

SEER News

Steinbrenner Institute for Environmental Education and Research

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Deb Lange accepts a Small Business Administration Grant, funding the New Western PA Brownfields Center, from Rep. Melissa Hart

Western Pennsylvania Brownfields Center

The Western Pennsylvania Brownfields Center will be housed in the Steinbrenner Institute for Environmental Education and Research at Carnegie Mellon. The new center will be a resource for local communities and will serve as a vehicle to enhance the growth of brownfields cleanup and development in western Pennsylvania, according to Deborah A. Lange, executive director of SEER.

“Solutions for brownfields are complex and multidisciplinary, and there is a wealth of experience in western Pennsylvania. As the center evolves, we hope to promote brownfield development by engaging the expertise of local stakeholder groups, including government officials and others from banks, consulting firms, insurance companies and real estate developers,” Lange said. “We are extremely grateful to Rep. Melissa Hart for helping us obtain a \$200,000 Small Business Administration grant to fund the new center.”

Brownfields are abandoned, dormant, and underused industrial or commercial properties with either actual or perceived environmental contamination that could deter expansion or redevelopment.

“The Pittsburgh region has been a leader in developing its old brownfields, and this new center will continue to stimulate that development,” Hart said. As in most Rust Belt cities, Pittsburgh’s riverfront was once home to mills and warehouses. In recent years, more than \$800 million in public and private money has been pumped into half a dozen projects to restore the old industrial riverfront, like the \$280 million conversion of the old LTV steel site into 2.7 million square feet of offices, apartments, retail shops, and entertainment venues in a section of the city’s South Side.

The new Western Pennsylvania Brownfields Center will work with community leaders and small businesses to eliminate development barriers and take advantage of opportunities for continued redevelopment of the region’s brownfields. In providing ready access to information, the new center will hold seminars and create a Web site, or “one-stop shop,” of useful brownfields development guidance, including information produced by federal and state sources, such as the U.S. Environmental Protection Agency and the Pennsylvania Department of Environmental Protection.

Alumni Spotlight: Sarosh Kumana (Tepper '77)

The birth of my son Kevin in 1988 was a catalyst for me. I suddenly felt responsible for the world he would live in. As I imagined his life, I started examining the data on resources, population, technology, habitat, and sustainability from the critical viewpoints of economics and political/cultural realities.

I realized that virtually all politicians simply respond to immediate pressures, and we cannot depend on them for leadership, to tell the hard truth. There are many limits that humans and nations have been unwilling to acknowledge. There is no magic bullet to solve the problem. Unfortunately, people still believe that a free lunch is possible; but it has seemed possible in the past only because we have been borrowing from the future, shortchanging our children.

But the future is already upon us. Some of the looming threats are quite immediate, and global interdependency means that we will experience many of the problems within this century- in our lifetime. Even rich nations and people will feel the pinch of resource-contention, while poor ones may simply be unable to survive, as has already been the case in parts of Africa. When survival itself is at stake, many norms of civilized behavior may go out the window, as we have seen in Rwanda, Darfur, Serbia, Croatia, Cambodia etc.

It is part of my commitment to be personally responsible and accountable for the world, rather than rely upon 'them'. In the most basic sense, there is no separation between them and us. I realized that there is only 'us'. Since then, I have undertaken, with a variety of partner organizations, several initiatives both in the US and in India, to spread awareness, and generate interest in the long-term big-picture future of the world, which could be encompassed in the word 'sustainability'.

For meaningful change to occur, a critical mass of the electorate has to unrelentingly make a stand for a sustainable future, and be prepared to make the many adjustments that it would require. A mass of people have to lead, so our 'leaders' can follow.

The keys to succeeding in this are information, knowledge and education, spread to interested students far and wide, in rich nations and poor, to examine the situation, and to devise multitudes of solutions and approaches that collectively can help humanity solve the many problems that need to be addressed. And that is why I turned to my alma mater CMU, which, due to its global reach and reputation in other centers of learning could be a leader once again in this sphere. I was fortunate to have been referred to Deb Lange at SEER, who was immediately interested and who came up with many ideas to move our pilot project (Great Global Sustainability Challenge) along until it came to fruition. She is as committed and inspiring a leader as I could have hoped for as a partner and deserves full credit, along with her cadre of dedicated student volunteers, for its success.

Sarosh Kumana grew up in Bombay, India. He graduated from St. Xavier's Boys Academy in 1970. After a degree in Economics from Sydenham College, University of Bombay, he furthered his education in England and the United States. Sarosh obtained an MBA, on scholarship, from Carnegie-Mellon University in 1977, where he was awarded the prestigious "Entrepreneur of the Year" prize.

Sarosh Kumana has worked in various parts of the real estate and investment industry since then. After a few years with Citicorp in Financial Management and Product Development in their Mortgage Banking subsidiary, Sarosh moved to San Francisco as Controller for Crocker Bank.

(CONTINUED ON NEXT PAGE)

Since 1982, Sarosh has been an independent businessman. As founder and President of numerous investment partnerships and corporations in Investments, Property Management, Real Estate and Loan Brokerage, Construction Management, Syndication etc. he has had extensive experience in successful business management.

He is actively involved in civic, community and political affairs, revolving around global sustainability, and also locally, in housing issues. His most recent civic project is to enable homeownership for thousands of San Francisco tenants through the Affordable HomeOwnership Alliance program known as HomeOwnership for Tenants (HOT) and Home Ownership Program for Equity (HOPE). He has been interviewed and quoted many times on radio, TV and in the print media.

Sarosh enjoys tennis, skiing, travel, and making a difference.



Sarosh during a presentation at the Great Global Sustainability Challenge.

New Research Centers

CAPS: Center for Atmospheric Particles Study

While the research covers topics ranging from carbon policy to quantum mechanics, there are several cohesive themes that cut across our various disciplines and unify the group as an interdisciplinary team. These themes include particulate matter, climate, health, atmospheric modeling, combustion sources, aerosol characterization, condensed-phase processing, gas-phase processing, radical measurement, atmospheric science and fundamental chemistry. For more information, please contact Neil Donahue, nmd@andrew.cmu.edu, <http://caps.web.cmu.edu/>

CSE: Center for Sustainability Engineering

Carnegie Mellon University, the University of Texas at Austin, and Arizona State University are pleased to announce the establishment of the Center for Sustainable Engineering, supported by the National Science Foundation and the Environmental Protection Agency. Sustainable Engineering may be defined as engineering for human development that meets the needs of the present without compromising the ability of future generations to meet their own needs (Bruntland Commission, 1987). For more information, please contact Cliff Davidson, cliff@cmu.edu, <http://www.csengin.org/>

WaterQUEST: Water Quality in Urban Environment Systems

Water QUEST is a multi-disciplinary center housed in the Carnegie Institute of Technology at Carnegie Mellon University with participating faculty from four colleges and eight departments. The driving mission of WaterQuest is to advance the scientific basis for management of inputs and inventories of contaminants in urban watersheds. For more information, please contact Jeanne VanBriesen, jeanne@cmu.edu, <http://www.ce.cmu/~wquest>

Media Boot Camp

Carnegie Mellon University's Steinbrenner Institute for environmental Education and Research (SEER) hosted the 2006 Media Boot Camp Series Wednesday, March 22 from 11:30 a.m. to 1:30 p.m. in the Singleton Room at Roberts Hall.

The Media Boot Camp series is designed to help faculty and researchers better understand the needs of the reporters covering science and the environment. The event is open to the public.

About 40 faculty and staff participated in the March boot camp which featured Juliet Eilperin, national environmental reporter of [The Washington Post](#); Jeff Mervis, deputy news editor of [Science News](#); Andrew Wright, senior/editor environment for [Engineering News-Record](#) and Allison Heinrichs, environmental reporter at the [Pittsburgh Tribune-Review](#).

Juliet is the author of "Fight Club Politics:How Partisanship is Poisoning the U.S. House of Representatives," a recently released and highly acclaimed book that challenges whether or not the House is fulfilling its intended charge to represent ordinary citizens. While visiting Carnegie Mellon, Juliet spoke of her current assignment in covering environmental issues. The environment is the intersection of policy, politics and science but she emphasized the need for the reporting of more rigorous (and accurate) science in the media.

Andrew represents a non-peer reviewed publication and noted that in a commercial world, catastrophes get first press. He see interest in areas such as clean coal, tar sands, green buildings and smart highways and he looks for practical applications of research: he must have content that sells to his readership. Andrew spoke to the dynamics of his job. His motto is anticipate, act, adapt!

"This workshop is a wonderful way to introduce young faculty to the world of journalism and newsmaking," said Wright.

Allison looks for local/western Pennsylvania, enterprising stories but emphasizes the need for statistics and facts.

Jeff has been writing about science policy for 25 years. He provided some coaching and laid out the ground rules for working with the media: you cannot argue nor be confrontational with the media; you need to understand what a reporter is looking for; and, you have to understand how the media works (such as the constraints of deadlines.)

Deb Lange, Executive Director of the SEER, said that the Media Boot Camp series has been well received by the participating faculty. "The key to successful media relations is rapport and mutual respect. The boot camps help to foster these relationships," Lange notes.

A fourth Media Boot Camp event, featuring more national and environmental reporters and editors, is scheduled for September 2006.

A recent article in the [NY Times](#) describes the greening of US campuses. The article discusses New House at Carnegie Mellon, the first green dormitory in the country, as well as green roofs and green dormitories at other school across the country. For more information, please visit the SEER website at www.cmu.edu/environment.



2006 SEER SEED FUND GRANTS

Congratulations to the recent recipients of the 2006 SEER seed grants!

Peter Madsen, H&SS, Philosophy - The Problem of Environmental Justice - an Immersion Course - The general goal of the immersion course is to broaden and deepen awareness among students of the pressing problems inherent in the area of Environmental Justice. Specific course objectives include:

- Defining EJ and detailing the extent of the problem
- Survey the academic field of EJ and EJ activism
- Identify causes of the problem at the organizational, social, economic and cultural levels
- Identify potential solutions to the problem

Franco Sciannemeo, CFA - The Sound of Carnegie Mellon - The study of environmental sounds focuses on the complexity of the natural world — of which humans are one element in the mix. The study requires the ability to articulate, understand, and respond to critical social, political, cultural, and scientific issues involving sound in natural and human-made acoustical environments.

Dave Dzombak, CIT, CEE - Point of Use Drinking Water Treatment As an Alternative to Bottled Water at Carnegie Mellon - The objectives of this project are to investigate available technologies for point-of-use drinking water treatment systems, to develop alternative designs and associated costs for implementation of such a system in CEE, to develop a recommendation for a system to implement in CEE, to develop educational materials related to the system decided upon by CEE, and to disseminate the findings to the broader campus community.

Paul Fischbeck and David Gerard, CIT, EPP - Taking Learning Beyond the Classroom: Developing Interactive Web-Based Tools to Examine New Vehicle Technologies on Energy Use and Emissions - The primary objective is to develop two interactive web-based tools for the SEER website.

Lucio Soibelman, CIT, CEE - Advanced Infrastructure Systems for Solar Decathlon House - The purpose of this course is to give students experience working on unstructured, real-world problems that, for proper treatment, require teamwork and contributions in diverse areas.

Elizabeth Casman, CIT, EPP - Institutional Challenges in Providing Sustainable Drinking Water Technologies for a Developing World - This project is intended to shed light on the problem of providing clean drinking water in places having neither the economic nor human resources to maintain advanced water treatment and delivery systems.

Scott Matthews, Cliff Davidson, Deanna Matthews, Michael Griffin, CIT, CEE - Eliminating the Production of Hazardous Wastes in Automobile Manufacturing: A Class Project to Assist the CMU Green Practices Program - As part of this project, students will travel to Michigan in the spring semester to visit two Ford manufacturing facilities (including the famous Ford Rouge Plant, an internationally-recognized example of a green manufacturing facility) to see first-hand what processes exist in automobile manufacturing, and which lead to hazardous wastes.

CIT - Carnegie Institute of Technology

CEE - Civil and Environmental Engineering

EPP - Engineering and Public Policy

CFA - College of Fine Arts

H&SS - History and Social Sciences

SEER News

USNWR Top 10 ranking!
Congratulations to the Civil & Environmental
Engineering Dept. for ranking again in the top 10
graduate schools in the country!



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Way to Go!

Congratulations to Patricia Stallings, winner of the Carnegie Mellon University Meeting of the Minds Environmental Award! Patricia was awarded for her honor's thesis, regarding undergraduate environmental education. Her thesis is intended to assess current interest in environmental courses, environmental subjects, outside-the-classroom activities or organized groups; facilitate the future pursuit of improvements to the environmental inside and outside-the-classroom curriculum and offerings; and engage those that are unaware or interested in current environmental curriculum or activities through practical assessment and recommendations.

First call for papers!

Engineering Sustainability 2007
Innovations that Span Boundaries
April. 15-18, 2007

Sponsor: Mascaro Sustainability Initiative, University of Pittsburgh
Collaborating Partner: SEER

Check out our website or the Mascaro Sustainability website for
more information!

SEER: www.cmu.edu/environment
Mascaro Sustainability:
www.engr.pitt.edu/msi/2007conference/confmain.htm

Great Global Sustainability Challenge Symposium

On April 7, 2006, the first annual Great Global Sustainability Challenge Symposium at Carnegie Mellon University was held. With 25 participants, numerous organizers and judges, the GGSC proved to be a success in its first venture.

The challenge was initiated in order to facilitate thought-provoking ideas concerning cities that need to address sustainability issues. The challenge was open to members of the Carnegie Mellon community, including students, faculty, and members of the Academy for Lifelong Learning.

Many interesting ideas were presented on global cities including Milan, Italy; La Paz, Bolivia; Beijing, China; Bangalore, India; and Mexico City, Mexico.

Some ideas given by the winning team, who did their presentation on Beijing, China, relate to the three dimensions of sustainability: environmental, economical and social. Their main concern, which amounts to a large environmental problem for the city, was air pollution. The group proposed three main ideas for providing Beijing with a sustainable future. The three ideas were car-driving reduction, efficient energy sources, and better construction. They figured that these ideas would create real, sustainable change by improving air quality, creating green or renewable energy, and increasing awareness of environmental problems. The group also proposed that the powerful and influential Chinese government should be persuaded to adhere to such changes in advance of and in motivation for the 2008 Olympics and 2012 Kyoto Protocol.

All groups presented intelligent and working plans for the global cities and they were all judged by the following criterion:

- 1) the idea's potential to create real, sustainable change
- 2) applicability to the city
- 3) creativity and originality
- 4) practicality
- 5) quality and effectiveness of presentation

The first Sustainability Challenge was quite an achievement, and we must give special thanks to our judges: Sarosh Kumana, Lowell Steinbrenner, Rebecca Flora and Michael Johnson; and to the students who helped coordinate this event: Meghan Laskowski, Emmelin Altschul, Isabella Cederquist, Ryan England and Diane Loviglio.



SEER News

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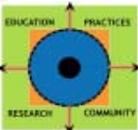
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