

RIT Libraries receive national recognition

The RIT Libraries have received the 2006 Excellence in Academic Libraries Award sponsored by Blackwell's Book Services and The Association of College and Research Libraries, a division of the American Library Association. RIT Libraries, comprised of Wallace Library, the Cary Collection and the RIT Archives, is the first library in the Rochester region and only the second library in New York state to earn this distinction.

This national award recognizes the staff of a university, college or community college library for programs delivering exemplary services and resources to further the educational mission of an institution, and acknowledges staff collaboration and innovation in particular. RIT Libraries have been recognized in the university library category.

This award puts RIT in prestigious company—Cornell University, North Carolina State University, the University of Arizona, the University



of Virginia, Loyola University (New Orleans) and the University of Washington—are the other past university library award recipients. It is worth noting that RIT and Loyola libraries have fewer than 50 staff, where the other universities have hundreds. An informative outline of

RIT Libraries' achievements is available at <http://www.ala.org/ala/acrl-bucket/excellenceaward/ritap.htm>.

Each winning library will receive \$3,000 and a plaque. RIT's plaque will be presented to RIT President Albert Simone at an award ceremony held at RIT from 2-3 p.m. on May 12.

"We are proud to be the recipients of this award, not only for what the staff at RIT Libraries has already accomplished, but also in recognition for what we are doing right," says Chandra McKenzie, assistant provost and director, RIT Libraries. "The strategic plan that we created together is moving us toward improving support for our constituents, the university, and the mission of RIT. The ACRL Excellence in Academic Libraries Award encourages us to believe that how we are doing this work reflects a model of service excellence. What is most important to us is that we are all

Library award, page 6

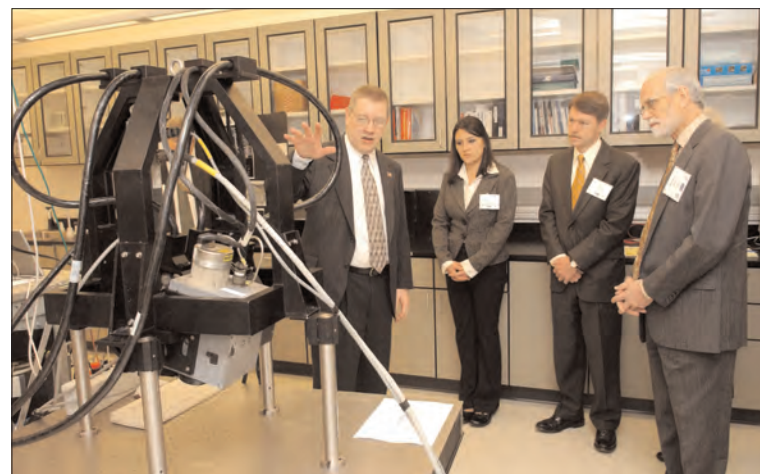
IT Collaboratory to open during March 3 ceremony

One of the focal points to RIT's expanding portfolio of research initiatives will be formally dedicated during an on-campus celebration. The IT Collaboratory Building, a recently constructed three-story facility directly north of the Center for Microelectronics and Computer Engineering, will

officially open during a ceremony on Friday, March 3.

The IT Collaboratory got its start in 2001 with a \$14 million grant from the New York State Office of Science, Technology and Academic Research. Since then, the RIT-led collaboration with the University at

IT Collaboratory, page 7



In a sneak preview earlier this month, representatives from the U.S. Department of Homeland Security toured the labs within RIT's new IT Collaboratory. Don McKeown, far left, RIT distinguished researcher in the Chester F. Carlson Center for Imaging Science, and Don Boyd, far right, RIT's vice president for research, were among the presenters. Greg Francis | photographer

Podcasting allows for mobile classrooms

Move over Bono and Kanye. Make way for RIT's Steve LaLonde in podcast land.

For spring quarter, LaLonde will be offering a graduate class—applied multivariate statistics—to students via podcast. It will be the first-ever class offered through podcasting at RIT.

Podcasting—posting an audio or video recording online that can be heard or viewed through a computer or downloaded to a portable device like an iPod—is yet another interactive technology catching on as a teaching tool, says Joeann Humbert, director of Online Learning.

"For students, this is about flexibility and learning preference," says Humbert.

"Podcasting as a tool allows students to review material anytime, anyplace. We know from our surveys of distance students that flexibility in course delivery is one of the main reasons students choose to take online courses. Having the added benefit of accessing this content in a mobile format will enhance student satisfaction.

"Many students will want to access course materials for clarification on difficult or complex course content, especially before final exams," adds Humbert. "The ability to access course content allows students with

Podcasting, page 7

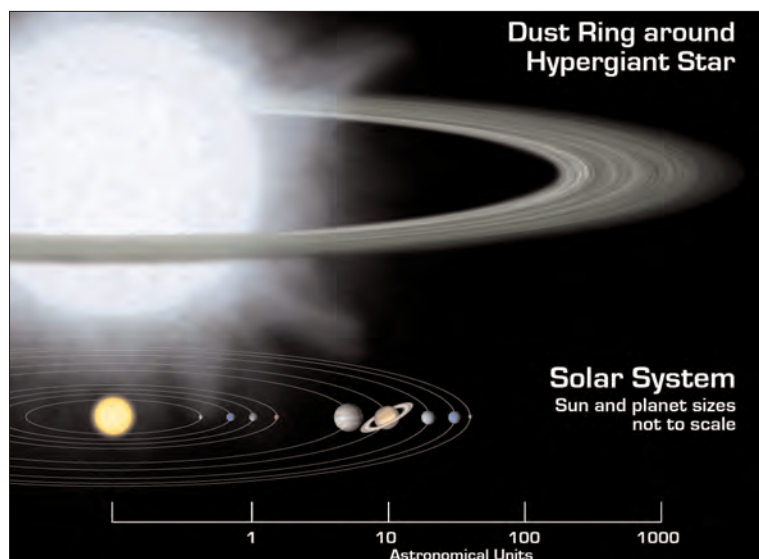


Steve LaLonde



Joeann Humbert

Researcher discovers hypergiant stars



This illustration compares the size of a gargantuan star and its surrounding dusty disk to that of our solar system.

Image courtesy of NASA/JPL-Caltech/R.Hurt

The discovery of dusty disks—the building blocks of planets—around two of the most massive stars known suggests that planets might form and survive in surprisingly hostile environments.

The discovery was made through NASA's Spitzer Space Telescope observations of two hypergiant stars by a team led by Joel Kastner, a professor at RIT's Chester F. Carlson Center for Imaging Science. His team's findings appeared in the Feb. 10 issue of *Astrophysical Journal Letters*.

Kastner used infrared spectra obtained by Spitzer to study a population of dying stars in the Large Magellanic Cloud—the Milky Way's nearest neighboring galaxy. Spitzer's sensitive spectrometer, which breaks

down infrared radiation into component wavelengths as a prism splits visible light into a rainbow, revealed that a third of the stars in the population thought to be in decline were actually younger stars in varying stages of development. Two massive and exceedingly luminous hypergiants stood out from the rest.

The curious spectra of these two hypergiants—with one star 70 times bigger than the sun—led Kastner to reexamine the stars' classifications as dying. The shape of the spectra, or the amount of light from different wavelengths, was characteristic of flattened disks of dust orbiting the stars.

Kastner describes the complex mixture of dust detected around the stars as the "tip of the iceberg,"

Discovery of hypergiant stars, page 7

Student spotlight

Student follows dream, leading to book on ADD

As a junior at Council Rock High School, in Newtown, Pa., Christina Bryce was told by a guidance counselor that she wasn't college material.

But Bryce knew that she didn't want to spend the rest of her life working in a supermarket, where she held a part-time job at the time. So she enrolled in Bucks County Community College, in her hometown, just outside Philadelphia, in the fall of 2000.

A few years later, after transferring to RIT, Bryce realized just how valuable it would've been for her, as a high school student with ADD—attention deficit disorder—had she been given better advice on her college dream years earlier. So she dedicated herself to writing a book targeting high school students and their

parents. *College for Me: A College Guide for Students with Attention Deficit Disorder* is Bryce's just-released self-help book offering advice on finding the right college and tips for college success.

The heart of the problem for prospective college students, Bryce cautions, is that not all colleges are created equal when it comes to providing accommodations for students with ADD. In fact, while many U.S. colleges offer no special services, she says, RIT is one of the best universities in the region for accommodations, particularly because of its Academic Support Center.

"There's a huge difference. RIT stands out for its learning support services," Bryce says.

These include the availability of



Christina Bryce with copies of her newly published book, *College for Me: A College Guide for Students with Attention Deficit Disorder*, at ColorCentric Corp. in Rochester.

A. Sue Weisler | photographer

note taking, books on tape or compact disc, drop-in tutoring and

untimed tests, with a reader and *Student follows dream, page 8*

Campaign Day successful

Members of RIT's men's baseball and lacrosse teams form impressive lineups, but that's not just on the playing field. On Feb. 9, each of these groups of student athletes "lined up" in the Student Life Center to make a monetary contribution to RIT.

"I've talked to the team about how they benefit from alumni donations," says Rob Grow, director of alumni relations and the men's baseball coach. "They truly understand that giving back to the university is important to helping it thrive."

Contributions like these represented the objective behind RIT's first-ever Campaign Day. Nine information tables, set up across campus, highlighted the importance of broad participation by the campus community in supporting the university's \$300 million Campaign for RIT. Each location offered the means by which interested donors could make their pledge.

When all was said and done, 939 gifts were received valued at \$15,760, prompting organizers to proclaim



Marie Giardino '02, director of TRiO Student Support Services, pledges her support to the Campaign for RIT as part of Campaign Day activities. A. Sue Weisler | photographer

the effort an overwhelming success.

"Beyond the participation numbers from the day, I am very pleased to see the faculty, staff and students come together to support the university through this effort," states President Albert Simone.

"I've spoken before about the growing culture of giving on this campus, and the Campaign Day activities were a testament to this movement."

Most of the day's gifts were directed to RIT's various scholarship funds, a critical need for students and for the future of the university's recruiting efforts.

Organizers praised the support of Student Government, who joined in the activities by selling SpiRIT bands and T-shirts. Student gifts will be used toward the purchase of a new costume for RITchie, the university's mascot. The staff of WTR-FM (89.7) also played a key role by providing listeners with live hourly updates on the status of Campaign Day activities. ■

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Celebrating a day of love



An owl fascinates more than 100 children from Rochester city schools during a Wegmans ZooMobile presentation on RIT's Love Day. RIT student clubs hosted activities on Feb. 14 that included science experiments, learning sign language, computer design, face painting, cookie baking and arts and crafts.

A. Sue Weisler | photographer

A real 'monster' truck



Among senior design projects—each computer controlled—demonstrated by RIT computer engineering majors on Feb. 16 was a remote-controlled surveillance vehicle, shown above held by William Burgdorf, a fifth-year student. With him are project teammates Tom Fisher and Eleni Binopolus-Rumayor, also fifth-year students. The battery-operated truck, controlled via an Internet connection, includes an on-board server and camera that feeds live video to a computer application. The vehicle is a prototype for a device that could be used for home security or military and police applications. Binopolus-Rumayor, who graduates this month, has accepted a position as a software product engineer with IBM Corp. in Research Triangle Park, N.C., starting March 6. She previously completed five co-ops with IBM.

A. Sue Weisler | photographer

RIT artists catch 'spring fever'

Jennifer Friede is a student at RIT's National Technical Institute for the Deaf. She is also a budding artist who creates by thinking and doing.

Or, as renowned artist Leonardo da Vinci once explained, "Where the spirit does not work with the hand there is no art."

RIT Bachelor of Fine Arts candidate, Friede, along with a dozen other students, will be showcasing their work at the Senior Fine Arts Studio Exhibition: Spring Fever at Gallery r, RIT's student-run contemporary gallery, located at 775 Park Ave. The show runs through March 18.

Spring Fever highlights work recognized and selected by RIT's fine arts faculty, featuring drawings, prints, paintings, sculpture and new visual forms.

As Friede describes her piece in the show *Self Portrait, Deaf Culture, 2004*: "I create a sense of motion with my art, working with varieties from realistic to abstract. Aesthetic beauty isn't just about how the artwork looks, but comes from the process."

For more information about the show or for gallery hours, call Gallery r at 242-9470. ■

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Self Portrait, Deaf Culture, 2004 by Jennifer Friede

NTID grants help enhance innovations for deaf students

Two initiatives concerned with equal access to technological education and career awareness for deaf students have been awarded grant monies for 2006.

The Nippon Foundation of Japan has awarded \$1.1 million to the NTID-sponsored Postsecondary Education Network-International to continue its work in expanding career and education opportunities for deaf people around the world. This brings the total award given to PEN-International to \$7 million. PEN works with colleges and universities in China, the Czech Republic, Japan, the Philippines, Russia and Thailand and plans to partner with colleges in Korea, Vietnam and Hong Kong this year. Since 2000, PEN-International has influenced attitudes, practices and policies among educators and industry leaders on

behalf of deaf or hard-of-hearing people.

The Graphic Arts Education and Research Foundation has awarded \$66,000 to NTID to develop the initial phase of an interactive Web

Since 2000, PEN-International has influenced attitudes, practices and policies among educators and industry leaders on behalf of deaf or hard-of-hearing people.

site to promote graphic communication as a viable career path for deaf high school students. Principal investigator Thomas Raco, faculty mem-

ber in NTID's arts and imaging studies program, will lead the three-year project, working with AIS Chairperson John Cox, AIS faculty member Jean-Guy Naud, and Counseling Services Chairperson Robb Adams, to create a site with information about careers in graphic communication.

The site will include an online inventory of career exploration materials, requirements for entry into graphic communication degree programs and employment, a process for students to develop an inventory of high school preparatory courses, interactive and individual online advising, information about accessible postsecondary technical education programs, career paths and mobility patterns, and links to key industry associations and companies. ■

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Six more weeks of winter



Renee Keiser, third-year professional and technical communication student, enjoys the festivities at the second annual Groundhog's Day Gala, sponsored by RIT's Department of Communication. The real groundhog, Punxsutawney Phil, saw his shadow again this year, signaling six more weeks of winter.

A. Sue Weisler | photographer

Hirschman is new endowed professor

Karl Hirschman has been named Micron Technology Professor of Microelectronic Engineering in the Kate Gleason College of Engineering.



Karl Hirschman

The designation was made possible by a four-year \$300,000 gift to RIT's microelectronic engineering department from Boise, Idaho-based Micron Technology Inc., a leading developer and manufacturer of flash memory chips, which are used in numerous "smart" electronic devices.

The gift is aimed at supporting undergraduate- and graduate-level studies in microelectronic engineering, including student research involving senior design projects and master's theses.

"Micron has hired over 20 of our students, who are now working in their Boise and Manassas, Va., facilities," Hirschman says. "Micron is aggressively recruiting for its Manassas site and is looking forward to staffing a new facility in Lehi, Utah—IM Flash Technologies—a joint venture between Micron Technology and Intel. Micron's contribution to RIT will ensure that our students continue to get the best education in microelectronic engineering that this country has to offer."

The gift will also facilitate a boost in overall in-class instruction on digital memory, Hirschman says. Non-volatile flash memory is used to store information even after electronic devices—such as computers, digital cameras, mobile phones and MP3 players—are turned off. Micron also makes CMOS image sensors for digital cameras and camera phones.

"This is a big boost for the program," adds Harvey Palmer, engineering college dean.

Hirschman '90, '92 (B.S. micro-electronic engineering, M.S. electrical engineering) is also director of RIT's Semiconductor & Microsystems Fabrication Laboratory. He joined the RIT faculty in 1993 after working as an engineer with IBM Corp. in Fishkill, N.Y. He earned a Ph.D. in electrical engineering from the University of Rochester in 2000. ■

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Old school meets new school

by Lisa Bodenstedt

This column presents opinions and ideas on issues relevant to higher education. We hope "Viewpoints" inspires discussion among the RIT community. To suggest an idea for the column, e-mail newsevents@rit.edu.

Why am I nervous? It's just an overnight. I can do this. After all, I have backpacked in sub-zero temperatures and trekked across remote locations in Nepal and Malaysia. What's so intimidating about spending a night in the RIT residence hall?

Everything—it's no longer my world. Back in 1980, it was. Now, politely referred to as "old-school," I'm about to enter a high temple of millennial culture called Photo House—one of RIT's special interest housing options.

I am a First-Year Enrichment instructor and performance coach. This September, I joined the full-time adjunct staff of FYE. It has been a major career change. For the last 23 years, I have been a practicing graphic designer. Both of my degrees—a bachelor's of fine arts in 1983 and a master's of fine arts in 2001—are from RIT. While FYE instructors come from diverse backgrounds, we share a common expertise when it comes to understanding our students.

While I'm feeling nervous waiting for my hosts, Sarah and Faith, to meet me at Gracies for dinner, I'm at least feeling confident about the reasoning behind my little overnight adventure. I want to know my students outside of the classroom. My hope is that acquiring this knowledge will make me a more effective teacher by providing me with more meaningful ways with which to connect the classroom to their lives.

My dates arrive on time. They help me navigate my way through Gracies' varied dinner menu. Our conversation revolves around whether to attend a lecture on the Middle East conflict; secretly I am hoping we decide to play video games. We do play video games, tour Photo House, watch movies and visit with other students in their rooms. One room in particular is a monument to messiness. My student peeks out from *under* her bed where she sleeps in the manner of a little mouse. Every cell and synapse in my body fights the

urge to start cleaning. I try not to let it show, but fail miserably.

In another room, on a Macintosh laptop, I notice an odd icon. It turns out to be a link to the HUB. I have found the head of the beast! The HUB is the illegal cyber never-never land offering one-stop shopping for all types of software, movies and music with no regard for copyright laws. And here it sits so innocently. While it's not my role to police students, it did make for an interesting discussion about ethical computer use. Copyright and plagiarism are core topics covered in FYE. This experience will deeply influence how I approach teaching the copyright and plagiarism lesson next fall.

Overall, I found the dorm life wonderfully welcoming and ordinary. This floor has a strong sense of community and a feeling of friendship. These Millennials are not so scary after all. I can't tell you in any precise, measured way, how this will help my teaching, but on an intuitive level, I know it will.

Viewpoints



It seems to me that in the classroom, after all of the objectives have been written and the pedagogical dust has settled, good teaching, at its core, is a relationship between two people. This connection can occur around a poem, math problem or photograph.

The approach each teacher takes in creating this connection will be different, but in the end it comes down to relationships and how well both teacher and student understand each other. Bodenstedt is a First-Year Enrichment instructor and performance coach.

FIRST makes a second stop at RIT

Although RIT is hosting it for a second time next month, it's still a FIRST—the Finger Lakes Regional FIRST Robotics Competition, that is.

Thirty teams of high school students from across the Northeast United States and Canada will be among an anticipated 2,500 visitors to RIT for the three-day competition, March 9-11, in RIT's Gordon Field House and Activities Center.

FIRST competitions challenge participants to solve engineering design problems in fun, sports-style contests involving remote-controlled robots that were designed, built and programmed by students and their mentors. FIRST—For Inspiration and Recognition of Science and Technology—aims to inspire students to pursue studies and careers in engineering, science and technology. The competition was created in 1989 by Dean Kamen, who is best known as the inventor of the Segway Human Transporter.

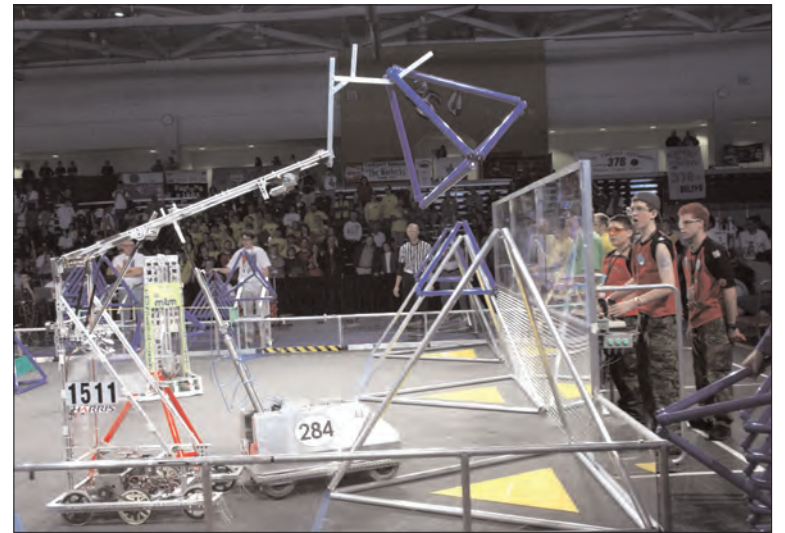
More than 28,000 high school students—competing on 1,125 teams from Brazil, Canada, Ecuador, Israel,

Mexico, the U.K. and almost every U.S. state—will participate in 33 regional competitions this year. Teams vie to advance to the national championship, April 27-29, in the Georgia Dome in Atlanta.

This year's second annual Finger Lakes regional competition, which features 13 Rochester-area teams, is open to spectators.

"When the light bulb goes on, and students connect their classroom education with the excitement of FIRST, that's what it's all about," says Edward Hensel, professor and department head of mechanical engineering and a mentor to the Fairport High School FIRST team, sponsored by Gleason Corp.

"Last year, 100 percent of the students graduating from the Fairport/Gleason FIRST team went on to become freshmen in college engineering and science programs. This year, we're on track for over 90 percent of our team's high school seniors to enter engineering and science programs as college freshmen next fall. FIRST is clearly having a positive



Remote-controlled robots square off in last year's inaugural Finger Lakes Regional FIRST Robotics Competition, hosted by RIT. This year's second annual event, March 9-11, is expected to draw 2,500 to Gordon Field House and Activities Center. A Sue Weisler | photographer

impact on our nation."

Opening ceremonies are slated for 9 a.m. Friday, March 10. Final rounds will be held 1-3 p.m. Saturday, March 11, followed by an awards ceremony at 3:15 p.m. March 11.

For more information, visit

<http://www.firstrochester.org>.

Sponsors of the Finger Lakes Regional FIRST Robotics Competition include RIT, Xerox Corp., Bausch & Lomb Inc. and *Rochester Business Journal*. ■

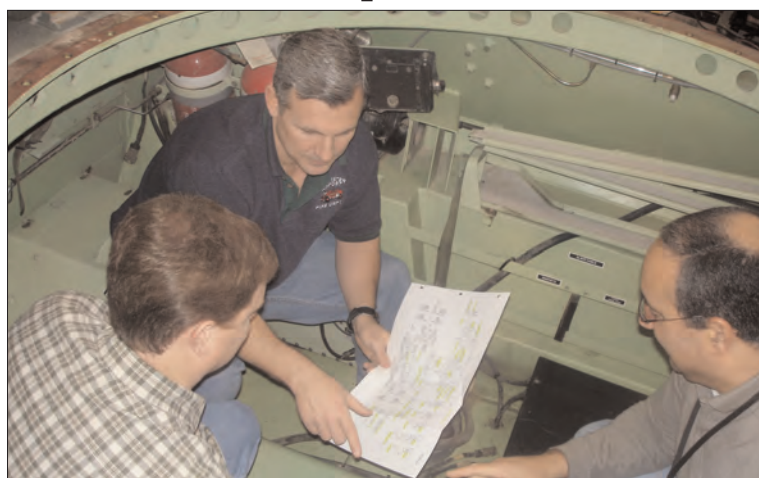
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CIMS engineers inspect LAVs

Engineers from RIT's Center for Integrated Manufacturing Studies have been selected to analyze components and systems of the U.S. Marine Corps light armored vehicles using a Society of Automotive Engineering process known as Reliability Centered Maintenance. The project will enhance CIMS' current research with the vehicles and assist in modifying this maintenance process, commonly utilized in private industry, for use in military applications.

Reliability Centered Maintenance is a structured, seven-step process which uses data and testing to incorporate the consequences of component and system failure into the maintenance of vehicles and equipment. It seeks to reduce the effects of failure on operations by more accurately predicting when and how components may fail and using this information to adjust re-supply and repairs accordingly.

The development of more advanced maintenance systems is incredibly important to the Marine Corps as they look to extend the useful life of military equipment. The



Senior program manager Edward McCarthy works with CIMS engineers in preparation for training with the United States Marine Corps. Laura Nelson | photographer

light armored vehicle model has been in operation since the 1980s, and the vehicles will need to stay in service for about 10 more years. Identifying better methods for maintaining systems and components will reduce costs and enhance the safety of U.S. troops in the field.

"We hope to use these maintenance techniques to provide better data and testing for use in predicting

the failure of components and reducing the affect of these failures on vehicle operation," says Edward McCarthy, a member of the engineering team and senior program manager at CIMS. "It is a fact of life that parts are going to fail, but if we can better predict and plan for failures we can fix problems earlier, with lower costs and less risk to personnel."

Military vehicles, page 6

On the 'Menu'



Patricia Vonderahe '87 (graphic design) and Richard Brainerd '91 (photography) teamed up to tell students about their work on Wegmans Food Markets' Menu magazine and other projects. Vonderahe, creative director for Wegmans, oversees a team of 35 designers, one photographer and two copywriters. Brainerd, a partner in Studio 2B and Digital Lighting in Rochester, does the photography for the magazine. The two spoke Feb. 8 as part of the RIT Alumni Career Speakers Series sponsored by the Office of Alumni Relations and Cooperative Education and Career Services. The series continues at noon March 15 with Dwayne Shaw '05 (information technology), a business analyst with JP Morgan Chase. His topic is "Graduating and Transitioning to Work."

A Sue Weisler | photographer

McQuade book touts cyber ethics expertise

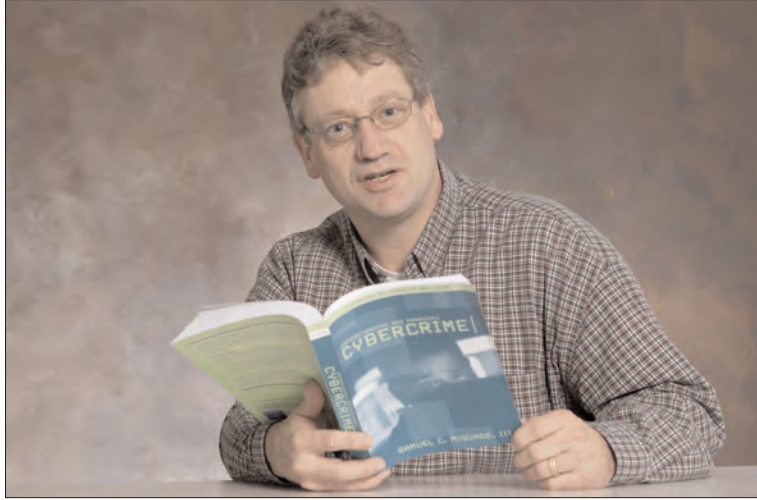
Not quite two months old, 2006 has already been an eventful year for RIT's Sam McQuade.

Previously an assistant professor of criminal justice in the College of Liberal Arts, McQuade recently moved to the College of Applied Science and Technology as coordinator of the cross-disciplinary professional studies master's program in the Center for Multidisciplinary Studies. He's also out with a new textbook, *Understanding and Managing Cybercrime*.

McQuade brings to the position an extensive background and expertise in cybercrime and cyber ethics, security policy and management, and public safety administration. Most recently, his research has focused on computer-enabled crime by adolescents, and he has conducted computer use and ethics studies involving RIT students.

His just-published textbook is the first-ever general text combining key issues such as social constructions of crime, physical and cyber attacks on information systems, cyber laws and regulations, investigation and prosecution of cybercrimes, information security management and cyber ethics. The text is ranked first on Amazon.com when the search term "computer crime" is used.

The text also provides an overview of controversial legal, social and policy issues related to cybercrime;



Sam McQuade with a copy of his just-released textbook, *Understanding and Managing Cybercrime*.
A. Sue Weisler | photographer

explores the historical foundations of cybercrime; and highlights technical and administrative challenges related to the emergence, prevention and control of cybercrime. It offers a unique multidisciplinary perspective—bridging information technology, computer security, cyberspace sociology and anthropology, deviance studies, law and criminal justice, risk management and strategic thinking, McQuade says.

With 30 years experience in criminal justice and security, McQuade has also studied the technological evolution of crime and policing, high-tech crime policy issues and security imperatives, police management and organizational change, public-private

policing, comparative policing and law enforcement ethics. He has two additional books in development—*The Encyclopedia of Cybercrime* and *High Tech Crime By and Among Adolescents: How IT Gadgets are Changing American Youth Social Interactions and Culture*.

The Millennial Generation: Computer savvy, but ethically challenged?

McQuade contends that a generation of computer users—today's youth of nearly all ages—is not being properly educated in computer ethics and information security. He depicts so-called computer addiction—for which his studies have shown empiri-

cal evidence—as a public health problem. However, he adds, these areas suffer from a lack of prior research—an obstacle he is confronting by exploring the expansion of his research to primary- and secondary-school levels.

In addition to research and teaching core graduate-level courses in the cross-disciplinary professional studies program, McQuade is working with faculty from CAST and other RIT colleges to create a concentration in security technology and a center for security and safety technology that will examine various functional and technical categories of technology and their implications for organizational and societal well-being, he says.

"We see all of this as interconnected, multidisciplinary and applied in nature," he says. "Because security technology and management play an

integral role in so many disciplines, it's important for students studying in many different fields—especially during the current era of worldwide terrorism—to be exposed to the implications for various employment sectors."

Collaborations are planned with faculty from several RIT departments including, but not limited to, civil engineering technology/environmental management and safety in CAST; criminal justice and science, technology and society/public policy in COLA; and information technology in GCCIS.

"Sam brings boundless energy and enthusiasm, as well as his expertise in security and safety technology and security management, to the position of graduate coordinator," says James Myers, director of the Center for Multidisciplinary Studies.

McQuade, page 8

Doodles lead to textbook cartoons

The name's Bond. David Bond. And he's the 'agent' behind the cartoons in *Understanding and Managing Cybercrime*, a new textbook written by RIT professor Sam McQuade (see main story).

The idea for the cartoons, which humorously depict cyber-themed issues, originated when McQuade and Bond attended a conference on cybersecurity, in Washington, D.C., a few years ago. While listening to one of the conference speakers, Bond began doodling and McQuade liked what he saw.

So Bond agreed to create some "edgy" cartoons to accompany select topics in the textbook.

"It was tough initially—what's really funny about computers?" asks Bond, who draws as a hobby and devoted a few months, off and on, to creating the cartoons in McQuade's book. But, he soon realized, some broader issues related to computers can be portrayed humorously. "It was fun. It's always nice to do something different."

Different, indeed. By day, Bond, who holds degrees in English and public policy analysis, is associate director for proposal development in RIT's Office of Sponsored Research Services (what one might term a 'left brain' job). But he's always held creative, artistic, 'right brain' interests too—possibly handed down from his grandfather, Milton Bond, who was an artist and RIT professor. His late grandfather's paintings can still be found around campus, Bond says. (For more on the work

of Milton Bond and other RIT artists, visit Wallace Library's "Art on Campus" Web site, <http://artoncampus.rit.edu>.)



David Bond

The younger Bond's drawing background consists of taking RIT courses—just for fun—in cartooning (a class taught by John Kovalski, who now creates the cartoon "Bo Nanas," which appears in *The Washington Post* and other newspapers) and basic media drawing.

McQuade's textbook also includes photos taken by Nate Fisk, a cross-disciplinary professional studies graduate student and research assistant.

Bond, who has been with RIT since 2000, is impressed with the text—and not just for the dozen or so of his cartoons.

"For an undergraduate course in cybercrime," he says, "this is it."

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One of a dozen cartoons—this one dealing with the protection of personal information—that David Bond created for Sam McQuade's new book on cybercrime

Device enhances toner industry

RIT's National Center for Remanufacturing and Resource Recovery has developed a new device that could impact the toner cartridge remanufacturing industry.

The OPC Drum Life Cycle Analyzer can assess the function parameters of the drum, and provide feedback to the operator as to whether or not the drum can be reused. For many cartridge models, the probability of recovering and reusing an OPC drum is over 50 percent. The improved testing process will prevent an estimated 221 tons of aluminum from entering landfills annually and will provide yearly cost savings to the industry of about \$15 million.

"Through this process we have been able to scientifically verify continued use for up to four life cycles for a component that was not often seen as a candidate for reuse or was not utilized to its fullest potential," says Nabil Nasr, director of the center and assistant provost for academic affairs.

Previously, companies looking to reuse OPC drums had workers examine the component through visual inspection with no mechanical enhancement. Furthermore, companies were often forced to accept warranty returns on products when printer cartridges with recovered drums failed following purchase.

The Life Cycle Analyzer uses a

high voltage probe to analyze the component, checking for pin holes along the drum, the thickness of the charge transport layer or coating and the electrical integrity of the component. The device then uses a customized, state-of-the-art software algorithm and comprehensive database to determine whether or not the drum meets standards for reuse. The entire process time averages 11 seconds per drum.

Following the initial proof of concept of the device, the center partnered with Optical Technologies Corp., a New York state remanufacturer, to commercialize the product. The device is now in production and will soon be ready for licensing. Optical Technologies received a \$200,000 grant from New York's Empire State Development Corp. for use in its commercialization efforts.

"When we first began studying the effectiveness of remanufacturing processes in the toner cartridge industry many scientific protocols and testing fixtures did not exist," says



The OPC Drum Life Cycle Analyzer will drastically reduce the waste associated with remanufactured printer cartridges while also decreasing production costs and increasing efficiency.

Laura Nelson | photographer

Simon Jessop, leader of the research team and senior staff engineer at the center. "It became clear that the easiest method for dealing with this problem was to use RIT's scientific and technical capabilities to create solutions and new machines that would improve the entire process. This technology is a direct outcome of those efforts."

The research involving the Life Cycle Analyzer was conducted through CIMS' Imaging Products Laboratory. The lab was created in 2001 through a \$150,000 state grant provided by Assemblyman Joseph Morelle. ■

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Professor takes viewers on the ultimate online road trip

It's a cross-country road trip requiring no money for gas or tolls. Bill Klingensmith, assistant professor of graphic design, is in the driver's seat and wants you to come along for the ride—online.

Last summer, Klingensmith and Robin Cass, assistant professor of glass in the School for American Crafts, drove along Interstate 90 from Seattle to Rochester, with a digital camera mounted to a laptop computer in the rear passenger side window of a car. Every ten seconds the camera snapped an image. Six days and thousands of miles later, Klingensmith had captured more than 15,000 images for a Web

site, www.driveproject.com.

"I want people to be able to look at the country's incredible landscape and see some places they may never get the chance to visit," says Klingensmith. "It was also a personal challenge to see if I could achieve the task of first taking all these images, and then secondly, figuring out how to design a way for anyone to see them all."

His Web site is gaining momentum. Driveproject.com is one of five finalists up for an Interactive Web award in the art category at the South by Southwest Interactive and Film Conference next month. Klingensmith's project is competing

against Web sites created by the Museum of Modern Art, AIGA, PBS and the National Portrait Gallery.

"I'm the underdog up against some pretty heavy hitters," he adds. "There is also a People's Choice Web Award given to the site that receives the most votes between now and March 3. So I'm hoping my friends and colleagues like the site enough to go online and vote for it."

To cast your vote, visit www.driveproject.com.

Klingensmith is already mapping out future road trips. "Maybe through Europe or along legendary Route 66. For the next trip, I want to use two

cameras and utilize a GPS unit to pinpoint exact locations. It would be great to drum up some sponsorship for the next big adventure." ■

Kelly Downs | kaduns@rit.edu

Photo at right: A few of the more than 15,000 photographs featured on a Web site created by Bill Klingensmith. Klingensmith drove from Seattle to Rochester with a digital camera mounted to a laptop computer in the rear passenger side window of a car.



RIT spirit: What we should be thinking about

by James Macchiano and Rob Grow

This column presents opinions and ideas on issues relevant to higher education. We hope "Viewpoints" inspires discussion among the RIT community. To suggest an idea for the column, e-mail newsevents@rit.edu.

School spirit is the key to uniting all of RIT. What unites every person at RIT besides academics? Everyone at RIT is a Tiger, and we are all orange and brown. We need to be proud of who we are and rally behind this identity.

Today, the school Web site is blue, the Gordon Field House is yellow and blue, athletics is orange and black, and Campus Safety vehicles are blue and black. Visitors are unclear of who or what we are when they come to RIT. They are bombarded with conflicting visual messages.

We have seen some recent progress in this area, such as the RIT lettering and seal in the field house, as well as the signage that is coming to the new university entrance. We hope this will lead to momentum that every day at RIT should be a reinforcement of who and what we are. We encourage the administration to establish this as a priority of the Institute.

Slowly, this will enhance campus

spirit, and this university will become alive. At a large university like RIT, it is easy for one to focus on just their individual college or department, and not show pride for the overall university. That needs to change. Students, faculty, staff and trustees all need to unite under one cause and one front—RIT.

Our campus needs to highlight and showcase our strengths and be proud of who and what we are. There is an outcry for unification; RIT needs to bring students together, and that starts from day one. If we want students to cheer in the stands at our hockey games and other athletic events, then we need to instill that sense of pride and enthusiasm now.

For example, banners of orange and brown need to adorn this campus. No more of the blue, maroon, purple, green and every other color. We need big banners and posters highlighting athletic programs and

successful students. We need to realize that having fun at school is a good thing and that we are building lifelong relationships with our students.

RIT has made great strides in beautifying the campus in recent years. It is great to see people interacting outside, playing hacky sack and drinking Java Wally's coffee outside of the library. The campus is more beautiful and more aesthetically pleasing than ever. While this has had a positive impact, there still lacks an overall sense of community and feeling that you are at RIT.

Let's take it one step further. Along with the Tiger on the quarter mile, we still need one spot on campus that everyone goes to for picture-taking opportunities and that says 'RIT.' There are great spaces, and they're beautiful and functional, but they need to say 'RIT.' That's the last piece of it—let's visually mark our territory as 'RIT.'

Viewpoints



RIT should be a cohesive family. We need to unite and collaborate together for the betterment of the students who are here and those to come. We have a responsibility to those who come next and we need to leave things in place so that new members of the RIT family will have a sense of pride and belonging as soon as they come to RIT.

We encourage all of RIT to come on board and make a concerted effort to unite RIT under the one thing we all have in common.

Go Tigers!

Macchiano is Student Government president and Grow is director of alumni relations.

Graphic design archives receive two grants

RIT's graphic design archives, part of RIT Libraries, was recently awarded two grants by nationally recognized foundations—the Getty Foundation and the National Endowment for the Arts.

The first grant, co-written by Kari Horowitz, art and photography librarian, and Becky Simmons, RIT archivist, was awarded by the Getty Foundation to assist with the organization of one of the largest collections housed in the graphic design archives—The Will Burtin Collection, donated to RIT in 2002 by Burtin's daughter.

Burtin, a well-known information designer, was trained as a typographer and designer in Germany and emigrated to the United States in 1938. He worked for the U.S. Army Air Corps and, in 1945, he became art director for *Fortune* magazine. He established his own design firm in 1949 with clients including Eastman Kodak Co., the Smithsonian Institution and Upjohn Pharmaceuticals.

The \$60,000 grant received from the Getty Foundation has been used to hire a project archivist to process, arrange, describe, catalog and create a viable search tool for this collection. In addition, a Web site will be created

to detail the collection and audio tapes will be converted to digital format.

The second grant, written by Simmons, was presented by the National Endowment for the Arts, in the amount of \$10,000. These funds will be used to organize the George Giusti collection and create an online finding aid for the collection.

The Giusti collection, donated to RIT in 1991 by his wife, is one of the department's premiere collections, with business papers and artwork documenting Giusti's lengthy career as a graphic designer and illustrator.

Seventeen sketchbooks and hundreds of original artwork, including collage, pen and ink, watercolor and graphite drawings



Zina Tsemel, left, and Amy Vilz are helping to organize the Will Burtin and George Giusti collections. The massive undertaking was made possible by funds received from the Getty Foundation and the National Endowment for the Arts.

A. Sue Weisler | photographer

are kept as part of the collection. Over 200 printed samples show his work in finished form.

Giusti was born in Italy and emigrated to the United States. After designing posters and publicity materials for U.S. government agencies, he worked as an editorial design consultant and created cover designs for *Time*, *Fortune* and *Scientific American* magazines. His works can also be found in the Museum of Modern Art.

The design archives, founded by RIT Professor Roger Remington in 1984, document and preserve the work of historically significant American graphic designers active from 1920 to the 1950s, as well as selected contemporary designers working in the modernist tradition. The archives have grown to include the works of more than 20 designers.

These collections are original source materials documenting designers' working lives and include unique items such as sketchbooks, sculptures, architectural models and printed samples, as well as slides, audiotapes and film.

To view the collections, contact Horowitz at 475-7871 or Simmons at 475-2557. ■

Vienna Carvalho | vnccom@rit.edu

Wine center names education director

Holly Howell '96 (B.S. food marketing and distribution), an adjunct professor in RIT's School of Hospitality and Service Management, has been named



Holly Howell

director of education for the New York Wine & Culinary Center, which is under construction in Canandaigua. RIT's College of Applied Science and Technology is a partner in the venture, which is scheduled to open its doors this summer.

In the position, Howell will oversee the center's educational programs, develop its long-term event and program plan, and implement collaborative initiatives with national, state and regional partners. She has more than six years experience in employee training and recipe development with Wegmans Food Markets Inc., another

partner in the center.

"Holly brings more than 25 years of outstanding industry experience to the New York Wine & Culinary Center, including rigorous academic instruction in food marketing and distribution, cooking school administration, retail marketing, staff supervision and restaurant service," says Alexa Gifford, executive director of the center.

Howell is also a freelance wine columnist for the Rochester *Democrat and Chronicle*.

The 19,500-square-foot center is expected to attract an estimated 100,000 yearly visitors. Other partners include Constellation Brands Inc. and the New York Wine & Grape Foundation. RIT's School of Hospitality and Service Management is leading the consortium's educational component.

For more information, visit <http://www.nywcc.com>. ■

Michael Saffran | mjsuns@rit.edu

Car and Driver magazine anyone?



RIT's mini-Baja car kicks up some dirt during the 30th annual Mini Baja East, hosted by RIT last spring. While team members have precious little time to sit around flipping through their favorite magazines—they have another car to finish building in time for this spring's competitions, after all—they hope that others have time for a little page turning. To help offset costs of construction and travel to competitions, the team is selling magazine subscriptions and renewals at discounts of up to 85 percent off newsstand prices. Visit www.rit.edu/baja and click "online magazine drive." For more information on RIT's mini-Baja team, contact Dave Hallbach, team manager, at 475-5102 or dwh9049@rit.edu.

A. Sue Weisler | photographer

News briefs

Decision-making lecture

"Situational Awareness in Information Fusion: Models and Metrics" is the topic of a lecture by John Salerno, a fellow with the Air Force Research Laboratory, in Rome, N.Y., 1-1:50 p.m. Feb. 23 in Xerox Auditorium in the James E. Gleason Building. Salerno will discuss "smart" decision-making based on the collection of information from multiple sources leading to reduced uncertainty in tactical situations. The talk, free and open to the public, is part of the Kate Gleason College of Engineering's Distinguished Speaker Series.

Math competition

RIT's Department of Mathematics and Statistics will host the Monroe County Math League All-Star Competition March 9, for the fifth consecutive year.

Approximately 600 students from more than 30 school districts across Monroe County are expected to attend the daylong event. Small-scale competitions will be held at various sites on campus throughout the day. The winners will compete in a final round 2:30-3 p.m. in Ingle Auditorium in the Student Alumni Union. For information, call Shelly Cicero at 475-2498.

Concert schedule

Upcoming concerts from the music program in the College of Liberal Arts will include the following performances:

Friday, Feb. 24—RIT Voice and Piano Students' Recital, 1 p.m. Music Room, A120, Student Alumni Union

Saturday, Feb. 25—RIT Orchestra Winter Concert, "Taking Stock." This performance will include Mozart's *Overture to Don Giovanni* and Elgar's *Enigma*, 3 p.m., Ingle Auditorium, SAU

Saturday, Feb. 25—RIT's Surround Sound with guest collegiate a cappella groups: Invitational Winter Concert, 8 p.m. Webb Auditorium, James E. Booth Building, \$3 admission.

Film festival showing

The Banff Mountain Film Festival has embarked on a worldwide tour, and is making a stop at RIT, Feb. 28-March 1.

The festival is an international film competition featuring the world's best footage on mountain subjects. It began in 1976 and is held annually on the first weekend in November in Banff, Alberta, Canada. Immediately after the festival, a selection of the best films entered in the festival goes on tour. Each community visited creates a unique celebration of local adventure and adventurers.

Tuesday and Wednesday night showings start at 7 p.m. in Ingle Auditorium, Student Alumni Union. Tickets are \$8 for general admission. For more information, visit www.banffcentre.ca/mountainculture/tour/ or contact Tom Connelly at 475-2628 or Tom.Connelly@rit.edu.

Information sessions

The RIT community is invited to attend information sessions regarding the campus-wide initiative to transition away from using social security numbers as primary identifiers. General information sessions will be held 11 a.m.-12:30 p.m. Feb. 24, CIS auditorium; 10-11:30 a.m. March 21, CIS auditorium; 1-2:30 p.m. April 4, LBJ-2590; 1-2:30 p.m. April 5, LBJ-2590; and 10-11:30 a.m. April 11, CIS auditorium.

RIT 'big' mentor area youngsters

Through the eyes of an 11-year-old, a college visit can be an awe-inspiring experience. Take Michael's first impression of RIT.

"It's nice and big," he says with a smile. "You can buy just about anything."

And while the candy counter and the Ben and Jerry's stand in the Student Alumni Union look appealing, they are hardly the reasons why this sixth grader can barely contain his excitement. Michael didn't arrive on campus expecting to satisfy his sweet tooth. Instead, he's in the market for something far more gratifying—someone to serve as his mentor and friend.

Enter Devin Snow. The second-year electrical engineering major from Rochester is among five pioneering RIT students initiating a program sponsored by Big Brothers Big Sisters of Greater Rochester. The effort—matching "little brothers and sisters" with RIT student mentors—is intended to provide each pair with the opportunity for one-on-one interaction during twice monthly gatherings on campus.

Snow is introduced as Michael's new big brother. An immediate embrace foreshadows the personal chemistry that the two quickly discover.

"He's a little (version of) me," explains Snow. "He's very outspoken with a lot of energy. I can tell we're going to work very well together."

"He's cool," confirms Michael. "He likes to talk, and he's nice to talk to."

This new campus-based Big Brothers Big Sisters program was developed in collaboration with Phyllis Walker, director of RIT's Community Service Office, and Helen Gormont, BBBS coordinator of volunteers. Gormont's participation at



Devin Snow shares a laugh with "little brother" Michael as they try their hand at the ESPN Interactive Experience in the RITz Sports Zone.

A. Sue Weisler | photographer

previous RIT volunteer fairs frequently sparked interest from students wanting to lend their time and support to the agency.

"She'd get a significant number of students who wanted to help," recalls Walker, "but the lack of transportation and the challenges of scheduling activities around the quarter system didn't meet the needs of our students."

So Walker and Gormont considered the potential of bringing "littles," ranging in age from 10 to 16, to campus as a way to establish relationships with RIT student mentors. These "big" would be in a position to expose youngsters to the benefits of college life, and parents and guardians could take comfort in knowing their children were enjoying activities in a

safe environment.

Children who participate in BBBS consistently exhibit behaviors highlighting the favorable impact of professionally supported mentoring. According to the agency, 96 percent of littles do well in school, 97 percent avoid drug and alcohol use and 97 percent avoid behavior that results in early parenting.

Tapping into RIT's large student body offers tremendous potential for BBBS to enhance its impact. Many local children who are accepted into the program may wait an extended period before an appropriate match is found.

"Bringing a program like this to a close-knit community like RIT provides the opportunity to create a positive buzz," says Jeff Newland, BBBS

executive director. "When people hear how easy, fun and rewarding being an RIT 'big' is, they want to learn more, and they get involved. As a result, we grow to reach more children even faster."

Since the pairs were introduced on Feb. 1, they've enjoyed their first set of activities, including dinner in the RITz Sports Zone and a scavenger hunt. Not all future sessions will include scheduled programs. Bigs and littles are free to take advantage of the university's wide range of resources to choose their own activities.

Coordinators are in the process of signing on more RIT student volunteers to become bigs, planning to have up to 20 campus-based matches by fall. BBBS hopes RIT's success will serve as a model for similar programs at the other Rochester-area colleges and universities.

"I know that it's very important," reflects big brother Snow, "particularly in Rochester. A lot of kids need role models in their lives."

For Michael, his focus is on sharing the joy of playing basketball, football, ice skating, swimming and "hanging out in the jacuzzi" with a new friend, adding, "It's just great getting to hang out with your big brother." ■

Paul Stella | pbscom@rit.edu

Becoming a 'big'

RIT's campus-based BBBS program meets the first and third Wednesday of each month. For more information, contact Phyllis Walker at 475-6056.

To learn more about Big Brothers Big Sisters of Greater Rochester, call 442-2250 or visit www.beabig.org.

Liberal arts students 'break a leg'



The RIT Players and the COLA Department of Fine Arts performed *The Exception and the Rule: A Brecht Show* earlier this month, celebrating the influential 20th century playwright Bertolt Brecht. The two-part production began with a documentary-style presentation of selections from Brecht's drama and poetry from the period, 1928-1938, including three scenes from *Fear and Misery in the Third Reich*. Shown above are Nate Jentsch as a Nazi storm trooper and Andrew Gibson, playing the character of a chauffeur.

Mark Fleming | photographer

Military vehicles from page 3

The team will be traveling to Albany, Ga., at the end of February to meet with Marine Corps personnel to begin the initial analysis. They will then produce a detailed report which will include extensive data on current component performance and failure rates as well as recommendations for integrating this information into current maintenance operations. The team will begin with the vehicle's pneumatic (air compressor) system and then move on to other systems in the future.

CIMS is currently working with the Marine Corps to install and test a system of sensors on the light

armored vehicle that will more accurately analyze and predict component health through measurement of a host of factors including temperature and vibration.

The data can then be uploaded from the vehicles and examined at remote headquarters.

The system is currently being tested on vehicles in the field and won the 2004 NCAT Defense Manufacturing Excellence Award.

The technology will greatly enhance failure prediction and will be an integral aspect of the CIMS team's maintenance analysis. ■

Will Dube | wjduns@rit.edu

Religious Life welcomes new campus chaplains

The Center for Religious Life recently welcomed three new chaplains into its fold.

Mary Cowles, director of Orthodox Christian Ministry, joined the staff of CRL last spring. She graduated from Saint Vladimir's Orthodox Theological Seminary in 1991, trained as a chaplain for three years, worked as a pediatric chaplain at Duke University Medical Center and was the director of Pastoral Care at Bradley Hospital, a psychiatric hospital for young people, for five years. A board-certified chaplain of the Association of Professional Chaplains, she was the first Orthodox woman to be commissioned as a chaplain.



Mary Cowles

a unique opportunity," Cowles says. "It's a vital group and growing and I'm really enjoying working with them."

Rev. Lorraine Frampton

became the new Lutheran Campus Ministry chaplain in October. She has experienced a variety of ministry settings including churches, hospice care, Bishop's staff and the Evangelical Lutheran Church in America. Her seminary studies focused on pastoral counseling and theology. She was drawn to RIT to "be a spiritual resource for students and learn from them what issues are important in their lives."



Lorraine Frampton

David Skeldon, transitional campus minister for the Baptist Campus Ministry, joined RIT last summer. He is also a graduate student at Northeastern Seminary and he earned his bachelor's in psychology from the University of Buffalo.



David Skeldon

He came to RIT because he "was called by God, encouraged by friends and the former campus minister, and I grew to love the people here," Skeldon says. He hopes to see students take more ownership of the ministry and pass it on to new students. After he finishes his graduate studies, he plans to enter into chaplaincy with the U.S. Navy. ■

Silandara Bartlett-Gustina | sjbcom@rit.edu

Institute offers real-world training

Knowing the ins and outs of the latest emerging Web technologies might look good on your resumé, but it won't land you—or keep you—a job if you don't have "people skills" to go along with it.

Enter the RIT Leadership Institute. Formerly known as the LEAD Program, the Leadership Institute teaches students the leadership skills they need to have the competitive edge to thrive in life after college, a.k.a. the real world.

"Gone are the days when all students needed to obtain a great job was a degree and technical competence," says Molly McGowan, director of RLI. "In today's competitive job market, employers are looking to hire college students that have proven leadership skills, where they have had opportunities to develop key skills in teamwork, problem solving, ethical decision-making and communication. The RLI offers a wide variety of experiences for students to learn about these important topics and practice these critical skills."

From credit-bearing certificate programs to volunteer work to conferences and breakfast series, the program offers students plenty of ways to learn how to be a leader and learn critical skills—making ethical decisions, working well on a team and leading a team, communicating successfully and building self-confidence.

The program also plans to collaborate with each of RIT's colleges to bring more opportunities to practice those newly learned skills.

Coming up, the RIT Leadership Institute is offering a business etiquette dinner and The Paychex Leadership Conference, an overnight interactive leadership skill building retreat in March and the Leadership and Mentoring Advancement Conference—Connectology, in April. A Women's Career Achievement Dinner with the RIT Women's Center is scheduled for May. Students can also choose to earn one of two leadership certificates and can get involved at any point.

Call 475-7058, email lead@rit.edu or visit www.rit.edu/lead for more information. ■

Silandara Bartlett-Gustina | sjbcom@rit.edu

Library award

from page 1

committed to working toward our strategic goals. Our library's organizational culture is such that we challenge ourselves to find a way to do better everyday, even with the things that are working well."

The Wallace Library, which also contains the Melbert B. Cary Jr. Graphic Arts Collection on the second floor and the RIT Archives and Special Collections on the third floor, is a multimedia resource center with a collection of more than 350,000 books and 2,900 print journal subscriptions. The Web-based online collections feature more than 150 research databases that contain over 16,000 electronic journal subscriptions.

"Judges tell us that RIT was selected for its impressive implementation of a new strategic planning process," says Simone. "The result was an extensive reorganization that focused the organization on using cutting-edge technologies to bridge the library with faculty and students in innovative, highly effective ways." ■

Vienna Carvalho | vnccom@rit.edu

Formula team has girl power

There are at least four girls at RIT whose dream is to drive a very small racecar at very high speeds.

But first, they spend most evenings and weekends in the mechanical engineering machine shop—a sort of heaven for car lovers—as part of a tight-knit team of students that applies what's learned in the classroom to create and race Formula SAE cars.

The RIT Formula SAE Racing Team has always consisted of a diverse bunch of people, and over the last few years the number of women on the team has grown. This year's team boasts the largest number of women in history—four—each with a passion for designing and building cars. It's obvious to everyone who watches them build that Erin Crowley, Rachel Belter, Stephanie Malinowski and Lauren Underhill know what they're doing.

Crowley loves being able to learn things that she wouldn't otherwise learn until her last year at RIT. "I want to design and race cars someday," she says. "I came to RIT specifically because of the team."

Underhill thinks about racing all the time. She even uses racing analogies when she speaks of RIT.

"I've found that at RIT there is a lot of freedom to steer your career in the direction you want to go. Any experience you have is what you make of it, and RIT has let me make the most of it in a lot of ways—through school, sports and now the Formula team."

The team has become cohesive—not only do they design and build together, but Underhill says group excursions to ski at Bristol



Erin Crowley, a second-year mechanical engineering major and member of the RIT Formula SAE Racing Team, prepares to service the brakes on last year's racecar. Crowley is one of four females on this year's team—an all-time high for the group. Anthony Capobianco | photographer

Mountain or shoot pool aren't uncommon.

Belter and Malinowski spend a lot of time building parts for the racecar. On a typical weekend, Belter has been known to stay from 11 a.m. Saturday to 6 a.m. Sunday.

"One night, I was about to finish up when our chief engineer asked me to build some new parts. Then he fell asleep on the couch, so I left them sitting on top of him when I finished the next morning," she smiles. "When he woke up at 10 a.m., he installed them in the car. It's those moments that make me happy to be part of the team."

The four bring more than diversity, dedication and skill to the Formula team, says Anthony Capobianco, a fourth-year mechani-

cal engineering student and project manager for the team. They also add such qualities as patience—which is necessary considering Belter's task in leading frame construction, Capobianco says—and it's a trait she has in abundance.

That patience will pay off in about three months for the members of RIT's Formula SAE team (its first competition is in Michigan this May). It may shock a few onlookers to see four young women engineers standing proudly by their team's car. But for them, it's less about gender and more about months of long hours and hard work—culminating with the opportunity to drive a very small racecar at very high speeds, just like the guys. ■

Becca Nelson | rln3821@rit.edu

Discovery of hypergiant stars *from page 1*

probably signaling that the disks of debris surrounding the stars are similar to the solar system's Kuiper Belt, a vast, distant collection of comets—and even Pluto-like objects.

"If Kuiper belts are the smoking guns of planetary formation around stars, it seems that these stars, as massive as they are, may be forming planets," he says.

In contrast to sun-like stars, hypergiants are only a few million years old and have a relatively short life span as far as stars go.

"These planetary systems, if they do form and exist, are short lived because these massive stars explode as supernovae," Kastner says. "So it's amazing that the raw material for planets could be found in such a hostile environment."

The study highlights only two of more than a dozen or so known

examples of very massive stars in the Large Magellanic Cloud that are bright infrared sources. The next phase of the study will use new Spitzer spectra of the additional hypergiant stars to determine how many more are encircled by dusty disks.

"We've discovered a new class of object, and we need to use Spitzer to measure the infrared spectra of a lot more of these objects to learn

how unique they really are," Kastner says.

Kastner's team includes Catherine Buchanan from RIT and Benjamin Sargent and William Forrest from the University of Rochester.

For more graphics and information about the hypergiant stars discovery, visit the NASA Spitzer Space Telescope Web site at www.spitzer.caltech.edu/spitzer. ■

Susan Gawlowicz | smguns@rit.edu

Astronomer's discovery in the news

More than 130 Web-based news organizations from around the globe referenced RIT Professor Joel Kastner's study of megastars, including MSNBC, ABC News, CNN, United Press International, The Hindu, National Post, Newsday and the New Scientist, among others.

Ten years of dedicated service to RIT



RIT President Albert Simone, left, and Jim Bodendstedt, RIT crew coach, center, thank Arthur Gosnell, chairman and CEO of Stonehurst Capital Inc., for his 10 years of sponsorship of the Stonehurst Capital Invitational Regatta. The regatta, one of the best-known collegiate fall rowing events, is held on the Genesee River in Genesee Valley Park. Co-sponsored by RIT and the University of Rochester, the event draws men's and women's crew teams from all over the country and Canada.

A. Sue Weisler | photographer

IT Collaboratory

from page 1

Buffalo and Alfred University has focused heavily on projects related to microsystems, photonics, remote sensing systems and nanomaterials.

The new facility represents the next stage in the IT Collaboratory's evolution, serving as a central repository that provides its partners better access to shared resources. "This new research center will be the hub for the collaborative work of researchers from RIT, our partner institutions and our industry and government sponsors," says Don Boyd, RIT's vice president for research.

Members of the RIT community are welcome to join the celebration, beginning at 10:30 a.m. Gov. George Pataki and Russell W. Bessette, NYS-TAR executive director, are among the dignitaries scheduled to take part in the ceremony. ■

Paul Stella | pbscom@rit.edu

Cao earns coveted NSF award

The National Science Foundation has awarded Xiaojun "Matt" Cao, an assistant professor in the B. Thomas Golisano College of Computing and Information Sciences, its Faculty Early Career Development Program Award. Cao is Golisano College's first-ever CAREER Award recipient.

The CAREER Award is considered the NSF's most prestigious award for young teachers and scholars who effectively integrate research and education in support of their organization's mission.

Cao will receive \$400,000 over five years for a project investigating a new paradigm called multi-granular optical switching. Cao's research looks at how to get massive amounts of data from one lab to another using optical networks. He will focus on the development of a switching framework to reduce the complexity, cost and size of both electronic and optical switches.

"It's a good feeling for me to receive this kind of recognition," says Cao. "My belief is that you work as hard as you can and you never know what will happen. I've put my heart and soul into this research."

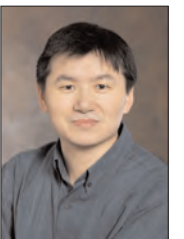
"The college is so proud of Matt's accomplishments," says Jorge Díaz-Herrera, dean of the B. Thomas Golisano College.

"This prestigious grant from the NSF is just further evidence of the caliber of Matt's research. He has already established himself as a published researcher in the field which is quite impressive for someone his age."

Cao started at RIT in 2004 and is part of the Golisano College's networking, security and systems administration department. He completed his Ph.D. at the University of Buffalo. The NSF grant has brought greater visibility to Cao's research and RIT's new Ph.D. program in computing and information sciences. "A number of students are approaching me and expressing their interest to work on their Ph.D. here at RIT," says Cao.

For information on his research, visit www.nssa.rit.edu/~cao. ■

Kelly Downs | kaduns@rit.edu



Xiaojun Cao

NYSTAR continues association with RIT



Russell Bessette, left, executive director of the New York State Office of Science, Technology and Academic Research, presented a faculty development award to RIT astronomer Don Figer during a ceremony on campus Feb. 8. Figer recently joined RIT as a result of NYSTAR's \$750,000 grant, highlighting the agency's commitment to assisting universities develop new areas of expertise leading to economic development.

A. Sue Weisler | photographer

Podcasting *from page 1*

multiple learning styles the option to digest the content at a pace that is right for them."

LaLonde, an assistant professor in the John D. Hromi Center for Quality and Applied Statistics in the Kate Gleason College of Engineering, has previously taught his distance-learning course by using DVDs. The DVDs will continue, but students will also be able to Web stream video on their computers or download lectures to an iPod, making the class portable.

"I have a lot of students who work full time and some of them travel," says LaLonde. "Podcasting will make the class mobile. Students can make productive use of time while traveling."

The podcast class will be a mix of video with LaLonde lecturing and PowerPoint slides displaying notes and other material.

While LaLonde's class is a first at RIT, the university already has a presence on iTunes with the ESPN SportsZone television program. The relationship with Apple's iTunes allows users to download video programs of the sports program at no charge.

RIT is strategically positioning with Apple to offer an array of programming for the RIT community, including local, national and global constituents, says David Cronister, director of the Educational

Technology Center.

Apple is teaming up with universities nationwide, including RIT, to bring "iTunes U" content for student and public use. The iTunes U software is an educational extension of iTunes, the Apple-based media store and player. The university version would allow students to access lectures, speeches and other video and audio files. While SportsZone is free and available to the public, academic courses would only be accessible to students.

"Mobile technologies, like iTunes, allow RIT to showcase and market all aspects of the university," says Cronister. "Imagine a prospective student previewing an actual course or downloading a virtual tour of the campus on iPods, smart phones and PDAs. This technology is going to allow RIT's diverse community to stay connected like never before, allowing for true anytime, anywhere access."

RIT is also unique in that all content will be captioned. This benefits both the hearing and deaf communities, says Humbert. "We have waited to begin offering podcasts until we had a process for captioning them. We know that this feature provided for our deaf and hard-of-hearing students is a good tool for all students." ■

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A beautiful Japanese tradition



Students from the Asian Culture Society raised more than \$800 selling origami flowers and corsages at their Valentine's Craft Sale. More than 600 flowers and more than 40 custom bouquets were made in just over 100 hours. Above, Vivian Yu, a second-year CIAS student, shops for the perfect bouquet. All proceeds benefited the American Cancer Society.

A. Sue Weisler | photographer

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APICS information office in CIMS

RIT has a history of collaboration with industry that has assisted companies and business associations in better serving their customers and members. This partnership is being advanced through the work of the national inquiry service of the Association for Operations Management, or APICS, located in the Center for Integrated Manufacturing Studies.

APICS is a not-for-profit education association that focuses on studying and promoting effective planning and scheduling in manufacturing and service organizations, using design engineering, management information systems and quality management practices. It offers training, certification and networking tools to over 75,000 members representing 25,000

organizations worldwide.

"APICS is a highly respected source for information and resources in the fields of operations and industrial management," says Lou Malucci, one of two APICS representatives who staff the international information center office. "The national survey office provides detailed reference materials and related resources to members worldwide. Last year, we answered requests from 40 states and 15 countries."

APICS representatives have more than 30 years of manufacturing and systems related industrial experience



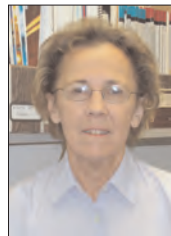
Lou Malucci

and can provide consulting and information on benchmarking metrics, best practices and industry standards.

"RIT's tremendous knowledge in applied research and industrial applications makes the university an ideal host for our organization," adds Karen Lovecchio, fellow APICS representative. "We have access to a variety of resources to better assist organization members and also can serve as a source for faculty and students."

For information, contact the office at 475-2098 or APICS@rit.edu. ■

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Karen Lovecchio

McQuade from page 4

Faculty Affairs Committee member, student-group advisor

As a member of the Faculty Affairs Committee, a subcommittee of RIT's Faculty Senate, McQuade chairs an investigation of intellectual property law liability. He is also faculty advisor to the RIT Security Practices and Research Student Association, a student-run organization that helps prepare students for future employment in the managed-security industry.

McQuade joined RIT in 2001 after serving in several security and justice-related positions in Washington, D.C. A former police officer, police detective and deputy sheriff, he also served as deputy director of research and resource development with the Metropolitan Police Department in Washington; study director with the Committee on Law and Justice of the National Research Council; and program manager with the National Institute of Justice of the U.S.

Department of Justice. ■

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Student follows dream from page 1

scribe, if needed, that may be taken in the center rather than a classroom.

RIT also offers structured monitoring, a fee-based program in which a learning specialist monitors students' academic progress throughout the quarter; and TRiO Student Support Services, a federally-funded program that provides academic support to full-time, matriculated undergraduate students. As she recounted in her book, Bryce even met a professor who had ADD.

The disorder affects the central nervous system, hindering short- and long-term memory. Those with ADD might be easily distracted and may experience dyslexia and difficulty processing information. Although treatable with medication, Bryce says she noticed little change in her symptoms while on medications, and she has since stopped taking them. She maintains a positive outlook on the disorder.

"I don't see it as a disability, I see it as a gift," Bryce says. "Without ADD, I wouldn't be as determined, as hard working and as dedicated to what I am doing."

A portion of proceeds from *College for Me* benefits the RIT Bryce Scholarship, which Bryce established to financially assist students with ADD. The first \$500 scholarship will be awarded this spring for the 2006-2007 academic year.

Bryce's book, which she wrote over three years, is available at Campus Connections and, in either hard-copy or digital format, at www.lulu.com/content/175813.

Editorial assistance was provided by Marianne Buehler, head of publishing and scholarship support services in Wallace Library, and book design and graphics were created by Michelle Amerine, a third-year new media design and imaging major.

Bryce graduates this month with a bachelor's degree in applied arts and sciences, with a concentration in graphic media and a minor in American history, from the Center for Multidisciplinary Studies in CAST. She also earned certificates in management process and organizational change and leadership. This spring, she will marry Kevin Hui '05 (information technology). She hopes to land a position with ColorCentric Corp., the Rochester-based on-demand digital printing firm that produced her book, and she eventually plans to begin writing a book on surviving the workplace with ADD.

In *College for Me*, Bryce, quoting a friend who likened having ADD to climbing a hill with a boulder attached to one leg, wrote, "It may take you longer to get to the top, but you can make it up like everyone else." She offers practical advice for all students: "College is the time when you *must* start doing things for yourself."

It was nearly six years ago when Bryce, setting out in pursuit of fulfilling her dream of attending college, did for herself what no one else—not even a high school guidance counselor—could do. She believed in herself. ■

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Newsmakers

Robert Bowman, professor and department head of electrical engineering, and **Imre Knausz '05** (M.S. electrical engineering) co-wrote "A 250µW 0.042mm² 2MS/s 9b DAC for Liquid Crystal Display Drivers." Knausz presented the paper, which disclosed a novel circuit architecture for driving small-format liquid crystal displays, such as those found in cellular phones, at the 2006 IEEE International Solid-State Circuits Conference, Feb. 5-9, in San Francisco.

Bruce Hartpence and **Lawrence Hill**, professors in the networking, security and systems administration department, presented the paper, "Wireless Carts: An Ideal Platform for Wireless Coursework," and conducted a workshop, "A Portable Wireless Networking Laboratory Environment," at the ACM SIGITE 2005 Conference. Hartpence also presented a paper, "Teaching Wireless Security" and Hill presented "Equipment Safety in the Wireless Laboratory Environment." All three papers are published in the ACM Digital Library.

Newton Howard, chairman and founder, Center for Advanced Defense Studies (a partner with the College of Applied Science and Technology and the B. Thomas Golisano College of Computing and Information Sciences); **Lt. Col. David Johnson**, senior fellow at the center; and **Chris Darby**, a member of the center's Technology Transfer Advisory Board, participated in a National Press Club panel discussion, "National Security Education: How Are Needs Being Met?," Dec. 19, at the National Press Club in Washington, D.C.

Stephen Jacobs, assistant professor of information technology, was elected as one of seven delegates to oversee balloting for the fifth annual Game Awards for the National Academy of Video Game Testers and Reviewers Corp.

James Perkins, associate professor of medical illustration, recently received the Illustrated Book Award, the top honor given for an illustrated medical textbook by the Association of Medical Illustrators. Perkins was recognized for his illustrations in *Netter's Illustrated Pharmacology* by Icon Learning Systems. The book was published in 2005.

V.V. Raman, retired professor of physics and member RIT's Institute of Fellows, is recipient of the Raja Rao Award, presented by the Samvad India Foundation for outstanding contributions to the literature of the South Asian Diaspora.

Raghuveer Rao and **Sohail Dianat**, professors of electrical engineering, co-wrote *Basics of Code Division Multiple Access*.

Johnny Robinson, professor in the School of Film and Animation, has produced his first documentary film, *Visual Lyrics*. It was screened in the fall at the Orinda Film Festival in Orinda, Calif. The film, co-produced by **Jennifer Horak**, Department of Access Services, investigates American Sign Language performing arts interpreting at an outdoor music festival.

Andreas Savakis, professor and department head of computer engineering, received the New York Center for Electronic Imaging Systems Technology Transfer Award for Economic Impact for research funded by the center and Eastman Kodak Co.

Clarence Sheffield, assistant professor of art history, foundations department, taught a summer course at the University of Oslo, "Norwegian Architecture and Design: From the Early Modern Period to the Present." Sheffield's perspectives on the state of Norwegian art and museums were also featured in the Norwegian newspapers, *Vaart Land* and *Uniforum* as well as *Dagbladet*, one of Norway's largest newspapers.

Josara Wallber, coordinator of the NTID Eye & Ear Clinic and assistant professor of audiology, earned a Ph.D. in audiology from the School of Audiology at the Pennsylvania College of Optometry in Elkins Park, Pa.

Sue Weisler, manager of photography, University News Services, contributed photographs to *Sentinel*, a newly published book by RIT Cary Graphic Arts Press. The photographs are from a personal project documenting the construction of the sculpture on campus.

Fritz Yambrach, associate professor of packaging science, recently earned his Ph.D. in international trade from the University of Buffalo. He wrote "Driving Innovation in the Medical Device Industry," which was published in the January 2006 issue of *MD&DI*, a publication of the Medical Device and Diagnostic Industry. He and **Amanda Crawford**, a third-year packaging science major, presented RIT packaging science expertise at the monthly meeting of the Cosmetic Industry Buyers and Suppliers, Jan. 11, in New York.

Correction

The previous issue of *News & Events* incorrectly reported the date of the Dierks Bentley concert.

The performance is at 8 p.m. March 3 in the Gordon Field House and Activities Center.

Tickets are \$22 for students, faculty, staff and alumni and \$28 for the general public.