient, and Lowell Steinbrenner

The seed funding program is one of the cornerstones of the SEER. It allows researchers and students to explore 'outside the box'. This freedom is critical to nurturing ideas that can lead to longer and more influential research programs.

L to R: Chris Hendrickson, Deb Lange, Jan Steinbrenner, Lowell Steinbrenner, and Jared Cohon



## A Look at the SEER Staff

### Chris Hendrickson, Director

Chris Hendrickson serves as Director of the Steinbrenner Institute. He is also head of Carnegie Mellon's Civil and Environmental Engineering Department. Dr. Hendrickson has been a member of the Carnegie Mellon faculty since 1978. During that time, he has served as Professor of Civil and Environmental Engineering, Education Director of the Engineering Design Research Center, and Associate Dean for Academic Affairs in the college of engineering. In 1996, Dr. Hendrickson was named Duquesne Light Company Professor of Engineering.

### Deborah Lange, Executive Director

Deborah Lange, is the Executive Director of the Steinbrenner Institute. Deb has been the Executive Director of the Brownfields Center at Carnegie Mellon since 1997. She holds a B.S. in Civil Engineering from the Pennsylvania State University (1979), a M.S. (1982) and Ph.D. (2001) in Civil and Environmental Engineering from Carnegie Mellon in Pittsburgh, Pennsylvania.

***"The environment has long been one of Carnegie Mellon's quiet strengths, and has emerged as one of our key strategic areas for the future. We have a great vision for where we would like to go with this effort, and I am so pleased that we now have this institute in place as the first important building block." -Carnegie Mellon President Jared Cohon***



**Steinbrenner Institute for  
Environmental Education and Research**

**Carnegie Mellon**

SEER  
111 Porter Hall  
5000 Forbes Avenue  
Pittsburgh, PA 15213  
Phone: 412-268-7121  
Fax: 412-268-7813  
Email: [dlange@cmu.edu](mailto:dlange@cmu.edu)

## UPCOMING EVENTS

- Sept. 3: The Future of the Automobile, co-sponsored by SEER, the Green Design Institute and the Carnegie Bosch Institute. Senior Management from Bosch North America will provide insight into the R&D efforts relative to automotive technology.
- Sept. 14: Regional Greening Workshop for Higher Educations, sponsored by the Pennsylvania Consortium for Interdisciplinary Environmental Policy, ReBuild America (US Dept. of Energy), and the Pennsylvania Dept. of Environmental Protection. Hosted by Carnegie Mellon's Green Practices Committee. Watch [www.paconsortium.state.pa.us](http://www.paconsortium.state.pa.us) for information.
- Sept. 29: Symposium 2004—Pittsburgh Prosperous and Sustainable, sponsored by Cornerstones. For more information contact Bob Johnston at 412-268-5994
- Oct. 20-24: Society of Environmental Journalists Conference, hosted by Carnegie Mellon. For more information, please see: [www.sej.org/confer/index1.html](http://www.sej.org/confer/index1.html)
- Fall 2004 TBA: Carbon Management Workshop funded by the Carnegie Bosch Institute and hosted by the Green Design Initiative. Theme: How will CO<sub>2</sub> Regulation Affect the Service Sector? What should companies do? Hosted by Carnegie Mellon's Green Practices Committee.
- Oct. 21: Lecture by Andy Rivkin, environmental reporter for the New York Times speaking on global environment and the media.
- Dec. 7: Shannon McMullen, Post-Doc in Center for Arts in Society, Re-Visions: Brownfields in Cultural Perspective, The Ruhr District and Pittsburgh, location on Carnegie Mellon's campus, TBA

**Watch the web site for continuation of our Distinguished Lecture Series and other lectures/seminars to be hosted throughout the academic year. [www.cmu.edu/environment](http://www.cmu.edu/environment)**