R·I·T news&events

Rochester Institute of Technology

February 26, 2009

Sensor research focuses on improving terrorist tracking

John Kerekes

Scientists at RIT are designing a new kind of optical sensor to fly in unmanned air vehicles, or surveillance drones, tracking suspects on foot or traveling in vehicles identified as a threat.

"I think we all understand that our military has a paradigm shift," says John Kerekes, associate professor in RIT's Chester F. Carlson Center for Imaging Science. "We're no longer fighting tanks in the open desert; we're fighting terrorists in small groups."

Kerekes won a $1 million Discovery Challenge Thrust grant from the Air Force Office of Scientific Research to design efficient sensors using multiple imaging techniques to track an individual or a vehicle.

The sensor will collect only the data it needs. It will assess a situation and choose the best sensing mode (black-and-white imaging, hyperspectral or polarization) for the purpose. Developing two strands of information—one about the target, the other about the background environment—will be key to maintaining a connection and for piercing through camouflage effects.

The sensor will collect a black-and-white image of a target, say a car, and will record the shape of the object.

The third imagery mode, polarization, cuts through glare and gives information about surface roughness. It provides details that distinguish between objects of similar color and shape. (This mode can lock onto the unique material properties of the blue car in question.)

A hyperspectral image will plot the object's color as it appears in multiple wavelengths, from the visible light to the near and short infrared parts of the spectrum beyond that the eye can see.

"These are all complementary pieces of information and the idea is that if the object you are tracking goes into an area where you lose one piece of information, the other information might help," Kerekes says.

As the lead scientist on the project, Kerekes assembled a comprehensive team with RIT collaborators and other scientists to envision the system from end to end: all the way from the design of the optical and microelectronic devices to the synchronizing algorithms that tie everything together.

Zoran Ninkov, professor of imaging science at RIT, is working on the overall optical system. Ninkov is modifying one of his own astronomical optical sensors for this downward-looking purpose. Alan Raisanen, associate director of RIT's Semiconductor and Microsystems Fabrication Laboratory, is designing tunable microelectronics devices to collect specific wavelengths. Ohio-based Numerica Inc., a large subcontractor on the project, is creating the advanced algorithms necessary for tracking a target and picking the right imaging mode based on the scenario.

"The idea is to lead to more efficient sensing both from the point of view of collecting the data necessary and being able to adapt to these different modalities based on the conditions in the scene or the task at hand," says Kerekes. ■

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IMAGINE RIT
INNOVATION + CREATIVITY FESTIVAL

Each issue of *News & Events* will feature a project to be showcased at Imagine RIT: Innovation and Creativity Festival on May 2. This week's spotlight:

Etch-A-Sketch Photo Booth

Presenter: David Brenner, Computer Science House

Brief description: Visitors will have their pictures taken and, using motors and a microcontroller connected to a computer, their image will be drawn onto an Etch-A-Sketch.

How is the exhibit creative and/or innovative: Combining a computerized Etch-A-Sketch with a photo booth has never been attempted.

Exhibit experience for visitors: Visitors will see themselves portrayed on a toy from their childhood.

For more, visit www.rit.edu/imagine.

Geoff Tesch | photographer

Hopscotch *by William Keyser*

Painting, sculpture showcase debuts at NTID

William Keyser exhibit introduces local art lovers to new creations

There are two defining qualities about William Keyser: Yes, he's made a good living as an artist, and second, he doesn't believe in the "R word"—as in "retired."

Woodworking and furniture design were Keyser's '61 (MFA furniture design) passion during his 35 years of teaching at RIT's School for American Crafts. The professor emeritus also became renowned for his professional accomplishments—his furniture and sculpture for residential, corporate, ecclesiastical and public art appreciation.

But after he "quit teaching," Keyser decided to go back to school and earned his MFA degree in painting from RIT in 2005. "Furniture—especially my ecclesiastic work designing altars, pulpits and objects for sanctuaries in many churches in the Rochester area—is what I have been noted for," Keyser says. "But this is my foray into painting and sculpture; it's sort of my coming out."

The Dyer Arts Center at NTID will host the William Keyser: Sculpture and Painting exhibition March 9-April 11, with an artist reception from 5 to 7:30 p.m. March 20.

For the exhibition, Keyser plans to fill the Dyer space with more than 100 pieces of artwork: paintings, sculpture and mixed media in wood, metal, glass and paper. Visitors will be able to see the chronology of his

Keyser, page 4

New study measures RIT 'climate,' working environment

RIT begins a self-study to better understand how individuals on campus perceive the learning and working atmosphere of the campus. The online survey will be available to faculty and staff in mid-March.

"The previous study focused a great deal on diversity—in fact, it was referred to as a diversity survey," says James Myers, chairperson of the Climate Study Steering Committee. "We view this study as a 'climate study,' which attempts to assess the work environment for all members of the RIT community. We ask questions about the climate for certain underrepresented groups but this is not the exclusive focus of the study."

"We hope, with good community participation in the survey, to have a good sense of how people feel about the work climate at RIT."

—James Myers, committee chairperson

The survey to be used for the study was developed by the Climate Study Steering Committee members. Over the last several weeks, review and input has been incorporated from Staff Council, Academic Senate, Institute Council and the Executive Diversity Council. Before distribution, the survey will be reviewed by the Institutional Review Board, the campus organization that oversees human subjects research.

The survey will be available for two weeks. Participants will be able to access the survey online using their RIT computer account.

"The survey goals are to collect perceptions of RIT faculty and staff on their beliefs about RIT practices and policies affecting underrepresented groups and their personal experiences

Climate, page 4

Student Spotlight

Bioinformatics student wants to help others' dreams come true

Rhea Sanchez wears a flower in her hair for you.

"I wear it especially in the winter," Sanchez says. "Everyone is so mesmerized by it, especially when I wear a bright pink or yellow one. Everyone gets so happy when they see it, so I figure I should just wear it."

Sanchez buys the artificial pikake flowers from a flea market in Hawaii when she is home on quarter break. This spring, her family will visit Rochester to watch Sanchez graduate with a B.S./M.S. degree in bioinformatics.

Sanchez grew up in Honolulu to Filipino parents. She never learned to surf or hula dance. Instead, she sang in statewide competitions before she could read and, with her parents' encouragement, cultivated an academic mindset. Early on she developed an interest in babies—not where babies come from, but why they sometimes don't come at all.

"It started with the normal curiosity of pregnancy," Sanchez says. "Babies in Filipino culture are a big, big deal."

A. Sue Weisler | photographer

Rhea Sanchez likes to spread a little happiness around the RIT campus by wearing brightly colored flowers in her hair.

She wondered why some women can have babies and others cannot. She kept pressing her mother for answers. Unsatisfied, the 12-year-old Sanchez began her own research and bought a book about infertility.

"My mom saw it on my bed," Sanchez remembers. "She already knew I was a bit curious about infertility in general. And while most parents would have started screaming, my

Student Spotlight, page 4

Scholarship program recognizes power of faculty mentoring

Associate professor Jennifer Schneider has always considered herself an "unofficial" mentor for students in the safety technology department in the College of Applied Science and Technology. And as a result of her participation in the Ronald E. McNair Postbaccalaureate Achievement Program, she has taken her mentorship role to a new level.

RIT receives $220,000 annually from the U.S. Department of Education for the McNair scholars program to provide educational services to low-income, first-generation college students—specifically African American, Latino and Native American— who are pursuing doctoral studies. Its focus is on the development of personal and educational skills, including effective communication and academic skills necessary for success in doctoral programs—as well as conducting invaluable post-baccalaureate research. The scholarship is named for Ronald McNair, a mission specialist astronaut who lost his life on the Space Shuttle Challenger in 1986.

Under the mentorship and guidance of committed faculty, students participate in a paid research internship to develop their research, presentation and publication skills. Students can also attend professional conferences and present their research at national conferences, meet with scholars, receive academic counseling and visit graduate schools.

In addition, The RIT McNair Scholars Symposium, held Feb. 13, addressed the important role of undergraduate research for students, their universities and the research community at large. Panelists discussed their personal research histories, their work with undergraduates and the importance of increasing undergraduate research opportunities at RIT.

A. Sue Weisler | photographer

Associate professor Jennifer Schneider and student Kwesi Amable discuss their joint research project regarding the vulnerability and resiliency of our community infrastructure. Amable is a McNair Scholar and works closely with Schneider, his faculty mentor, as one component of the program.

"Challenge and support are the fundamental ingredients in the McNair Graduate Opportunity Program's educational philosophy," says Essie Sierra-Torres, program director. "A student is most likely to grow academically and personally when he or she is both challenged and supported. The program structure attempts to foster these fundamental ingredients and thus facilitates skill development and motivation through academic research and mentoring.

"For a number of reasons, underrepresented minorities have not been provided with sufficient opportunities to explore academic disciplines that will help lead them to graduate studies," adds Sierra-Torres. "This lack of experience can and often does result in poor acclimation to the nature and process of research. Further, in the absence of hands-on approach to scientific investigation, underrepresented students do not acquire the basic research skills and laboratory preparation that is required for advanced studies. To overcome these obstacles, effective mentoring practices need to be established."

Kwesi Amable, a third-year medical informatics and bioinformatics dual major in the B. Thomas Golisano College of Computing and Information Sciences, is one of 26 McNair Scholars from across all RIT disciplines that found studying with a faculty mentor like Schneider and conducting research to be an unforgettable experience.

Schneider, who has been involved with the program since its inception, enjoyed working with Amable, who

McNair, page 4

Grant will help students in computing disciplines

Students in the B. Thomas Golisano College of Computing and Information Sciences have a unique opportunity to partner with the federal government. The college's Department of Networking, Security and Systems Administration has secured a grant from the National Security Agency, on behalf of the U.S. Department of Defense, to fund a scholarship program aimed at students studying a discipline related to computer and network security.

"The purpose is to increase the number of students who are entering the field of security and information assurance and to meet the Department of Defense's need for expertise in the areas of information technology for war fighting and security of its information infrastructure," says Sharon Mason, the principal investigator of the grant and a networking, security and systems administration professor.

The scholarship covers the full tuition of both undergraduate and graduate students. Undergraduate winners receive a $12,000 stipend and graduate recipients receive a $17,000 stipend. In exchange, recipients agree to work for the Department of Defense for one calendar year for each year they receive the scholarship. Many winners also participate in internships with the Department of Defense during the time they receive the scholarship.

"The students who apply for the scholarship are really excited by the idea of working with the government on this initiative of national defense," Mason says.

This is the second time the department received the grant. ■

John Follaco | jpfuns@rit.edu

Recognition for research

A. Sue Weisler | photographer

Manjeet Rege, right, assistant professor of computer science, is congratulated by David Bond, director of Sponsored Research Services, for participation in RIT's PI Institute series. Rege was among hundreds of RIT faculty and staff members recognized for research activity in 2008 during the annual Principal Investigators Reception held Feb. 12.

Xerox Corp. awards tuition assistance to four RIT engineering students

Four RIT students are the recipients of the Xerox Technical Minority Scholarships, presented annually by Xerox Corp., which recognizes high academic achievement in the fields of science, engineering and technology.

RIT's 2009 honorees are Dwight Cooke, fifth-year mechanical engineering major from Castleton, N.Y.; Clarissa Gore, fifth-year electrical engineering major from Conway, S.C.; Harold Mendoza, second-year computer engineering major from Alexandria, Va.; and Tatiana Stein, first-year mechanical engineering major from Houston.

A total of 122 graduate and undergraduate students from across the country were chosen from more than 800 qualified applicants for this year's Xerox Technical Minority Scholarship. The program targets minority students enrolled in technical degree programs at the bachelor's degree level or above who show financial need. Winners receive money toward tuition costs for the 2009-2010 school year. ■

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Shifting into high gear

A. Sue Weisler | photographer

Ashley Shoum, a fifth-year mechanical engineering major, explains the intricacies of developing automatic shift controls on a high-performance, all-terrain vehicle to Mark Kempski, professor of mechanical engineering. Shoum is project leader for her seven-member team consisting of students from the mechanical, electrical and industrial and systems engineering departments. The ATV team was one of 36 design teams presenting completed and mid-project evaluations at the Kate Gleason College of Engineering Multidisciplinary Senior Design Reviews.

New liberal arts courses bring societal issues to the forefront

Jennifer Wolfley, adjunct professor of English and criminal justice, has dedicated her professional life to increasing understanding and assisting people involved with one of America's most prevalent, if little talked about, social problems—prostitution. As the longtime director of Rochester's Mary Magdalene Outreach Center, she works to assist prostitutes in getting off the streets and rebuilding their lives, while also enhancing public awareness concerning the social effects of the issue.

Through two courses offered at RIT, Wolfley is working to increase the educational understanding of prostitution and crime, in general, and assist future professionals in better addressing the problem.

Prostitution and Vice, being offered through the Department of Criminal Justice, and the Literature of Crime, through the English department, both seek to help students reflect on the root causes of prostitution and crime, as well as engage discussion about possible solutions.

"The National Task Force on Prostitution has estimated that more than one million people, and 1 percent of American women, have worked as prostitutes," notes Wolfley. "Given these statistics, more attention needs to be focused on why people take up this profession, how to get people off the streets and prevent others from starting.

"These courses will hopefully give our students a background in the problem that will assist them in making better decisions related to the subject in their professional careers," she continues.

Prostitution and Vice provides a background on the development of the illegal sex industry in America and current social, criminal and political policies related to the issue. Wolfley also brought in vice cops and former prostitutes to discuss the subject with her class.

The Literature of Crime includes writings on a host of topics related to criminal behavior and government response including literature on serial killers, sex crimes and white-collar crime.

Wolfley hopes through these efforts her students will not only understand the problem better but also develop more sympathy for the people involved in the sex industry, a key she feels to combating the problem.

"A large majority of prostitutes do not want to be doing what they are doing and efforts to address prostitution should be focused on treatment and assistance as opposed to incarceration," Wolfley adds. "These courses seek to put a human face to the problem and enhance awareness of this critical component of the issue." ■

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In case you missed it in *News & Events Daily:*

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- RIT News YouTube channel: **Tigers' Winning Attitude**
- RIT In the News:
  Daily Messenger—**'Banjo' Bill's in the presidential chair**
  Democrat and Chronicle—**Powerhouse RIT women's hockey club concludes season**
  Rush-Henrietta Post—**RIT student housing gets green light**

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RIT astrophysicist 'moonlights' as local jazz musician

Kastner and his band play the Lovin' Cup March 8

Stardust is a scientific term referring to dust grains that are formed by the cooling gases ejected by stars. It's also a fitting name for RIT professor Joel Kastner's jazz band—one of two bands in which he plays on a regular basis.

Kastner is a professor in RIT's Chester F. Carlson Center for Imaging Science, where he teaches classes in imaging science and astrophysics. He is also the lead guitarist for two local bands, Stardust and The Powells, the latter featuring an Americana sound that blends rock, folk and country. Both bands are mostly comprised of the same musicians, but have very different sounds. And both bands have found their haven inside Lovin' Cup at Park Point.

"The Lovin' Cup is just a great space," says Kastner. "The owners are really making a noble effort to be one of the area's sorely needed live music hangouts."

Kastner's professional life in astronomy is focused on studying star and planet formation, as well as the dying stages of stars like our Sun. One of his goals is finding new ways to discover planets outside our solar system. He tries to do that by examining stars, or suns, and the gases that surround them. Seeing that type of activity can indicate future planet formation. Learn more about his current work by visiting www.rit.edu/news/?v=46540.

Joel Kastner plays around town with his two bands, Stardust and The Powells.

So why hasn't Kastner focused on his own "star" formation? He's been playing guitar since his early teens and could have very easily decided to pursue music professionally. Although not able to completely forsake his guitar, Kastner chose instead to follow in the footsteps of his father, a physicist and amateur astronomer.

"Growing up, we always had a telescope in the backyard," he says. "I just found it natural to be studying the stars and trying to further the science."

Kastner attended University of Maryland as an undergraduate in physics. He also began his graduate studies in astronomy there, which he later completed at University of California at Los Angeles. He went on to join the research staff at Massachusetts Institute of Technology before taking a teaching position at RIT.

Kastner knows better than most that once the music gets in you you've got to let it out. Check out his upcoming show at the Lovin' Cup, 7-9 p.m. March 8, with Stardust. ■

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Parthum earns patent for film processing to improve micro-devices strength

Michael Parthum has been awarded a patent for stress mitigation in thin films. A professor in the manufacturing and mechanical engineering technology department and program chair of the electrical/mechanical engineering technology program in the College of Applied Science and Technology, Parthum developed the patent for a new process to develop multilayer film structures in micro-electrical-mechanical systems. The process involves layering materials on silicon to reduce stress, enhance material strength and improve performance in micro-machines.

Michael Parthum

"This is important in the integrated circuit and MEMS field where depositing materials on silicon is usually done at high temperatures," says Parthum. "This leads to residual stress being created because of the differences in the materials coefficients of thermal expansion. The new process gives more options to researchers and manufacturers through control of thickness of the materials in a multilayered composite to eliminate the effects of residual stress. What this could mean for the processing industry is greater freedom in developing a wider range of micro-devices, the expansion of frequencies and better control of final geometry."

Parthum's methodology uses multiple layer composites, under controlled conditions could be used to develop a better understanding of nucleation forces that occur at the boundary layer in chemical vapor deposition or physical vapor deposition processes—the processes to produce and deposit thin films, respectively. In the new process, the use of multiple layers has the potential to improve performance of many common devices that use microprocessors such as cell phones, pressure sensors, radiation detectors, high security applications and gyroscopes.

Three additional patents are pending related to this system development for Parthum. His research focus is thin films/composite materials, radio frequency identification technology and nucleation, the process of using high heat or low cooling thresholds to crystallize liquids for nanotechnology research. ■

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Grant will help researchers study retention, advancement of female STEM faculty

RIT has been selected as one of 11 schools to receive a Institutional Transformation Catalyst grant through the National Science Foundation's ADVANCE program. The $200,000 grant was awarded for the proposal "Establishing the Foundation for Future Organizational Reform and Transformation @ RIT" (EFFORT@RIT). The proposal was developed by a cross functional team of faculty and staff who have embarked on a two-year study across five RIT colleges.

The grants support institutional self-assessment activities focused on the recruitment, retention and promotion of female faculty in science, technology and mathematics departments within higher education.

"The goal of the research is to identify barriers for our current women STEM faculty in regards to rank, tenure and leadership role progression," says Margaret Bailey, Kate Gleason Chair and associate professor, Kate Gleason College of Engineering and EFFORT@RIT principal investigator.

A climate study is being developed by the assessment team of Bailey and co-principal investigators Stefi Baum, director of the Center for Imaging Science, College of Science; Sharon Mason, associate professor, Golisano College of Computing and Information Sciences; Jacqueline Mozrall, department head, industrial and systems engineering department, Kate Gleason College of Engineering; and Maureen Valentine, Miller Professor and vice dean, College of Applied Science and Technology. Other key members of the team include Gina Williams, business analyst, RIT human resources and Joan Graham, director, Institutional Research and Policy Studies. The climate study will be launched this fall.

The goal of the project is to develop an approach to identify the barriers and address factors resulting in the under-representation of women in STEM faculty positions at RIT.

The team will analyze what factors women look for when seeking academic positions. The team, in close collaboration with human resources and Institutional Research, will also look at how well RIT provides, or does not provide, for these factors by conducting a survey, objective data review and benchmarking exercises.

In academia, institutions receiving ADVANCE grants have been recognized as those at the forefront of institutional change in the area of gender inclusiveness and equity within faculty ranks, Bailey adds. ■

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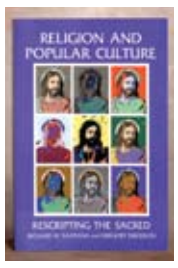
Religion, pop culture coexist in new book

RIT AUTHORS SPOTLIGHT



Richard Santana, associate professor and chair of RIT's Department of English, is exploring how religion and morality are expressed in popular culture and the impact this has on the development of religious themes in American life.

Santana's newest work in this area is *Religion and Popular Culture: Rescripting the Sacred,* co-authored with New York University professor Gregory Erickson.

The work discusses the role of the United States as a creator and exporter of popular culture and how that has affected religion in this country. The authors examine themes present in popular music, literature and television/film and compare these to messages present in modern religions. The use of MTV-style videos and rock music by various religious organizations to recruit young people is one example.

Richard Santana

"The book is unique because it doesn't just look at how religion influences culture or vice versa, it examines the ways in which popular mass culture creates religious expression often when it is least expected," explains Santana. "We examine music as different as Madonna, John Coltrane and Iron Maiden to raise issues about interpretation, cultural value and religious identity."

This is Santana's second book, following *Language and the Decline of Magic,* released in 2006. His research interests vary broadly. He is most interested in how language influences and sometimes shapes perception. He says his next project will examine the development of science in the early modern and enlightenment period as related to the shifting function of language. ■

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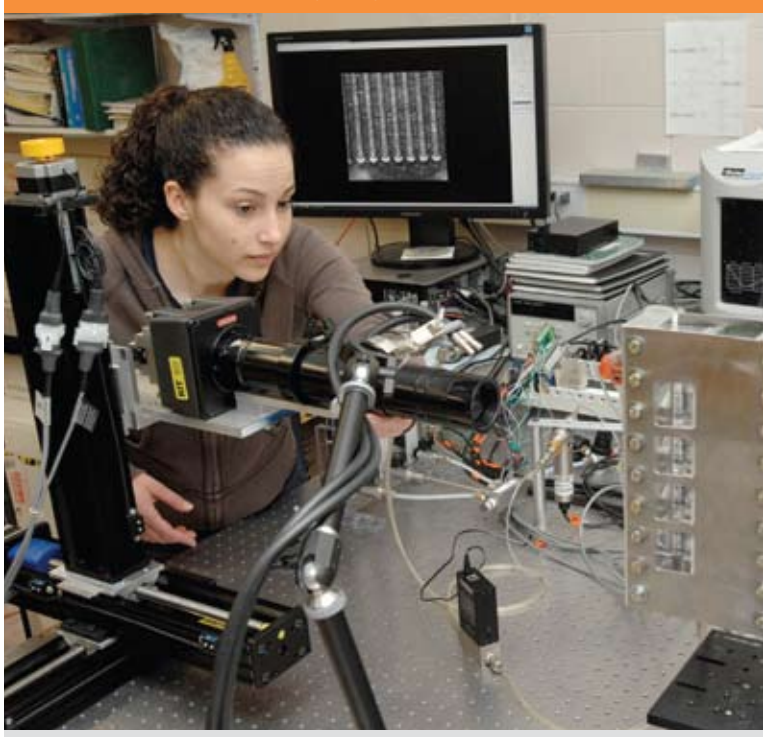
Hard at work on cutting-edge fuel-cell research



A. Sue Weisler | photographer

Jackie Sergi, a mechanical engineering graduate student, at work recently in a new fuel-cell lab in the Kate Gleason College of Engineering.

NTID welcomes veterans with hearing loss

Nearly a quarter of all classes held at RIT have at least one deaf or hard-of-hearing student and an interpreter, captionist or notetaker to help facilitate communication.

So a logical education destination for U.S. servicemen and women who have suffered hearing loss—a top disability reported by veterans serving in Iraq or Afghanistan—is RIT.

RIT/NTID has created the Military Veterans with Hearing Loss Project, on the heels of the recent RIT announcement that it intends to become a "Yellow Ribbon" college, offering significant tuition reductions to any full-time veteran who has served since 2001.

Up to 10 veterans with hearing loss may be enrolled in the fall at RIT, with the program growing to up to 50 veterans in the next five years.

"It makes sense for us to welcome the men and women serving our country who could benefit from the education and access services we offer," says NTID President Alan Hurwitz. "Our talented faculty and staff have experience helping those who have suffered a sudden hearing loss. RIT/NTID would be a perfect option for veterans seeking to continue their education. We are happy to help serve the men and women who have already sacrificed so much to serve our country."

The focus for these veterans is to take classes to earn four-year or graduate degrees at RIT, with access services such as captioning and interpreting as appropriate, provided by NTID. NTID also has a hearing aid shop, a cochlear implant center and counselors trained to help those who suddenly lose their hearing.

Exposure to more than 85 decibels continuously or 140 decibels for any length of time can damage hearing. A rifle can produce 160 decibels of sound. On average, the men and women serving in Afghanistan and Iraq have served longer time in combat than any other U.S. military conflict.

A Web site for the initiative has been created to offer prospective students more information about the college and details the services available. Visit www.rit.edu/ntid/veterans. ■

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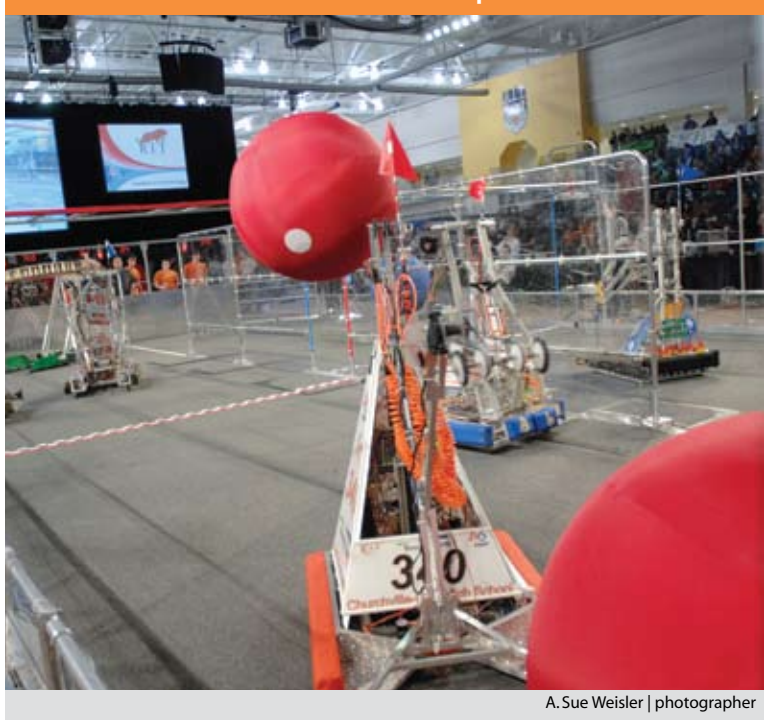
Another 'FIRST' for RIT robotics competitors



A. Sue Weisler | photographer

The Finger Lakes Regional FIRST Robotics competition is celebrating its fifth anniversary at RIT. The competition will be held March 5-7 in the Gordon Field House and Activities Center. RIT currently has 16 FIRST Robotics Scholars enrolled at the university.

Student Spotlight *from page 1*

mom said, 'Oh, so you bought a book. Is it good?' 'Yes, it is.' And that was it."

Sanchez's long-term goal is to be a laboratory director at a fertility clinic. She wants to help couples that cannot have children.

"My job would be to use technology to make it happen for them," Sanchez says. "You help nature along in the lab, where nature would have prevented that from ever happening."

Studying bioinformatics positions Sanchez for a career to which there is no direct path. Instead of pursuing a medical degree as her next step, Sanchez is finding her own way to a career in fertility and reproductive health using bioinformatics as a segue to a doctoral program in reproductive biology.

"It's an odd and unique fit," Sanchez says. "While bioinformatics is a specific, hybrid major, it's also broad. We took a lot of courses in computer science, database, statistics, IT and math, and we also learned about an array of biology. Looking specifically at the biology portion of our major, I was able to use that as a springboard for what I want to do in graduate school, which is going back to the fertility field and in vitro fertilization. There is a connection by means of all the topics bioinformatics covers."

Sanchez came to RIT "on a leap of faith." She couldn't afford to visit campus and made her decision to apply to RIT based on pictures, student reviews and her own research. She was intrigued by the genetic engineering class offered through the bioinformatics program and wondered if that major could lead her to the reproductive health field. She also wanted to leave Hawaii to experience the seasons. "I wanted to feel time pass and that something new is coming," she says.

During her five years at RIT, Sanchez fell in love with bioinformatics. She completed a co-op at the esteemed J. Craig Venter Institute, won an award for outstanding undergraduate research and worked as a teacher assistant for Gary Skuse, director of bioinformatics, whom she calls "a mentor for life."

"I still don't know how to get where I want to go," Sanchez says. "All I know is that I'm going, and that I'm going to get there at some point and that's all that matters. I might be taking a few extra turns here and there, but I'm having fun along the way. I'll figure it out." ■

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Vote now for the Hobey Baker award's RIT nominees

RIT senior forward Jesse Newman, pictured here, and junior defenseman Dan Ringwald are on the fan's ballot for the 2009 Hobey Baker Award. The award, college hockey's most prestigious honor, is awarded to the best player in the country. Vote at www.hobeybaker.com/voting/. Voting concludes March 20.

Shared Governance

Student Government is pleased to announce that it will be awarding three academic scholarships. Criteria for these scholarships will be based on innovative and creative solutions to problem solving. The applications consist of two letters of recommendation from an RIT faculty or staff member, a résumé, essay response and an academic profile. A $1,000 cash prize will be presented to the winner with the most original ideas. Submission deadline is March 20.

A dinner honoring the winners will be held in April. Scholarship applications are available at www.sg.rit.edu or in the RITreat, Student Alumni Union, room 1150. Leadership Institute scholarships are also available at campuslife.rit.edu/leadership/rli_scholarships.php or in the RITreat, SAU, room 2150.

Climate *from page 1*

within the RIT work environment," says Alfreda Brown, interim chief diversity officer and member of the steering committee. In addition, information from the survey may also shed light on how well RIT attracts and retains faculty and staff from underrepresented groups. The committee intends to perform a climate survey on an annual or biennial basis. A student climate study will be distributed at a later date.

Members of the steering committee are James Myers (chairperson), director of the Center for Multidisciplinary Studies; Steve LaLonde (co-chairperson), associate professor, Center for Quality and Applied Statistics; Alfreda Brown, interim chief diversity officer; Jeff Cox, director of International Student Services; Jeff Hering, director, Center for Religious Life; Kit Mayberry, vice president of special projects; Donna Rubin, director, Women's Resource Center and Kim White, director of diversity assessment and research management. ■

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Keyser *from page 1*

work in the disciplines of painting and sculpture, and how it has evolved over the years.

As Keyser explains, his modus operandi has also changed. The spontaneity of creating abstract paintings and free-standing sculptures is what drives him to work in solitary bliss for 6 to 10 hour intervals at his studio—a 2,000 square-foot building behind his residence in Victor.

"Furniture design is diametrically opposite from painting—everything is premeditated, and once the designs are approved by the clients no further changes are made during the process of building it," Keyser says. "Many times after a piece was done with 15 coats of oil on it and ready to deliver, I would look over and see the scraps around the band saw and they were often more interesting than the furniture.

"That intrigued me and I started looking at the debris around the shop and saying, 'Hey, that could be a piece of sculpture.' I find inspiration in architecture, junkyards, yoga, calligraphy, the scrap box in my studio, and in the last piece I did. I try hard to surprise myself, to have fun and to go where I've never been before."

For gallery information, call 475-6855 or e-mail Robert Baker at rbaker@ntid.rit.edu. ■

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Newsmakers

Jeffrey Baker, adjunct professor of psychology, published the book *Extended Testing Time for College Students with Learning Disabilities.* It features Baker's research examining the performance outcomes of the use of extended testing time at the post-secondary level.

Skip Battaglia, professor of film and animation, was honored with retrospective screenings of 10 of his internationally acclaimed animated short films at the Ottawa International Animation Festival in Ottawa, Canada. Battaglia's films were produced from 1980 to 2006.

Jorge Díaz-Herrera, dean of the B. Thomas Golisano College of Computing and Information Sciences, has been appointed to a two-year term as a member of the advisory committee for the National Science Foundation's Directorate for Computer and Information Science and Engineering.

Shatakshee Dhongde, assistant professor of economics, presented her research titled "An Analysis of Changes in Poverty in India" in October at the Development Economics Seminar series at Cornell University. She also spent time in India where she presented "Measuring the Impact of Growth and Income Distribution on Poverty" at Institute of Economic Growth and Indian Statistical Institute in Delhi, as well as the Gokhale Institute of Economics and Politics, Pune.

Joni Dowling-Kell, interpreter, Department of Access Services, is author and illustrator of *Friends Forever*, a picture book that helps children cope with the loss of a pet.

Gail Gilberg, lecturer in English, had her essay "Conversion: Trail of a resident alien" selected for inclusion in the anthology *Women and Risk Taking*. The book was selected for the 2008 Amelia Bloomer List of America's best feminist writing, sponsored by the American Libraries Association. It was also named to the Best of the Best of University Presses for 2007/2008.

Larry LoMaglio, associate professor of liberal studies at NTID, and advisor for RIT's Lambda Alpha Upsilon fraternity, was recognized by the fraternity's national organization with the Seven Metas Award. The fraternity was founded in 1985 as a support group to provide a social and cultural outlet for students of Latin American heritage. There are 10 national chapters now, including the one at RIT, which has deaf and hearing students.

Erhan Mergen, professor of decision sciences, presented "Statistical Process Control and Acceptance Charts," co-authored with Donald Holmes of Stochos Inc., at the 60th North East Quality Council Conference, in October in Marlborough, Mass.

Thomas Seager, associate professor in the Golisano Institute for Sustainability, co-authored "Coupling Multicriteria Decision Analysis and Life Cycle Assessment for Nanomaterials," which appeared in a special issue of the *Journal of Industrial Ecology* in October. The piece focused on the possible benefits of life cycle assessment in reducing the environmental impact of nanomanufacturing.

Fred Wilson, professor emeritus in the College of Liberal Arts, recently visited Ukraine as part of a team evaluating four universities who were potential recipients of a grant from the U.S. Agency for International Development. Wilson served as the scientific consultant to the coordinating agency that will recommend which university should receive funding.

James Winebrake, chair of science, technology and society/public policy, has been appointed to the National Research Council's Committee on Fuel Economy of Medium and Heavy Duty Vehicles. The committee will conduct an assessment of fuel economy technologies for medium and heavy duty trucks and provide guidance to the National Highway Traffic Safety Administration as it addresses fuel economy standards for this vehicle class. The research council provides scientific and technical assistance to Congress and the President and is part of the United States National Academies.

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isn't even enrolled in Schneider's department.

"It's important to reach across curricular lines when it comes to research because it helps bring new perspective to your project," Schneider says. "This is also central to why so many of us came to RIT as professors to begin with."

"Kwesi has the personality to chase details, and he worked his way through to get external funding for our research project," adds Schneider. "This program helps students understand the nuts and bolts of managing research. I will continue to work with Kwesi; he's been terrific. I'm definitely keeping this kid." ■

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