F STIP

National Technical Institute for the Deaf • Rochester Institute of Technology



IMAGINERIT

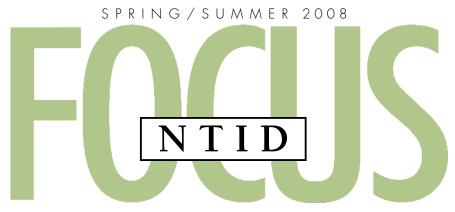
Congratulations to the Class of 2008!



Proud Representative

Kyle Edenzon, of Northridge, Calif., who graduated this May with an associate degree in Laboratory Science Technology, was selected as NTID's 2008 commencement delegate. The recipient of many awards and scholarships, Edenzon, who is planning to continue his education in RIT's Biotechnology program, was selected twice to present his research at national American Chemical Society conferences.

In his commencement address, he told fellow graduates, "Here at RIT we have grown not only as students, but also as individuals. We have learned that life will always throw things at you, but you can overcome them and things will always work out if you try hard enough."



National Technical Institute for the Deaf • Rochester Institute of Technology



ABOUT THE COVER

On May 3, RIT hosted its first annual Imagine RIT: Innovation and Creativity Festival. Thousands of visitors came to campus to explore hundreds of faculty, staff and student projects—all demonstrating the innovative thinking and creative spirit and energy that are uniquely RIT. See the article on Page 3 for more about the event and the creative exhibits and performances by NTID faculty, staff and students.

RIT/NTID 2008 FOCUS magazines are printed on a paper that has 10-percent postconsumer recycled fiber, which results in a total environmental savings of 10.02 trees; 28.96 pounds waterborne waste; 4,260 gallons wastewater flow; 472 pounds solid waste; 928 pounds net greenhouse gases and 7,103,110 BTUs.



FEATURES

- **3** Celebrating Innovation and Creativity
- **5** Remember, Rediscover, Reconnect
- **6** Alumni Return as Recruiters
- **10** Enhancing the Educational Experience
- **12** Innovation in Teacher Preparation
- **15** Shakespeare on Campus

DEPARTMENTS

- **2** Alan's Update: Imagine That!
- Profiles in College:
 Shannon Bean
 Jason Gallant
 Daron Ladson
 Christie Ong
- Faculty/Staff Profiles:
 Stephen Campbell
 Sharron Webster
- Advancing the Mission: \$1.2 Million Scholarship Encourages Entrepreneurs

ALAN'S UPDATE



Editor Pamela L. Carmichael, '04

Writers Ilene J. Avallone Kathy A. Johncox Susan L. Murad, '01 Kathleen S. Smith

Graphic Designer Jeff Arbegast, '93 RIT University Publications

Photography Allison Anderson Mark Benjamin, '76, '94 Ben Liddle A. Sue Weisler, '93

FOCUS is published by the Marketing Communications Department at the National Technical Institute for the Deaf, a college of Rochester Institute of Technology, Rochester, N.Y.

The views expressed in guest columns do not necessarily reflect the position of NTID or FOCUS magazine.

Marketing Communications 585-475-6906 (voice or TTY) 585-475-5623 (fax) NTIDMC@rit.edu (e-mail)

Admissions

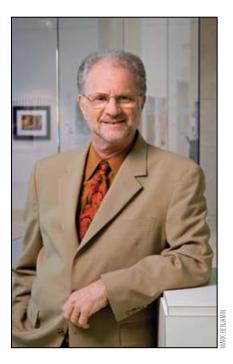
585-475-6700 (voice or TTY) 585-475-2696 (fax) NTIDAdmissions@rit.edu (e-mail) www.rit.edu/NTID

The NTID Foundation 585-475-6836 (voice or TTY) 585-475-5949 (fax) NTIDFDN@rit.edu (e-mail) www.rit.edu/NTID/Foundation

To subscribe or unsubscribe to FOCUS magazine or to update your mailing address, please contact NTID Marketing Communications, 52 Lomb Memorial Drive, Rochester, N.Y. 14623-5604 or visit www.rit.edu/NTID/FOCUS.

RIT will admit and hire men and women; veterans; persons with disabilities; and individuals of any race, creed, religion, color, national or ethnic origin, sexual orientation, age, or marital status, in compliance with all appropriate legislation.

25M-P0520-05/08-CAN-JSA ©2008 Rochester Institute of Technology All Rights Reserved



Imagine That!

his spring, our campus was invigorated by the great success of RIT's inaugural Imagine RIT: Innovation and Creativity Festival on May 3rd, which featured hundreds of exhibits, demonstrations and activities. Thousands of people jammed the campus to see the innovation and creativity that abound here.

NTID was terrifically represented during the festival. The NTID Electric Bike Club demonstrated its award-winning alternative-fuel vehicle, and a group of Computer Integrated Machining Technology students displayed a live steam locomotive built from scratch. A Digital Wall Art project showed how an Ideaboard and computer technology could bring together artists from around the world to build a "collaborative canvas" of art. Students used fire and dirt in demonstrations of arson crime scene evidence and soil analysis.

Visitors somberly viewed an online

multimedia museum commemorating the Deaf experience during World War II and the Holocaust, and marveled at Computer Science student Josh Allman's clever use of computer code designed to generate romantic poetry by mixing lines of existing poems.

Observers cheered NTID's College Bowl contestants as they fielded simulated competition questions. Visitors also applauded dance and theater performances and browsed innovative art exhibits. Read more about the festival on Page 3.

The NTID community is looking forward to the upcoming 40th Anniversary Reunion celebration, June 26-28. In addition to the always popular golf tournament, this year's reunion, themed "Remember, Rediscover, Reconnect," will include a reception for fraternity and sorority members, tours that showcase the growth of the campus and workshops featuring some of our talented alumni. Learn more about the reunion on Page 5 and please visit www.rit.edu/ntid/reunion to stay informed of the latest reunion plans.

Finally, as another means of staying connected with our constituents, we recently launched a new vlog feature, Video Extra, on the NTID website, which will highlight news topics, alumni information and special event updates to keep the RIT/NTID community and friends informed. Messages from me will be delivered via online video in signed English, with captioning and voice provided, to be truly accessible to all. You can view Video Extra on my website:

www.ntid.rit.edu/vpanddean/. Have a wonderful summer!

Dr. T. Alan Hurwitz



Fun for All Thousands of visitors of all ages enjoyed the inaugural Imagine RIT: Innovation and Creativity Festival. Visitors to the CSD Student Development Center explored exhibits by NTID student clubs and organizations.

Celebrating Innovation and Creativity

by Pamela L. Carmichael

nnovation and creativity reigned on the RIT campus May 3rd for the university's inaugural Imagine RIT: Innovation and Creativity Festival. The event showcased RIT's unique blend of technology and the arts—the "left brain, right brain collision" as RIT President Bill Destler likes to say.

Thousands of visitors came to campus to explore hundreds of faculty, staff and student projects—new product and services ideas, creative arts and crafts and faculty and student research—all demonstrating the



Conductors in Training Young festival visitors took turns on the steam locomotive built by a team of NTID Computer Integrated Machining Technology students.

innovative thinking and creative spirit and energy that are uniquely RIT and that have shaped Destler's vision of RIT as the nation's first "innovation university."

Since coming to RIT last year, Destler has championed what he calls RIT's "unfair advantage"—its unique blend of programs in the arts and sciences, coupled with the unparalleled diversity offered by NTID.

The college showcased that diversity on May 3rd with NTID Laboratory Science Technology students demonstrating their forensic skills for festival goers while a team of Computer Integrated Machining Technology students exhibited their working steam locomotive. Visitors looking for an alternative to high gas prices tried out a vehicle built by the Electric Bike Club. And those looking for a new perspective enjoyed the bird'seye view provided by a Web-cam mounted on a remote-controlled blimp as it flew around NTID's CSD Student Development Center transmitting images onto a video wall.



Alternative Energy Members of the NTID Electric Bike Club demonstrated their awardwinning vehicles and offered festival visitors the opportunity to take a spin.



Bird's Eye View Members of NTID's Imagine RIT Blimp Team flew their remotecontrolled airship with a Web-cam mounted on it, projecting images onto a video wall in the CSD Student Development Center.



Human Everyday Movement

Festival goers participated in a demonstration of "creation in the moment," in NTID's Panara Theatre, inventing a dance by manipulating everyday gestures into more abstract movement.

Festival attendees toured art exhibits and enjoyed dance and theater performances as well as American Sign Language poetry. And those new to sign language learned some signs and explored Deaf culture.

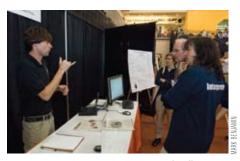
"There is a lot to see here," said Thaddeus Kciuk, an RIT alumnus who attended the festival with his wife, Cathy.

Kciuk test drove one of the NTID Electric Bike Club's awardwinning vehicles.

"This is fantastic," he said. "I'm surprised at how fast they go."

Rochester resident Ken Reiter and his wife brought their two children, ages 9 and 10, to the festival.

"I wanted my kids to have an opportunity to see the campus," he said. "This festival is a great way to expose young kids to college."



High-Tech Poems Visitors to Josh Allmann's booth in the festival Wow! Center (RIT's Gordon Field House and Activities Center) learned how the Computer Science student developed a computer program to generate unique poetry using words and styles from many authors.

"What an exciting day and an exciting time in RIT's history," said Dr. T. Alan Hurwitz, RIT vice president and CEO/Dean for NTID. "I have never been more proud of



Collaborative Canvas Student Seong Hyun Toh participated in the creation of a digital wall art project with other artists in various locations at NTID, Washington, D.C., and in Mumbai, India. The artists used

networked computer technology to design and draw together in real-time to create a unique collaborative artwork. The computer screen on the table allowed Toh to see the artwork as it was being created. The same images were projected onto the video wall in the background, so visitors could observe the process.

NTID's faculty, staff and students. Today, they shared with our visitors the truly unique, innovative and creative spirit of this college."

Along with hundreds of exhibits across the RIT campus to stimulate visitors' imaginations, there was traditional festival fare, including food, carnival rides, music and activities for children.



Forensic Science Visitors observed as students in NTID's Laboratory Science Technology program used forensic analysis to determine if a simulated fire was an act of arson.

Destler is pleased with this first-ofits-kind event, and looks forward to next year's festival, which will take place May 2. He sees the festival as much more than just an open house.

"The festival's mission goes beyond showcasing the thriving RIT campus," he says. "We see it as a call to national service. Innovation is one of our country's last competitive advantages. Young Americans walk to the beat of their own drum, and their desire to be different is an innate American

Imagine RIT 2008

NTID and RIT's seven other colleges wowed visitors with displays and hands-on activities centered around 10 themes:

Imagine...

- ...Being Green
- ...Healthy Living
- ...a Global View
- ...Innovative Science and Technology
 - ...Creative Play
 - ...A Communication Revolution
 - ...on Stage
 - ... Artistic Visions
 - ...New Ventures
 - WOW! Imagine That!

Festival visitors were able to:

- · Ride an electric bicycle and discover how it works
- See pumpkins soar out of a pneumatic cannon
- Test drive a Segway
- Pilot a radio-controlled blimp
- See a 3-D asteroid
- · Learn how swarm robots detect mines
- Explore a virtual theater
- Discover nano-powered solar cells
- See robots compete
- · Learn how video games are designed and developed
- Participate in the electronic creation of a color painting
- Discover how a green lung helps clear the air
- See a solar oven
- Experience poetry in American Sign Language
- · Stroll through unique art exhibits
- Enjoy live theater, music and dance performances
- · Enjoy carnival rides, food, family fun and more

characteristic. Channeling that passion in constructive ways will foster the United States' leadership in technical innovation and creative ideas for new products and services."

Editor's Note:

Visit www.rit.edu/imagine for more information.

Remember, Rediscover, Reconnect

by Susan L. Murad



lans are in full swing for RIT/NTID's 40th Anniversary Reunion, June 26-28 on the RIT campus. The reunion committee of alumni, faculty and staff volunteers is planning a full slate of activities that will inform and entertain. Their goal: to make this the best reunion ever.

Every five years, alumni and the campus community come together to commemorate the opening of NTID on the RIT campus.

"As time approaches for the June 26 opening ceremonies, the excitement about reunion is building for alumni, family and friends as well as RIT/NTID faculty and staff," says NTID Alumni Relations Director Matthew Driscoll, '94. "We're all looking forward to sharing memories and discovering all that's new at RIT/NTID!"

Plans for the weekend include entertainment by noted deaf actor and comedian John Maucere; screening of the film Wrong Game; a golf tournament at Wildwood Country Club in nearby Rush, N.Y.; a get-acquainted reception; food; workshops; an ice cream social; art exhibits; RIT/NTID history displays and much more. On Saturday, the last evening of the reunion, a special

dinner will be held honoring the Distinguished Alumni Award winners from the past five years.

For the first time, the Alumni Relations Office has developed a series of video-logs or vlogs to keep alumni informed of the latest reunion news. The vlogs were videotaped in various new locations throughout campus, such as the CSD Student Development Center and Gordon Field House and Activities Center.

"We wanted to give alumni who haven't been back to campus since the 35th reunion a feeling for some of the new facilities," Driscoll says. "The vlog is a great way to introduce these buildings to our alumni and generate excitement about coming back to campus."

A Reunion Giving Challenge with a goal of raising \$40,000 was established to commemorate NTID's 40 years of existence.

"We want to ensure that NTID has the resources to make the next 40 years as successful as the first," says Robert Mathers, '74, Reunion Giving Challenge co-chair.

Contributions to the challenge can be directed to scholarships, equipment or other areas of personal importance, and will receive a dollar-for-dollar match through the federal government.

Clarice Bondoc, '04, created the 40th Anniversary Reunion logo, capturing the reunion's fun and excitement.

Alumni contributors to online discussion groups from Washington, D.C., and Rochester have begun reminiscing about their favorite onand off-campus activities and eateries.

"A genuine fondness for RIT/NTID and the Rochester community is a common thread in the online discussions," says Driscoll.

The deadline to register for reunion is June 1. For a complete listing of all reunion activities and to register, visit www.rit.edu/ntid/reunion.

Reunion Sponsors

Platinum



<mark>sorenson</mark>communications"



Silver



Supporting Sponsors





Alumni Return as Recruiters

by Kathy A. Johncox



Job Talk Bob Foley (left) and Donald Slate (center) team up on behalf of Raytheon Company to talk to engineering, computer science, math and electrical and software engineering students about job opportunities.

n annual event since the NTID Center on Employment first hosted it in 2001, the NTID Job Fair gets better every year, offering tangible value for students and employers alike. Each year, several hundred students attend the event, and the number of employers that participate has increased from 17 in 2001 to 43 last year. Nearly all of the companies who have participated have hired students for co-ops or permanent jobs. And, last October, a record number of RIT/NTID alumni took advantage of the opportunity to come back to campus as employer representatives to recruit current students.

"I know firsthand that the quality of education at RIT and the demands of the co-op program do a terrific job preparing students for employment," says Donald Slate, a 2006 Engineering Management graduate who is a manufacturing engineer at Raytheon Company. "When I attended the

job fair as a student, I developed a relationship with Bob Foley, university program manager at Raytheon. After I started working at Raytheon, I got in touch with Bob, who has been coming to the job fair since it began, and I volunteered to help recruit."

"Raytheon, like most employers, places a high value on using alumni to recruit at their alma mater," says Foley. "And as an engaging and credible Raytheon employee, Donald is both a role model and a recruiter for us at the job fair."

Mary Kate Dean, a 2006 Human Resource Development graduate, who works as a college relations recruiting coordinator at Xerox Corp., remembers the frustrations of the job search process and wants to help both students and her employer by sharing her experiences with students who soon will be in the workforce.

"I want to increase my employer's awareness of the need for internships, co-ops and job opportunities for deaf

and hard-of-hearing people," says Dean. "And I want to talk to students about what it takes to be successful at getting a job."

Teresa Murbach, a 1991 Information Systems graduate who works as a computer scientist at the National Security Agency (NSA), wants to give something back after the great education she feels she received.

"I am a proud graduate of RIT/NTID," says Murbach. "I recommended that NSA's recruitment and hiring office include the NTID Job Fair on its recruitment schedule, and I volunteered to come as a technical recruiter. I feel privileged to come back as an alumna, and I hope to help current students find jobs and have the experiences I have had."

In today's competitive employment market, employers can get the edge by sending successful alumni back to connect with soon-to-be graduates in need of jobs.

"We have to go where we know we can get the kinds of talented, qualified and diverse professionals we need for continued success, and RIT/NTID is one of those places," says Don Weber, NSA deputy chief of recruitment and



Getting Advice Lisa Velez (left) and Marisol Lopez (right) get information and encouragement from Mary Kate Dean, college relations recruiting coordinator at Xerox Corp.

staffing. "We are selective about who we send out to recruit. Teresa is there as an alumna, but most importantly, she represents the agency well and is a talented professional computer scientist with success at NSA."

When ITT asked Warren Poe, a 1982 Computer Information Systems graduate who works as a software engineer, if he would be interested in assisting the company with recruiting RIT/NTID students, both he and his employer saw an opportunity to increase the diversity of employees in that division.

"I enjoy talking with prospects and learning about their diverse backgrounds and job aspirations," says Poe. "They are bright, curious and highly motivated."

He knows what he is talking about. His son, Jonathan, will graduate from RIT's E. Philip Saunders College of Business, and he has two other sons attending RIT.



All in the Family Jonathan Poe (left), a student in RIT's College of Business, and his father, Warren, a software engineer at ITT, enjoyed their respective roles as job hunter and recruiter.

"Alumni coming back to recruit really impresses the students," says John Macko, interim director of the NTID Center on Employment, which sponsors the job fair in collaboration with the New York State Department of Labor. "It helps them see themselves in that position, as successfully employed graduates in the future."

"Having alumni recruiters is good because they show students that companies hire from RIT, and their being here creates a great relationship between students and alumni," says Jonathan Poe. "This relationship becomes part of the student's network,



Making Connections The 2007 NTID Job Fair drew more than 300 students and 43 employers.

and that's a very important result of the job fair."

Michael Walsh, a Computer **Integrated Machining Technology** major, says, "At a previous job fair, I was able to talk with folks from Rock Island Arsenal, and with a fellow student who had already completed a co-op with them. I landed a co-op there last summer, and it was one of the best experiences of my life. Last fall, RIA asked me to represent them at the job fair."

From the alumni recruiters' point of view, some of the advantages of coming to the job fair are personal—to see former faculty mentors, connect with fellow alumni, marvel at the changes on campus and enjoy a feeling of coming home. Professionally, they are impressed by the students they meet, and agree it's an excellent opportunity to connect with well-trained, highly skilled potential employees who can hit the ground running when they start work.

"I was really impressed with the students with fire in their eyes," says Dean. "They're tough; they know what they want; they're ready to take on the world; and we as employers have to be ready for them."

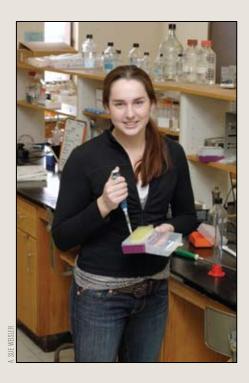
"The students at RIT/NTID are truly impressive and ambitious, and I wish them the best success after graduation," says Murbach. "NTID will always have a special place in my heart, and I will provide as much support as I can."

"It's always great to return to NTID and see for myself all the changes and advancements," says Slate. "This is reflected most in the students who come by the job booth, and it's enjoyable to interact with them andvery important from an employer view—find out what they're studying and what their future interests are."

Advice from alumni recruiters for students looking for co-ops or permanent jobs

- Keep your grade point average up; it will increase your job choices.
- Take advantage of your co-op; it will help you prepare for the world of work.
- Make your job search successful through perseverance, patience and planning.
- Keep an open mind and be prepared for different experiences. This is very important in the transition from school to work.
- Strengthen your ability to work well both in teams and independently; it will make you more valuable to an employer.

Editor's Note: For information about participating in the NTID Job Fair on October 14, 2008, visit the NCE website at www.rit.edu/NTID/Coops/Jobs.



hannon Bean wants to make a difference in peoples' lives. The 20-year-old Biotechnology student from Manchester, Maine, credits her father, a high school basketball coach, and her mother, a nurse, with fostering her compassion for others.

When she was 4 years old, two significant events occurred in Bean's life: her hearing loss was discovered, and she was diagnosed with Type 1 diabetes.

Bean attended public schools and first encountered American Sign Language here at RIT.

"Being here with the Deaf community helped me learn a lot in a short time," she says.

Bean is a second-year member of the RIT Lady Tigers Basketball team.

"Since third grade, basketball has been my favorite sport," she explains. "My dad taught me to play, and basketball is my passion."

Another of Bean's passions is science.

"I love science because I had great teachers who helped me develop that love," she says. "I decided to major in Biotechnology, since I enjoy working in a hands-on laboratory setting. I'm also interested in the business side of biotechnology such as pharmaceuticals. This summer I hope to get a co-op in a lab."

Bean's free time is limited, but she still finds time for fun.

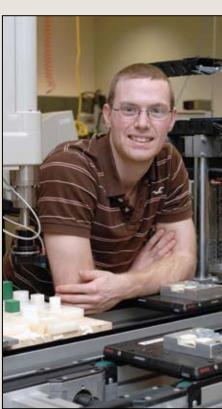
"There's so much to do here that I'm never bored!" she says. "There are a lot of great clubs to get involved in. I'm part of Rotaract, a community service club, and I love to dance. I take a hip-hop class and love it. It takes away any stress you might have—you don't think about anything you just dance!"

Bean plans to use her education to help others.

"I'm thankful every day that there are treatments to help manage my diabetes. I want to try and find treatments for others who are not as fortunate as I am."

Jason Gallant

by Kathy A. Johncox



ason Gallant's introduction to RIT was attending the Explore Your Future program when he was in 11th grade. It was at EYF that he experienced being part of the Deaf community for the first time.

"I loved it," says Gallant, 22, from Clinton, Maine. "My hearing loss is a nerve loss, and it's progressive. I was mainstreamed and was the only hard-ofhearing student in my school. I didn't get hearing aids until 10th grade, and before EYF, I really hadn't had contact with any deaf people."

Gallant was interested in crew before college, and after arriving at RIT, he joined the team because he likes the challenges crew presents.

The team practices six days a week and competes in regattas across Massachusetts, New York and Pennsylvania during the fall and spring crew seasons. During spring break, the team goes to Coco Beach, Fla., to train for a week.

'Crew challenges you mentally and physically, and you really have to focus," he says. "Everyone has to work together, and it's not about one person. It's always the team that wins."

Growing up, Gallant worked on many build-it and fix-it projects with a friend's dad and knew from a young age that engineering was in his future. With a major in Manufacturing Engineering Technology, and co-ops yet to fulfill, Gallant plans to graduate in 2010.

One of his favorite experiences has been a troubleshooting class in an automation technology course, involving an assembly line breakdown and figuring out how to get it up and running. With Dean's List success, he is preparing for a career in manufacturing.

"I could see myself working with an engineering design group in product development," he says.

To finish his degree, he'd like to get a co-op or two in the Rochester area, not so he can be in a familiar place—but so he can still row.

"One word I would choose to describe RIT is 'inspiration.'" says Gallant. "RIT encourages you to be the very best that you can, and to achieve your goals."

Daron Ladson

by Ilene J. Avallone

aron Ladson's interest in American Sign Language and Deaf culture began at a young age.

"I started taking sign language classes at my church when I was 10 years old, so I could communicate with a girl there who was deaf," says Ladson, 21, a fourthyear American Sign Language-English Interpretation major from Capitol Heights, Md. "I enjoyed it so much that I continued my lessons throughout elementary school, and decided early on to pursue a career in interpreting."

He chose RIT/NTID, knowing he would get an excellent education in interpreting and the interaction with the Deaf community he sought.

"This is such a special place; it's broadened my horizons," he says. "I've made friends from different cultures and diverse backgrounds from all over."

Ladson says that interpreting is a humbling experience for him.

"When I'm interpreting, it's not about

me; it's about facilitating communication between two different parties," he says. "It's very rewarding.

"I've gained many benefits as an interpreter," he adds. "I've become a good listener; it's taught me how to work well under pressure; and it's provided me with many opportunities to learn new things."

Ladson says it's the student life at RIT that he enjoys most. He's held leadership positions in the Ebony Club and NTID Student Assembly, and was a member of RIT's Gospel Ensemble and the AALANA Collegiate Association. He received the Dr. Robert Frisina Award and the Dawan L. Albritton Humanitarian Award in recognition of his commitment to education and his exuberant NTID spirit.

After he graduates, Ladson's goal is to find an interpreting job, perhaps in a church. He also has an interest in becoming a preacher, and hasn't ruled out the possibility of extending his education to study in that field.



by Ilene J. Avallone

Christie Ong

hristie Ong's mother once told her she'd have a bright future and would be a role model for other deaf and hard-of-hearing individuals.

Today, Ong, of Seattle, Wash., has taken those words to heart and embraces her college experience with a passion for rigorous academic studies and leadership activities.

At 21, Ong has achieved a couple of firsts at RIT: She's the first deaf or hardof-hearing student to major in RIT's new Advertising and Public Relations program, and she's the first student deaf or hearing—to hold the Major Student Organization liaison position for RIT Student Government.

A third-year Dean's List student, Ong is making the most of her college experience.

"I want to take full advantage of my RIT education and explore other areas outside my major like women's studies, human resources and nutrition," she says.

Ong has a zest for life and is involved in many activities. In addition to her MSO liaison duties, Ong sits on the RIT President's Commission on Pluralism

and Inclusion. She's also a member of the Lambda Pi Eta Honor Society and the DOVES, a club for deaf female students. She served as communications director for NTID Student Congress last year.

Ong is a member of the student chapters of the American Marketing Association, the Public Relations Student Society of America and the American Advertising Federation.

She has won the Vice President/Dean's Scholarship, the Nathaniel Rochester Society Scholarship, the RIT Student Government Freshman Scholarship, the Dr. Robert Frisina Award and the Isaac L. Jordan Sr. Pluralism Award.

This summer she'll participate in PEN-International's Summer Leadership Institute in England, and afterwards she hopes to study in Ireland for six weeks.

"My family is my inspiration," says Ong. "My parents emigrated here from Indonesia, and I recognize the hardships they endured for me and my brother, a member of the world-renowned 'President's Own' U.S. Marine Corps Band. I hope to someday inspire others as my brother and parents have inspired me."



Enhancing the Educational Experience

by Ilene J. Avallone



In the Lab LST students complete a quantitative analysis using gas chromatography in their instrumentation lab class.

Over the past year, NTID has invested in significant upgrades to a number of classrooms and labs, enhancing students' educational experiences with renovated facilities, new equipment and state-of-the art technologies.

Science Lab Gets Major Facelift

The NTID Laboratory Science Technology lab re-opened to students last fall—bigger, better and brighter.

The 2,200 square-foot lab renovation and expansion provides workspace and equipment like what students will find in the working world as they pursue careers in chemistry, biology, biotechnology, pharmaceuticals, environmental science and forensics.

"The moment I entered the new lab I was amazed," says second-year student Quinn Cruise. "Now we have a lot more space, and it's better organized, with the classroom separate from the experiment area."

With more than a 300 percent increase in enrollment since it began in 2002, the LST program is one of the fastestgrowing programs at NTID.

"As the popularity of this program continues to rise, the expanded lab will vastly improve the student work experience," says Todd Pagano, LST program director.

"It's so exciting for our students to be able to work and learn in a lab that incorporates real-world applications," adds NTID Science and Mathematics faculty member Dave Templeton, who was instrumental in designing the new space.

"The renovated facility allows students to gain hands-on experience in a lab setting that's on par with the most advanced industrial labs—allowing them to be well trained for future co-ops and permanent jobs," says Pagano.

Multimedia Lab Opens to Interpreting Students

Enrollment in RIT/NTID's American Sign Language-English Interpretation program has steadily increased over the past decade, and students in the program are benefiting from a significant technology upgrade.

Last summer, \$1.2 million and a lot of planning transformed one of the program's three classroom/lab facilities into a state-ofthe-art digital lab with high-tech audio and video equipment. The multimedia lab provides 10 student computer stations, each equipped with a camera, headset and microphone; two robotic video cameras and a wireless microphone for live recording; a ceiling-mount video projector; a wallmount projection screen; and a separate instructor's station with room controls.

The conversion to digital technology has resulted in greater efficiencies for both students and faculty.

Today, interpreting students use digital technology to record their signing/ interpreting, and can record video onto audio and audio onto video for interpreting between ASL and English, which allows them to review their performance and improve their skills in both areas. When they are finished with an assignment, they save their work to their own folder on a central server, and can drop their file into their instructor's folder for assessment.

"The digital lab has brought a new experience for many of us in the program," says Cody Martin, a third-year student. "It's much easier to save and review our work using USB flash drives and DVDs. It's amazing how simple it is now to capture video."

Faculty member Lynn Finton adds, "The ability to digitally capture and store live video and audio of students in a central area on the network is a significant improvement because it enables students and faculty to comprehensively manage student video recordings."

"Students and faculty also realize huge time savings with the new digital technology because they have anytime, anywhere access and can securely view, edit and transfer files from any computer on the network, and no longer need to be physically in the lab to do this," explains Richard Smith, curriculum support coordinator for the American Sign Language and Interpretation Education Department.

Cochlear Implant Center Expands

In less than a decade, the number of students with cochlear implants at RIT has grown exponentially, from 29 students in 1999 to more than 240 students in 2008.

"The rapid growth in the number of students who need cochlear implant services was quickly surpassing the amount of space we had to accommodate them, so this fall, we added more individual sound-dampened therapy rooms to new space in the Cochlear Implant Center," says Lawrence Scott, Communication Studies and Services chairperson.

The therapy rooms contain six new computer stations equipped with new aural educational software programs that students use to practice their listening and speechreading skills to help improve their spoken English language recognition.

"Our goal is to provide communication support and assistance to students with cochlear implants, so they can maximize the benefits of their implants and succeed in college," says Scott. "The additional space will enable us to accommodate the growing number of cochlear implant users and enhance their auditory learning."

Reaching Out

Through a grant from The Sprint Foundation that was matched with internal funds, NTID has taken a major step in supporting distance learning for deaf and hard-ofhearing remote learners—those students who are not physically on campus. A classroom in NTID's Learning Center was converted to The Sprint Relay Experimental Distance Learning/Access Demonstration Lab last summer.

The lab is being used as a beta testing site for adapting and evaluating alternative instructional and access technologies in support of remote learners who are deaf or hard-of-hearing. It also provides a forum for information exchange among RIT/NTID faculty, students, instructional designers, technologists, researchers and access service providers, and is used as a vendor display/ consumer testing site for evaluating new products related to remote learning.

The lab features new desktop computers, wireless laptops, videoconferencing systems and a 3M Ideaboard—a wall-mounted, computer-based display, similar to a Smartboard, but featuring network capabilities, supporting real-time interactions among remote and onsite learners.

"With this distance-learning tool, deaf and hard-of-hearing students from anywhere around the world will be able to be part of one classroom," says Jeff Porter, NTID Learning Consortium chair. "The innovative adaptation of current and emerging technology will make tremendous contributions to expanding our conventional notions of where, how and with whom learning can happen," he says.

Engaging the Millennial Student

Today's students are technologically savvy because technology always has been a part of their lives—whether its surfing the Internet, instant messaging, texting or video gaming.

Because students are heavily influenced by interactive technology, Charlotte L. V. Thoms, an associate professor in NTID's Business Studies Department, decided two years ago to integrate it into her classroom.

Thoms uses the Student Response System, known as "clickers," a small wireless unit much like a television remote control with a keypad of letters and numbers. Clickers allow her students to respond in class by using the hand-held device that sends their information to a receiver attached to Thoms' computer. The computer records and displays student responses in real time.

These wireless devices transform Thoms' lectures into interactive learning experiences. Because the SRS gives the students a sense of anonymity, it can make them more eager to respond and promotes active participation and learning.

"The use of clickers generates an enthusiasm that leads to greater student engagement and improved learning," says Thoms. "Of all the tools in my arsenal, clickers are requested by my students.

"I have seen that the use of this technology increases students' retention of course material," she adds. "In my class, students need to learn more than 200 vocabulary words in a 10-week period. The clickers are a great way to help them with acqusition of new words and concepts. It also boosts their achievement level. I've seen my students' performance level increase 40 percent," she says.

From science lab to multimedia language-learning lab to Cochlear Implant Center to distance learning lab to innovative classroom technologies, NTID's new facilities and technology-enhanced classrooms are improving the educational experience for students, and will continue to play an increasing role in providing exciting opportunities for students and faculty alike.



Remote Learning NTID faculty and staff receive a demonstration of The Sprint Relay Experimental Distance Learning/Access Demonstration Lab. Standing left to right, Prashant Gahlowt, NTID Learning Center tech lab assistant; Wesley Blue, NTID Learning Center supervisor; and Jeffrey Porter, NTID Learning Consortium chair.

Innovation in Teacher Preparation

by Susan L. Murad



Historic Figures RIT/NTID professors Bonnie Meath-Lang and Geoff Poor portray Anne Sullivan Macy and Edward Miner Gallaudet as part of a "time machine" experience for MSSE teacher-candidates.

Benjamin Franklin once said, "Genius without education is like silver in the mine."

It takes knowledge and skill to mine silver, and genius as well, and for those who hope to mine the genius of deaf and hard-of-hearing students, NTID is the perfect place to prepare.

NTID's Master of Science program in Secondary Education of Students who are Deaf or Hard-of-Hearing uses the considerable expertise of faculty with years of experience in deaf education to help future teachers become genius miners.

"We have a great team," says Gerald Bateman, professor and program director. "They're very dedicated to our students' success. It's a great feeling to see these students grow, graduate and go on to teach. Each of us feels we had a small role in who they've become as teachers."

Students have enrolled in the MSSE program from throughout the United

States and countries such as China, Greece, India, Japan, Portugal, Thailand and Zambia. The program, which has graduated 175 students since it began in 1995, is accredited by the New York State Department of Education and the Teacher Education Accreditation Council, and has received three grants from the U.S. Department of Education.

Collaboration

Bateman and his team, including full-time faculty Christopher Kurz, Harry Lang and Nora Shannon, and several part-time instructors, stress innovative approaches to teacher education. One example is a course called Microteaching, which was developed by the MSSE team in cooperation with the NTID Performing Arts program, with the Educational Design Resources Department and the NTID Learning Center providing technical support.

"The performing arts program provides us with five or six deaf college-student actors who act out high school student behaviors in mock classroom settings," says Lang. "Two cameras capture both the teacher-candidate and the student actors, and split screen videos are uploaded to the Web, so the teacher-candidates can study and critique their own efforts."

The student actors model behavior that the teacher-candidates will likely face in a high school classroom setting: everything from dealing with medical issues, to handling students arguing or falling asleep in class, to boundary issues such as a student asking a teacher-candidate to the prom.

"We want our teacher-candidates to learn how to manage situations before they face them in the teaching world," Lang says. "That's the goal of the Microteaching class. After encountering challenging situations in this course, they leave feeling much more confident about situations they may confront in their own classrooms."

Another collaboration with the performing arts program involves the use of a "time machine" to bring back several characters from deaf education history to speak to the teacher-candidates about their lives and work, and implications for teaching deaf and hard-of-hearing students today. Teacher-candidates are able to spend time with the likes of Anne Sullivan Macy or Edward Miner Gallaudet and ask them about their experiences and perspectives.

The need to provide teachercandidates the opportunity to observe best practices of current teachers in the field resulted in the creation of "VETFLIX"—an online library of videotapes featuring veteran teachers in their classrooms

"The teacher-candidates are also required to observe veteran teachers in live classroom situations," says Kurz.

"We also schedule videoconferences between these seasoned professionals and teacher-candidates to allow the free flow of ideas and strategies."

Research Fuels Adaptation

While technology and innovation support teacher preparation, research and experience provide the basis for MSSE course content. RIT/NTID faculty who teach MSSE courses draw on their own research and experience to help teacher-candidates understand the landscape that they will enter upon graduation.

"Basing teaching and curriculum development on experience and the most recent educational research is what evidence-based instruction is all about," Shannon explains.

"The face of deaf education is continually changing," says John Albertini, chairperson of NTID's Department of Research and Teacher Education. "For those of us preparing teachers in the MSSE program, it's critical to keep up with those changes and to provide the best preparation possible."

With 84 percent of deaf and hard-of-hearing students learning in mainstream educational settings, the need for itinerant teachers is on the rise. Itinerant teachers travel throughout a given school district or geographic area, providing learning opportunities at many grade levels and in different subject areas.

Susan Foster, a professor in NTID's Department of Research and Teacher Education who also teaches in the MSSE program, conducted a study of itinerant teachers to learn more about their work, and what type of preparation best helps a budding itinerant teacher succeed.

"Itinerant teachers need to be competent in their subject area, but must also be extremely flexible as they tend to 'wear many hats," says Foster. "They work with many teachers and students, sometimes in the general classroom and often individually as well as working with parents and helping to coordinate meetings and services for students."



In the Classroom Heather Mooney, a 2002 graduate of the MSSE program and teacher at the Rochester School for the Deaf, provides one-to-one mathematics instruction for a student.

Making it Personal

Those who work with MSSE graduates are impressed with the caliber of their preparation and their dedication to students.

"We are fortunate to have some excellent teachers here at RSD who graduated from RIT's MSSE program," says Dr. Harold Mowl Jr., superintendent and CEO of Rochester School for the Deaf. "We've also been pleased with the MSSE graduate students who complete their student teaching assignments at RSD. These MSSE students and alumni show their commitment to theteaching profession and to deaf and hard-ofhearing children."

Also in Rochester, the Monroe (County) Board of Cooperative Educational Services #1 is staffed largely with graduates of the MSSE program.

"Day after day, these fine professionals make it possible for deaf and hard-of-hearing students to be successful in public school settings," says Marty Nelson-Nasca, director of the BOCES Deaf/ASL Department. "They're trained to support other professionals such as classroom teachers, nurses and teachers in special areas like music, art and physical education to

effectively provide educational opportunities for the students."

One of MSSE's many graduates is Patrick Graham, who teaches at the Phoenix Day School for the Deaf in Phoenix, Ariz.

"MSSE not only taught us teaching skills, but also helped us grow into the teachers we are," says Graham. "The staff in the MSSE program really takes the time to understand the students, and that teaches us to take the time to truly connect and understand the students that we serve."

Julie Stewart, a teacher at the Ohio School for the Deaf in Columbus, agrees.

"The MSSE program allowed me to choose my teaching style and philosophy of how to teach students who are deaf," she says. "We also were taught the learning theories that new education laws demand. The popularity of using different teaching tools to fit all kinds of learning styles among our students was very beneficial for me. And the amount of time spent on internships was perfect. MSSE is an excellent teacher preparation program."

By combining technology, innovation, research and dedicated faculty, the MSSE program is preparing teachers of tomorrow to mine genius throughout the country and around the world.

Stephen Campbell

by Kathy A. Johncox



hen Stephen Campbell, director of NTID Technology Support Services, enlisted in the U.S. Air Force at age 18, he couldn't have envisioned where life would take him. Born in Cornwall, Ontario, Canada, he became a U.S. citizen shortly after enlisting.

Campbell joined the Air Force as a carpenter, and ended up in data systems administration where it was "love at first byte." He was immediately attracted to the many ways data could be collected and stored and the many ways it could simplify lives.

This attraction started a series of events that took Campbell, his wife and their three children, around the world. He went from training in Texas, to assignments in Germany, where he managed multimillion dollar operations budgets and more than a billion dollars in Air Force communication sites throughout Europe, to Oklahoma, to Iceland, and finally to Los Angeles.

"It was just fun; it wasn't work," says Campbell. "I loved it, and they paid me

to do it. After I retired from the Air Force, I got the job here, and I'm still getting paid for what I love to do."

Along the way he earned a bachelor's degree in Information Systems from University of Maryland, European Division, and an M.S. in Information Technology and an Executive MBA, both at RIT.

His military career prepared him well for the rigors of managing the vast and growing data and technology needs of RIT/NTID faculty, staff and students.

A good day at work for Campbell includes one or more of the following: finding a new solution with hardware or software; talking to a concerned parent about the technology available to their son or daughter; providing technologies that support a variety of conferences and presentations at the college; and getting positive feedback about the activities his department is involved in.

"I've been here for 10 years," says Campbell, "and it's just been the opportunity of a lifetime to work at NTID."

Sharron Webster

by Ilene J. Avallone



t the beginning of the academic quarter in Sharron Webster's math class, it's not unusual for students to be somewhat disinterested. Many of them are there because it's a requirement, and don't understand its relevance to their major.

But Webster promptly helps her students makes sense of it all.

"I tell them that math develops logic skills, and it's pertinent to any career they pursue because in the workplace and everyday life, being able to solve problems can lead to great advantages," she says.

This compelling analogy, as well as Webster's patience, creativity and enthusiasm, leads her students to become engaged and motivated learners.

"I encourage students to share their knowledge, successes and failures, and question one another," she says. "In such a supportive environment, students develop the confidence they need to explore their problem-solving strategies and discover that there are many ways to approach problems."

A graduate of RIT/NTID, she earned both an associate degree and a bachelor's degree in Business Administration, and a master's degree in Applied Mathematics and Statistics.

Webster, a Michigan native, has worked at NTID for 25 years, 10 of them in the Science and Mathematics Department. She is a recipient of the NTID National Advisory Group Award and the NTID Alumni Association Outstanding Alumni Award.

Webster met her husband Kip, an interpreting manager at RIT, while they were residential advisors on campus. The couple has two children.

In her spare time, Webster likes to play the logic-based number placement puzzle Sudoko, and keep informed about emerging classroom technologies.

"I find it very rewarding to teach," she says. "Math is a difficult subject for many students, and I enjoy the challenge of getting them excited about it and seeing their successes."

Shakespeare on Campus

by Kathy A. Johncox

early 400 years after William Shakespeare's death, dedicated NTID faculty, staff and students continue to bring his characters to life for both hearing and deaf audiences. Since 1974, the NTID Performing Arts program has staged such classics as Taming of the Shrew, Romeo and Juliet, The Tempest, A Midsummer Night's Dream and Macbeth.

How do they bring these classics to life? And what do today's deaf and hard-ofhearing students learn from the experience of performing Shakespeare?

FOCUS asked Bonnie Meath-Lang, professor and NTID Performing Arts artistic director, to explain.

FOCUS: What are some of the challenges in performing Shakespeare?

Meath-Lang: Shakespeare's plays are deep, psychological and complex. The task for any actor is to connect one's life experiences to those of the character in order to interpret the role authentically. With young actors, this takes some time, simply because they may not have had a similar experience, but in the end, there always is some life experience to use.

Shakespeare's language is very beautiful and very different; some of the words are archaic and no longer in use, so that's intimidating. But as you start to rehearse and read and act out that beautiful language, the fear evaporates. We have terrific translation support, usually a poet, or actor or scholar who works with the students to understand their interpretation of the language, and then create meaning with them. This allows the students to experience the power of both English and American Sign Language fully.

FOCUS: Do the students get excited about performing Shakespeare's work?



Classic Performance Macbeth (Jeret Hackbarth, right) pays homage to King Duncan (Daniel Brucker, left) in the NTID Performing Arts 2007 production of Macbeth.

Meath-Lang: Absolutely. There is a long history of performing Shakespeare in the Deaf community. He's such an amazing storyteller. And his understanding of human nature fascinates students who are pursuing their own identities, their relationships and their place in the world.

FOCUS: How do you make a Shakespearean play visually accessible?

Meath-Lang: Mounting a production that combines deaf, hard-of-hearing and hearing backstage crew and actors requires creativity. Because our actors have to be able to see each other at all times, the stage management, lighting, and set design have to be created with that in mind. Through the use of monitors and small cameras, everyone behind the scenes can see what's happening on stage, and the student stage manager is positioned in front of one of the cameras, so that the stage crew can see him or her on the monitor for the cues.

FOCUS: How does performing Shakespeare add to the students' life experience?

Meath-Lang: All theater emphasizes ensemble or team work, personal responsibility, self-discipline and honoring deadlines. In addition, performing Shakespeare makes students aware of truly great literature and aware that they are capable of performing complex, nuanced roles that's a tremendous confidence builder. Our students become aware of the complexity of ASL in the translation process, and more appreciative of the way different languages work. There are times I just have to sit back in a rehearsal or a performance—I see our student actors and crew and faculty and staff bringing these great stories to life on stage—and I can't get over how lucky I am to have our resources and to work with this talent.

What students say about Shakespeare's work

"Shakespeare's plays are very smart. The characters tend to have many interesting relationships and conflicts. I also enjoy the seamless continuity of his stories. In the process of 'becoming' Macbeth, I started to understand his story, his relationships to other characters and their conflicts on a much deeper level."

-Jeret Hackbarth

"What I like about Shakespeare's plays are the plots that are so cleverly written; there are twists around every corner in his plays. There is also the historic aspect in his work that I find very interesting."

-Daniel Brucker

\$1.2 Million Scholarship **Encourages Entrepreneurs**

by Susan L. Murad



Getting Advice Amanda Massab, '06, '07, a graduate student in RIT's College of Applied Science and Technology, discusses her business plan with Associate Professor Richard DeMartino, director of RIT's Albert J. Simone Center for Innovation and Entrepreneurship.

Florida-based charity has donated \$600,000 for deaf and hard-ofhearing Rochester Institute of Technology students who are eager to become entrepreneurs.

The Johnson Scholarship Foundation's Endowed Scholarship for Innovation & Entrepreneurship will annually award \$5,000 to 12 deaf or hard-of-hearing RIT students who are studying entrepreneurship.

The donation qualifies for federal matching funds, making the scholarship base \$1.2 million. As an incentive to encourage community donations, the Johnson Scholarship Foundation is offering to match up to an additional \$100,000 in donations received from outside sources, which could result in increasing the total scholarship endowment to \$1.6 million.

Launching a new business is a daunting task for any entrepreneur, and deaf and

hard-of hearing students pursuing new ventures face additional challenges, which can often prevent them from becoming successful. This has limited the number of deaf entrepreneurs.

"The Johnson Scholarship Foundation believes that education empowers people to be more independent and to more fully participate in the economic and social benefits of our society," says foundation president Malcolm Macleod. "Our creation of an endowed scholarship for innovation and entrepreneurship for deaf and hardof-hearing students at RIT/NTID was a natural outgrowth of these ideas. We have every confidence that this scholarship will help generations of deaf and hard-of-hearing students to become successful entrepreneurs."

The scholarships are expected to enable some students to attend college who might otherwise not be able to. They are also expected to enable recipients to devote more time to research and studying than working to pay for college.

"These scholarships will help free up students, so they can focus on participating in course-related activities and developing their business models, rather than working to pay for their education," says Dr. T. Alan Hurwitz, NTID's dean and CEO and vice president of RIT for NTID. "They will have an important advantage in establishing their businesses after graduation."

The first scholarships are expected to be awarded later this year. Amanda Massab, '06, '07, a Career and Human Resource Development graduate student in RIT's College of Applied Science and Technology who is taking courses in the entrepreneurial program, looks forward to the launch of the scholarship.

"I developed a business plan for my entrepreneurial class, and I thought it was a lot of fun and interesting," says the Brooklyn, N.Y., native. "I think it's a great idea to have a scholarship for deaf and hard-of-hearing students in this area because I'm sure I'm not the only one who has ideas. Not only will we need scholarship money to help get started, but we need mentors, too."

The timing of the donation fits with RIT President Bill Destler's vision of making RIT the first "innovation university."

The Johnson Scholarship Foundation, based in West Palm Beach, was created in 1991 by Theodore and Vivian Johnson. Theodore Johnson was an employee of United Parcel Service in the early 1920s and bought stock in the company at every opportunity, which appreciated over his lifetime. He felt he had been lucky in life and wanted to use his wealth to help other people.

In Memoriam



his spring, the 2008 Distinguished Alumna Award for NTID was awarded posthumously to Barbara M. Fallon, who graduated in 1989 with a bachelor's degree in accounting.

Known fondly as "Bobbie," Fallon, who passed away in February, was a certified public accountant at KPMG in Montvale, N.J. She was a dedicated volunteer in her community, a generous contributor to the NTID Alumni Fund, and recently had been invited to join the NTID Foundation Board of Directors.

With the support of her family, friends and colleagues at KPMG, NTID has established the Barbara M. Fallon KPMG Memorial Endowed Scholarship Fund to enable future students to attend RIT/NTID.

$R \cdot I \cdot T$

Rochester Institute of Technology

National Technical Institute for the Deaf Lyndon Baines Johnson Building 52 Lomb Memorial Drive Rochester, NY 14623-5604

CHANGE SERVICE REQUESTED

Non-profit Org. U.S. Postage **PAID** Rochester, NY Permit 626



Celebrating Dance In February, the RIT/NTID Dance Company presented *RIT/NTID Dance Company—A Ten-year Retrospective*, showcasing some of the favorite dance works created, choreographed and directed by NTID's Thomas Warfield for this unique ensemble of deaf, hard-of-hearing and hearing dancers. For more than 20 years, the RIT/NTID Dance Company has presented a diverse repertoire of full-length ballets and student and faculty choreography in modern dance, jazz and a variety of ethnic-based dance. Pictured here, dancers Jessica Clark (center), Jen Jones (left) and Constance Gautier perform the Mannequin Dance from *Peter and the Wolf*, first performed at NTID in 2000.