The Carnegie Mellon Leadership Academy announced its inaugural class during the Leadership Symposium in March. The academy is a professional development program geared to staff members who demonstrate leadership potential, commitment to the future of Carnegie Mellon and a strong drive to achieve greater levels of responsibility.

“THE Leadership Academy is not a one time thing. It’s something we hope to do for many years to come,” said Ron Placone, assistant vice president of Learning and Development.

Both men’s contributions are widespread and far-reaching. Elliott created new efforts in student recruitment that have now become national models in higher education. Goodnow transformed a strong college division into an internationally renowned center for organizational psychology.

“The Leadership Academy is something we hope to do for many years to come,” said Placone.

The first class includes:
- Miroslava Angelova, director for business operations, Information Networking Institute
- Michael Bett, managing director of the Pittsburgh Science of Learning Center, Human-Computer Interaction Institute
- Tara Branstad, director, enterprise creation/senior manager, Business Development and Licensing Center for Technology Transfer and Enterprise Creation
Q&A With Priya Narasimhan: Sports Experiences Enhanced by Fans

How has your research team been involved with your work?

My research team has been closely involved in implementing the details of the vision that we set out with. Both my Myron (football engineering) and my YinzCam research groups have been involved in the day-to-day design and implementation decisions. YinzCam is designed to help fans select and view live video feeds from unique camera angles throughout a variety of sporting arenas.

Chris Swaney

Priya Narasimhan is like a high-speed comet. This energetic and creative assistant professor of electrical and computer engineering and computer science takes pride in challenging her students to turn dreams into reality. She teaches the capstone electrical and computer engineering “Embedded Systems Design” class in which students have developed some novel technologies for industry and social networking venues. She also was recently named the East Coast Director of Carnegie Mellon CyLab’s $2.4 million Mobility Research Lab, which will help the telecommunications industry improve handheld devices. We caught up with her right after one of her fast-paced classes to discuss her work.

What prompted you to tackle research in sports technology?

I am a huge sports fan, and I follow all sports closely. I have always looked for ways to enhance the fan experience, being a fan myself, and also to improve all aspects of the game, ranging from refereeing to training and scouting.

What are the commercial applications of this work?

For YinzCam, the commercial applications are to provide the fan with a unique experience at a sporting event through their mobile phone. For the team/stadium, YinzCam provides an additional way to generate revenue. For football engineering, this is a way for the team to obtain technology to improve training and scouting.

What is the next step for the research?

The next step is to look at deeper and more interactive mobile experiences, with social networking, location awareness, and also richer explorations of interactive video.

Lee’s residency will focus on the most progressive states in the world, and a fabulous place in which to live, work and visit,” Premier Rann said.

Lee’s residency will focus on the most progressive states in the world, and a fabulous place in which to live, work and visit,” Premier Rann said.

Lee’s residency will focus on the most progressive states in the world, and a fabulous place in which to live, work and visit,” Premier Rann said.

Lee’s residency will focus on the most progressive states in the world, and a fabulous place in which to live, work and visit,” Premier Rann said.

Lee’s residency will focus on the most progressive states in the world, and a fabulous place in which to live, work and visit,” Premier Rann said.

For YinzCam, the commercial applications are to provide the fan with a unique experience at a sporting event through their mobile phone. For the team/stadium, YinzCam provides an additional way to generate revenue. For football engineering, this is a way for the team to obtain technology to improve training and scouting.

What is the next step for the research?

The next step is to look at deeper and more interactive mobile experiences, with social networking, location awareness, and also richer explorations of interactive video.

What was your reaction to winning this year’s Emerging Female Scientist Award from the 13th annual Carnegie Science Center Awards for 2009?

The award means a lot, particularly since it’s from the Carnegie Science Center, which is a wonderful place where youngsters are exposed to and gain appreciation of science.

Lee’s mission is to increase awareness and understanding of good design as integral to a sustainable future for South Australia and to identify current and potential strengths and key design influencers. She will assist in the development of an integrated design strategy for South Australia leading to new models of interdisciplinary collaboration. Other goals include establishing networks, through local, national and international relationships, with social networking, location awareness, and also richer explorations of interactive video.

What is the next step for the research?

The next step is to look at deeper and more interactive mobile experiences, with social networking, location awareness, and also richer explorations of interactive video.

What was your reaction to winning this year’s Emerging Female Scientist Award from the 13th annual Carnegie Science Center Awards for 2009?

The award means a lot, particularly since it’s from the Carnegie Science Center, which is a wonderful place where youngsters are exposed to and gain appreciation of science.

Lee’s mission is to increase awareness and understanding of good design as integral to a sustainable future for South Australia and to identify current and potential strengths and key design influencers. She will assist in the development of an integrated design strategy for South Australia leading to new models of interdisciplinary collaboration. Other goals include establishing networks, through local, national and international relationships, with social networking, location awareness, and also richer explorations of interactive video.

What is the next step for the research?

The next step is to look at deeper and more interactive mobile experiences, with social networking, location awareness, and also richer explorations of interactive video.

What was your reaction to winning this year’s Emerging Female Scientist Award from the 13th annual Carnegie Science Center Awards for 2009?

The award means a lot, particularly since it’s from the Carnegie Science Center, which is a wonderful place where youngsters are exposed to and gain appreciation of science.

Lee’s mission is to increase awareness and understanding of good design as integral to a sustainable future for South Australia and to identify current and potential strengths and key design influencers. She will assist in the development of an integrated design strategy for South Australia leading to new models of interdisciplinary collaboration. Other goals include establishing networks, through local, national and international relationships, with social networking, location awareness, and also richer explorations of interactive video.

What is the next step for the research?

The next step is to look at deeper and more interactive mobile experiences, with social networking, location awareness, and also richer explorations of interactive video.

What was your reaction to winning this year’s Emerging Female Scientist Award from the 13th annual Carnegie Science Center Awards for 2009?

The award means a lot, particularly since it’s from the Carnegie Science Center, which is a wonderful place where youngsters are exposed to and gain appreciation of science.

Lee’s mission is to increase awareness and understanding of good design as integral to a sustainable future for South Australia and to identify current and potential strengths and key design influencers. She will assist in the development of an integrated design strategy for South Australia leading to new models of interdisciplinary collaboration. Other goals include establishing networks, through local, national and international relationships, with social networking, location awareness, and also richer explorations of interactive video.
14th Annual Meeting of the Minds
FROM OUTERWARE TO ORGANICS, UNDERGRADUATE RESEARCH INSPIRES BUZZ IN EVERY COLLEGE

WHAT: 14TH ANNUAL MEETING OF THE MINDS UNDERGRADUATE RESEARCH SYMPOSIUM
WHEN: WEDNESDAY, MAY 6
WHERE: UNIVERSITY CENTER
ONLINE: WWW.CMU.EDU/UGR/MOM/

Victor Marmol is studying on how small robots can coordinate as a team to perform tasks and map areas in places too dangerous for humans. The research also has applications for industry.

Federico Rios and Nicholas Hagelin will present their research on “Gadget Jackets” at this year’s Meeting of the Minds. The School of Design sophomores envision incorporating commonly used items into outerwear designs to improve functionality and aesthetic qualities.

Jillian Bateman
Sharing is fundamental to research, and collaborative innovation will have the University Center buzzing.

Students from across campus will present research at the 14th Annual Meeting of the Minds Undergraduate Research Symposium on Wednesday, May 6. The event will include oral presentations, poster displays, paintings, clothing and more.

“We are researching the feasibility of building an organic community vegetable garden on campus,” Strano said. “Food is such an integral part of our lives, yet many students don’t think about where their food comes from or how they can eat more healthy and reduce their carbon footprint.”

They are proposing to build the project behind the Stever House.

To learn more about the projects visit www.cmu.edu/news/news-notes/index.shtml

“It’s hard to get a snapshot of everything that’s happening on this campus,” said Stephanie Wallach, associate vice provost for education, “but Meeting of the Minds is exactly that.”

Federico Rios and Nicholas Hagelin, sophomores in the School of Design, will present their research on “Gadget Jackets.”

“Industrial design is all about finding unmet needs, improving people’s lives and exploring alternative solutions that lead to new ideas,” Hagelin said.

“We want to create something that would aesthetically and functionally improve people’s interactions with their world.”

Their proposed series of jackets will store the gadgets and essentials we can’t bear to part with — iPods, wallets, keys, cell phones and Blackberries.

“We are trying to go beyond making your belongings match your outfit,” Rios said. “We want them to be a part of you, since they are so crucial and unavoidable.”

Sarah Strano and Andrew Stocchetti, a junior and senior in the Civil and Environmental Engineering Department, will discuss “Urban Farming and Food Education Program at Carnegie Mellon.”

“We hope to have the beginning of a garden this semester and be producing vegetables by next fall,” Strano said.

“We have planted seedlings and will start building the beds over the next few weeks.”

Strano and Stocchetti have invited the entire campus to share in the growth and benefits of the garden. They are organizing volunteer days, in which students can come down and help out for a few hours.

“We would like for students to eventually use the garden as a living laboratory,” said Strano. “For example, engineering students who want to design a rain catchment system would have the opportunity to do so and immediately witness the results of their work.”

Victor Marmol, a sophomore in computer science, is working on robots that can explore an unknown environment and perform tasks as a group without human intervention.

“There are a lot of scenarios where exploration and coverage by robots is important and useful — disaster recovery, urban warfare, building mapping and industrial cleaning to name a few,” he said of his project, “Autonomous Multi-Robot Exploration and Coverage.”

“It’s pretty amazing to be able to see robots coordinate to achieve a task. It’s even more amazing when they perform the task better than humans do.”

Wallach said the event is one in which the campus intellectually comes together to find out what everyone is doing.

“We’ll have a lot of conversations under one roof,” she said.

For more information on the Meeting of the Minds and a complete list of presentations, visit www.cmu.edu/uro/MoM/. Meeting of the Minds sponsors include Intel, Yahoo, Johnson and Johnsson and Ford Motor Company. The event will conclude with an awards ceremony at 5 p.m. in McConomy Auditorium.
Georgianne Papacostas, a senior policy and management and international relations major, interned in the Office of Congresswoman Rosa DeLauro (D-Conn.) this past summer. Her mother is Greek, and her father is from Cyprus and grew up in the now-divided capital Nicosia.

“Every summer that we visited Cyprus, my uncle would always show us the wall that split the two sides,” Papacostas said.

While she was born in Chicago, she has been living in Saudi Arabia since she was 9. When she mentions her upbringing, Americans often ask her about her father’s homeland. During her internship, Papacostas met the Cyprus Ambassador to the United States Andreas Kakouris, who expressed an interest in speaking at universities. She extended an invitation to visit Carnegie Mellon.

“Thomas Kakouris discussed why reunification matters as part of the University Lecture Series in March. The Hellenic Student Association also sponsored the event. The island of Cyprus has been forcibly divided since the Turkish invasion and occupation in the summer of 1974. While efforts to resolve the conflict have been unsuccessful, a new process and direct talks aimed at a negotiated solution are taking place between the President of the Republic of Cyprus, Demetris Christofias, and the leader of the Turkish Cypriot community, Mehmet Ali Talat, under the auspices of the United Nations.

Kakouris told the audience that while the division of the island is “one of the issues that falls off the radar screen,” citizens’ civil rights are at stake. He described the European Union as a mosaic of nations. He said while Cyprus might be a “small piece of the mosaic, it is still a very important part of it.”

Carnegie Mellon’s Center for the Arts in Society (CAS) has established intensive, interdisciplinary research groups called “clusters.” Consisting of Carnegie Mellon faculty, graduate students and outside experts, these research clusters will be centered around cutting-edge areas of inquiry, with a goal of creating books, exhibitions and other research products that improve the depth and quality of the interface between art and the humanities.

“The Center for the Arts in Society is seen as a metawhite bridge between the humanities studies and artistic inquiry. These clusters offer new opportunities for faculty across campus to create new research initiatives and educational collaborations,” said Hilary Robinson, the Stanley and Marcia Gumberg Dean of the College of Fine Arts.

“John Carson, the Regina Gouger Miller Head of the School of Art, and Jon Klaber, associate professor of English, are leading the first research cluster focused on public art, with working groups centered around “Controversy in the Arts” and “Performance and Ecology.” This inquiry area grows out of and expands upon existing focal areas at Carnegie Mellon and CAS. The public art cluster, while mostly focused on research, also will work to establish new classes, projects and outreach efforts to the local community.

The research clusters are supported by a $500,000 endowment grant from The Andrew W. Mellon Foundation and a matching endowment grant from an anonymous donor.

A Better Community By Design

and expanding business opportunities for the design and building industries in the state. She also hopes to initiate innovative projects and provide advice about emerging and visionary approaches to shaping the built environment that can position South Australia as a national and international leader in integrated and sustainable design.

Her speciality is bringing agencies together to work collaboratively on built design projects. She will work with the state government’s departments of Health, Arts, Education and Planning as well as the Australian Institute of Architects, Flinders University and the University of South Australia.

“You’ll often hear designers say when there are market constraints, that’s when design really rises to the occasion. There’s no question that water and climate in South Australia pose great challenges, but there are also other environmental assets that can be harnessed to mitigate those factors. Two of those are geothermal power and wind power,” Lee said.

Carnegie Mellon Jazz Ensemble

David Pellow directs “Jazz and the Digital Orchestra,” sponsored by WRJO FM 90.5. Research for this concert’s technology was made possible by the School of Computer Science and Microsoft. 3 p.m., Sunday, April 19

Carnegie Library Music Hall, Homestead

“The Illusion”

Tony Kushner’s adaptation of Pierre Corneille’s classic comedy reveals a profound truth about the relationship of theatre to the human struggle.

8 p.m., Tuesday–Friday, and 2 p.m. and 8 p.m., Saturday, April 22–24

Philip Chosky Theatre

Carnegie Mellon Philharmonic

Ronald Zoltman will be the guest conductor with Enrico Karem, violin.

8 p.m., Wednesday, April 29

Carnegie Music Hall, Oakland

Other Events

Spring Carnival

Annual events include Buggy races, student booth competitions, MoBot races and various alumni events.

Thursday–Saturday, April 16–18

www.confab.andrew.cmu.edu/~isc/index.html

8th Annual Computational Molecular Biology Symposium

The symposium brings together biologists, computer scientists and interdisciplinary researchers from Carnegie Mellon, the University of Pittsburgh and the Western Pennsylvania community to share new approaches and cutting-edge findings in areas where computation and biology intersect. In honor of the 200th birthday of Charles Darwin, the theme of the 2009 symposium is “Evolution.”

9 a.m.–4 p.m., Wednesday, April 22

Mellon Institute Conference Room

“Celebration of Teaching” Awards

The awards recognize the accomplishments of faculty who exemplify the university’s standards of excellence in education with three main awards: The Ryan Award, The Dorothy Award and The Academic Advising Award. The most recent recipients of the College Teaching Awards are also honored. A reception begins at 4:30 p.m. with the award presentation scheduled for 5:15 p.m.

Thursday, April 23

Rangos 1 & 2, University Center

Meeting of the Minds

The Undergraduate Research Symposium, or the “Meeting of the Minds,” is a university-wide celebration of undergraduate research.

Wednesday, May 6

University Center

Carnegie Mellon Commencement

Sunday, May 17

Geising Stadium
This year’s Spring Carnival theme is “Epic Adventures,” and Buggy alumni on campus and beyond have found a quest of their own to pursue. The Buggy Alumni Association, http://cmubuggy.org, is celebrating its inaugural year as part of this year’s festivities.

“We welcome anyone that is interested in buggy to become members on the Web site,” said Sam Swift (H’04). Swift, a doctoral student in the Tepper School of Business, is the group’s secretary and webmaster. “Our goals include making buggy interesting to a broader audience. We welcome any feedback from the community about how to make that happen.”

Staff members, such as the Buggy Alumni Association’s Carsen Kline (E’99), a process engineer in the Nanofabrication Facility, call being a part of Buggy the best experience they had as an undergraduate.

“Most of my friends came from Buggy, and the sport is still fascinating to me after all these years. I want to keep the tradition alive so that future students here can have their own Buggy experience.”

Last year Sweepstakes, commonly known as Buggy, had a banner year. The men broke a 20-year Spirit course record twice, and the women also broke the course record twice, and the women also broke a 20-year Spirit course record twice, and the women also broke the course record twice.

This year will be the first year to have an official “King of the Hill” Award for the fastest driver on the upper part of the course. Kline said WRCF 88.3 FM has been naming the fastest pusher on the first hill for a number of years, but no trophies have been awarded.

Along with the introduction of the Buggy Alumni Association this year, Spring Carnival has several new activities. People at the Midway will have the opportunity to play group games on their cell phones while waiting in line or waiting for performances. Also, PNC is providing a new environmentally inspired $500 prize for the best booth that promotes recycling of materials.

Perennial favorites of the Spring Carnival include a production by Scotch’n’Soda, which celebrated 70 years in 2008. This year’s show is “Me and My Girl.” Additional shows during the week include the Friday night Student Activities Board concert with opening act “Ted Leo and the Pharmacists” and headline “The New Pornographers.” On Thursday night, the comedian Zach Galifianakis will perform. Galifianakis has appeared on numerous Comedy Central shows and appeared in the 2008 movie “What Happens in Vegas.”

The return of the Pittsburgh Marathon on May 3 has helped spark some to give their feet a workout. Brett Guy, an MBA student at the Tepper School of Business, helped form the Tepper Endurance Club, which has members training for the race and the half-marathon. Registration for all races that day has filled up.

“A group of my classmates and I started the Endurance Club because we’re passionate about running, swimming and cycling,” Guy said. “We’ve all been involved in these sports in some form, and we wanted to provide a supportive training environment for individuals of all skill levels.”

The group meets for 4- to 8-mile runs Saturdays at 9 a.m. at the corner of Tech and Frew streets. Several smaller groups also meet throughout the week. Individuals of all skill levels, from beginners to those with several marathons under their belts, are invited to participate.

The Carnegie Mellon community will have many half-marathon and marathon participants, including Mary Martin who will be walking the 13.1-mile course. “I caught the ‘bug’ after the first marathon in Columbus last October,” said Martin, an administrative associate in the Athletics Department. “It was a wonderful experience to be a part of; and once you see your time upon completing the course, you want to try to improve that.”

Even if your path is less than 26.2 miles, experts in the Athletics Department have put together some safety tips for running, walking and bicycling:
- Don’t run or bike alone.
- Wear reflective material if you run before dawn or dusk.
- Look both ways before crossing a street and obey traffic signs and signals. Cars may not always obey the right of way.
- Carry identification or write your name, phone number and blood type on the sole of your shoe.

The return of the Pittsburgh Marathon draws many from campus community

As the weather warms up, more of the Carnegie Mellon community is moving outdoors.

Obituaries

Dramatic Writing Program Head Milan Stitt Dies at Age 68

Milan Stitt, the Raymond W. Smith Professor of Dramatic Writing and head of the Dramatic Writing Program in the School of Drama, died March 12 of liver cancer. He was 68.

A campus memorial is being planned for 7:30 p.m., Thursday, April 30 in the Philip Chosky Theater. “Milan was a much loved professor and colleague, devoted to his students and to his profession. His presence will be sorely missed,” said Hilary Robinson, the Stanley and Marcia Gumberg Dean of the College of Fine Arts.

“Milan was an inspirational mentor, guide and pastoral friend to a generation of Dramatic Writing students. His Play Lab was one of the highlights of the program. His kindness and boundless enthusiasm for all facets of his students’ creative development at Carnegie Mellon, and later in their careers defined his generosity, sensitivity and humanity,” said Peter Cooke, head of the School of Drama.

As a writer, Stitt is perhaps best known for his play “The Runner Stumbles,” which was named Best Broadway Play of 1976 in the annual Best Plays book. The play — about a priest who was put on trial for murdering a nun — was based on a real life event that took place in Stitt’s native Michigan in 1911. Stanley Kramer directed the 1979 film version of the screenplay, which starred Dick Van Dyke, Kathleen Quinlan, Beau Bridges, Ray Bolger and Tammy Grimes.

He wrote teleplays and mini-series for all the networks. His CBS television movie, “The Gentleman Bandit,” was the most-watched film of the season, and “Long Shadows” for American Playhouse was nominated in 1996 for an International Emmy as Best Teleplay.

Donations can be made in Stitt’s memory to the Theatre Associates Endowed Scholarship, University of Michigan School of Music, Theatre and Dance, Office of Development and External Relations, Stearns Building, 2005 Baits Drive, Ann Arbor, Mich. 48109-2075.

Engineering Scholar Leaves Legacy of Innovative Research

Carnegie Mellon University’s Alfred A. Thiele, a distinguished scholar in the Electrical and Computer Engineering Department, died suddenly March 26 in Pittsburgh. A private funeral service was held April 1 in Louisville, Ky. Thiele, 71, contributed to the fundamental understanding of the physics behind magnetic bubble domains and invented some of the primary devices that were used in magnetic bubble computer chips during the early 1970s at Bell Telephone Labs in Murray Hill, N.J.

The Louisville, Ky., native earned his first patent at age 19 for research involving transistor technology for electric circuits.

“It’s hard to believe he is gone because he had been skiing in Vail, Colo., just two weeks before his death,” said friend and colleague Chris Bowman, director of the university’s Nanofabrication Center. “He was a wonderful researcher with a great sense of humor and a love of life and sports,” said Bowman, who often went sailing with Thiele.

After working for two years on a bubble memory project at Burroughs Corp. in San Diego, Thiele came to Carnegie Mellon in 1981.

Stanley H. Charap, a professor emeritus at Carnegie Mellon who shared an office with Thiele, said his peer was always on the move. “He would pop in on his bicycle, and begin chatting with anyone passing by the office,” Charap said.

“He was a great friend, and a wonderful inspiration to graduate students who enjoyed mentally sparring with him about a broad range of research challenges,” said Bowman, who drove to Kentucky to attend the April 1 funeral.
education. Goodman has led many initiatives to create mutually beneficial university partnerships and educational programs in Latin America, India, South Africa and Israel.

**Elliott Created New Ways To Do Old Jobs**

In the early 1970s, the number of high school graduates in Pennsylvania, which at the time made up the majority of Carnegie Mellon’s recruiting base, was declining. As director of admission, Elliott needed to broaden the school’s reach, so he employed a marketing approach to student recruitment. In his own words, he found “new ways to do old jobs.”

Those new ways included many regional recruiting programs at area hotels and sleeping bag weekends, which gave prospective students a first-hand opportunity to experience what life was like at Carnegie Mellon. It included a more personal touch as he personally met with prospective students and their parents, showing them the campus and introducing them to the many, many people he knew as they walked along the Cut.

“Cindy Dennis, our Rhodes Scholar winner, said she attended Carnegie Mellon over MIT because of the personal attention that Bill showed to her and her family when she visited,” wrote Vice Provost for Education Indira Nair in her letter nominating Elliott for the Doherty Prize. “Bill has said to us, ‘Students are ... the most important people on campus. They are not people to be tolerated so we can do our own thing. They are our thing.’”

Elliott’s new recruiting system coupled with Carnegie Mellon’s rise in stature proved to be a winning combination. The number of applications rose dramatically over the years setting school records for applications received. This past February, the Office of Admission announced a new high mark with 22,780 applications for the 2009-2010 school year.

“Bill is one of the architects of building Carnegie Mellon into one of the elite national and international universities,” wrote Eric Grotzinger, a biological sciences professor and associate dean of the Mellon College of Science.

Elliott’s impact also includes his work with the Carnegie Mellon Academic Resource Center (CMARC), formerly the Carnegie Mellon Action Project (CMAP), and the Summer Academy for Math and Science, which he founded in the late 1990s. CMARC is an academic support center for students and SAMS is an enrichment program that aims to increase the talent pool of underrepresented minorities for Carnegie Mellon and other colleges and universities.

Nair said nearly 700 students have attended SAMS, which has been cited as an exemplary program by the American Association of Colleges and Universities and that many SAMS students have attended Ivy league schools. “SAMS and CMARC are two of his most far-reaching innovations,” she said.

“For nearly four decades Bill has worked to enhance the quality of life for all students by aggressively recruiting underrepresented students, and supporting programs to retain and graduate them,” wrote former CMAP Director Gloria Hill, now assistant dean and director of the Academic Advisory Center for the College of Humanities and Social Sciences, and Ty Walton, director of CMARC and SAMS.

“He has been unconditionally wedded to the notion that the value of diversity is realized and learning is enriched for all students when a variety of perspectives are brought to bear on the exploration and resolution to real world problems.”

Elliott’s impact has also been felt in Education City. “He was the driving force in getting the Qatar Campus up and running,” wrote Chuck Thorpe, dean of Carnegie Mellon University in Qatar. “Bill has truly brought the best of Carnegie Mellon to our campus here in Doha. He is direct, thoughtful, hardworking, respectful and very good at what he does. I lean on him, and learn from him, as the best kind of mentor, not just for what he does, but for who he is.

Goodman’s A Global Force

Goodman has taken Carnegie Mellon to the world and has brought the world to Carnegie Mellon. “As chair of the International Committee, Paul Goodman has brought together key international faculty from across the disciplines on campus and helped to forge a series of advances in our university’s internationalization,” wrote University Professor of Architecture Vivian Lothness in a supporting letter.

“Paul has led the committee in identifying the breadth of international experience for our students, from study abroad to internships abroad to global studies on campus.”

Initially nominated for the Doherty Prize in 2007 by the late Biological Sciences Professor William Brown, University Professor of Modern Languages G. Richard Tucker and Eberly Center for Teaching Excellence Associate Director Marsha Lovett, Goodman’s nomination was re-submitted this year by Lothness, Lovett and English Department Head and Professor David Kaufer.

The nomination letter praised Goodman for building educational networks, promoting a “learning contract” between students and faculty, creating educational programs and producing educational films to enhance the classroom experience. In 2000, Goodman created a technology-enhanced learning network with Carnegie Mellon coordinating efforts for leading universities in Mexico, El Salvador, Ecuador, Columbia, Chile and Argentina. The goal was to improve teaching and learning outcomes in these countries through the use of technology, and assessments show that this has been achieved.

Goodman helped to launch a similar network in India. The National Program for Technology Enhanced Learning includes all of the Indian Institutes of Technology and the Indian Institute of Science. He also coordinated the creation of a new School of Information Systems at Singapore Management University (SMU).

In a supporting letter, Information Systems Professor Randy Weinberg said Goodman “was, and continues to be, instrumental in advising the leadership at the School of Information Systems at SMU and that he played a vital role in negotiating various programs that provide opportunities for top undergraduates in Singapore to complete their studies through residencies at SMU and at Carnegie Mellon. “Paul’s wisdom, advice and skillful attention to the big and small details throughout the negotiations made this deal possible,” Weinberg said. “He’s a tireless worker, full of good ideas and sound judgment.”

Goodman worked with the South African government to initiate a master’s degree program in software engineering for South African women from disadvantaged institutions. Students spend the first 18 months of the program in South Africa learning the Carnegie Mellon curriculum and then the final six months at Carnegie Mellon.

The university’s involvement in designing curriculum for the Leadership Institute for Jews and Arabs in Israel is also a Goodman-led effort. The institute hopes to foster social change and reform, and develop new leadership in Northern Israel to improve the quality of life in the region for Arabs and Jews. Carnegie Mellon has held workshops on campus for the institute’s leaders.

Goodman is also known as a producer of educational documentaries. His film, “Escola de Samba” follows the work of a Brazilian dance group called “Camisa Verde e Branco” (Green and White Shirts) over a 10-month period, in which they prepared to compete against other groups in Brazil’s annual Carnival. Another film, “The Dabbawallas,” looks at an organization of 4,500 dabbawallas who accurately deliver home-cooked meals for lunch to workers around Mumbai, India. Both films, which have aired on public television stations around the United States.

Focus on how developing countries without access to technology use human and social ingenuity to create complex, efficient and reliable work systems.
Celebration of Teaching Honors Ryan, Doherty, Advising, Outreach and Teaching Award Winners, April 23

The university community is invited to a Celebration of Teaching at 4:30 p.m., Thursday, April 23 in Rangos Ballroom, where winners of the Ryan Award for Meritorious Teaching, the Doherty Prize for Sustained Contributions to Excellence in Education, and the Academic Advising and Mentoring Award will be honored for their exceptional contributions to education.

College teaching award winners will also be recognized as well as the winners of the Mark Gelfand Service Award for Educational Outreach, a new honor being presented this year.

The following is the list of honorees.

ROBERT DOHERTY AWARD FOR SUSTAINED CONTRIBUTIONS TO EXCELLENCE IN EDUCATION (co-winners)
Bill Elliott, vice president emeritus
Paul S. Goodman, Richard M. Cyert Professor and director of Strategic Development, Tepper School of Business

WILLIAM H. AND FRANCES S. RYAN AWARD FOR MERITORIOUS TEACHING
Cliff L. Davidson, professor, departments of Civil and Environmental Engineering and Engineering and Public Policy

ACADEMIC ADVISING AND MENTORING AWARD
Therese Tardio, associate teaching professor, Department of Modern Languages

THE MARK GELFAND SERVICE AWARD FOR EDUCATIONAL OUTREACH (co-winners)
Linda Flower, professor, Department of English
Leonard Kisslinger, professor, Department of Physics

COLLEGE TEACHING AWARDS
College of Engineering
Benjamin Richard Teare, Jr., Teaching Award
William Messner, professor, Department of Mechanical Engineering

College of Fine Arts
Jeremy Picač, assistant professor and director of dFAB, School of Architecture

College of Humanities and Social Sciences
Elliott Dunlap Smith Award for Teaching and Educational Service in Humanities and Social Sciences
Kenneth Kotovsky, professor, Department of Psychology

Heinz College
Martina Wade Teaching Award
Harold D. Miller, adjunct professor, School of Public Policy and Management

Excellence Award for the MISM/MSIT programs
Lyne Pastor, visiting associate teaching professor

MBA Teaching Award/George Leland Bach Excellence in Teaching Award
Ray Reagans, associate professor of organization behavior and theory

Mellon College of Science
Julius Ashkin Teaching Award
Peter B. Bengt, associate professor, Department of Biological Sciences

School of Computer Science
Herbert A. Simon Award for Teaching Excellence in Computer Science
Klaus Sutner, teaching professor, Department of Computer Science, and associate dean for Undergraduate Programs, School of Computer Science

Tepper School of Business
Excellence in the Classroom, B.S. Business Administration Program
Pierre Jihong Liang, associate professor of accounting

Excellence in the Classroom, B.S. Economics Program
Stephen Spear, professor of economics

Graduate Students Lauded for Community Service, Teaching

Emily Mize Robare is this year’s Graduate Student Service Award winner. She was presented the award on April 3 as part of the Innovation with Impact: Celebration of Graduate and Professional Student Research, Projects, Teaching and Service program in Rangos Ballroom.

Her work to build a stronger community through activities such as an all campus scavenger hunt, which got the Heinz College students out of Hamburg and around campus, was well received. She also is associated with many of the events that have occurred since she joined the Heinz College, wrote Jackie Speedy, director of Student Affairs for the Heinz College, in her recommendation of Robare. “Of particular interest to the committee was her work building the Buddy Program to support the increasing number of new international students who often have little time to settle in before classes start and get acclimated to a new way of life and studying.”

Robare also has reached out to other groups in Heinz to create an inclusive environment with the Diversity Initiative, Spanish Conversation Club and other initiatives. She has led many “firsts” for the college — Spring Picnic, Multi-cultural Thanksgiving Dinner, expanded community service activities and more.

The Service Award Committee presented an Honorable Mention Award to Melissa Witzberger, a fourth-year Ph.D. student in Biological Sciences, in recognition of her work to develop the Sciences Teaching Club, www.cmu.edu/bio/teaching-club/, and to build a more welcoming climate in her department.

“Melissa has worked tirelessly and enthusiastically to spearhead a number of important paradigm changes in our department,” wrote John Woolford, professor and acting head of Biological Sciences. “She stands out as a leader and has worked with him for three years. “During her ‘28’ hour days, Nina was most responsive to students’ inquiries, because she was so dedicated and committed to be of utmost value to the students and the course objectives,” Hartkopf said in his letter of recommendation.

This past fall she stepped in to teach the “Zero Energy House” class when Shih-Lei Lee assumed the role as interim head of Architecture.

“Heir passion and drive for perfection took the class to new levels of performance,” Lee said. “I am inspired to achieve similar results the next time I teach it myself.”

Graduates also weighed in on Baird’s ability to inspire her classes.

“The never ceased to amaze me how thoroughly she must have delivered on content to make each lecture a highly charged and dynamic discussion that could accommodate in its fold multiple dimensions of the topic discussion,” said Avneet Gujral, a 2007 graduate in sustainable design.

Benjamin Beppler of the Physics Department and David Gray of the Department of Philosophy also were recognized for their teaching abilities with honorable mention citations.
It’s easy to understand why Cliff Davidson, a faculty member at Carnegie Mellon for more than three decades, is this year’s recipient of the William H. and Frances S. Ryan Award for Meritorious Teaching. After all, he wrote the book on teaching.

With Associate Provost for Education Susan Ambrose, Davidson, a civil and environmental engineering and engineering and public policy professor, authored “The New Professor’s Handbook: A Guide to Teaching and Research in Engineering and Science,” now in its fourth printing. The book, which covers topics such as developing courses, proposal writing, innovative teaching methods, mentoring and tutoring students, and publishing in peer-review journals, is based on a seminar series Ambrose and Davidson created in 1986, called “Preparing for a Faculty Career.” The series, still going strong, attracts grad students from the College of Engineering, the Mellon College of Science, the School of Computer Science, the Heinz College and the Tepper School of Business. The duo also created faculty workshops at Carnegie Mellon based on their writings from 1996 to 2000.

Davidson talks the talk and walks the walk. His creative teaching methods have included a hands-on class project in which students disassembled a toaster to identify aspects that could be improved for environmental benefit.

“Cliff is a fantastic instructor — his history of instructor FCEs (faculty course evaluations) are phenomenal and nearly all above 4.5 (out of a possible 5.0),” wrote professors James Garrett, M. Granger Morgan and Lawrence Cartwright in their letter nominating Davidson for the Ryan Award. They noted that Davidson has created a number of highly popular and timely courses, such as “Sustainable Engineering,” which emphasizes the environmental effects of engineering decisions. The course has been expanded into four half-semester courses, and other colleges and universities are using the sequence as a model for course development.

Davidson’s nominators also praised him for playing a key role in launching the Center for Sustainability Engineering with colleagues at Arizona State University and the University of Texas at Austin, and the Environment Across the Curriculum effort at Carnegie Mellon.

Many of Davidson’s colleagues and former students supported his nomination.

“Cliff is extremely well organized, thoughtful about what he is doing, no matter what it is he is teaching, and tremendously passionate about his students and their learning outcomes. He is a professors’ professor,” Garrett, head of the Civil and Environmental Engineering Department, wrote in a supporting letter.

“From the first class that I had with Cliff in 1978 to all of my educational interactions with Cliff since I joined the Civil and Environmental Engineering faculty in 1989, I have consistently observed the exceptional skill, creativity and passion that Cliff brings to all dimensions of teaching, inside and outside the classroom,” said David Dzombak, the Walter Blenko Sr. Professor of Environmental Engineering.

“The reason why Cliff’s students love him is partly due to his teaching style and partly due to his enthusiasm and optimism to solve tough problems,” said Ph.D. student Shahzeen Attari. “If I am half the professor Cliff is, I will be a great teacher, outstanding mentor and adviser, and an innovative, sharp thinker.”

Davidson says the university-wide award is a culmination of his career in a way, but he doesn’t plan on stopping here.

“I learn many new things every day and plan to continue sharing them in class,” Davidson said. “Teaching is an activity that one can always improve on, and the enjoyment of teaching increases as one improves.”

Davidson earned his bachelor’s degree in electrical engineering from Carnegie Mellon in 1972. He received his master’s degree and Ph.D. in environmental engineering from the California Institute of Technology in 1973 and 1977, respectively, and joined the Carnegie Mellon faculty in 1977.

She’s sometimes referred to as “Mother Therese,” a very fitting reference for the compassionate Therese Tardio, this year’s recipient of the Academic Advising and Mentoring Award.

An associate teaching professor of Hispanic Studies, Tardio is known as an exceptional teacher, advisor and mentor. She’s the triple-threat of the Modern Languages Department.

“Students not only praise her expertise in the classroom, but they have also commented on her role as a passionate, concerned, sensitive and available advisor and mentor,” wrote professors Susan Polansky, G. Richard Tucker and Indira Nair in a letter of nomination. “Therese is a gifted teacher, and her profile as a supporter and guide of students sets her in a special category of advisor-educator-mentor.”

Her nominators say Tardio reaches out and gets to know the "whole student."

“Therese makes it a point to know the student at several levels — as a student and emerging scholar, as a campus leader and participant, as an intellectually curious young person, and as someone dedicated to social causes. As their academic work, but also about their families, their passions, their frustrations, their soccer goal-scoring records, their musical talents, their boyfriends and girlfriends. Therese’s big heart and generosity seem to have no limit,” her nominators said.

Many students wrote glowing letters praising Tardio for her dedication and commitment to them.

“During my time at Carnegie Mellon, I was touched by Therese’s candor and warm demeanor as well as her thoughtful advice and constructive criticism,” wrote Elizabeth Anderson, a 2006 graduate with a degree in policy and management and Hispanic studies. “Therese successfully balanced her position as a respected leader alongside her role as a helpful colleague. For this reason, Therese is far more than a professor: she is a wise and trusted mentor.”

“As a student, I felt that she gave me unlimited time — I could hardly understand how, because whenever I came to her office for a meeting there was always a student there before me, finishing up their meeting, and there would always be another student afterwards,” wrote Katy McKinney-Bock, a 2006 graduate with a Bachelor of Humanities and Art degree in music performance and Hispanic Studies. “Teaching is one of Professor Tardio’s most natural qualities, and she has touched many people with her passion and talent.”

Others wrote about the inspiration she provided them.

“It is through her dedication to students’ development and success,” continued on page 10
Statistics Professor Wins Tweedie Award

Jiaoshun Jin, associate professor of statistics, has been named winner of the 2009 Tweedie New Researcher Award from the Institute of Mathematical Statistics (IMS).

Jin was awarded the prize for his fundamental theoretical advances in understanding “Needle-in-a-Haystack” problems. He developed practical False Discovery Rate Controlling Procedures and Higher Criticism Procedures for use in such problems, and has made applications to cosmological data analysis, genomics and network traffic analysis.

Jin’s recent research is focused on high-dimensional classification, which has applications in many areas.

“For example, many medical science teams seek to gather and study gene microarray data in hopes of separating healthy patients from those affected by a disease,” Jin said. “In statistics, we call this a high-dimensional classification problem.”

The idea is to take a large number of features, such as genes, and either estimate very large numbers of parameters or test numerous hypotheses simultaneously. Advances in this field enable a faster extraction of useful information in fields such as genomics, astronomy or image processing, and broaden the scope of theory and methodology in statistics.

“I think this is a very interesting topic and may fuel future research,” he said.

The Tweedie Award is in honor of Richard L. Tweedie, who played a significant role throughout his professional career in mentoring young colleagues at work and through professional society activities.

Jin will present the Tweedie New Researcher Invited Lecture at the 2009 New Researchers Conference, July 28-31 in Baltimore. He also is co-organizing the second IMS-China International Conference on Statistics and Probability in Weihai, China, July 3-6.

Tardio Tops in Advising

and her innate desire to help others that Therese’s students are inspired to challenge themselves not only to be their best, but also to reach outside their personal spheres and use their achievements and talents to help others succeed as well. This is what I believe should be the ultimate goal of a teacher,” wrote Mauren Antkows-ki, who earned her bachelor’s degree in art in 2004.

“Working with her as my thesis advisor was the most intellectually challenging and satisfying time of my life — and just as important, it was so much fun!” wrote Michael Gibbons, a 2004 graduate who majored in Spanish and international relations. “Therese was an incredibly positive influence in my academic development. Every student should have someone like Therese as a mentor.”

And the final word goes to Polansky, head of Modern Languages.

“She has helped students travel the world and has served as a beacon for their academic, professional and personal journeys. Therese is in every sense a total advis- sor, a marvelous model to emulate,” Polansky said.
Gunshots, skid marks, fingerprints and DNA analyses — these all sound like the elements from a crime scene television show like CSI. But such evidence is also being examined in a Mellon College of Science Interdisciplinary Laboratory in Doherty Hall. In a first-year Interdisciplinary Lab course, called “38-101 Eureka! Forensics Laboratory,” first-year students are learning crime scene techniques, not in hopes of becoming the next Gil Grissom, but to learn valuable problem-solving skills that they will employ throughout their academic and future careers.

For the 50 students who took the class this year, their forensics training might yield additional dividends. During the final lecture of the course, Allegheny County Medical Examiner Karl Williams paid a timely visit to the class to discuss what they had learned over the mini-session and to answer the students’ questions about forensics. His visit came a week before the National Academies of Science released a scathing report on the state of the U.S. Forensic System.

Among the list of deficiencies revealed was a failure to educate U.S. citizens about the reliability of forensic evidence. “When investigating a crime, and presenting evidence, physical evidence is essential and can often, rightfully or wrongfully, trump testimony,” Williams told the class. “People don’t always know that things like hair and handwriting analysis are softer forms of evidence than DNA. It’s all trying to tell the most convincing story, using every piece of evidence. A single piece could make or break the story.”

Forensic evidence is presented in criminal prosecutions and civil litigation to support conclusions about individualization. Individualization is when a piece of evidence, like a hair sample or gunpowder residue, is matched to a particular source. According to the National Academies of Science report, no forensic method has been shown to be indisputably accurate, outside of nuclear DNA analysis. While these other methods do play a valuable role in forensics, many people don’t realize that they only provide a clue, not the complete answer.

Williams said he knew of no other programs such as Carnegie Mellon’s that serve to educate students about the basic principles of forensics. While there has been an initiative to educate judges about the reliability of forensic evidence, little has been done to educate the public in general as well as those who make up the jury about reliability and probability. He said that often a conviction comes down to who presents the evidence in the most convincing manner, not what evidence is the most convincing.

“This class, where none of the participants are training to be crime scene investigators, represents a step toward the direction of fulfilling the National Academy of Science’s mandate to educate society-at-large about what DNA evidence is, what forensic science is and what culpability and probability are,” said Biologist Sciences Associate Teaching Professor Christopher W. Borysenko, who directs the Mellon College of Science Interdisciplinary Lab and teaches the Eureka! course.

Over the course of the mini-semester, the students read through a double-murder mystery written by Mathematical Sciences Teaching Professor Russ Walker, listened to lectures by Sciences Librarian Dianne Covington and Hunt Institute Director Bob Kiger, and learned how to use a computer program, called Mathematica, and federal databases to design DNA fingerprinting experiments. Lab experiments included the chemistry of gunshot analysis, the physics of skid marks, the biology and physics of fingerprint analysis and the biology of DNA analysis. According to Borysenko, by completing the course the students gain a broad knowledge of forensics that will help them to make decisions in the future, but most importantly, the students will know how to look at a problem and find a solution in a logical and analytical manner.

Eureka! was developed by a team of MCS faculty in 2003 to get students in the Mellon College of Science and and Humanities Scholars Program into the lab during their first year while combining experiments that cross the college’s four departments: Biological Sciences, Chemistry, Mathematical Sciences and Physics. The class emphasizes interdisciplinary problem-solving, giving students a taste of the complex challenges that will face them in their careers as scientists.

**Eureka! Course Solves Mysteries Behind Crime Scene Investigating**

**Engineering Student Wins Prestigious National Space Club Award**

Junior Ross Finman is headed for the moon by way of Washington, D.C., where he will receive the prestigious Robert H. Goddard Memorial Scholarship at the 52nd annual Goddard Memorial Dinner this month.

“I am thrilled to win this award because it is a great example of how the unique Carnegie Mellon environment allows motivated and driven students to pursue their technical aspirations,” said Finman, 19, a junior in electrical and computer engineering.

The National Space Club Award of $10,000 is given each year to stimulate the interest of talented students to advance scientific knowledge through space research and exploration. Award recipients must be pursuing or have the intention of pursuing studies in science or engineering during their university career. It is given in memory of Robert H. Goddard, America’s rocket pioneer.

“I could not think of a more deserving awardee,” said the Fredkin University Research Professor William “Red” Whittaker. “Ross is a jewel. He is a phenomenal leader and very engaging. He drives himself to lead and pulls his team along with him,” said Whittaker, who heads the university’s team attempting to win the $20 million Google Lunar X-Prize for landing a robot on the moon, driving it at least 500 meters on the lunar surface and transmitting images back to Earth. “He is an extremely hard worker and is very serious about working in the field of space technology.”

A rocket enthusiast since childhood, Finman is an avid skydiver, rock climber, mountain biker and skier.

“I came to Carnegie Mellon interested in robotics but I am now hooked after being involved with our amazing X-Prize team,” said Finman of Nashua, N.H., who is also involved in a separate team challenge to build an autonomous dirt-digging robot for a NASA competition.
Nadine Aubry Awarded Lane Professorship For Outstanding Research and University Citizenship

Carnegie Mellon’s Nadine Aubry has been named the Raymond J. Lane Distinguished Professor in Mechanical Engineering. Aubry, head of Carnegie Mellon’s Department of Mechanical Engineering, received the prestigious professorship for her outstanding research contributions and her leadership in mechanical engineering.

“I am deeply honored by this recognition, and I plan to continue championing change and innovation throughout my department and the highly ranked College of Engineering,” said Aubry, who was recently awarded the distinction of fellow by the American Association for the Advancement of Science (AAAS).

University Provost and Senior Vice President Mark S. Kanet praised Aubry for “raising the stature and visibility of the university through her many achievements.”

Ray Lane, a university trustee and managing partner of Kleiner Perkins Caufield & Byers, said this professorship is awarded to individuals with entrepreneurial spark and leadership abilities that are endemic to the problem-solving environment at Carnegie Mellon. “Professor Aubry is an outstanding researcher and an excellent role model for young women seeking to enter the important fields of science and technology, where much of the business economy’s innovation is created,” said Lane, who also is chairman of Inspire Innovation: The Campaign for Carnegie Mellon University.

The public phase of the $1 billion comprehensive campaign began in October 2008. Pradeep K. Khosla, dean of Carnegie Mellon’s College of Engineering, praised Aubry for leading-edge work in improving technologies involving fluid flows in areas ranging from aerospase and tissue engineering to biotechnology. “The Department of Mechanical Engineering is growing, and this latest accolade reflects her hard work and outstanding vision and leadership.”

The author of more than 200 scientific papers, Kohl’s research focuses on the application of elementary particle physics to the very early universe. He is a co-author of the standard textbook on particle physics and cosmology, “The Early Universe.” His book for the general public, “Blind Watchers of the Sky,” received the 1996 Emme Award from the American Aeronautical Society.

The Buhl Lecture is sponsored by Carnegie Mellon’s Department of Physics. The lecture is funded under the auspices of the Buhl Professorship in Theoretical Physics, which was established at Carnegie Mellon in 1961 by The Buhl Foundation. The lecture is free and open to the public.