R·I·T news&events

Rochester Institute of Technology August 23, 2007

RIT scientists develop technology to enhance view of deep space

Snapshots from space may someday confirm the presence of lakes and oceans on Europa—one of Jupiter's moonsand on other planetary bodies. Donald Figer



Imaging detectors that capture information from every wavelength in the electromagnetic spectrum could detect the presence of liquid methane or hydrocarbons, the stew that just might sustain microbial life forms.

An imaging detector under development by a team of scientists from RIT and University of Rochester promises to revolutionize future NASA planetary missions with technology that could withstand the harsh radiation environments in space. The team won \$592,000 from the NASA Planetary Instrument Definition and Development Program to design, build and test a detector that should be resilient against radiation damage. The lightweight device will be smaller and consume less power than technology currently in use. The novel readout circuitry design will give the device a radiation tolerance not possible in standard optical detectors.

"All these benefits will lead to lower mission costs and greater scientific productivity," says Donald Figer, director of the Rochester Imaging Detector Laboratory at RIT and lead scientist on the project. "But, ultimately, radiation immunity is the focus."

Figer's team includes Zeljko Ignjatovic from UR, Zoran Ninkov from RIT, Melissa McGrath from NASA Marshall Space Flight Center, and Shouleh Nikzad from NASA's Jet Propulsion Laboratory.

The new detector is based on a technology created by Ignjatovic and his colleagues at UR in which each pixel reads and converts its signal from analog to digital immediately upon capture. Standard optical detectors lack this capability. Instead, signals must travel along a line of sensors to reach a readout

circuit. This wastes energy and leaves the signal vulnerable to radiation damage that degrades the circuit over time.

"In space astronomy and planetary missions, detectors are frequently the critical pacing item," says Stefi Baum, director of the Chester F. Carlson Center for Imaging Science at RIT. "By developing detectors with greatly reduced noise properties and greatly enhanced tolerance to radiation damage—the chief lifetime limiter of detectors in space—the collaboration should dramatically improve the reach in sensitivity and lifetime of the missions to explore and understand the nature of the planets with which we share our solar system."

Testing the overall system will determine how the sensors hold up in cryogenic environments where the detector is cooled to very low temperatures, imitating conditions in space. The device will be tested at RIT in the Rochester Imaging Detector Laboratory, a new facility established Imaging detectors, page 4

RIT scores high in U.S. News annual college rankings

RIT is again recognized for educational quality and value in the annual U.S. News & World Report:



America's Best Colleges. Since the magazine began ranking colleges in 1983, the university has consistently been listed among the top regional universities.

RIT ranked eighth overall in the "Best Universities-Master's (North region)" category, and scored second in peer assessment, which is a survey of presidents, provosts and deans

from other universities judging a school's academic excellence.

In the "Great Schools, Great Prices" category, RIT ranked sixth among master's universities in the North. The formula used to determine which schools offer the best value relates a school's academic quality to the net cost of attendance for a student who receives the average level of financial aid. The higher the quality of program and the lower the cost, the better the deal, accord-

ing to U.S. News. In the "Programs to Look For" category, RIT was listed as one of only 14 colleges nationally

U.S. News rankings, page 4

\$1 million in federal funds slated for RIT microsystems research

RIT's NanoPower Research Laboratories are slated to receive \$1 million in federal support for the university's Integrated Power for Microsystems initiative thanks to the efforts of U.S. Reps. John "Randy" Kuhl Jr. and James Walsh. The congressmen secured the funding in the form of an earmark in the House Energy and Water Appropria- Randy Kuhl tions Bill, which passed the House



Ryne Raffaele

James Walsh

on nanopower is groundbreaking," says Kuhl, whose district includes the RIT campus. "This new initia-

tive, Integrated

in July.

Power for Microsystems, will go a long way in powering sensors and other microsystems which can be used in homeland security, intelligence, energy and defense. I know RIT is up to this challenge, and I look forward to seeing more about the results of this research."

"This funding will further RIT's

position as a national research leader in nanopower and microsystems," says Walsh, ranking Republican member of the Labor-HHS-Education Subcommittee on Appropriations. "The research advanced not only has national implications but will boost industry innovations within upstate New York companies."

The Integrated Power for Microsystems initiative at RIT will build on the university's unique capabilities in nanopower technology to address a critical national challenge—the ability to effectively and efficiently power the next generation of autonomous microsystems.

The NanoPower Research Labs at RIT, headed by Ryne Raffaelle, address future energy and power needs through nanomaterials and nanotechnological approaches to energy conversion, energy storage and power RIT have been working with issues related to power conversion and storage using new materials such as carbon nanotubes and quantum dots. This new program will leverage the existing work taking place at RIT and apply these materials to challenges associated with powering autonomous microsystems.

"This announcement is a wonderful validation of the vision that RIT demonstrated in the creation of the NanoPower Labs at RIT," says Raffaelle, "and a testament to the fine work of the men and women who

have worked to develop our capabilities and reputation in this field. This support will enable us and our corporate partners in upstate New York to develop breakthroughs that will make a real difference in how we generate and store energy, and how we can power the next-generation of medical and security-related microsystem devices."

"Dr. Raffaelle's research to enhance the performance of energy conversion and storage devices through the development of nanomaterials is an outstanding example of university-based innovation that can stimulate economic growth," says RIT President Bill Destler. "What is particularly significant about this project—in addition to its timely and very important impact on issues such as defense, homeland security and the nation's energy independence— is the opportunity that it will afford local technology firms to partner with our NanoPower Research Labs in prototyping new products for a rapidly growing emerging market. This research program will further strengthen the region's assets and reputation as a center for alternative energy technologies."

RIT will partner with regional companies (including Wakonda Technologies in Fairport, Ultralife Batteries in Newark and Wilson Greatbatch in Clarence) to prototype and pilot new devices using micropower systems.

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A. Sue Weisler | photographer

Visually impaired youngsters from all over the country came to RIT to attend the ImagineIT workshop hosted by the B. Thomas Golisano College of Computing and Information Sciences. During the four-day event, funded by a \$100,000 National Science Foundation grant, students programmed robots, created video games and built computers. Pictured above are Antonio Vanderhorst, left, an RIT graduate student, assisting 14-year-old Tommy White, from Elkhart, Ind., with his robot. While tackling real-world computing applications, the students learned about potential career opportunities. Stephanie Ludi and Tom Reichlmayr, RIT software engineering professors, served as the program's co-directors.

Welcome back events scheduled

The start of another academic year is just around the corner. Below is a list of key events that will kick off the year:

- ■First-year Student Resource Fair, 9 a.m.-6:30 p.m., Aug. 26, Gordon Field House and Activities Center. An opportunity to help first-year students and their families learn about various RIT services.
- ■Convocation for New Students, 9-11 a.m., Aug. 27, Field House. A welcome event for all first-year students and their families that is preceded by the Tiger Walk, an RIT tradition of providing a rowdy welcome to incoming students as they process into the ceremony.
- President's Address to the Community, 9-10:30 a.m., Aug. 30, Field House. Bill Destler, RIT's ninth president, makes his first formal address to the RIT community. The event also features remarks by the president of Academic Senate, chair of Staff Council, president of Student Government and the interim chief diversity officer.
- Lighting the Way Ceremony, 8-9:30 p.m., Aug. 31. This ceremony, in its second year, is designed to welcome RIT women to the campus community. The ceremony begins in the Field House with several speeches before a candlelight procession to Grace Watson Hall for a reception.

New projects

Combining art and engineering to make beautiful images, page 2

Viewpoints

A message of thanks for a successful RIT United Way campaign, page 3

Scholarship and Research

CIMS funding will help upstate New York manufacturers remain competitive, page 4



Newsmakers

Read about your colleagues' latest accomplishments, page 4

Formula racing takes fifth

RIT's Formula racing team captured fifth place overall, among 64 teams from 13 countries, in the Formula Student Germany contest, Aug. 8-12, in Hockenheim, Germany. In the team's first-ever participation in the competition in Germany, RIT earned first place for skid pad, fourth place in endurance/fuel economy, 11th place for design, 14th place in the autocross race and 16th place for acceleration.

"The team is very happy with our performance, and we were very well received here in Germany," says Alan Nye, professor of mechanical engineering and team advisor. "While we were on the track during autocross and endurance, the announcer kept referring to us as 'a well-respected team from upstate New York that has competed in Formula competitions all over the world—they have a lot of experience and are definitely a team to watch."

'Fore' a good cause

"Tee-off" the 2008 United Way Campaign of Greater Rochester by registering to play in the 20th Annual Rick Pettinger Memorial Golf Tournament.

The event will be held Sept. 20, at Shadow Lake Golf Club in Penfield. The registration deadline is Sept. 8, and the cost of \$95 per person, \$60 for students, includes greens fees and cart for 18 holes, lunch at the turn, awards and a dinner buffet

Early bird registration ends Sept. 1 for the cost of \$90 per person. For more information, call 475-7408 or 475-6011.

RIT earns gaming award

RIT has won a Microsoft XNA Game Studio Express Innovation Award, recognizing the university's strong gaming degree programs at both the bachelor's and master's degree

The \$20,000 award is one of only six awarded internationally by the commercial games division of Microsoft. The award provides funding to RIT's B. Thomas Golisano College of Computing and Information Sciences for state-of-the art equipment, increased curriculum development, complimentary XNA Creator accounts for faculty and students and collaborative opportunities with the Microsoft XNA development team. XNA is a technology platform that makes it easier for beginners such as students to write games for Windows PCs and XBox 360s. RIT faculty and students can use the XNA technology and deploy their own created games on XBOX 360 free of charge.

Volleyball team honors

RIT's women's volleyball team achieved a 3.40 grade-point average, earning them the Game Plan/AVCA Team Academic Award for the fifth straight season in 2006-2007.

The award honors teams that displayed excellence in the classroom by maintaining at least a 3.30 cumulative team grade-point average on a 4.0 scale and a 4.10 cumulative team GPA on a 5.0 scale during the school year. Each school receives a plaque and each player receives a certificate commemorating the designation.

Project helps students beautifully blend art and engineering

Art and engineering intersected in a recent project involving Foundations students, in RIT's College of Imaging Arts and Sciences, and a group of RIT engineering students.

For years, students in Stephanie Kirschen Cole's 2-D Design course have created computer-designed, hand-painted kaleidoscope-like paintings. Because kaleidoscope art is most interesting while in motion, however, someone had to physically spin the compositions to enhance the visual effect. But no longer, after members of RIT's student chapter of the Society of Hispanic Professional Engineers stepped in. They created a motorized display board that, with the flip of a switch, turns a kaleidoscope painting into a spinning work of art. The result: a kaleidoscope in motion—as it's meant to be—bursting with color and even new colors.

"We find that they actually transform, producing new colors," says Cole, explaining the phenomena of an optical perception of color change.

The kaleidoscope is the perfect tool, she suggests, for the study of color and color theory topics covered in 2-D Design.

In creating the motorized display board, the 15-member group of Hispanic engineering students designed



A. Sue Weisler | photographe

Stephanie Kirschen Cole talks with members of RIT's student chapter of the Society of Hispanic Professional Engineers about a motorized display board that students designed to show kaleidoscope art in motion. From left are chapter members Ariel Enriquez, Jorge Daccarett and Ramon Campusano, chapter president.

a device with a sturdy base, an arm and a plate with Velcro to hold the painting in place, a motor powered by a 12-volt battery, and a potentiometer to regulate speed.

One of the first project challenges, says chapter president Ramon Campusano, a second-year computer engineering major, was securing the painting to the metal plate without using a screw. "Don't touch the front," he says about the

design consideration that leaves the painting untouched.

The device, demonstrated in Bevier Gallery last spring, is a prototype. But for Cole, who for years has showcased her students' nonmoving artwork behind glass, the invention has given her colorful visions of grandeur.

"This is just a starting point," she says. "I have this vision of well over 20—all spinning at the same time.

This project has been very significant because of its interdisciplinary focus of art and technology."

Adds Benjamin Varela, assistant professor of mechanical engineering and chapter advisor: "This was a very interesting project because it involved art and engineering. Students had an opportunity to learn outside the classroom from other disciplines and to exercise their team building skills—and it was fun!"

The kaleidoscope project wrapped up a successful year for the 15member student chapter, which last spring captured first place in a Project Management Institute competition and second place in a contest sponsored by APICS—the Association for Operations Management. This October, chapter members will compete in the APICS International Conference and Expo national competition in Denver. In addition, the Xerox Foundation awarded scholarships to chapter members, funded the development of projects such as the kaleidoscope motorized display board, and supported students' attendance at the National Technical & Career Conference 2007, sponsored by the Society of Hispanic Professional Engineers, in Denver.

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Poe earns inaugural scholarship

In recognition of former RIT first lady Carolie Simone's dedication to and involvement with NTID and Rochester School for the Deaf, the



Matthew Poe

two institutions have established The Carolie R. Simone Endowed Scholarship at NTID. Throughout her 15 years at RIT, Mrs. Simone worked towards increasing access and enhancing educational opportunities for deaf and hard-of-hearing students.

Matthew Poe of Henrietta has been named the first recipient of the scholarship. He is the son of alumni Warren and Deborah Poe, and he will be joining his two brothers Jonathan and Nathaniel at RIT when he begins classes in the Kate Gleason College of Engineering this fall.

First preference for the scholarship is given to graduates of Rochester School for the Deaf. Recipients must be enrolled either in an associate or baccalaureate degree program at RIT/NTID and must demonstrate strong academic potential and financial need.

All gifts to The Carolie R. Simone Endowed Scholarship, up to \$50,000, will be matched thanks to a challenge by the RIT Board of Trustees. In addition, federal matching funds will be applied to both the donor's gift and the trustee match resulting in a total four-to-one donor gift match. If the donor's company offers a matching gift program, that donor's gifts will be matched six-to-one.

To make a scholarship donation, contact Bryan Hensel, NTID development officer, at bhensel@ntid.rit.edu or 475-6222.

Pamela Carmichael | plcnmc@rit.edu

Library open house to offer food, fun and musical entertainment

The campus community is invited to attend RIT Libraries annual Fall Open House noon-4 p.m.

Aug. 31. Guests are encouraged to stop by and "Get Connected" with RIT Libraries' staff who will provides food, activities, live entertainment and networking opportunities.

Other activities include a guest DJ booth in the Idea Factory, showcasing custom playlists created by RIT Libraries staff members, and the creation of the RIT Community

R-I-T LIBRARIES

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OPEN-HOUSE-07

an interactive craft project where your customized link can become part of the chain.

In addition, informal building mini-tours will be held featuring library "hot spots," and interpreters will be provided. New students will receive a complimentary gift at the circulation desk just for stopping by.

For more open house information, visit wally.rit.edu or contact Bob Chandler, rrcwml@rit.edu or 475-4716.

RIT student competes in Microsoft Imagine Cup finals

Ziyan Zhou was among a pool of more than 100,000 students to advance to the Microsoft Imagine Cup World Finals, a competition for technology students. The secondyear RIT computer science student participated in the software design category representing Team North America. Ziyan's three teammates were from Western Washington University, Texas A&M University and McGill University in Montreal.

"It was like participating in the Olympic Games," says Zhou. "I met the brightest 300 youth in the world from 56 different countries. It was a lot of time and work, but it was totally worth it."

Preceding the World Finals Competition in Seoul, Korea, Zhou's team was one of 10 to visit Microsoft headquarters in Redmond, Wash., to share their software application with Microsoft chairman Bill Gates. Zhou and his team created a languagelearning network called Project Omni.

"There were two key factors that led us to our idea," says Zhou. "The first is how popular social networking Web sites are with millions of students, including our friends using them every day. We wanted



Submitted photograph

Ziyan Zhou, far left, a second-year RIT computer science student, along with three other college students from the United States and Canada, comprised the North American team in the World Finals of the Imagine Cup in the software design category.

to find a way to take the excitement surrounding these massive student communities and apply it to educational technology. The second key factor was the struggles students face when learning foreign languages. Meeting people and helping them with language is one of the most effective ways to learn a new language. Our team sees social networks as a natural solution for helping students learn and communicate."

Zhou advanced to the World Finals after successfully competing at the regional and national levels following an online qualifying round. A total of 14 students from RIT's B. Thomas Golisano College of Computing and Information Sciences competed in the Imagine Cup Regional Finals in Boston.

Microsoft Corp. started the Imagine Cup competition in 2003 to encourage young people to apply their imagination, passion and creativity to create technology innovations that can make a difference in the world. The theme of this year's competition was "Imagine a world where technology enables a better education for all."

There are nine categories of the Imagine Cup Finals: software design, embedded development, Web development, programming battle, IT challenge, algorithm, interface design, short film and photography.

Team Thailand placed first in the software design invitational followed by Korea and Jamaica. ■

Kelly Downs | kaduns@rit.edu

Viewpoints

RIT's United Way campaign a success—thanks to you by Lynn Rowoth

s my second year as the RIT United Way coordinator wraps up, it has been my pleasure to have facilitated the campus campaign, along with a Steering Committee comprised of volunteers representing each division and college, including representatives for retirees, students and the RIT Inn & Conference Center. Each year, they contribute their time and talents to plan and implement creative and innovative campaigns, with several new ideas already in the hopper for

The RIT community did an incredible job in 2007—surpassing our goal of \$385,000 to raise \$386,559which exceeds the amount raised last year by 4.6 percent. Thank you to everyone who participated with pledges and support of our special events throughout the campaign.

For the 13th consecutive year, RIT has received an Award of Excellence from the United Way of Greater Rochester. And, for a second year, United Way recognized local companies who contributed more than \$100,000 as members of the Cornerstone Society, and we also received this distinction. In addition, RIT was honored as one of the 2007 Top 10 Employee Campaigns—acknowledged for consistently performing best practices that lead to a successful campaign.

It has been impressed upon the

RIT community the importance not only of moving from "good to great" as a university but also being a "Category of One." These ideals can be achieved in the classroom as well as across campus through the leadership and volunteer efforts exemplified in the RIT United Way Campaign.

The teamwork exhibited by hundreds of RIT employees, retirees, students, Osher Lifelong Learning Institute members and RIT Inn & Conference Center staff crossed all organizational boundaries to create one of the best campaigns in the Rochester area, which is held up as a role model for other collegiate campaigns. An added benefit to RIT's involvement in United Way is the example that has been set for our students which communicates the importance and values of an ongoing contribution to one's com-

Congratulations for a job well done, and sincere thanks to the following volunteers and departments:

- Steering committee members
- Key captains
- RIT poster production team which involves faculty, staff and students in NTID Art and Computer Design, College of Imaging Arts and Sciences' School of Photographic Arts, the Printing Applications Laboratory and University News

- Poster representatives who generously shared their personal stories
- RIT Food Service for the Taste
- Student Government representatives
- Volunteers for the Rick Pettinger Memorial Golf Tournament and Taste of RIT
- Hole sponsors and volunteers for the Mini Golf on Campus kickoff
- Day of Caring volunteers
- Omega Phi Beta sorority and First Year Enrichment instructors for hosting events
- Educational Technology Center, Facilities Management Services, The HUB, Human Resources, Information Technology Services, Tech Crew, PAL, Payroll and Public Safety for assistance and support
- RIT departments that donated prized to the campaign raffles

and I extend my sincerest appreciation to the 500-plus volunteers who implemented the campaign and the 1,680 people who supported the RIT United Way Campaign through their contributions.

Although it may seem that my hand continuously is outstretched for a contribution or a donation of some kind, my arms always are wide open to embrace friends both new and old. The past two years have



been incredibly inspiring for me as I work side by side with so many talented people and experience, firsthand, the generosity of the RIT

Rowoth is associate director for special events and conferences for Government and Community Relations.

idea for the column, e-mail newsevents@rit.edu.

Grant supports Osher Institute initiatives

Osher Lifelong Learning Institute at RIT, a membership-led organization that stimulates minds and

forges friendships among people ages 50 and older who live in Greater Rochester, has been awarded its second grant from The Bernard Osher Foundation. The academicbased organization—an affiliate of RIT since 1987—will receive a grant for \$100,000 to support the Osher Institute's mission and programs.

"This is a significant investment that will enable us to expand our membership and provide additional opportunities for us to enrich the lives of active learners in a growing segment of our community", says Deborah Stendardi, RIT vice president for government and community relations. "We appreciate the Osher Foundation's confidence in RIT and being a part of a growing national network of more than 100 university-based lifelong learning centers located on prestigious campuses such as Tufts, Rutgers, Northwestern and Carnegie Mellon."

Osher at RIT is located at 150 Research Blvd., Henrietta. The program currently has 390 members and includes individuals with a broad range of professional experiences in industry, education and public

"Osher offers our members a place where they can learn from other members, lead a course if they choose to, and remain active in their retirement years," says Julie Blowers, Osher program director.

For information, call 292-8989. ■ Marcia Morphy | mpmuns@rit.edu

Retiree parking info

All retirees will be permitted to park in visitor and general

parking spaces this year. All

retirees must stop by RIT's

Parking Office to receive a

permanent vehicle registration

decal. The registration form can

also be downloaded http://fin-

web.rit.edu/grms/pats/forms.

html. Retiree parking permits

administration, short term or handicapped spaces (unless you have a state handicapped

are not valid in reserved,

parking permit).

News brief

This truly is a campus-wide effort, community.

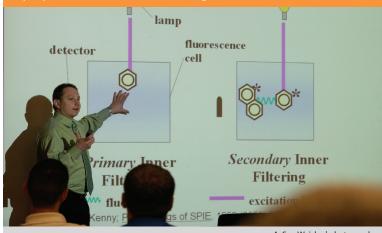
This column presents opinions and ideas on issues relevant to higher education. To suggest an

Magnificent learning



Everyday Engineering Summer Camp for seventh- and eighth-grade girls, hosted July 16-27 by the Kate Gleason College of Engineering, featured daylong, hands-on sessions about the engineering behind common, everyday items such as cars, compact discs, faucets and sneakers. Participants also visited Strong National Museum of Play to learn the science of the butterfly habitat. Above, Evelyn Haynes, an eighth-grader at Roth Middle School, takes a closeup look at a butterfly. The camp, supported by a grant from Microsoft Corp., was sponsored by WE@RIT, which sponsors programs for young women interested in engineering studies and careers.

Symposium showcases undergraduate research



RIT held its 16th annual Undergraduate Research Symposium Aug. 10. The symposium, designed to spotlight research conducted by undergraduate students, has seen a 30 percent growth in its number of participants since last year. NTID student Kyle Edenson, pictured above, won one of the symposium's best research paper/presentation awards for his research on polyaromatic hydrocarbons.

Internship gives students a taste of imaging science

This summer a group of high school students is finding out what it's like to be imaging scientists.

schools were chosen to participate in the eighth annual Chester F. Carlson Center for Imaging Science Summer Internship Program. The competitive, seven-week program places students in the center's various research labs where they work 40 hours a week. The students earn \$8 an hour for their time, but gain far more in knowledge and experience.

"We're actually doing research," says May Cheung, a senior at Webster-Schroeder High School. "I feel like we're students here."

Cheung and Raliek Boswell, from Edison High School, work under the direction of professor Joseph Hornak in the MRI lab, and are testing new imaging materials and methods. Cheung and Boswell presented their research at the Undergraduate Research Symposium earlier this month.

Nan Wang, from Brighton High School, joined the PRISM (Print Research Imaging Systems Model-



A. Sue Weisler | photographer

High school students May Cheung, left, and Raliek Boswell run experiments in the MRI lab, testing new imaging materials and methods as part of the Chester F. Carlson Center for Imaging Science Summer Internship Program.

ing) lab in July and quickly became part of the group. Wang is using a new instrumental technique for measuring the glossiness of printed materials—an area of particular interest to companies like Xerox and Hewlett Packard.

"Everyone brings something to the table, including a high school intern

who has good insights," says Jon Arney, co-director of the PRISM lab.

Other interns can be found working in the biomedical imaging lab and the visual perception lab, or with scientists in the remote sensing and astronomy groups.

Bob Callens, a physics teacher at Honeoye Falls-Lima High School,

has coordinated the summer intern program at CIS for five years in conjunction with Joe Pow, associate

Typically, the interns work independently of each other or in small groups assigned to different labs. To provide cohesion, Callens requires the students to attend a daily staff meeting, field trips to local imaging-related businesses and to submit daily blogs of their experiences. The interns will defend their projects in the final capstone event of the summer from 9:30 a.m. to noon, Friday, Aug. 24, in the Carlson Center auditorium, room 1125. The RIT community is welcome to attend.

"The summer intern program is all about creating opportunities for high school students to engage in real scientific and engineering research as integral parts of our laboratories, working side by side with faculty, staff and undergraduate and graduate students," says Stefi Baum, director of CIS. "The sooner we can show students the impact they can have on the world through

a career in science or engineering, the more we help build the critical U.S. workforce in these areas for the

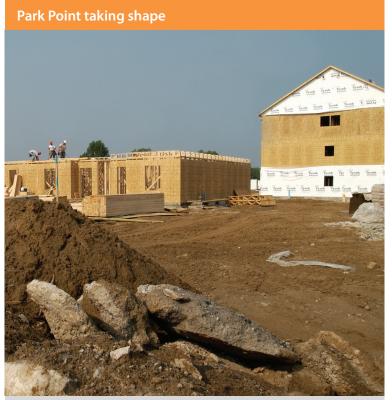
The summer internship program is open to qualified juniors who show a level of proficiency in math and science. The competitive selection process begins in January and includes extensive interviews.

The number of students accepted depends on the availability of projects and researchers. Last year, the program accommodated a larger group of 17 interns.

"Over the past few years, there have been as many as 40 applicants and as few as 20," says Pow, who started the internship program in 2000. "Including this year's group, a total of 71 students have gone through the program. We hope it encourages students to come to RIT."

"Once they're here they realize pretty quickly they're part of the whole place," Callens says. "It gives them a whole new world to shoot for."

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Foundations and buildings emerge at Park Point, the \$72 million retail and residential development at the corner of John Street and Jefferson Road. Apartments, restaurants, a bookstore and other retail stores will give RIT students and the Rochester community even more choices.

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Produced by University News Services, Building 86, 132 Lomb Memorial Drive, Rochester, N.Y. 14623 (585) 475-5064 | 475-5097 (fax) | news&events@mail.rit.edu Dateline: RIT www.rit.edu/news/dateline **Podcasts** www.rit.edu/news/podcasts The Tiger Beat Blog www.thetigerbeat.com/blog Photo Gallery www.rit.edu/news/gallery

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www.rit.edu/newsevents

August 23, 2007 | Volume 39 | Number 19

Designer Peter Bella '03

Contributing writers

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State funds boost manufacturing initiatives

Members of the New York state Assembly delegation, including Assemblymen Joseph Morelle and David Koon, along with RIT President Bill Destler and Nabil Nasr, assistant provost and director of RIT's Center for Integrated Manufacturing Studies, recently announced \$800,000 in new funding, which is included in the 2007-2008 state budget, to support a pair of programs—the Innovation Testbed and the Knowledge Clearing House. Assemblymembers Susan John and David Gantt also requested the funding on behalf of RIT.

These two initiatives were among the key recommendations of CIMS' Roadmap for the Revitalization of Upstate New York Manufacturing, a two-year, bottom-up analysis of upstate manufacturers that was funded with support from the New York state Assembly and the U.S. Department of Commerce. Both efforts will assist companies in implementing new technologies into their production processes, enhance technical knowledge and improve overall competitiveness.

"The key to future economic development will be innovation and partnerships between the private and academic sectors," Morelle says. "The CIMS testbed and clearinghouse are precisely the sort of campusbased resources needed to support entrepreneurship and job creation in upstate, and indeed all across New York. It is an honor to be a part of this ground-breaking effort and to work with an institution of such enown and excellence as RIT."

"The Roadmap report and these two very significant initiatives are demonstrative of the kind of university-industry collaboration that is made possible by unique resources such as CIMS," notes Destler. "The outstanding members of our Assembly delegation who secured this funding have been strong and united proponents of CIMS since its very inception, and we are most appreciative of their continued investment and confidence in CIMS and RIT."

"RIT has long been among the foremost leaders in addressing the challenges our region faces in turning around our economic fortunes, as demonstrated through the work of CIMS and its Roadmap report," says Koon. "I am proud to partner with my Assembly delegation colleagues to invest in the initiatives recommended in this report. I believe that the continuing work we are funding will have a dramatic impact on the



Nabil Nasr, assistant provost and CIMS director, second from left, and Dominic Maiola, CIMS technician, far right, discuss an Innovation Test Bed Project with Assemblymen David Koon and Joseph Morelle. The Test Bed was one of the projects funded under a state grant that Morelle and Koon announced at a recent event at RIT.

manufacturing sector in upstate New York and will be a critical component in our economic turnaround."

CIMS' Roadmap study sought to analyze the upstate manufacturing environment by surveying individual companies and cluster organizations, making on-site visits to dozens of manufacturing facilities, and engaging government, business and community leaders in an open dialogue regarding current assistance efforts and challenges facing businesses. The implementation of new technological innovations and access to technical knowledge about new market opportunities and industry trends are two areas the study highlights as requiring improved focus.

In response, the Innovation Test Bed and the Knowledge Clearing House will work with individual companies and cluster organizations to test, validate and implement new innovations and study and disseminate information on new market and product development opportunities. CIMS will also work closely with the state's Manufacturing Extension Partnerships and Industrial Development Agencies to identify companies who need assistance as well as additional areas of focus.

"This funding will enable CIMS to go full speed ahead in working with manufacturing firms and other partners to help the target industries deal with the competitiveness challenges they are facing, create new business opportunities using new technologies and identify potential inter-industry collaborations that will further strengthen economic

growth throughout upstate," says Nasr. "We look forward to a strong return on this investment for New York state."

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U.S. News rankings from page 1

recognized for excellence in the "internships/co-ops" category. It is the sixth straight year RIT has made the list—based on nominations from college presidents, chief academic officers and deans—since U.S. News began the category in 2002.

RIT is also recognized among the top 70 undergraduate engineering programs among universities where the highest degree is a doctorate. In 2003, RIT launched its microsystems engineering Ph.D. program, the first of its kind in the nation.

"We are proud that RIT is consistently recognized by U.S. News & World Report," says President Bill Destler. "Our continued rankings reaffirm the high value of RIT's excellent academic programs and commitment to student success. It is not just the career orientation of RIT that makes the university so unusual and special. It is the extraordinary focus of its academic programs around science and technology, business, and design and the arts, combined with the outstanding programs of NTID, that lead me to believe that RIT can be moved to a position of even greater prominence in international higher education." Paul Stella | pbscom@rit.edu

Deborah Blizzard, assistant professor in the Department of Science, Technology and Society/Public Policy, has received the 2007-2008 Ronald D. Dodge Memorial Grant to support her project, "Teaching Teams: A Dialogue Between ASL Interpreters, C-Print Captionists, and CLA Faculty."

Steve Diehl, associate professor of imaging and photographic technology, revised two articles in World Book Encyclopedia on cameras and microfiche. The issue of storing digital images was the topic of a presentation Diehl gave at the Photo Marketing Association International Convention in Las Vegas.

Eugene Fram, J. Warren McClure Research Professor of Marketing, and co-author, RIT alumnus Michael McCarthy, associate professor of marketing at Miami University in Ohio, collaborated in a research study on "Hike Up Brand Equity," which appeared in the August 2007 issue of Promotional Products Business.

Varda Main, director of the Technology Licensing Office, presented on emerging technologies at RIT during the seventh annual SmartStart Venture Forum Featuring UNYTECH in Albany.

Louis Malucci, research assistant for the national inquiry service of the Association for Operations Management at RIT, recently published B-47 Stratojet: Mission: Be a $Nuclear\ Deterrent\ to\ the\ Nuclear\ Threat\ of\ the\ Cold\ War-Mission\ Complete.$

Nabil Nasr, director of RIT's Center for Integrated Manufacturing Studies, was invited by the U.S. Department of Commerce to participate in the Organization for Economic Cooperation and Development's Sustainable Manufacturing Workshop, June 21-22 in Copenhagen, Denmark. Nasr presented "Designing Sustainable Manufacturing Practices."

Darcy O'Dell, associate interpreter in the Department of Access Services, reviewed the book, Words in my Hands, in the winter issue of the Journal of Deaf Studies and

Michael Peres, chair of biomedical photographic communications in the School of Photographic Arts and Sciences, recently received the 2007 Louis Schmidt Award, given by the BioCommunications Association. The award recognizes Peres' outstanding contributions to the progress of biological communications.

Imaging detectors from page 1

to develop detector technologies for the composition of a surface without next-generation ground-based and space telescopes.

The new imaging detector under development will boast a dynamic range and greater short wavelength sensitivity. Figer believes the detector could become a key technology for future planetary missions in the most severe radiation environments. The detector technology could figure heavily in missions under consideration for NASA's Discovery, Mars Exploration and New Frontiers programs.

The detector might someday be used to capture hyperspectral imaging from a platform orbiting the outer planets or their satellites. Cameras looking down on Europa could take a picture of every wavelength at every pixel.

"We could use that information to figure out if there are lakes of water on Europa or hydrocarbons on Titan," Figer says. "We can figure out

having to land on it, which we might want to do 10 years later. Then we would know where to land."

Figer was recruited by RIT through a faculty development program grant awarded by the New York State Foundation for Science, Technology and Innovation. ■

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Obituaries

Ruth D'Aprix, former administrative assistant for RIT's Saunders College of Business,

Robert Wabnitz, RIT alumnus and founder and former director of RIT's medical illustration program, July 28.