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Solar house finds a niche on campus, page 3
Staff Council launches food drive, page 6

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Depression rates climb for students

The number of Americans being treated for clinical depression has more than tripled since 1987, an increase that is especially apparent on college campuses. Carnegie Mellon is no exception.

First-year students at CMU have an above-average rate of depression, according to a recent survey by the Cooperative Institutional Research Program (CIRP). The survey of more than 9,800 students entering college, conducted two years ago, asked respondents if they had felt depressed in the previous year. Students entering CMU answered affirmatively 10 percent of the time, surpassing the national average of 7 percent.

Michael Murphy, dean of Student Affairs, could not precisely account for CMU’s higher rates, but offered his own theory.

“Some evidence would support that gifted people and high-achievers tend to be more self-critical and to have high self-expectations. While other schools, especially the high-select [schools], have bright young people, we have a particularly focused and high-achieving group here. It is not surprising that they may experience more anxiety and depression.”

The conference was designed to attract a diverse audience where everyone could find one or two things that interested them, said Margaret McDonald, assistant vice chancellor for Academic Affairs at Pitt. The three-day event offered participants a mix of sessions and lectures to attend. Internationally renowned scientists, including Nobel Prize winner Ferid Murad, gave keynote speeches discussing their work in DNA, proteins and cell signaling mechanisms.

Spotlight sessions featured scientists from Carnegie Mellon and Pitt whose lectures covered timely topics relevant to both scientific and public communities. Spotnot and poster sessions exhibited the work of local faculty, post-doctoral fellows, and graduate and medical students as well as scientists from non-academic settings.

Peter Berger, associate professor of Biological Sciences at CMU, showcased his work in one of the poster sessions in what he called his attempt at “blatant self-promotion.” Berger’s research involves attaching fluorescent tags to genes to allow identification of proteins in a cell. He said the research continued on page 5

Synergy, diversity rule at conference

Alumni Hall on Pitt’s campus, formerly the Masonic Temple, bustled with activity on Sept. 18, 19 and 20 as roughly 1,000 people — scientists, students, businesspeople and community members — converged for Science 2002 — Synergy in Science, Pitt’s second annual fall celebration of science.

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Next summer the Carnegie Museum of Natural History will unleash up to 150 decorated dinosaurs throughout the streets and suburbs of Pittsburgh.

Beginning in April, the DinoMite Days installation will showcase artist-decorated, scientifically correct fiberglass dinosaur models of the stegosaurus and tortosaurus, along with a few tyrannosaurus rexes. Applications from artists, which were due Oct. 15, have been coming from as far away as New Mexico, much to the surprise of exhibit coordinators who had expected to attract mostly local artists to the project. Patricia Bellan-Gillen, professor of Art, unveiled the first dinosaur, a T-Rex, on Oct. 1 at the museum. The dinosaur will be displayed for one year and then donated to the Laurel Foundation for their support. Bellan-Gillen said she has been using animal symbolism in her art for the past 15 years, and she painted the T-Rex accordingly. "The dinosaur is a reflection of the museum and nature. It has images ranging from one-celled organisms to mollusks to mammals — connected with vines, twigs and leaves," she explained. The idea of placing decorated animals around cities is not new, however. The idea began in 1998 in Zurich, Switzerland when artist Walter Knapp asked his son, Pascal Knapp, to create three-dimensional fiberglass cow statues to use as canvases. The idea caught on and in 1999 the first American Cow Parade was held in Chicago. The next year, there were Cow Parade exhibits in New York, Stamford, CT, and West Orange, NJ. Artists since then have also decorated horses in Rochester, NY, fish in Baltimore, pigs in Seattle, bears in Maine and corn on the cob in Bloomfield, IL, to name a few. And Pittsburgh is not the first city to parade dinosaurs. Wilmington, DE, is displaying 48 dinosaurs in its downtown area until Oct. 19. Ted Hermann, director of marketing for the Carnegie Museum of Natural History, is excited, however, that Pittsburgh’s dinosaurs will be “much more realistic.” The Laurel Foundation, which makes continued on page 6

Riders feel bus route cutbacks

A Port Authority budget deficit may thwart the travel plans of many Pittsburgh bus riders and could eventually bring the entire bus system to a screeching halt. Effective Sept. 1, the Port Authority of Allegheny County (PAT) eliminated 24-hour service and cut 4 percent of its services, including approximately a dozen low-ridership routes.

“Given our financial situation, we can’t afford to keep 24-hour service,” said Bob Grove, a spokesperson for Port Authority.

“It’s a last resort — we’re out of options.” State transit funding has been frozen for five of the past seven years — the equivalent of a budget cut because of inflation. In an effort to combat the financial crunch, PAT has resorted to service cutbacks, layoffs and a company-wide wage freeze. Zone 1 base fares have increased by $0.05 to $1.75 and monthly passes have increased from $48 to $60.

One concerned group of Pittsburgh bus riders has launched a grass-roots campaign to help salvage PAT’s services. The 60-member Save Our Transit (SOT) is part of continued on page 6

Wolfram calls “new science” paradigm shift

“We clearly have an overcrowded situation here,” Computer Science professor Dana Scott told the more than 500 people packed into Rangos Ballroom Oct. 31 near Student Union.

Wolfram talks about his controversial self-published bestseller “A New Kind of Science.”

The cookies were cleaned out early by the crowd of older students and faculty, 10-to-1 males with only one necklace in sight. Wolfram attracts this attention because of his impressive CV and the large claims he makes for his new book. A mathematical geologist at Eton and Oxford, he earned a Ph. D. from Caltech in 1979 at age 20, and two years later was among the first winners of a MacArthur “genius” grant. He founded Wolfram Research in 1986 to develop the Mathematica program, today standard software for solving complex equations.

In 1991, Wolfram began writing the book that became “A New Kind of Science.” This May, Wolfram said, he “emerged from being a recluse,” with the publication of the book that has been covered extensively in The New York Times, the newswires and scientific journals. Wolfram told the Rangos audience that the book explained “an intellectual structure that I have spent years, decades, two years later was among the first winners of a MacArthur “genius” grant. He founded Wolfram Research in 1986 to develop the Mathematica program, today standard software for solving complex equations.

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**Talkers**

**Obsessed with light and space**

Lighting designer Heather Carson presents a slide show of her recent work Sept. 18 as part of the annual Wats:On? Festival. Filling the slot left open by the last-minute cancellation of Broadway designer Jules Fisher, Carson is an award-winning lighting designer.

“Not too many of us are obsessed with light and space, but I am,” explains Carson, who considers lighting an expansive, limitless medium that is yet to be tapped into. Underlying her vision is her design for a hanging photograph series she screened at Wats:On? — “Islamic culture through film, photography and new media,” which explores the idea of Islamic martyrdom and poetry written by Iranian artists and scholars the opportunity to live and work at the Adamson Wing. A mixture of student, faculty and staff were present, along with about 100 students from Central Catholic High School — the last group obvious from their ties. After his presentation, Rogers spent about 20 minutes answering questions from the audience.

**Iranian filmmaker speaks**

Iranian filmmaker Shirin Neshat broke those barriers, exploring, revering, challenging, beautifying and space,” she said, explaining that she is also working on a lighting theory book, which she says she writes in her head all the time. “I have a book in me. More information about her work is available at www.lighthunt.net. The annual Wats:On? Festival celebrates a wide range of creative expression, including the works of Iranian filmmaker, is one of her favorites. She referred to his idea, which she shares, that creative work is only powerful through the power of its existence.

**Lost voices from Guatemala**

Mark Brazantiz, an assistant professor of fine arts at West Virginia University, is a co-founder of the "River of Lost Voices: Stories from Guatemala" — a captivated crowd of nearly 100 students and faculty on Oct. 7 in the Adamson Wing as the second installment in this year’s Adamson Visiting Writers Series.

**United Way drive opens**

In an effort to boost contributions, sponsors of the university’s United Way campaign are offering prizes to donors through weekly raffles. The grand prize is four round-trip airfares to Orlando plus seven nights at a four-bedroom home with a pool. To be eligible for the grand prize, you must make your contribution online by Dec. 31. The prize drawing will be Jan. 15. Other prizes will be awarded in drawings every Monday through Nov. 18.

**FOCUS**

In seven issues a year — is a publication of opinions. FOCUS seeks a variety of opinions. **Managing Editor:** Brian Connely. Reporting and Writing: Soni Abatta, Katie Bailey, Jonathan Bogash, Jason Bugg, Bianca Chang, Denise Culver, Stacie Funemore, Sara Hembeger, Andrew Johnson, Jeanie Kim, Leah Messina, Sonni Abravanel, Meg Papp, Amy Parkav, Ann Pfeffer, Kathleen Robertson-Smith, Rachel Smith, Ken Wu. **Photography:** Brian Connely, Ken Andreyo. **Production:** Donna Badger, Laura Miller, Melissa Sloane. **Founding Ed:** David Demarest (Eng.-Esl.).

FOCUS Management Committee: Ed McCarthy, Richard Fish, Barbara Fish, John Varnes, Melissa Sklar. **Focus**
Solar contest house returning to Donner ditch

Thomas Spiegelhalter feels as if he is being punished for not driving an SUV to CMU every day. The visiting associate professor from Germany reasons that if his colleagues who drive less fuel-efficient vehicles can write off a portion of the cost as a business expense, then he should be able to write off the costs of maintaining his bicycle.

Spiegelhalter, who teaches in the School of Architecture, talks enthusiastically about this nation’s environmental awareness and the steps being taken to improve it. He was relieved, then, when the Department of Energy announced plans for the Solar Decathlon, a nationwide collegiate competition to design and build solar homes.

The new competition, which was held on the National Mall in Washington, D.C., from September 9 to October 1, was an outgrowth of the Solar Puerto Vallarta, a cooperative-ventures competition sponsored by the Department of Energy for universities.

The purpose of the new contest is to demonstate practical ways to produce and use energy within the home and office. Students this year were given size limitations and 10 categories in which they would be judged. Additionally, they had to make the houses esthetically pleasing and accommodating to modern conveniences.

CMU’s submission, which was developed in the Donner ditch, is an 800-square-foot, 1.5-story house with reflective wood paneling on the front, and of course, solar panels on the roof. A small overhang on the porch provides just enough coverage to allow the sun to shine through in the winter, but still has sufficient protection for the warmer months. One central unit contains the pluming and electric solutions to the house, and the rest was designed for easy deconstruction and reconstruction to take the structure to its new location at the National Mall.

Universities began designs for the solar homes in spring 2001. Last fall, 14-qualifying designs for the Solar Decathlon were selected by a panel of judges, including a design by current fifth-year Architecture student Andrew Lee. His design was one of 14 that qualified to participate nationwide.

Spiegelhalter and Stephen Lee, a professor in the School of Architecture, guided their third- and fifth-year projects over the course of the following two semesters to work on plans of the house. They recruited design professor Liza Wellman for assistance with the interior of the house, and her students developed appliances and furniture. Students in several design studios researched solar energy and low-energy buildings, rounding out the multi-disciplinary project. Actual construction of the building began last summer in Donner ditch.

One of the first trials faced by the decathlon is the framing of the house. Sponsors of the T-Rex contest awarded $5,000 each to the 14 universities and colleges to start their projects; the remainder was raised by the students themselves. At Carnegie Mellon, the total construction cost now amounts to over $145,000, excluding labor. Most of the building materials and furnishings were provided by donations from such companies as IKEA and Apple Computer.

Another initial challenge of the project was the basic task of getting such a diversified group to work together.

“We have students of different ages, majors and motivations working on this project — CMU is a school where individual assignments are to often be highlighted, and this was a group effort, something we’re not used to,” Stephen Lee said.

The result of the group project is an innovative house. Triple-layered windows keep the place cool during the summer and warm during the winter and there are advanced storage systems for both water and energy. The Design students developed low-energy lighting fixtures as an alternative to using the dryer and other appliances. The innovations are functional and environmentally friendly, yet another key idea is the house’s extreme modularity and mobility.

Because the house had to be transported to Washington, D.C., for the competition, the group knew that they would have to build something that would be easy to assemble and disassemble. This is where the panelized framework came in. The house was also designed to sustain all types of weather, and to be adaptable to the rapid urbanization taking place all around the world.

Stephen Lee expressed his personal quality for the new homes being built today, in that the solar house points to an alternative.

“While the planet looks like it has huge amounts of land, that doesn’t mean we should go to gobble it all up. We need to stop supporting suburban sprawl and move back into cities, where we should have less land for housing, and more for recreation,” he said.

As it stands, the Solar Decathlon house is 1.5 stories tall. Its modular design is flexible, so it is capable to extend it to 2.5 stories, 3.5 stories, even 4.5 stories, a space-saving concept that is already being employed by some of the more populated nations as Japan and Germany. Storage units such as cabinets and drawers were designed as modular, mobile sliding units.

Such design concepts are no stranger to Spiegelhalter, whose German architecture background make him aware of building passive, low-energy homes to meet German anti-pollution regulations. He points out that the average U.S. house consumes two to three times more energy than a German house. Though the cost of making a low-energy structure is higher, he says, “the way they’re currently built in the U.S., the extra initial cost is outweighed by the long-term benefits of reducing the impact on the environment and helping the environment. Spiegelhalter was overjoyed, then, when the Solar Decathlon:

“I was really suffering at the beginning, and am very happy now that the Department of Energy is doing this. That’s why I love my job — I get to work with people who are young to create a future and make the world a better place,” he said.

Stephen Lee, who was a Carnegie Mellon student in the early ’70s during the first global oil crisis, is also familiar with energy-efficient architecture. Lee explained, “For the Sheffield Street Demonstration in Manchester. He likes the fact that Solar Decathlon is such a hands-on experience.

“It’s about providing the best educational circumstances for my students. When they enter the workforce, they’ll know how to transform a design into a finished product. Professionals know that there’s a difference between sitting in front of the computer and creating a design that plan, into actual bricks and concrete.”

Other faculty members said they learned a great deal from the Solar Decathlon.

Wellman said, “It’s so rare as a student that you get to go through this whole process. Just being around this whole thing, you obviously learn a lot. You don’t think about it, but then somebody asks you a question about it, and all of a sudden you’re full of answers.”

A few students were able to stay with the house, which was dismantled and brought back to CMU, where it was relocated to its former location near the Donner ditch. It will be on display throughout the city — on the National Mall, in some way, in their lobby, or wherever they choose.

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Journalists reflect on the mixed legacy of Sept. 11

Immediately after the Sept. 11 attacks last year, most of us had the luxury of being able to express our emotions. We cried. We prayed. We watched TVs and hoped that This Wasn’t Really Happening. We also spent a lot of time in front of our TVs and their websites, gleaning any information we could. But that information did not just magically appear; it was gathered, sifted, and reported by journalists who did not have the opportunity to examine their thoughts and emotions that day. They had to go to work on the biggest story they would ever cover.

On Sept. 9, the College of Engineering sponsored a panel discussion with seven journalists who discussed what that first day was like last Sept. 11. This discussion, titled “Running Toward Danger,” opened the week-long commemoration of 9/11. It took place in Roberts Hall.

Prior to the start of the panel, visitors could view and browse the 20 images of Sept. 12 front pages from newspapers throughout the world. The Newesum, located in Athens, VA., archives and displays news on significant events from around the world. The most striking display juxtaposed the front page of The Wall Street Journal with the front page of The Newesum. She set the tone for the panel with her opening remarks: “We all remember where we were on September 11, 2001. It was because of reporters around the country that we all became eyewitnesses to what was happening.” Then she introduced the panel and asked them to share their stories.

The most dramatic story was told by Jim Pensiero, vice president for news operations at The Wall Street Journal. He arrived for work early. “It was budget season — an ordinary day.” The WJS offices are across the street from the World Trade Center, and when the first plane hit the north tower, Pensiero began phoning employees to ready the newspaper’s back-up site in northern New Jersey, just in case. Even after the second tower was hit, Pensiero was so busy making arrangements that he “wasn’t connecting the dots at first — It never occurred to me that these buildings were going to fall down. To watch this 110-story building turn into dust . . .”

Despite the horror of having his neighborhood transformed into a war zone, Pensiero’s priority was making sure WJS operations could continue. “It happened early enough in the day that we were able to regroup,” but it wasn’t until about 5 p.m. that they were certain of the next day’s publication. Not only did the newspaper publish three editions on Sept. 12, but they managed to deliver 1.7 million out of the normal 1.8 million copies.

Dennis Reddy, columnist at the Pittsburgh Post-Gazette, was also on the panel. His dilemma: “How do you tell this story from your own perspective as a columnist?” His inspiration: stepping outside to stare at the night sky and watch the planes, satellites and stars overhead. What was happening on Flight 93 in those final moments? He asked. That became the subject of a column. He also spent a lot of time trying to understand the people and the minds behind the attack. Rachel (Snyder) Basinger, another panel member, is a young reporter from the Daily Courier in Connellsville, PA, who was suddenly thrust into the biggest story of her life.

Basinger had been asked by her editor called to assign her to get local reaction and seek out any local connections. Basinger was preparing to leave home when United Flight 93 crashed and her editor called again and told her to get to Shanksville ASAP.

Her first response was, “I’m not going to look professional, because I just got out of the shower.” She had trouble finding Shanksville, because it was too small to appear on any maps. When she finally arrived at the crash site, she was surprised by the lack of debris — there was no reason to stay. The site could impact the economy of Pitts- burgh and the vitality of Oakland.

“I know that a lot of students use the buses to get to class,” said Taka Agawa, a first-year Physics major. Other students cite safety concerns due to the lack of late-night service. “We’ve had times when we’ve wanted to go to Squirrel Hill at night, but can’t get the bus. We think about walking, but no one wants to walk at night,” said Stacey Lee, a freshman student in H&SS, pointing out that the route from Carnegie Mellon to Squirrel Hill is poorly lit.

“It’s a problem for students who are on campus late at night and need to get home because this means that they still have to walk since Escort or the Shuttle might not be running or may only go so far,” said Heather Frantz, a senior in Computer Science and Human-Computer Interaction. “My roommate now can’t take the bus home from the Greyhound Station downtown, which not only means that I have to go down and get her in the middle of the night, but she also has to stand in the middle of a deserted parking lot until I arrive — kind of risky.”

Campus Police Sgt. William Ricci said that he has not seen an increased demand upon Shuttle and Escort services since the beginning of the semester. “It’s run about the same as usual,” said Ricci. “We have a pretty steady clientele.”

Shuttle buses and vans leave from the Morewood Gardens turnaround on the quarter and three-quarter hour from 6:45 p.m. until 10:45 p.m. and follow pre-designated routes that begin at Forbes Avenue and reach as far as Creme Avenue to the north, Dithridge Street to the west and South Negley Avenue to the east.

“Escort vans are available by demand only and take campus riders to academic buildings in specific university buildings from 6:30 p.m. until 6:40 a.m.

“The route is totally governed by univer-

sity housing,” said Ricci. “On occasion, we’ll go a block or two over (from the set route), but with our allotment of vehicles, and drivers, we can’t go too far beyond it.”

Ricci said that he has not received many requests to increase the area covered by Shuttle and Escort services and that Campus Police have no current plans to expand the routes beyond the current 1.5-mile radius of campus.

Ricci explained that if students are stranded beyond the reach of the Shuttle and Escort services, a campus rider cannot be dispatched to pick them up due to the necessity of keeping all public vehicles available for emergencies in the surrounding area. Instead, Campus Police will call Yellow Cab, with whom they have a special agreement, to pick up the students.

“We will not leave a student stranded,” said Ricci.

SARA HEMMERBRECHT
Fall may be an unusual time of year to be thinking about the IRS, but a group of graduate students from Carnegie Mellon is already working on reeducating their taxes.

The students were heading to Washington, D.C., to ask the federal government to stop taxing their stipends, the money they earn through teaching or research assistantships. Depending on the amount of their stipends, students now pay up to $200 per month in federal taxes. Prior to 1996, graduate students were exempt from federal taxes.

The lobbying event, scheduled for Oct. 9-11, was part of an organization called the Graduate Student Organizations at Carnegie Mellon, the University of Pittsburgh and the University of Pittsburgh at Greensburg. Students from several other colleges and universities were also expected to attend.

Students at Carnegie Mellon (GSA) at Carnegie Mellon believes that tax exemption would help students where they need it most — their pocketbooks. Students who decide to attend graduate school often find themselves in high-paying job opportunities for meager stipends and long work hours.

Nearly half of all graduate students use loans to pay school expenses and supplement their incomes, according to the U.S. Department of Education. For some students, the money saved from the tax exemption could mean the difference between making ends meet and having to take out additional loans.

“Basicly, my entire stipend covers part-time babysitting, taxis and health care costs,” says Adina Golombok, a Ph.D. student in the Mellon College of Science. She and her husband have two children, ages 9 months and 3 years. “I wouldn’t complain about having more money in my pocket. Every little bit helps,” Golombok says. According to the U.S. Department of Education, the average cost of graduate tuition in 2000 was $13,955.

Most of these students depend on the income from their assistantships to meet basic living needs.

“We hope to make a lot of noise about this issue. We’re talking about saving graduate students approximately $1,000 a year in federal taxes,” says Alix Widge, a Robotics graduate student who heads external affairs for GSA.

“We want the issue fresh in the minds of the new Congress as soon as they are seated,” said Marcia Tennyson, the congressional liaison for the GSA. This term Congress is slated to reauthorize the Higher Education Act. Organizations hope to persuade key members of the Ways and Means Committee and the Finance Committee to sponsor a tax exemption for graduate students.

“We’re not talking about a lot of money here — only what’s fallen behind the Congressionl couch. The government needs to support graduate education to strengthen our economy,” Widge said.

The groups are arguing that Congress should not tax graduate students because their work is critically important to the stipends they receive. If schools paid stipends according to the number of hours students work, the income would be below minimum wage. It is for this reason that many state governments, including Pennsylvania, don’t tax stipends.

Matt Cronian, a Ph.D. student in the Graduate School of Industrial Administration, says he sees tax exemption as a matter of principle.

“If just doesn’t make sense that the government gives universities grants for research and ends up indirectly taxing the same money.”

According to GSA, the lobbying event has garnered support from a number of organizations that represent graduate students, including the National Association of Graduate and Professional Students, the American Medical Student Association and the Council of Graduate Schools.

Some labor unions that represent student employees also support the cause. If graduate students could lose the benefit of union representation if they are no longer defined as employees, labor unions would also be jeopardized with universities for better stipends, health care and daycare benefits.

Over the past couple of years, members of labor unions “I think health care is a lot bigger issue for graduate students than whether or not we pay taxes. For example, if I were paying around $5,000 this year for the school’s health insurance.”

A tax exemption will encourage graduate students to develop a voice in politics and government. The event was scheduled to wrap up on Oct. 11 with a strategizing session.
“Slow down. Look around you. Experience your world.”

These words do not apply to you. This type of pseudo-hippie dogma is not normally heard on our campus, much less anywhere in this age of high-speed information, transportation, deliberation and acquisition. If you’re in one in place, you’re probably not enough to accomplish something just in time to venture somewhere else.

In 10 minutes, you’ve got a meeting with your boss. Half an hour after that, it’s a quick lunch en route to a doctor’s appointment, and then to your office. But make sure that you don’t forget to perturb the authorities, or you have to stay later tonight and finish up tomorrow’s presentation.

Nevertheless, these are the words — directions really — that Greg Fogel, a four-year communication design student, shouts at patrons via his art. Fogel’s exhibition, entitled “Take Nothing for Granted,” explores the world around us. “I want to show everybody just how amazing the world is when we take advantage of all the awareness that our senses give us to experience it,” said Fogel.

The first of two series, entitled “Textures,” consists of photographs focused on subtle surface characteristics of materials one most likely walks past every day. From wood to metal to plastic, Fogel’s work embodies a mindset that he feels has been lost in contemporary society. Even though he doesn’t introduce any grand statements about the human condition.

“Looking at my photographs, you probably won’t see a reflection of your inner self,” said Fogel.

The first photograph in the “Textures” series depicts the masheshift tunnel created by looking into a school bus window and out the other side. Further down the line, a close-up of a big red tire pipe reveals minute inconsistencies in the dozens of machine drilled holes. Next to that, a black-and-white print of a cement column proves that a straight and sturdy edifice is littered with tiny deviations in the angle, height, width and depth of the bricks that form it.

Fogel said, “There’s attention to the beauty that lies in the pattern, shape, depth, reflectivity and other material qualities of objects.”

SLAN MERTZ

Staff Council food drive, serving the hungry since 1994

More than 85,000 Allegheny County residents would have been relegated to their dinner tables last night without assistance from the Greater Pittsburgh Community Food Bank.

The Food Bank, located in Duquesne, distributes food to 360 agencies, including food pantries, soup kitchens and shelters. Most of these agencies are located in Allegheny County, although 11 other counties in Southwestern Pennsylvania also receive donations.

For the past eight years, Carnegie Mellon’s Staff Council has helped these Pittsburgh area residents by sponsoring an annual food drive, which this year runs from Nov. 4 to Nov. 15.

A committee of five ran the first food drive. It started with a vision from Gloria Dadowski.

“I thought there was a need for this, but I knew that I couldn’t do it myself,” said Dadowski.

In 1994, the first year, the committee collected 1,355 pounds of non-perishable food items. In 1999, the drive had its best year to date with 4,165 pounds.

The Food Bank collects 500,000 pounds of food annually as a result of food drives, according to Patty Vandillen, the drive’s coordinator.

Women, children and senior citizens represent 45 percent of the population at the Pittsburgh Food Bank. The Food Bank’s goals are to keep people from starving, provide nutrition education and awareness, and to provide a significant source of food.

“We are looking for people who are hungry anywhere in Allegheny County,” said Vandillen. Other critical items include peanut butter, canned soup and vegetables, rice, and canned or powdered milk.

Personal hygiene items, including shampoo, soap and toilet paper, are also needed. For a complete list of acceptable items, visit www.pittsburghfoodbank.org.

Volunteers are needed for the sorting and repackaging of donations on Monday evenings, Saturdays or until 3 p.m. Mondays through Fridays.

If you are interested in helping with this year’s Food Drive, please contact Gloria Dadowski at dadowski@andrew.cmu.edu or Carole Panno at cp1g@andrew.cmu.edu.

If you are interested in learning about volunteer opportunities at the Greater Pittsburgh Community Food Bank, call Ivy Ero at 412-460-3663 ext. 211.

JASON BREG

Synergy conference at Pitt attracts a diverse audience

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fits well with the burgeoning biotechnology research in Pittsburgh, and he welcomed the opportunity to showcase it.

Local scientists are also doing pioneering work in regenerative medicine, a field with great potential to help patients with diseases ranging from Alzheimer’s to heart disease.

The McGowan Institute for Regenerative Medicine at the University of Pittsburgh School of Medicine describes regenerative medicine as an emerging field that approaches the repair or replacement of tissues and organs by incorporating the use of cells, genes, or other biological building blocks along with bioengineered materials and techniques.

Three prominent local scientists came together for a spotlight session to discuss their work in three areas of regenerative medicine: neurotransplantation, cardiovascular tissue engineering and bone tissue engineering.

Douglas Kondziolka, director of the Neuronal Transplantation Research Program and the McGowan Institute for Regenerative Medicine, explained the question: Is it too soon to be talking about techniques that may allow people to replace damaged parts of their brain with new functional brain cells?

His research answers that question. He has injected healthy brain cells into the stroke-affected regions of patients’ brains with half of the patients showing improvement. The brain cells were obtained from a cancer cell line that has been coaxed into becoming healthy, non-cancerous brain cells. These cells can be placed into the brain and differentiate into the spinal cord in the hopes that the cells will make connections with the patients’ own cells. In Kondziolka’s phase I trial, he injected either 2 or 6 million of these brain cells into 12 stroke patients.

The phase I trial indicated that the procedure was safe and feasible, allowing researchers to move into a phase II trial. The 15 patients enrolled in the phase II trial were treated with either 5 or 10 million brain cells, and each patient underwent neuropsychological testing to identify visual and spatial problems and improvements. Although the outcome of the Phase II trial will not be released until next month, one patient has already shown improvement just six months after the treatment. Such neurotransplantation has the potential to help patients who have had strokes or are afflicted with Alzheimer’s and Parkinson’s diseases. “For many years, everyone said that the brain cannot heal itself, but it can,” explained Kondziolka.

Pittsburgh scientists are also engineering tissues to help heal the heart. William Wagner, associate professor of Surgery and associate professor of Chemical Engineering and Biomedical Engineering at Pitt, discussed his vision for a myocardial patch. This patch, which Wagner is in the process of designing, can be placed on parts of the heart that have been damaged during a heart attack. The patch ideally will be composed of material that has high elasticity and strength and controllable rates of biodegradation, and is able to support heart cell growth. Wagner has developed a polymer for the patch, and the next phase is to incorporate biological molecules that will encourage the heart cells on the patch to adhere to and grow on the patient’s own heart.

Tissue is also being engineered on CMU’s campus in the Bone Tissue Engineering Center. Jeffrey Hollinger, director of the center and professor of Biomedical Engineering and Biological Sciences at CMU, presented his work in the specialized area of bone tissue engineering. By engineering bone, Hollinger explained during his talk, there is the potential to treat trauma victims, older people with osteoporosis and adolescents with developmental bone deficiencies. Working with two important molecules – bone morphogenic protein and RUNX2 researchers have been able to regenerate whole segments of bone.

AMY PAYLAK

Donations to the food drive:

1994 1,355 pounds
1995 1,500 pounds
1996 2,215 pounds
1997 4,189 pounds
1998 3,580 pounds
1999 8,165 pounds
2000 4,567 pounds
2001 4,432 pounds

Thirty-five staff members, led by Gloria Dadowski and Carole Panno, serve on this year’s food drive committee. Each member serves on one or two subcommittees (advertising, business, kickoff meeting, logistics and one/day one can).

Lori Bell, Kathy Boscick, Jason Bugg, Barbara Bugosh, Karyn Carpenter, Dee Clevsdale, Jackie Cushin, Pam Delfine, Kunta Fossett, Mary Gordon, Linda Gregory, Tara Kline, Koto Hutchings, Bridget Jakab, Ania Jankowski, Jamie Lazos, Barbara Matti, Mary Martin, Ed McAfoose, Toni McIlrath, Anita Nesaw, Megan O’Malley, Ed Palka, David Renppelin, Julie Schampel, Al Schwartz, Lori Shah, Renee Snyder, Char Turney, Valerie Wadyko, Tia Williamson, Kay Vinay and Margaret Weigand.

Greg Fogel, “Big Rig Exhaust,” photo from the exhibit “Take Nothing for Granted”

GREG FOGEL

Photography exhibit takes a good long look

Today’s fast-paced world is when we take advantage of all the awareness that our senses give us to experience it,” said Fogel.
Baruch Fischhoff, professor in the Department of Political Science and Decision Sciences, spoke here Sept. 23 at a ceremony in which he received the Roozbeh House Chair in Humanities and Social Sciences. After greeting the audience and expressing his profound gratitude to the Heinz family, he made the following remarks:

I am also honored to be associated with the university, which has built a reputation by taking risks where more established institutions might have coasted. One of those gambles that particularly matters to me is struggling to find ways to bridge the worlds of theory and practice. A generation or two ago, departmental and institutional structures addressed that in terms of “giving psychology away.” Such well-intentioned noblesse oblige should be seen by us as concerned about providing a return on its investment. However, it also puts the public at risk of being subject to theoretically sound, but untestable, schemes.

A sound formulation comes from Alan Baddeley, a cognitive neuroscientist who was long director of the British Medical Research Council’s Applied Psychology Unit at Cambridge. Alan characterized this as requiring constant interplay between basic science and applied science.

Basic science tests the meaningfulness of theory by seeing whether it has anything new to say about concrete situations. Applied science tests the truth of theory by seeing whether what it has to say is true.

Basic applied science, on the other hand, extends theory by forcing it to address new issues. In turn, it is informed by demographic, policy, and economic changes that are evident in all fields. If we gain traction with a theoretical approach, we risk creating a self-referential community whose hands are full, trying to come up with more ideas that its members will accept. If we then are making progress on some practical problem, we risk funding our hands full with client service, so that little of general utility is learned. (For those familiar with the Christine Lavin song: we risk becoming prisoners on our own hands.)

A healthy university community is essential to achieving this balance. No one can fully understand another’s practical problems or disciplinary perspective. Sustained interaction, mutual respect and patience are needed for this to be true. Those of us who are new to this institution, whether we are full professors or are just coming aboard, may want to get some experience in this situation before we subject other’s work to the rigorous criticism of making chair awards. However, I think that they should reflect recipients’ contributions to making this community work, rather than just individual accomplishments. The test should be particularly stringent for those of us at the upper ends of the academic food chain. And we should be particularly sensitive to those who make any possible success that was won.

The people on the list include the support staff and administration who make the ab

Bridging the gap between theory and practice

“Like the confrontation with the real world, the confrontation with other disciplines should humble us by highlighting the limits to any perspective and to any set of methods.” — Baruch Fischhoff

Faculty on leave: A who’s who of who’s away

Katayen Barmak, CIT, fall. He will investigate the impact of alloying elements on the mechanical properties of NiTi, Pd and MgAl alloys and films and lines for application in silicon chip interconnect.

L. Richard Carley, CIT, academic year. He will help to continue and develop the new startup IC Mechanics.

Hilary Masters, H&S, spring. He will work on one-act plays and on developing a performance space for the department.

James Daniels, Cit, H&S, spring. He will work on data from the XMM-Newton and Chandra telescopes.

Jeffrey Peterson, Cit, MCS, fall. He will work on data from the XMM-Newton and Chandra telescopes in Cape Province, South Africa.

Rami Grossberg, MCS, spring. He will complete work in the field of mathematics at Stanford University.

Stanton Peirce, GSIA, academic year. He will continue developing advanced statistical language technologies.

Siddharth Acharya, Cit, H&S, fall. He will study energy markets with researchers and traders at Southern Energy in Atlanta.

Alex Hills, CIT, academic year. He will start a company based on his Rollaboard furniture.

Christopher Jones, H&S, fall. He has been awarded a Fulbright to lecture on multimedia at the Catholic University of Porto in Portugal. He will advise us on the establishment of graduate programs in multimedia.

Itir Karasemid, MCS, fall. She will teach Dalcroze Eurythmics at the CMU School of Music Dalcroze Training Center summer programs in Taiwan.

Robert Tilton, CIT, spring. He will collaborate with the management team of a new company that is developing innovative products with advanced network technology.

Jeffrey Peterson, MCS, fall. He will continue developing a future cosmology telescope at the University of California, Santa Barbara.

Ray Reagans, GSIA, academic year. He will research projects at Columbia University on links between social networks and revenue management.

Kenneth Kotovsky, H&S, spring. He will work on a monograph summarizing the results of a series of studies on non-confrontational negotiation. He will also release the textbook, which was a book of the late Herbert A. Simon’s recent psychology papers.

Ron Rosenfeld, SCS, spring. He will be pursuing collaboration on speech and language technologies.

Jeffrey Peterson, SCS, spring. He will be writing a graduate-level textbook about continuous systems dynamics and collaboration with other members of several computer data storage companies.

Robert Tilton, CIT, spring. He will collaborate with the management team of a new company that is developing advanced network technologies.

Baruch Fischhoff, CIT, academic year. He will complete work in the field of mathematics at Stanford University.

Il-Horn Hann, GSIA, academic year. He will teach at the Marshall School of Business, at the University of Southern California, and work on research projects on price discrimination strategies based on measuring consumer product preferences.

David Heath, MCS, fall. He will study energy markets with researchers and traders at Southern Energy in Atlanta.

Alex Hills, CIT, academic year. He will start a company based on his Rollaboard furniture.

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Ron Rosenfeld, SCS, spring. He will be pursuing collaboration on speech and language technologies.

Ira Rothstein, MCS, academic year. He will pursue projects in effective field theories and run a workshop oncharm physics in the spring at the Institute for Nuclear Theory at University of Washington.

Michael F. Schierer, H&S, fall. He will analyze data and prepare publications on recovery from coronary artery bypass graft surgery and adjustment to diagnosis and treatment for early-stage breast cancer.
Lost dog finds shelter with Robotics Club

Last month a white dog with bull terrier markings was walking outside on campus during a storm when a few kind members of the Robotics Club, who looked on from a nearby building, decided to take action and rescue her. What was the first thing they did? Well, post a picture of her on their website; of course, in the hope that someone would take her in.

The first post was at 12:01 a.m. on Sept. 4. Just one minute into the new day, the dog found her way onto Carnegie Mellon’s campus — and into quite a few people’s lives. She was rescued by Aaron Shnayek, a fifth-year senior studying Electrical and Computer Engineering and a member of the Robotics Club. “I saw a dog that clearly shouldn’t have been alone outside in the rain, and brought it in.”

For almost a month the dog was in possession of the Carnegie Mellon Robotics Club. The members tried to find a home for her by advertising on CMU’s internal digital marketplace, mic market, and spreading the word through friends and acquaintances.

The Robotics Club called the local animal shelters and also checked to see if the dog was microchipped — a procedure which involves injecting a fluid into the dog’s ear that contains microchip pieces which serve to identify the dog, much like a license plate would identify a car. But there was no trace of the dog’s being microchipped, either.

Ergo Una was — for the moment — everyone’s dog. But not for long.

First to take interest in her was Brian Curfman, a former student who is now co-coordinator of student development. He came up with name “Oona,” from a Native American word meaning “one.”

Through three degrees of separation, Curfman was put in touch with Gwen Buss, assistant director for undergraduate programs in the Electrical and Computer Engineering department. They arranged a meeting so that Buss and her fiance could check out the dog.

It was love at first sight for Buss, who was already looking for a dog. “Once I saw her, I was like, ‘I have to have her!’” She and her fiance, Jeff Stanzczak, who is a Spanish teacher in the Franklin Regional School District in Murrysville, took in a new, permanent member of their household.

Una is one to three years old, according to her veterinarian, and appears to be a bull terrier-dalmatian mix, judging, respectively, by her sturdy 60-pound frame and telltale spots around her left eye and right ear. The spelling of her name was changed to “Una,” the feminine version of “one” in Spanish, which both Buss and Stanzczak speak.

When Buss tries to describe her new pet’s personality, she says with a laugh, “She’s strong, but sensitive.” Una spends the day loafing around the apartment while her owners are at work, and spends her nights on long walks with them in Schenley Park, sniffing at other dogs and literally dragging her owners around.

According to a website on Kabalarian philosophy, the name Oona embodies “the desire to focus on the details of your immediate interests to the extent that others consider you to be fussy.” A dog desiring to focus on other immediate needs? How animal.

Despite the fact that her new owners already seem to love her, it’s strict living for Una, who hasn’t yet been given free reign in her new household. She can’t sit on the bed and must stick to a strict diet of light food until she sheds some unwanted puppy pounds.

“But for now, she seems to be living the life. According to Buss, Una is “so expressive” and doesn’t let a day go by without showing her new owners — with lots of barks and wagging of her tail — that she is utterly grateful for her new home.

And what if her original owner comes knocking one day? Buss will simply define what is rightfully hers: “[I’ll say], her name isn’t Spot, it’s Una!” As long as the dog doesn’t suffer an identity crisis and lose these owners, that’s fine with us.

Sonni Aratta

Wolfram calls his “new science” a paradigm shift

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nature? The mathematical equations that are the bedrock of science, he said, do not explain complex behavior very well.

Looking for alternative explanations, Wolfram in the early ’80s began to consider the model of computer programs. “I began to have the idea that I might be able to find primitives for what nature does. Can’t the rules be more general? The rules embodied in programs might be what nature is doing.”

Wolfram studied short programs known as “cellular automata” that contain simple rules for coloring white and black squares in a grid, saying, for example, that a white square cannot be below two black squares. The idea, Wolfram said, is to “run the simplest programs and see how they behave.”

Identifying rules for 256 cellular automata, Wolfram came across rule 30, which became the bedrock of his new intellectual structure. Starting with one black square, Rule 30 produces a pattern that Wolfram called “very nearly random.” (See illustration) “Extremely simple rules,” Wolfram explained, “can produce very complex behavior. We don’t put a lot in, but we get a lot out.”

Wolfram explained the emergence of complexity through simple rules in the examples of snowflakes, waves lapping at a boat and pigmentation patterns of mollusk shells. Wolfram described the reaction to his book as “all the signs of a paradigm shift in the making,” an expansive claim that is not necessarily winning him friends in academia.

The book was not peer-reviewed or published by an academic publisher, and the text has citations of previous work only in a long appendix.

The lack of citations and peer review have been the chief criticisms of the book among academics. Wolfram said, in effect, that he didn’t have time to do the citations. “By the ’90s, I was discovering things pretty quickly. I kept going until I was able to print a coherent whole.”

He didn’t dwell on the lack of peer review or academic publisher, either. “In the end,” he said, “it was easier just to publish it myself.” The first 50,000 copies were printed on May 14, Wolfram said, and sold out in a day, at $44.95 a copy.

“Could something so fundamental not have been known for ages?” he asked. Before computer programs like his own Mathematica, Wolfram allowed, it was too hard to run the numbers. More importantly, he said, our intuition argues against the idea that the universe is simple and complex can grow out of something very simple. Nature, Wolfram said, has a special secret for building complex systems. “Humans need to foresee what the thing they are building will look like. Nature has no such constraint.”

For a guy who has been a recluse since 1991, Wolfram was quick on his feet in front of the crowd, with a sharp wit and prickly charm. Wolfram asked the many critics of the book to read it first. “A New Kind of Science” weighs in at more than 1,400 pages, however, and few people are on record as having read the whole book.

Wolfram’s new science takes on board not only physical reality but also the big philosophical questions. Wolfram explains free will by a concept he calls “computational irreducibility,” which maintains “There is no better way to know what a system will do other than running the system.”

Human beings’ place in the universe is another one of those big questions. The history of science, Wolfram said, keeps showing us that there is nothing special about us.

“We still think that we are special in our complexity,” Wolfram said, even though we suffer an unpleasant crisis anything that humans can do. “Lots of things in nature do complex equations.”

Brian Connelly

FPO