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Gearing up for Middle States Accreditation

Nearly 150 RIT faculty and staff are lending their focus to reaffirm the university's commitment to student success, particularly as it relates to a global society.

The team is taking part in a self-study effort for reaccreditation by the Middle States Association. Participants have been assigned to one of five subcommittees examining institutional value proposition and governance, resources and administration, assessment, enrollment and student support, and faculty and curriculum.

Each group will submit findings, which will be used in assembling a draft report, to the steering committee in March. Administrators and the RIT community will have an opportunity to offer feedback on the report this fall.

"This self-study will enable us to assess our strengths and challenges within the context of our mission and goals," says Thomas Rico, professor of art at NTID and steering committee chair. "In accomplishing this, we may be able to identify strategies that respond to some of these challenges and help us recognize additional opportunities for growth and development as a university."

This is the initial phase of RIT's 10-year reaccreditation process. In March 2007, the university will host a peer review team assembled by the Middle States Commission on Higher Education, which will conduct an on-site evaluation.

For more information on the accreditation process, visit http://www.rit.edu/~accredit/. ■

Paul Stella | pbscom@rit.edu

President Clinton visits RIT

At the invitation of B. Thomas Golisano, RIT trustee and the founder and chairman of Paychex Inc., President Bill Clinton paid a visit to RIT on Dec. 14. The former president toured the B. Thomas Golisano College of Computing and Information Sciences prior to giving a 50-minute presentation to students, faculty, staff, trustees and invited guests. Clinton talked about his work to address world problems through the Clinton Global Initiative. He also saluted RIT for cultivating the next generation of scientists and engineers but warned that the United States is in danger of losing its competitive edge as fewer American students pursue technological career paths. "Whatever your politics, there should be an insistent demand by American citizens that we dramatically increase the number of people we are educating in science, engineering and technology. It is pivotal to the future that you hope to have." Clinton is the fourth former U.S. president to appear at RIT—following visits by Presidents Ford, Carter and George H.W. Bush.

A. Sue Weisler | photographer

MLK honored on Jan. 17

Calvin Mackie

RIT's Commission for Promoting Pluralism will host the 24th annual Martin Luther King Day celebration at 4 p.m., Tuesday, Jan. 17, in Ingle Auditorium, Student Alumni Union. The keynote address, "Living, Learning and Achieving in a Global World," will be delivered by Calvin Mackie, a professor, speaker, author and inventor.

In 1992, he co-founded Channel ZerO, an educational and motivational consulting company, and he has been active on the public speaking circuit for over 15 years giving motivational presentations to numerous educational, civic and corporate institutions.

He has won numerous awards including the 2003 National Title One Distinguished Graduate for Louisiana, 2002 Black Engineer of the Year Award for College Level Educators, 2002 New Orleans Data News Weekly Trailblazer Award, and the Pi Tau Sigma/ASME Excellence in Teaching Award in Mechanical Engineering for 2000 and 2002.

In 1999, he received a patent on a device to retrofit luggage stowbins on Boeing 737 and 757 commercial airliners.

He is the author of *A View from the Roof: Lessons for Life and Business.*

The celebration is free and open to the RIT community.

For more information, call 475-4993 or visit www.rit.edu/diversity. ■

Vienna Carvalho | vnccom@rit.edu

Trio celebrates 25 years in broadcast booth

The voices of RIT hockey, from left to right, Chris Lerch, Randy Bloechl and Ed Trefzger.

John Narewski | photographer

When someone thinks of RIT men's hockey, a winning tradition is often the first thing brought up in conversation. Two national championships, nine ECAC titles and 13 trips to the NCAA Championship Tournaments in the last 25 seasons are evidence of the Tigers' success.

For most of this run, Tiger fans have been able to share in the action through the familiar sounds of three men. Randy Bloechl, Chris Lerch and Ed Trefzger have been behind the microphones, describing all of the action over the airwaves of WITR-FM (89.7) during the last quarter century.

All three men are 1984 graduates of RIT. Bloechl earned his bachelor's degree in business, Lerch in applied software science and Trefzger in mechanical engineering.

Each took different paths to the broadcast booth. Trefzger was the station manager at WITR for his final two years as an undergraduate, and he hired Bloechl to try his hand at broadcasting in the fall of 1982. For the first 15 seasons, Trefzger worked more on the technical side, producing the broadcasts, before joining the booth full time as the host of the pre-game show and as a color analyst in the mid 1990s.

Lerch was brought into the booth during the 1995-1996 season, originally as an interview between periods to discuss his weekly column as the Division III columnist for United States College Hockey Online (www.uscho.com). A year later, Lerch joined Trefzger as the main color analyst. The crew has thrived since, and the three men, who did not know each other while undergraduates, have become best friends. Their friendship has allowed for good chemistry—turning the broadcasts into a cohesive, informative and often times humorous production.

"We do this because we love RIT. It's our way of giving back and we like hockey," says Bloechl.

This season, with RIT making the jump to Division I, the schedule has increased to 35 games. The trio admits the time commitment is challenging to their families, especially when they do not get paid for their work on the airwaves and have to take vacation time to travel on certain road trips. In their day jobs, Lerch is the head of technical services at RIT's Wallace Library. Bloechl is an accountant for Spoleta Construction in Rochester. Trefzger owns his own database programming and Internet development business and produces an Internet-only trade publication called *Jazz Week.*

RIT men's hockey Head Coach Wayne Wilson is appreciative of what the men bring to the program.

"They are a part of RIT's history," says Wilson. "They've been around and seen almost every game during this time. Not many people would have been as loyal, spending time away from their families to travel with us, and do it for no pay. We are very fortunate to have them."

Not one of them has plans to hang up the microphone soon.

"I'm with my three best friends and we have fun doing this," says Bloechl. "Until it stops being fun, I plan on doing this for as long as I can."

"We take pride in the fact that we could provide a top-notch, quality broadcast, while injecting some personalities, adding humor and having fun," says Trefzger. "Plus, I don't think any one of us wants to be the first one to stop." ■

Joe Venniro | jtvsid@rit.edu

The next RIT men's hockey game is 7 p.m. Saturday, Jan. 14, versus Oswego State at Ritter Arena.

RIT inspection course 'takes off'

Pilots of light-sport aircraft—such as powered parachutes—can inspect and maintain personal crafts with expertise after completing a new, federally approved, 16-hour inspection course offered by RIT.

The Federal Aviation Administration has granted RIT approval to issue the Light-Sport Aircraft Repairman's Certificate with Inspection Rating. RIT's Light-Sport Aircraft/Powered-Parachute Inspection Course, the only one of its kind in the nation, is offered 8 a.m. to 6 p.m. Saturdays and Sundays once a month. The first session was held on Dec. 17—the 102nd anniversary of the Wright brothers' first powered flight. The next classes are on Feb. 18 and 19.

Successful completion of the course gives the owners of experimental light-sport aircraft the ability to perform annual inspections that would otherwise need to be conducted by an airport mechanic at considerable cost, according to Kevin Kochersberger, RIT associate professor of mechanical engineering and course instructor. Certification is valid for the lifetime of the holder.

Inspection course, page 4

News briefs

Alum helps baby Noor

An RIT alumnus played a part in getting an Iraqi infant to the United States for treatment.

Air Force Capt. Craig Hinkley, a 1997 RIT mechanical engineering grad, was the pilot of a military transport plane that transported baby Noor, her father and grandmother from Baghdad to Kuwait for the first leg of her journey. The 3-month-old girl is being treated for spinal bifada at Children's Healthcare of Atlanta, where she arrived on Dec. 31.

Georgia National Guardsmen discovered the baby in December during a raid of a house in Abu Ghraib, a poverty-stricken district west of Baghdad. The soldiers first got Noor to a U.S. military base for medical examinations and called American charities and friends to solicit help for the little girl.

The story has received extensive media attention. Hinkley's role was first reported on WHEC-TV (Channel 10) in Rochester.

Exploring new ventures

The Rochester Entrepreneurship Conference will examine "Growing Entrepreneurial Ventures" 8 a.m.-5 p.m. Jan. 20. Keynote speakers are Philip Saunders, chairman of Griffith Energy and Genesee Regional Bank, and Dick Kaplan, president and CEO of Pictometry International Corp.

The event begins with breakfast at 7:30 a.m. followed by lectures/seminars in the B. Thomas Golisano College of Computing and Information Sciences auditorium and Louise Slaughter Building.

The Entrepreneurship Conference is sponsored by RIT, the University of Rochester, High Tech Rochester, The Innovator's Edge, Greater Rochester Enterprise and *Rochester Business Journal*. The conference fee is $75, with discounts available for students and faculty. Registration is through High Tech Rochester at htr.org; for information, call 475-2199.

'Real World' software talk

Susan Land, software engineering section manager at Northrop Grumman IT/TASC, will be the featured guest in the next installment of the Dean's Lecture Series, sponsored by the B. Thomas Golisano College of Computing and Information Sciences. Land will present The Real World Application of IEEE Software Engineering Standards at 1 p.m. Jan. 20 in the Golisano College auditorium.

The free, public event will be followed by a reception. Land has more than 18 years of experience working in information management systems programming, database systems development and enterprise application programming.

EMBA scholarships

Following the success of last year's initiative, the College of Business is again offering scholarships to accepted applicants of the 15-month Executive MBA program.

The RIT EMBA scholarship allows Rochester-area individuals with work experience to earn their degree at a competitive overall cost of $42,000. This includes all books, a laptop computer and software, breakfast and lunch on class days, and a one-week international study experience in Europe. Classes begin in August.

The next two EMBA information sessions take place at 11 a.m. on Jan. 21 and Feb. 18 in the Max Lowenthal Building. Visit www.ritemba.com or call the College of Business at 475-7435.

Employees showcased at Student Affairs awards

RIT's Division of Student Affairs honored 21 employees for length of service and presented awards for outstanding service at an annual faculty/staff recognition brunch in December.

Cheryl Phillips, administrative assistant for the vice president of Student Affairs, was celebrated for her 30 years at RIT. Phillips joined RIT's Physical Plant in 1975 and Student Affairs in 1977.

"Cheryl is my everyday angel," says Mary-Beth Cooper, vice president for Student Affairs. "You should all get to work with someone like Cheryl in your career. When I think of all the treasures at RIT, Cheryl Phillips is, without a doubt, at the top."


Joshua Bauroth

The New Staff Outstanding Service Award, for staff with less than five years in their field, was presented to **Joshua Bauroth**, First-Year Enrichment instructor.

In his nomination, Latty Goodwin, director of FYE, writes: "He epitomizes the professionalism and student-centered dedication that our division and RIT seek in our employees. Perhaps the thing I most appreciate about Josh is how he holds others and me in FYE to high standards. I have come to rely on Josh to always thoroughly explore the rationale behind our decisions and to ask the tough questions. I have also observed this in his interactions with his students, a tactic that is remarkably successful in encouraging critical thinking skills."


Robin Amico

The Outstanding Support Service Award was given to **Robin Amico**, senior staff assistant, Center for Residence Life.

In her nomination, she is described as being "an integral factor in the success of the Center for Residence Life, creating systems to track spending and improving the center's ability to forecast financial needs."

As part of her duties, she helps RIT's eight special interest houses manage their budgets and "always has time to help the students handle anything that needs to get done." In her financial role, Amico often refers to herself as the "Ladybug," saying she "bugs people to get receipts and paperwork in on time and correctly, but tries to be a lady about it."


Nicole Boulais

The Excellence in Service Award was presented to **Nicole Boulais**, coordinator of Student Affairs assessment. In her nomination, John Weas, assistant to the vice president of Student Affairs, said, "Nicole's efforts to advance scholarship and quality practices across the division and her investment of time and energy in the design of new learning environments have been exceptional.

"Nicole has served as a powerful change agent, encouraging the design of assessment strategies across the division."


Trudy Howles

The Faculty Award for Promoting Learning Outside the Classroom was given to **Trudy Howles**, associate professor of computer science. The award is given to a faculty member outside the Division of Student Affairs who has contributed, in an exceptional way, to student development and success through their support or involvement in activities outside the dassroom.

In her nomination, she is described as being "dynamic, innovative and committed, a true class act" whose service to students has "propelled her to the head of the class." ■

Silandara Bartlett | sjbcom@rit.edu

RIT's youngest artists at work

Gabriel McMurtrie shares a silly moment with mom, Elouise Oyzon, at the Margaret's House art show opening, Dec. 15. For 10 weeks, 23 preschoolers from Margaret's House and 16 pre-service art educators from the School of Art worked hard to produce unique and exciting art for the show.

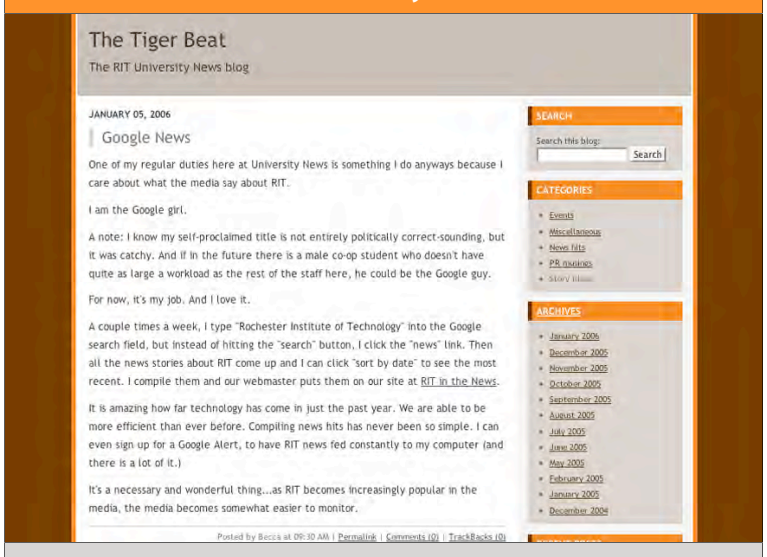
A. Sue Weisler | photographer

A thirst for knowledge

Invigorating thoughts reign at RIT's Athenaeum, the innovative, educational organization for adults over 50. From left, members Roselle Fine and June Clase chat with Deborah Stendardi, RIT vice president of Government and Community Relations, at the new classroom facility at 150 Research Blvd. New and returning members are invited to open house sessions from 9:30 a.m. to 3 p.m. Jan. 16-19. The sessions are free and classes fill quickly. For membership information or a winter course catalog, call 292-8989 or visit www.rit.edu/athenaeum. The Research Boulevard location has free parking and is handicapped-accessible.

A. Sue Weisler | photographer

Behind the scenes at University News



What are your thoughts about the people and programs that keep RIT in the headlines? UniversityNews has joined the blogosphere. The "Tiger Beat" takes you behind the scenes with the staff at University News for insights on how news happens. Join the conversation at www.rit.edu/news or www.thetigerbeat.com.

Dyer Arts Center hosts platinum prints exhibit

The NTID Dyer Arts Center is hosting a distinguished traveling exhibition on loan from Deerfield, Mass. The Allen Sisters: Pictorial Photographers 1885-1920 will be on display from Jan. 16 to March 3. Frances Stebbing Allen (1854-1941) and Mary Electa Allen (1858-1941), of Deerfield, started working as photographers after progressive deafness obliged them to reassess their chosen vocation of teaching.

The Arts and Crafts movement played a critical role in their careers and the sisters found Deerfield's 18th century houses and furnishings offered an ideal environment for their colonial re-creations—complete with family and neighbors donning period clothes to complement the pictures.

This exhibition will showcase 50 platinum prints of the Allen sisters' photographs of country scenes, figure and child studies, and landscapes of New England, California and Great Britain. The California landscapes, arguably their most artistic prints, compose their last large body of work. The Allen sisters died within four days of each other in 1941.

On Friday, Jan. 20, from 9 to 10 a.m., there will be a discussion of the exhibit led by Karen Christie in American Sign Language.

For more information and gallery hours, call 475-6855. ■

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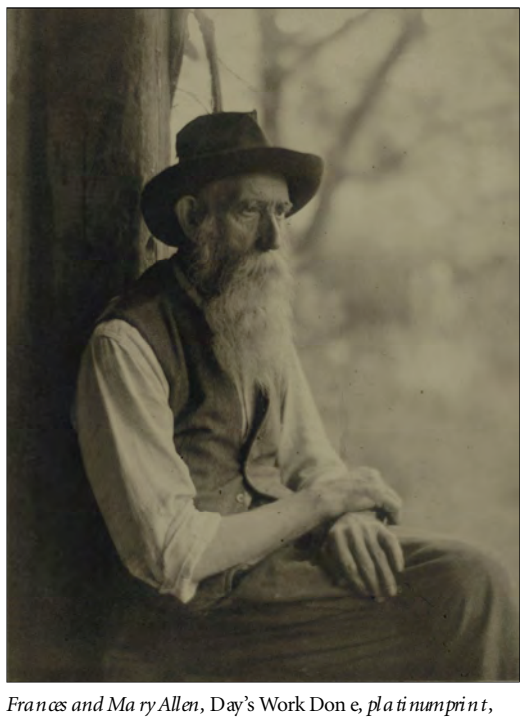


Frances and Mary Allen, Day's Work Done, platinum print, c. 1915. Courtesy of Memorial Hall Museum, Deerfield, Mass.

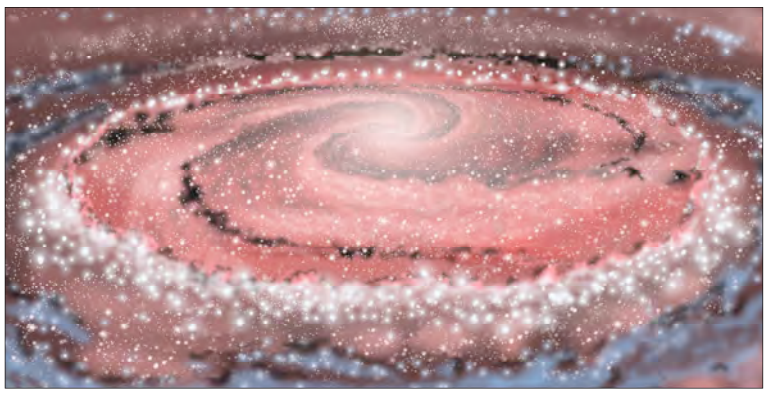
Inside a black hole

How does matter spiral its way to the center of a galaxy and into the mouth of a supermassive black hole? A new study led by RIT scientist Kambiz Fathi provides the best glimpse yet at material descending into the core of a galaxy hosting a large black hole. The study predicts that, barring obstruction, the galactic debris will take about 200,000 years to make a one-way trip through the inner regions of the galaxy and into oblivion.

An international team of scientists led by Fathi, together with astronomers in Brazil, Italy and Chile, measured the internal motions of gas surrounding the nucleus of the active galaxy, NGC 1097. Using modern spectroscopic techniques with the Gemini South Telescope in Chile, the team measured the motion of matter streaming from the galaxy's spiral arms—dense areas of stars and gas in a spiral configuration— to the heart of the galaxy. The observations zoomed in 10 times closer to the supermassive black hole than ever before, to see clouds of material within 10 light-years of the galactic core. Previous observations of this type of environment have detected gas clouds located between 100 and 1,000 light-years from the galaxy's nucleus.

Fathi presented his results at the annual meeting of the American Astronomical Society on Jan. 9 in Washington, D.C.

Blackhole, page 4



Artist's conception of the inner ring structure of galaxy NGC 1097, which is about 4,500 light-years in diameter. Kambiz Fathi studied the detailed motions of this gas and presented his results at a meeting of the American Astronomical Society.

Photo courtesy of Gemini Observatory by Jon Lomberg

Designing fashion's future

It's like something out of a science fiction movie—college students visit a mall of the future and return to strut their stuff.

Two materials science and engineering students from the College of Science did more than present papers at the annual fall meeting of the Materials Research Society, held last month in Boston. Bhavin Parekh and Naveen Rawat participated in the first ever Materials Research Society "smart fabrics" fashion show, an event highlighting the potential of technology in future apparel.

Students from some of the nation's top engineering schools either wore a special outfit or accompanied a model wearing the "smart clothing." Some wore shirts that light up, others donned underwear that battles dermatitis, tank tops that use optical fibers to glow in the dark, or jean jackets that use the sun's rays to charge a cell phone. The technology thrilled the 5,200 visitors, who watched in awe as dresses changed color to correspond with body temperature and transformed instantly from short skirts to flowing gowns.

Several technology companies participated in the event, which included thumping rock music and a "Manhattan-style" runway. Some models showed off a little skin here and there, but others were fully clothed—in computers. A wearable computer was one of the show's highlights—it included a jacket with an electronic light display woven into the back and a sleeve-mounted keyboard to control it. The effect transformed its wearer into a walking billboard.

Kalathur Santhanam, director of material science and engineering at RIT, was pleased to see a large turnout at the society's first fashion show. "They wanted to show that there is an important and practical future for the technology we create," he says.

Some of the outfits were more practical than others. For example, one company displayed an emergency poncho made of aluminized heat-resistant fabric that a firefighter can drape over a victim in seconds to provide protection during a rescue. Other companies are developing "self-cleaning" suits with surfaces designed to mimic the texture of the lotus leaf or a fly's hairy wings to deflect dirt and water.

One of the RIT students wore completely fire-resistant clothing. "Walk around in a fire in that clothing and you're safe," says Santhanam. Plus, the Material Research Society says that all the garments can be washed at least 100 times.

Other universities represented in the show were Carnegie Mellon University, Boston University and Massachusetts Institute of Technology. Engineering students from the Materials Research Society chapters at each college enjoyed the experience and received a glimpse ahead at a future of clothing almost as smart as they are. ■

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Bhavin Parekh, right, poses with model Laine Blumenkopf in the Materials Research Society fashion show. The small logo on Blumenkopf's dress can change color depending on body temperature.

Photo courtesy of Anita Miller, Materials Research Society

PR students boast real-world success

Final class projects—common at RIT, a university known for applied learning—may bring to mind unique engineering design, innovative technology or creative works of art. RIT students create numerous examples of each, and the hands-on projects offer a good measure of student ability.

For a group of RIT communication majors, final projects—also emphasizing learning-by-doing—culminated with stories in the news.

The students, in a Public Relations Writing course, offered for the first time by the College of Liberal Arts last fall, created press kits including a pitch letter, news release, fact sheet and supplemental material to promote actual news stories of their choosing. Setting the projects apart from those at other universities, according to course instructor Michael Saffran, is that the press kits were not only graded but were also sent to actual news reporters at newspapers and television stations—landing some real-world results.

"'Wow, something I put together made it into the paper,'" says Juanita Sikorski, a second-year advertising and public relations major, recalling her reaction when her story idea, about the Farm Sanctuary, in Watkins Glen, ran in the Rochester *Democrat and Chronide* on Nov. 18. "I was ecstatic! The press kit gave me insight into what PR writers have to take into account when looking for stories and how to 'hook' the media."

A few days later, a story profiling Bill Finnerty, associate pastor of the

PR student success, page 4

Diana McKee, left, and Juanita Sikorski, communication majors, whose final projects for a class in public relations writing landed stories in area newspapers. A. Sue Weisler | photographer

New CIMS, Navy project

Engineers and professors at RIT have combined their expertise to utilize state-of-the-art technology to assist the U.S. Navy in the sustainment and improvement of its aircraft.

Michael Haselkorn, senior staff engineer at the Center for Integrated Manufacturing Studies, and Raymond Grosshans, professor of industrial and science technology at NTID, are working with a team of scientists and students along with engineers from Acro Industries, a local Rochester manufacturer, in a project to redesign and improve numerous components of the Navy's EA-6B Prowler jet. The improved design of these parts will reduce costs and improve the safety of the EA-6B, one of the Navy's key aircraft types.

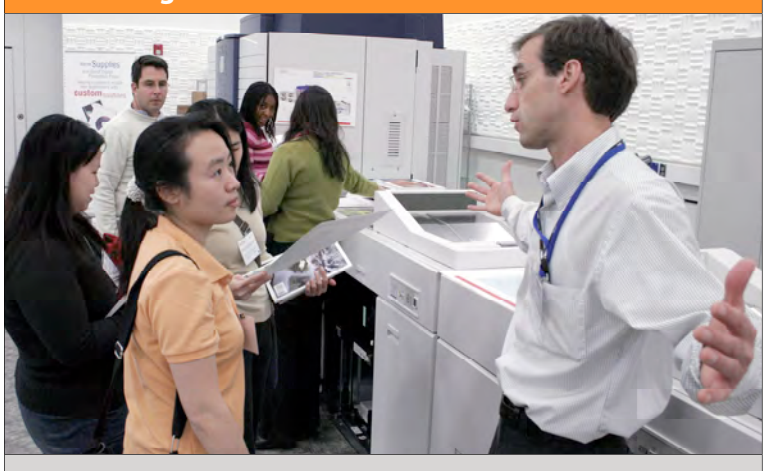
"This project is a unique opportunity to combine the latest scientific innovation with the capabilities of private industry to address key issues of our nation's military fleet," Haselkorn says. "The project is advancing scientific knowledge in the field, serving as a training tool for RIT students, promoting a local company and enhancing the quality of naval aircraft. It really is a win-win all the way around."

The team is utilizing new laser scanning technology to create a three-dimensional digital schematic of the turtleback, the metal cover over the EA-6B's fuselage. The

CIMS project, page 4

Professor Raymond Grosshans, left, and Michael Haselkorn use laser imaging equipment to create a digital schematic of an aircraft part. Laura Nelson | photographer

Networking with Xerox's best



About 60 students and faculty from the School of Print Media spent Dec. 5 at Xerox's Gil Hatch Center for Customer Innovation. Print media grad student Adam Dewitz, who interned at Xerox last year, helped organize the event, which featured presentations and a panel discussion with Xerox executives, product demonstrations and time for students to network with Xerox experts. In the photo, Scott Stevenson, color innovation specialist for Xerox Production Systems Group, discusses the Xerox iGen3 110 Digital Production Press with grad student Nutthavee "Noy" Poonbunditkul.

News briefs

Award-winning research

Stephen Sudirgo, a microsystems engineering Ph.D. student, won an award for best student paper at the 2005 International Semiconductor Device Research Symposium, Dec. 7-9, in Bethesda, Md. The paper, "Analysis of the Biasing Conditions and Latching Operation for Si/SiGe Resonant Interband Tunnel Diode Based Tunneling SRAM," was co-written with David Pawlik, microelectronic engineering graduate student; Sean Rommel, assistant professor of microelectronic engineering; Santosh Kurinec, professor and department head of microelectronic engineering; Phillip Thompson of the Naval Research Laboratory; and Paul Berger, professor of electrical and computer engineering at The Ohio State University.

Construction kudos

For the second time in four years, a team of RIT civil engineering technology students earned first place in the heavy-highway division of the annual Associated Schools of Construction regional competition, Nov. 10-13, in Fairfield, N.J.

This year's challenge involved estimating costs to construct a new ventilation shaft over an existing New York City subway line. Guidelines stipulated that there should be no interruption of subway traffic or automobile traffic on the streets of lower Manhattan during construction. More than 100 students representing 20 teams from 11 colleges participated in three divisional competitions.

For finishing first, the RIT Project Management Competition Team—Amanda Ashline, Ying Chen, Miguel Gonzalez, Derrick Hale, Jeremy Hills and Dan Morphy—earned $2,000 and advances to the annual Associated Schools of Construction/Associated General Contractors of America National Student Competition and convention, March 19-22, in Palm Springs, Calif. Todd Dunn, associate professor of civil engineering technology, is the team's advisor.

Sexual assault workshop

Last month, the RIT Women's Center hosted a sexual assault training workshop by the National Organization of Men's Outreach for Rape Education. Fifteen male students from RIT and NTID, Byran Lloyd of NTID's Student Life Team, and Ew Quimbaya-Winship of the Women's Center attended the intensive two-day workshop to establish a male-peer education program to address sexual assault issues on campus.

This workshop is the only rape prevention program to clearly report long-term positive effects as an intervention with men and significantly decreases men's belief in rape myths. RIT now has a group of trained male students to deliver effective peer-to-peer education to help support the RIT's goals to reduce sexual assault.

For more information, contact Ew Quimbaya-Winship at eqwwom@rit.edu or 475-7464.

Cool Beanz

Beanz, the new coffee shop in the Grace Watson lobby, officially opened Nov. 28. The shop serves several coffee varieties, Freshens Smoothies and fresh bakery items. Hours are 8 a.m.-11:30 p.m. Monday-Friday and 4-11:30 p.m. weekends. Incidentally, computer science major Paul Rossbach won a year's worth of coffee and a gift pack from Spot Coffee for naming the establishment.

Slam dunk—celebrating 50 years

Members of the undefeated 1955-1956 RIT basketball team gathered at Clark Gymnasium as part of their 50th reunion recently. The team presented the ball from their final game of that season to President Albert Simone at half time of the RIT vs. York basketball game. The 1955-1956 squad remains RIT's only undefeated basketball team. From left to right: Front: Lou Alexander (assistant coach), Ken Eybers, Ken Johnson and Ralph VanPeursem. In the second row, rear: John Buchholz, Rick Fox (Coach Leo Fox's son), George Holdridge, Don McCaughey, Ed Baucum, Fred Moss and Jeff Landsman. Seth Slavin | photographer

news&events

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CIMS project *from page 3*

schematic is used to build a model from which they can perform a structural analysis of the part to identify flaws and improve quality. This analysis was previously impossible due to lack of accurate schematics, making improved manufacture of parts extremely difficult.

"We apply the newest scanning methods to provide an analysis of the dimensions and schematics of the turtleback, information that was previously not available in this detail," Grosshans explains. "This data is essential in analyzing the structure of parts to enhance quality and increase useful life."

The technology is also allowing RIT students access to state-of-the-art equipment and proving essential real-world engineering experience.

"This project has been a tremendous learning opportunity and has enhanced my knowledge base and technical skills," adds Zachary Mott, a co-op student at CIMS and a mechanical engineering major.

The Navy is now working with Acro and Haselkorn's team to build flight-ready prototypes of the turtleback. Tests are set to begin early this year.

"Acro Industries is pleased to be working in cooperation with RIT and Dr. Haselkorn's team to combine new technologies along with our manufacturing expertise supporting our military's requirements," adds Joseph Noto Sr., president of Acro Industries.

Haselkorn and Grosshans worked with two additional companies, Romer Cim Core and NVision Inc., to develop the scanning technology, which includes a portable mechanical arm, laser and camera system. They eventually hope to use the system for other commercial opportunities in manufacturing and structural analysis.

"This technology can be used in numerous industries to transform existing parts and structures into digital models that can then be analyzed, redesigned and improved," Haselkorn adds. "With this technology, the sky really is the limit; it's fast, accurate and portable."

Haselkorn's research is part of a broader collaboration involving CIMS, RIT faculty and students, private industry and the United States military to apply technological innovation and scientific advancements to current issues surrounding parts, equipment and systems in a wide variety of military operations.

The Fiscal Year 2006 federal budget includes an additional $3 million to support the CIMS Defense Systems Modernization and Sustainment Initiative, bringing the total federal investment to $24 million.

For more information about the EA-6B project, including photos, visit the www.sms.rit.edu/projects.aspx. ■

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A race against time and snow

Jon Schull, IT professor, right, talks with student Jarrod Pritchard about an online grassroots campaign to help survivors of October's deadly earthquake in Pakistan. Victims are in desperate need of winter survival gear. Schull, along with several colleagues and students, created the Web site QuakeHelp.net urging people to donate camping equipment. Since Thanksgiving, more than 20 drop-off sites have been set up in six states. RIT collected dozens of sleeping bags, tents and blankets to be shipped to relief workers in Pakistan, Kashmir and India. RIT's Interfaith Center and Hillel organized the donation drive.
A. Sue Weisler | photographer

Inspection course *from page 1*

"I was pleased to learn that we have received the first powered-parachute inspection course approval in the country," Kochersberger says. "The FAA accepted the course without a single revision."

Kochersberger, a licensed pilot and glider flight instructor who specializes in aerospace engineering, has taught flight dynamics, aerostructures and aerodynamics, experimental aerodynamics and wind tunnel balance design. His book, *Light Sport Aircraft Inspection Guide*, will be published next month.

Kochersberger was named Pilot of the Century by the Experimental Aircraft Association in 2003. For the distinction, he was at the controls of a reproduction 1903 Wright Flyer in Wright Brothers National Memorial, a national park near Kitty Hawk, N.C., to commemorate the 100th anniversary of powered flight in December 2003.

The course covers airframe assembly, disassembly and inspection; inspection of propulsion systems, landing gear, materials, engines and electrical systems; corrosion and degradation; safety, rules and regulations; and theory of flight. Students must be at least 18 years old, fluent in English and U.S. citizens or permanent residents. Registration is limited to 16 students per class. Cost of $350 covers all course materials, including a CD-ROM.

Kevin Kochersberger, associate professor of mechanical engineering, left, and John Chambers, a fifth-year mechanical engineering B.S./M.S. student and lab assistant, inspect a powered-parachute airframe. Kochersberger instructs the only light-sport aircraft/powered-parachute inspection course in the nation. A. Sue Weisler | photographer

The course will also be offered to RIT students this spring, Kochersberger says, and a fixed-wing inspection course is under development and expected to be approved and offered Feb. 4-5.

Visit http://lsa.rit.edu or contact Kochersberger at 475-6775 or kbkeme@rit.edu. ■

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PR student success *from page 3*

Open Door Baptist Church, in Chili, which was pitched in a press kit created by Diana McKee, a fourth-year communication major, appeared in the *Gates-Chili Post*.

"To know that I pitched that story and it was important enough that a reporter jumped on it is exciting and fulfilling," McKee says. "What will stick in my mind is actually playing the role of the PR person. It was gratifying when I saw the story run the following week. I'll never forget that experience!"

News stories about RIT's new Animal Advocacy Group, pitched in a press kit created by Mallory McGee, a first-year advertising and public relations major, ran on WHAM-TV (Channel 13) in December and in the *Democrat and Chronicle* this month. Profiles of the founder of Kittens in Need of Rescue, a cat rescue organization in Gates, were featured in the *Democrat and Chronicle* and Messenger Post Newspapers. The story idea was pitched by Angela Rialdi, a fourth-year advertising and public relations major.

At least two key benefits were anticipated and realized from the student projects, says Saffran, who is also associate director of RIT University News Services. "Foremost, students gained real-life experience—a hallmark of an RIT education. Additionally, along with press kits, some students now have actual newspaper clippings—tangible results highlighting their skills—for their portfolios."

"This class, these students and their work are terrific examples of the concept of 'applied liberal arts'—a concept communication majors have long appreciated and practiced," says Bruce Austin, professor and chair of communication.

Adds McKee: "People who have experience with PR know that most of the time your name won't be associated with the piece. But it's the inner satisfaction from accomplishing a goal of getting my story idea used that matters." ■

Black hole *from page 3*

"It is the first time anyone has been able to follow gas this close to the supermassive black hole in the center of a galaxy," says Fathi, a postdoctoral scholar in the College of Science. "The work of our team confirms some aspects of the main theories that have never been observationally confirmed to this level. We have been able to show that it is possible to measure these velocities down to these scales."

Modeling the galaxy's spectra revealed the dynamic shifts in the gas and showed the spiral arms pulling gas from about a thousand light-years out from the center to the nucleus at 52 kilometers (31 miles) per second.

The team measured the streaming motions toward the black hole by using two-dimensional spectroscopy to capture spectral data at hundreds of points surrounding the nucleus of the galaxy.

These observations were captured with integral field spectroscopy, which takes light from hundreds of different parts of the telescope's field simultaneously and splits it from each region into a rainbow or spectrum of light.

"This allows astronomers to do in 30 minutes what would have taken four nights a decade ago," says Fathi.

NGC 1097 is located about 47 million light-years away in the southern constellation, Fornax.

This work used data from the Gemini Observatory's Multi-Object Spectrograph integral field unit and the Hubble Space Telescope's high resolution Advanced Camera for Surveys.

The results of this study will appear in an upcoming issue of *The Astrophysical Journal Letters*. ■

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