

WINTER 1995

FOCUS

NTID

National Technical Institute for the Deaf • A College of Rochester Institute of Technology





Teaming up to new heights Deaf high school juniors who attended NTID's annual Explore Your Future program last summer spent a week sampling five technical career areas and enjoying extracurricular activities that encouraged team building and leadership development.

Photography by Dana Parker

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ABOUT THE COVER

The four duotone photographs on the cover illustrate the many and varied careers in technical fields awaiting deaf RIT female graduates. "Making Herstory" on page 13 details the Institute's pioneering "Deaf Women's Studies" course, which encourages students to chase down these and other dreams.

Cover photography by
A. Sue Weisler

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FOCUS

NTID

Editor

Susan Cergol

Coordinator

Kathleen S. Smith

Writers

James Graves

Wendy Levin

Beth M. Pessin

Kathryn Schmitz

Deborah R. Waltzer

Art Director

Colleen Clarke, RIT Communications

Photography

Vicki Hurwitz—p. 3 (top)

Bruce Wang—p. 3 (bottom)

Mark Benjamin—pp. 4 (top), 18, 22

A. Sue Weisler—pp. 4 (bottom), 6-9,

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Matt Hochkeppel—p. 5 (top)

Courtesy New York State Assembly—p. 5 (bottom)

Courtesy Emory University—p. 10

Courtesy The John Hopkins Medical Institutions—p. 15 (top)

Courtesy Girl Scouts of the Genesee Valley—p. 15 (bottom)

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David Carson—p. 27

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

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Marketing Communications

(716) 475-6853 (voice or TTY)

(716) 475-6500 (fax)

Recruitment and Admissions

(716) 475-6700 (voice or TTY)

(716) 475-2696 (fax)

The NTID Foundation

(716) 475-6836 (voice or TTY)

(716) 475-5949 (fax)

FROM THE DIRECTOR'S DESK

As many of you know, I decided to step down from my position as director of NTID in December, and I have begun a six-month sabbatical to start writing the history of NTID. I will return to RIT in summer 1995 as an Institute professor and will be active in the Institute's fund-raising, international, and creative arts efforts. NTID Dean James DeCaro will assume the additional responsibility of interim director until a search for a new director is completed.

I'd like to depart from my usual *FOCUS* comments and use this forum to reflect briefly on my 26-year career at NTID.

It has been a marvelous adventure. I have seen the Institute mature from infancy to its current position as a world-renowned leader in the education of people who are deaf. I am intensely proud of that position, and a bit nostalgic as well, as I recall NTID's beginnings more than a quarter century ago.

I have been privileged to be at or near the helm since NTID moved from congressional legislation to reality. I welcomed the first 70 students in 1968, helped establish the array of technical and professional programs that flourish today, oversaw the construction of NTID's impressive academic facilities, accommodated hundreds of additional students during the "Rubella Bulge" of the early 1980s, and opened NTID's

doors to international students.

Today's NTID is a model of innovation. Our 1,100 deaf students continue to study and live with RIT's 12,000 hearing students. They benefit from the knowledge that we have gained during this first quarter century, knowledge of how to successfully structure challenging academic programs to prepare our graduates—more than 3,000 of them—to live and work in a variety of careers around the world.

NTID has always been in a class of its own; a college that meets the unique needs of deaf students in a way that no other institution in the world has done as well.

If you never have visited NTID, I encourage you to do so, particularly during the academic year. You may wish to visit this spring during our annual open house April 7. I invite you to contact the department of recruitment and admissions for more information or to schedule an appointment.

Thank you for your continued commitment to NTID's most important mission: preparing deaf students for success at home, at work, and in life.

William E. Castle

Dr. William E. Castle

AROUND THE QUAD



The Spiritual Sages Taking a break from answering questions are, from left, Alok Doshi, James Munro, Robert Rice, and David Tai.

And the answer is...

A team of four NTID students took first-place honors at the recent College Bowl competition, held in July during the National Association of the Deaf's (NAD) biennial convention in Knoxville, Tennessee.

Coached by Vicki Hurwitz, student development educator in NTID's department of student life, the NTID team of Alok Doshi, fifth-year information technology student from Rockville, Maryland; James Munro, fourth-year business administration student from Ramsey, New Jersey; Robert Rice, fourth-year business student from Abington, Pennsylvania; and David Tai, fifth-year computer science student from Atlanta, Georgia,

competed against teams from California State University at Northridge and Gallaudet University.

This was NTID's first win since the competition began in 1988. The NTID team, the Spiritual Sages, received a traveling trophy.

Dubbed "The Varsity Sport of the Mind" by national organizers, College Bowl is a question-and-answer game of quick recall played among teams of four students. At the NAD College Bowl, teams answered questions in eight categories, including arts and literature, geography, mathematics, science and nature, Deaf culture and history, politics and social studies, sports and leisure, and entertainment.

Building bridges across the quarter mile

In an effort to enhance Institute services to students, Reginald Redding was named assistant vice president for student affairs in addition to his post as director of NTID's Center for Student Resources.

In the announcement of this new joint venture between NTID and RIT's division of student affairs, Dr. Linda Kuk, RIT vice president of student

affairs, and Dr. James DeCaro, NTID dean, wrote: "The goal of this collaboration is to ensure the seamless provision of student-centered services to RIT's deaf and hearing students. Further, this will be another step in our continuing efforts to establish barrier-free programs and services for all RIT students—deaf and hearing alike.



Reginald Redding

NEWSMAKERS

Faculty and Staff

In July, Dr. Gerald Bateman became interim director of NTID's new master of science in secondary education of students who are deaf or hard of hearing program, the curriculum for which currently is being developed.

Dr. William Castle, director of NTID, and Dr. Diane Castle, professor in the department of audiology, traveled to Japan May 23 through June 5 on behalf of the Institute. In addition to visiting representatives of various philanthropic foundations, the pair met with Eiichi Mitsui, a deaf Kutani porcelain artist whose work was exhibited in NTID's Switzer Gallery this fall.

Thanks to Jules Chiavaroli, associate professor in the department of construction technologies, architectural technology students have a new textbook from which to learn. Chiavaroli wrote *AEC Drafting Fundamentals*, which was published earlier this year by West Educational Publishing.

Marcia Dugan, special assistant to the director of NTID for public information, was elected national vice president of Self Help for Hard of Hearing Persons Inc. in July. Dugan also is president of the Rochester, New York, chapter.

Dr. Bonnie Meath-Lang, professor in the office of the dean, and Dr. Harry Lang, research associate in the department of educational research and development, have written *Deaf Persons in the Arts and Sciences: A Biographical Dictionary*, a collection of 150 biographies of deaf artists and scientists, to be published during the 1994-95 academic year by Greenwood Press.

Cheri McKee, associate interpreter in the department of interpreting services and part-time student in RIT's professional and technical communications program, was recognized in April as one of RIT's 38 Outstanding Undergraduate Scholars.

Sidonie Merkel Roepke, assistant professor in the imaging arts and sciences support department, exhibited her textile piece "In and Out of the Garden" and won second place in last fall's national juried exhibition of the Society of Experimental Artists in Shreveport, Louisiana.

NTID's performing arts department has been in the spotlight. Last January, a segment about NTID's music, theater, and dance ensembles was featured on the *CBS News Sunday Morning* program. The piece, "To Be Heard," was seen by more than six million viewers, and in October it won an award from the National Easter Seal Society.

Dr. Donald Sims, research associate in the department of communication research, is president-elect of the Academy of Rehabilitative Audiology (ARA). His one-year term will commence in January 1995.

Dr. Joan Stone, professor in the department of physics and technical mathematics, has been appointed interim associate provost of RIT as well as co-chair of RIT's strategic plan implementation committee.

Paul Taylor, associate professor in the department of applied computer technology, was named liaison to NTID's Deaf Professional Group for the 1994-95 academic year.

Mary Vreeland, visiting teacher/artist in the department of performing arts, won a Helen Hayes Award in May for her performance in *Mother Courage and Her Children* at the Shakespeare Theatre in Washington, D.C. Vreeland teaches acting and script analysis courses at NTID.



Recognition for a job well done Three members of the Institute community were recognized in May for their exceptional contributions to NTID's goals and to the quality of life for students and colleagues. Dr. Albert Pimentel, chairperson of NTID's National Advisory Group, second from left, presented Outstanding Service Awards to, from left, Jorge Samper, media specialist in the department of instructional design and evaluation; Dorothy Krause, custodian in the physical plant; and Donna Gustina, coordinator of the office of communication assessment services.

NTID faculty member lauded



Marilyn Mitchell

Marilyn Mitchell, assistant professor in NTID's Center for Sign Language and Interpreting Education, was one of four RIT faculty members to be honored in May with an Eisenhart Award for Outstanding Teaching.

Mitchell is known among her students as a supportive and dedicated educator as well

as a professional role model in the interpreting field.

"The greatest gift is watching students grow," says Mitchell, who has been a member of NTID's faculty for more than 15 years. She sees the classroom as a place where students gain new skills and knowledge and learn about themselves as people.

In addition to the Eisenhart Award, Mitchell's dedication to the educational interpreting field has been recognized by two service awards. In 1990, she received the Outstanding Service Award from Genesee Valley Region Registry of Interpreters for the Deaf, of which she is a member and served as president from 1989 to 1990. In 1993, she received the Robert F. Panara Award for Outstanding Service to Deaf Students in New York State from the New York State Support Service Personnel Organization.



California, here we come! Bikers Matt Hochkeppel, Kevin Jones, Ricky Postl, and Christopher Kurz celebrate their arrival in San Francisco.

NTID students hit the road

Four NTID Kappa Phi Theta fraternity brothers mounted their bicycles June 3 in Chatham, Massachusetts, to raise awareness of environmental issues. Roughly 5,000 miles and countless blown tires later, they braked to a halt alongside San Francisco's Golden Gate Bridge in August.

Along the way, cyclists Matt Hochkeppel, Kevin Jones, Christopher Kurz, and Ricky Postl received a traffic ticket for riding on the Connecticut

interstate; were handed job application forms in a Kentucky Taco Bell restaurant when they asked for paper and pen to solicit directions; and were abruptly awakened by an early morning sprinkler system as they slept outside a Newport Beach, California, Chamber of Commerce building.

Best lesson learned? "No one should be homeless," says Postl. "It's not easy to sleep outside or have no destination or shelter for the next day."



Working with the political process During a class field trip to Albany, New York, in May to conduct exploratory work on legislative issues that have an impact on deaf and hard-of-hearing people, deaf RIT social work students met with New York State Assemblywoman Susan John. Conferring with John, seated third from left, were Julie Guntner, Cynthia MacDonald, Stacey Sagner, Ami Garry, and Michelle Price; standing, Tony Laperna, meeting interpreter and graduate of NTID's interpreter training program; and Christopher Wagner.

NEWSMAKERS

Students

Congratulations to the following students and recent graduates who received 1993-94 academic awards from NTID during a luncheon in May: Marvin Albert of New Orleans: Outstanding Student Award; David Bowell of Abilene, Kansas: Academic Achievement Award, Outstanding Student Award; Heather Brannan of Kendall, New York: Outstanding Graduate Award; Louis Caplan of North Haven, Connecticut: Outstanding Student Award; Stacy Finkle of Penfield, New York: Academic Achievement Award; Michelle Gaul of Farley, Iowa: Academic Achievement Award, Outstanding Student Award; Mark Loucka of Garfield Heights, Ohio: Academic Achievement Award; John Joseph McKeever of Springfield, Pennsylvania: Academic Achievement Award; Richard Reba of Fort Gordon, Georgia: Beth Duffin Award for Outstanding Tutor/Notetaker; Catherine Stotts of Las Vegas, Nevada: Academic Achievement Award; Susan Ann Weaver of Rochester, New York: Beth Duffin Award for Outstanding Tutor/Notetaker.

Angel Flores of Bronx, New York, third-year student in the applied art and computer graphics program, designed the logo for the May 18 "Beat the Back-up Day," a special event sponsored by the Brighton-Henrietta (New York) Transportation Management Association to encourage use of alternative forms of transportation.

Kristine Gray, fourth-year student in RIT's interior design program, was named RIT's Senior Female Athlete of the Year last spring. Gray, from Grand Rapids, Michigan, plays on RIT's volleyball and softball teams.

Twenty students enrolled in the manufacturing processes technology program welcomed fellow NTID students, prospective students, and parents during two open houses in April. The hosts included: Nick Achin, Anthony Anderton, Brian Bard, David Benson, Ken Cassidy, Jason Coryell, Juanito Crespo, Tom Degasse, Jason Fik, Harry Fisher, Michael Grow, Jeff Hasley, Pablo Llamas, Mark Miller, Jeff Mosher, Michael Nutter, Andreas Rackl, David Steiner, Ken Summerville, and Brendan Ward.

Members of the RIT Student Music Association, including deaf musicians in the NTID Combo, NTID Flute Loops, and RIT Timestompers, presented their third annual Kaleidoscope concert in May to help unite the RIT community through music.

Michael Kienzle, who graduated last year from RIT's graphic design program, received in May NTID's Charles R. McDougal Memorial Award. Kienzle's artwork, as well as that of 70 other deaf students enrolled in NTID's visual arts programs and RIT's College of Imaging Arts and Sciences, was on display in NTID's Switzer Gallery last summer as part of the Institute's annual Student Honors Show.

A STUDENT STUDY

Frank Sankey

by Kathryn Schmitz

The cloud of Frank Sankey's 1991 unemployment truly did have a silver lining. Sankey, who graduated from NTID's electromechanical technology program in 1990, spent three unsuccessful months after his layoff from Eastman Kodak Company searching for a job before returning to RIT to enroll in the telecommunications engineering technology program.

"If I hadn't been laid off, I never would have gone back to school and learned about telecommunications," says Sankey, a 27-year-old Pittsburgh native. "While I was working for Kodak [as a troubleshooter for copy machines], I had no desire to get a bachelor's degree."

When Sankey returned to RIT, he learned that he could transfer his electromechanical technology credits to the telecommunications program. With a bachelor's degree in telecommunications engineering technology, Sankey will have the credentials to set up systems that enable users to communicate via simple rotary-dial telephones or through complex computer networks that employ satellites. The field is growing rapidly, creating high demand for skilled technicians who can work with increasingly complex systems.



Making the sale Frank Sankey, right, explains to a potential customer how pagers work.

"Frank has a very bright future in telecommunications because of recent federal legislation that will require many companies to provide services to people with disabilities," says Carol Richardson, coordinator of RIT's telecommunications engineering technology program. "Telecommunications will be used to provide many of those services."

According to Sankey, who is the first deaf graduate of the program, the main virtue of telecommunications is that it facilitates communication among all people, deaf and hearing.

"You don't have to be hearing to talk on the telephone," he explains. "I want to help deaf people improve their communication abilities to their maximum potential."

As a first step toward empowering his deaf peers through telecommunications, Sankey works as a communications consultant with the Rochester branch of Page New York. This job also serves as a cooperative work experience for Sankey, enabling him to complete the requirements for his bachelor's degree program. His role is to create awareness in New York's deaf communities of technologies that can facilitate communication, including alphanumeric pagers and paging services.

"Frank is an excellent liaison between Page New York and the hard-of-hearing and deaf community," says Ruth Perrin, Page New York sales manager.

Wireless technology such as pagers are of particular interest to Sankey. Alphanumeric pagers can display a brief message, telephone number, and name of the person sending the page, enabling people to receive important information even when there isn't a telephone nearby.

While taking a course at RIT on wireless telecommunications, Sankey learned about the technology used by pagers.



Valuable lessons Sankey learns how to program a telephone from Carol Richardson, coordinator of RIT's telecommunications engineering technology program.

"You don't have to be hearing to talk on the telephone. I want to help deaf people improve their communication abilities to their maximum potential."

"Now I'm able to explain to potential customers exactly how pagers work," he says. "I'm better able to market the product because I understand it."

At RIT, Sankey made the most of his educational opportunities. Simulations in the telecommunications technology laboratory were an integral part of the program, enabling students to design, implement, and test telephone and computer networks. According to Richardson, Sankey worked hard, and in his last quarter, with only one required class left, he still took a full course load.

"This is indicative of his work ethic," says Richardson, "and it will serve him well in the future."

Keeping up with current and future telecommunications technology is important to Sankey, who reads various telecommunications trade publications and "talks" with professors and other professionals via the Internet computer network.

Eventually, he would like to work with a company to help set up a telecommunications network that would enable people to communicate with one

another and increase their ability to use computers. For Sankey, working on such a network would allow him to ensure that all employees enjoy equal information and communication access in the workplace.

"Telecommunications is the wave of the future," he says. "I want to help make deaf people more productive in their jobs by giving them the fullest advantages that telecommunications technology can provide." ■

Come look through my worldscope

by Jane Mullins



Toppling the invisible wall Jane Mullins takes a direct approach when it comes to communication issues.

Jane Mullins, career development counselor in the Center for Student Resources, describes herself as a soft-spoken woman who prefers gentle persuasion over direct confrontation when addressing conflicts with others. But four years ago, frustrated after another meeting in which some colleagues didn't sign consistently or didn't take turns when participating in the discussion, Mullins took a different approach.

"I felt a strong desire to educate people about Deaf culture and the communication needs of deaf people," she says.

Taking pen in hand, Mullins combined her love of writing short stories and her fascination with television's *Star Trek: The Next Generation* to write the following science fiction-style essay in which she invites hearing colleagues to step into the shoes of deaf professionals.

—Susan Cergol

I have this pair of antennas. They're located on top of my head; two purple, wiry lines with knobby ends. For a long time, they hung silent and immobile, upside down on either side of my head. I never knew anyone else who had antennas on top of their heads. And in my interactions with antenna-less beings, I just kept those antennas out of sight and mind. Bumping one day into my antenna-less friend XP, she says to me, "Hi, WV, how xyrtvw you xrtysd?" I think to myself, oh she's asking how I am.

"I'm doing pretty good for such a blue Monday. How 'bout you?"

"Xrytpbm good—but xrytwm fell down xrrdgm."

Who the heck fell down, I silently wonder.

She continues, "ZT xrydtrbm doctor xmghtr xmptrws bed."

Oh yes, her husband ZT must have hurt himself somehow, never mind the details.

"Gee, I'm sorry," I say. "I hope he feels better real soon."

My life continued this way for some time. Then one day, I ventured into this strange world. For the first time ever, I saw other beings with antennas! Egad! Wiry lines with knobby ends just like mine. One thing struck me as strange. The antennas on these other beings were standing upright on top of their heads, and even

more oddly, while deep in conversation, these antennas were in constant motion—crisscrossing, flip-flopping, twirling here and there.

Then it dawned on me. I could use my hitherto silent antennas to communicate! It took me a while to bring life to these limp, inactive antennas. But I did it. And my life completely changed. Conversations became completely intelligible: "Hey, WV, did you know they're predicting a sunspot storm tonight?"

"No, I didn't. What time?"

"Approximately 15:08. Better get ready for it!"

New worlds continued to open up for me. Then I became a sheptonian, which involved working with both *I* who use their antennas consistently and all the time, and *X* who could choose to communicate with or without their antennas. I found this latter trait queer.

I'd walk along the halls and find *X* huddled in conversation, their antennas very silent. I did not understand enough to know if I could join them. It was as if an invisible wall existed between these *X* and me.

Even more oddly, in meetings that included many *X* and only one or two *I*, I'd find different *X* having earnest conversations among themselves without using their

antennas. Although these conversations seemed interesting, not one pair of antennas would move. Then when the meeting began, all the antennas would spring to life. Sometimes more than one pair of antennas would be "talking" at the same time, and I'd miss half the information. Other times, one pair of antennas would begin twirling before I'd have a chance to connect with the previous pair of antennas.

"We need to do an atmospheric study on Mars IV," one would say. Then before I could even blink one eye, I'd find the next speaker concluding, "...been contacted and will begin the process." Something is wrong here, I'd think to myself. In an exciting world where information is finally accessible to me, I'm still not getting it all.

Then the meeting would end. And immediately, all these hitherto active antennas would drop to the sides of the *X*'s heads, and that "invisible wall" would go up between these *X* and me.

How would you feel in my place? ■

Students with Usher Syndrome enlarge their field of vision

Independence Redefined

by Beth M. Pessin



Tunnel vision Students with Usher Syndrome experience gradual loss of peripheral vision, caused by retinitis pigmentosa (RP). The visual field of those with severe RP looks something like this—as contrasted with normal vision, inset.

Thirty-year-old Jelica (Bruer) Nuccio's independence is by her own design. Deaf since birth and faced with progressive vision loss, she's made most decisions related to significant aspects of her life—where to live, which career path to choose, and what leisure activities to pursue—to maintain her autonomy.

For Nuccio, a 1988 RIT graduate who earned a bachelor's degree in biology, independence is a concept she continually redefines and firmly protects.

During spring quarter, Nuccio shared her journey toward independence with a small but focused group of NTID students. Those 17 students, like Nuccio, have Usher Syndrome, a genetic condition that combines congenital deafness with progressive vision loss caused by retinitis pigmentosa (RP).

RP, a degeneration of the retina, causes night blindness and gradual loss of peripheral vision, leading to tunnel vision—often described as being similar to looking down the barrel of a gun.

The extent and rate of progression varies among individuals. For some, RP may lead to total blindness. Most people with RP are legally blind by age 40, with a central visual field of less than 20 degrees in diameter.

In Nuccio's case, her vision began deteriorating gradually when she was a teenager, but the slow change did not have a considerable impact on her lifestyle. She remained active on several high school sports teams and participated in school clubs. During the next

Planning for the future Alumna Jelica Nuccio currently works as a lab technician, but she is preparing for a career in public health, a profession that does not rely as heavily on visual acuity.



few years, her visual field continued to narrow, and in 1983, the same year she started college, her condition was diagnosed as Usher Syndrome.

Today, Nuccio has virtually no peripheral vision and severely limited central vision. Her changing vision has altered her perspective on independence, an issue she discussed candidly with students in April.

"I gave up driving a car, certain job choices, and participating in team sports, but I found many alternatives for independence, such as living in Atlanta, which has a lot of public transportation," says Nuccio, cytogenetic specialist at Emory University's Genetics Laboratory.

"I am also changing my career path," adds Nuccio, who is pursuing a master's degree in public health at Emory University. "My current position requires a lot of vision work, and my [changing] vision will not bring me any guarantee of job security. I have some residual vision, and I want to take advantage of this time to prepare for my future."

Nuccio's presentation was one of several activities organized in April by Patti Lago-Avery, career development counselor in the business counseling services department, to educate students, their teachers, support personnel, and peers about Usher Syndrome. About 75 students, faculty, and staff members attended the events, which were the result of NTID Dean James DeCaro's recommendation, based on the strategic plan, that the Institute improve support to students with Usher Syndrome.

Many of the students who attended the workshop learned that they have

Usher Syndrome only within the last few years. Because of the condition's progressive nature, it usually is not diagnosed until individuals are teenagers or young adults. According to Dr. Donald Johnson, audiologist and manager of NTID's Eye and Ear Clinic, eye problems such as loss of peripheral vision often go undetected because routine eye examinations only check central vision.

As a result, many of the NTID students who have Usher Syndrome just now are beginning to learn what it means to have the condition.

Tom O'Brien, fourth-year student from Sodus, New York, participated in the events because he wanted to share his experiences with others. O'Brien learned that he has Usher Syndrome when he returned to college in 1990 to pursue a bachelor's degree in RIT's imaging science program. After receiving an eye exam by Johnson, suspicions arose that O'Brien has RP, and possibly Usher Syndrome.

Since he was a teenager, he has had night blindness, and in recent years, O'Brien, an avid volleyball player, noticed that he increasingly had been missing ball returns during the game. He also realized that he had been having difficulty finding things and that he frequently bumped into furniture and other stationary items.

But because his change in vision was so subtle, he had been adjusting without knowing it.

After evaluating O'Brien and finding "blind spots" in his visual field, Johnson arranged for further evaluations at the University of Rochester Medical Center. Those exams confirmed Johnson's suspicion.

"I tried to prepare myself [for the outcome]," says O'Brien, "but I still had trouble dealing with it. At first, I tried to handle the situation by myself.... I kept busy with school and really put it out of my mind. But that first year after I was diagnosed, I experienced more vision changes, and that slowed me down."

Returning to college after working as an optical technician and living on his own for nearly eight years was difficult enough, but O'Brien's vision changes intensified the adjustment.

"In hindsight," says the 31-year-old, "I should have taken a year off because it wasn't an easy transition. I felt very isolated."

Like O'Brien, Melissa Berman, second-year student who participated in a panel discussion titled "Life With Usher Syndrome," wanted to talk about her experiences. She said that attitudes of others often can be barriers.

"People in high school didn't understand and didn't know how to respond when they found out that I have Usher Syndrome," says Berman, who was 19 when she received the diagnosis. "Now when I see friends, they say they feel bad for me. That makes me angry. All they see are limitations, but they need to know I am an independent person and that I can do anything. I am

Patti Lago-Avery
counselor in the
services depart-
ment learned about
Usher Syndrome
two years earlier
from her memoirs
about her life

The dark of night

First memories...I do not see well at night. I am about 15 or 16 years old when I realize this, but I assume that other people do not see well at night. After all, it is dark out there, right? Other things happen in the dark, but I make no note, nor do I talk about it. Just like other people, I do not see in the dark!

One of the earliest symptoms of retinitis pigmentosa (RP) is night blindness, which is caused by a deterioration of the retina, a delicate tissue in the eye that contains cells that capture light and transmit signals to the brain, where "seeing" actually occurs. Night blindness can be a symptom of a number of retinal disorders, and deaf people experiencing the condition do not necessarily have Usher Syndrome. Evaluation by an expert is required.

Out of place

I am 22 years old and living in a college dorm. I start to notice that I do not see things on the floor. I am falling over things that my roommates leave lying around. This is happening a lot and I wonder why.

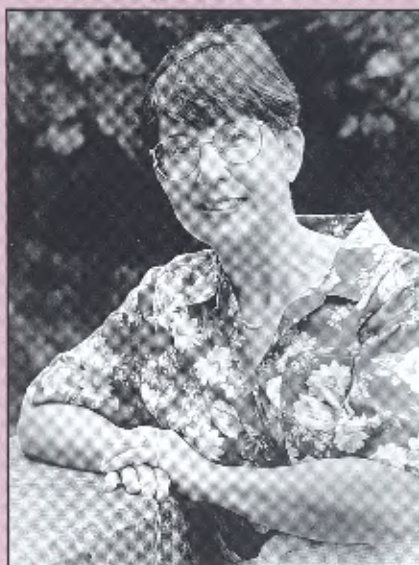
Over a period of years, people who have Usher Syndrome gradually lose their peripheral vision, resulting in "tunnel vision." Some people eventually lose their central vision.

Eye examination

At my yearly eye examination, I tell the doctor about not seeing things on the floor. After conducting a crude test to check my dark adaptation ability, he takes me to his office and tries to talk to me about my vision. He gives me a very fat medical book to read. I read medical terms about vision, none of which I understand, except the word BLIND. I become fearful, my heart is beating fast...I ask the doctor if I am going blind. Oh no, he assures me and pats my hand. Then he writes two words on a piece of paper and hands it to me. It says "retinitis pigmentosa."

RP is the name given to a group of inherited diseases, Usher Syndrome among them, that affect the retina.

Memories—Vision



Patti Lago-Avery

Suspicions

During winter semester 1973-74, I take a graduate course called "Hereditary Deafness" and am required to research and write a paper on some type of hereditary deafness. By an ironic twist of fate, I choose Usher Syndrome as my theme. While doing the research, something clicks. Many of the symptoms related to Usher Syndrome match my experiences. I'm reading about deafness and retinitis pigmentosa...what is it about those words...where have I seen them before? Slowly it dawns on me, did I see those words on the paper the doctor handed me two years earlier? I cannot remember clearly. I'll call my mom.

There are two forms of Usher Syndrome: Type I, in which individuals are born profoundly deaf and experience problems with balance, and later begin to exhibit the first signs of RP. Individuals with Type II experience moderate to severe hearing loss at birth but do not have balance problems. They usually begin to experience signs of RP as teenagers.

Depression

During my first year in graduate school, I enter a deep depression. I do not attend classes. I do not see friends. I stay in my room and cry a lot. My friends reach out to me...one friend gives me In Search of Serenity, a book written for people in recovery programs but valuable to anyone dealing with grief and emotional pain. I read the book straight through...it spoke to my heart and my pain...it gave me the will to take one day at a time.

It's important to recognize that people who have Usher Syndrome are individuals and go through different stages of grieving and acceptance at different points in their lives. You can be a friend by listening and being supportive.

Teaching

In the fall of 1980, I start working in a new department at NTID and in my first department meeting, I tell others I have Usher Syndrome. I explain what they can do to make communication more effective with me and how to get my attention. Reaction is positive, so I decide to take another step and tell my students. During the first day of class, I talk about communication needs in a straightforward manner. At the end of the quarter, I also ask students for feedback on the teaching evaluation forms to see if they think my vision [restrictions] interfere with my ability to teach...I do not want my needs to override the students' needs. It has been 13 years since I have begun asking for this feedback, and to date only one student has given me a negative response.

Communication tips: To make the visual field larger for a person who has Usher Syndrome, it is best to stand at a distance. Sign in a smaller frame of space. Do not touch the person's shoulder to get his or her attention. Do not entertain your friends who have Usher Syndrome in dark places, such as darkly lit restaurants or clubs. Do allow the person to be independent.

W

ith shiny black tap shoes safely tucked inside a cher-

ished plastic carrying case and leotard and tights hugging her body, a little girl in the early 1950s dashed into a St. Louis studio for the start of her beloved weekly dance class.

For 10 years, the girl's immersion in a world of grande pliés and kick-ball-changes brought her boundless joy. She adored copying the graceful dance master's movements. And on recital day, she and her buddies giggled backstage as they adjusted their magnificent sequined costumes before showing off their talents to beaming moms and dads.

But when the girl turned 16 and envisioned a professional dance career, she was told that she could not pursue that goal because she is deaf. With no deaf role models available to support her, the girl sadly abandoned her dream.

Many years later, when she learned that a deaf woman named Frances Woods had danced her way across U.S. dance halls and night clubs from the 1930s to 1950s, her initial anger was replaced by a fervent commitment to help other deaf women discover their roots and realize their goals.

"I wish I had known about Frances Woods as a young girl," says Vicki Hurwitz, the would-be dancer-turned-student development educator in NTID's department of student life. "I wanted the right to dream like everyone else."



As part of her graduate studies in RIT's career and human resource development program, Hurwitz turned her personal memories into positive action for NTID students by creating the Institute's—and the country's—first "Deaf Women's Studies" course. The three-credit general education class was first offered in spring 1993.

In addition to her personal confrontation with a significant attitudinal barrier, Hurwitz was motivated to develop this course for other reasons as well.

While teaching NTID's "Deaf Heritage" course in 1992, she noticed a lack of information in the curriculum about deaf women's achievements. And from numerous conversations with female students, Hurwitz, long active in women's organizations, was struck by the students' limited knowledge of their deaf foremothers and contemporary concerns that pertain to all women.

Matching a need with a creative solution was a joyful experience for Hurwitz.

"Unlike teaching a section of the established 'Deaf Heritage' course, teaching 'Deaf Women's Studies' is more



Learning on and off campus Top, students read about Dr. Helen Brooke Taussig at the National Women's Hall of Fame; middle, Hurwitz displays with pride a "Rosie the Riveter" plaque given to her by her students; bottom, class member Nicole Montagna makes a presentation about an inspiring deaf New York City artist.

Help Wanted: Models for Choice

Lawyer, physician, civil engineer—are these careers typically pursued by deaf women?

No, says Janet MacLeod-Gallinger, research associate in NTID's Center for Postsecondary Career Studies in Deafness. Published in the *American Annals of the Deaf* (October 1992), her study of nearly 2,500 deaf female high school graduates and their career decisions shows that while women continue to expand their range of career choices by venturing into "nontraditional" occupations, deaf women still are more likely to become office workers, teachers of deaf children, or social workers.

"Deaf women continue to pursue a relatively narrow range of college programs leading to stereotypical female careers," says MacLeod-Gallinger, a 13-year NTID veteran.

She believes that a shortage of role models largely is responsible for deaf women's limited career choices.

"Girls and young women are influenced more by what they see than by what they're told," she says. "If a young deaf woman never sees a female engineer or physicist, it may be difficult for her to aspire to that goal."

To help remedy that situation, the Institute has implemented a number of new recruitment strategies. Starting this year, NTID's Summer Vestibule Program (SVP) has been modified to require that new students sample all academic programs before selecting one, as a way of

exposing female students to a variety of career options.

As part of the sampling experience for construction technologies programs this year, for example, students viewed a videotape that profiles two female and two male alumni of the civil and architectural technology programs. And faculty members like Sandra McGreevy, adjunct instructor in the civil technology program and a professional structural engineer, presented career information to students.

"There are plenty of job opportunities for women in technical fields," says McGreevy, who teaches structural design and drafting to third-year students.

"Ideally, young women should prepare for these careers by taking math and science courses in high school, but if they don't, we still can get them 'up to speed' once they enroll at NTID."

Other instructors share McGreevy's perspective.

"As a technologist and father of a daughter and two sons, I'm very sensitive to the societal forces that influence career choices according to gender," says James Jensen, chairperson of NTID's department of construction technologies. "I influenced my sons in developing early interests that led them into technological careers, and I've consciously attempted to provide similar experiences for my daughter. I want her to know the fun of technology and to feel capable of pursuing a technological career if she wishes."



Sandra McGreevy



Juliette Gordon Low

satisfying because it is *mine*," says the seven-year NTID veteran with pride.

The most recent class last spring consisted of 15 students, including two males and one hearing female. The course featured material about historic deaf women as well as presentations by guest speakers on topics such as empowerment, women's organizations, perspectives on women's changing roles in society, and deaf women in education and the arts. Reading material used in class included *The Empowered Woman*, by Dr. Riki Robbins Jones (1992), and *Deaf Women: A Parade Through the*

Decades, by Mabs Holcomb and Sharon Wood (1989).

From the first class to the last, as students moved from sharing their professional goals, dreams, and frustrations to debating the pros and cons of abortion rights, class members grew as individuals and as friends.

"If we can turn to our history and learn about deaf women's past contributions, then we can find the power within ourselves to do anything," says former class member Elke Pieters, 1994 medical laboratory technology graduate who envisions a career in medicine. A

self-starter, Pieters initiated a team class project that involved videotaping 20 NTID students as they expressed their views on women's career opportunities and equality between the sexes.

"This class has helped me make a long list of deaf women I can look up to," adds Angelina Arellano, second-year student from El Paso, Texas, and a founder of NTID's newly organized Deaf Womyn Students' Network.

The course was particularly interesting for Nicole Montagna, the only hearing class member, who is a student at the State University of New York

College at Geneseo. Montagna, a third-year sociology student, received special permission from Hurwitz to enroll in the class because of her interest in women's issues as well as her ability to converse in American Sign Language.

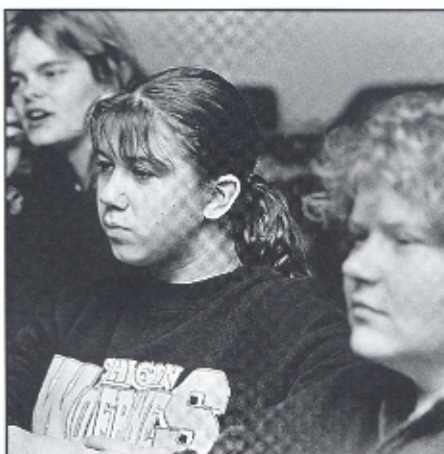
"Deaf women are caught in a bind," Montagna wrote in one of her essays. "They experience the marginalization of being deaf in a hearing-controlled society and the experience of being women in a patriarchal society.... On a societal level, there is slowly but surely more recognition of Deaf culture and an evolving consciousness about deaf women's issues, which hopefully will foster activism and progression."

And, when asked to make a presentation about a deaf woman whom he admires, Ryan Biser selected his 22-year-old sister, Robyn. Biser, third-year printing production technology student, described how the "rebellious young woman" bought a one-way ticket to travel from the family home in Stuarts Draft, Virginia, to California, where she volunteers as a "buddy" for people with AIDS.

"This course has helped me realize how much I look up to my sister," he says. "She can do anything she sets her mind to."

One highlight of the academic quarter, according to the students, was a class trip to the National Women's Hall of Fame in nearby Seneca Falls, New York, the birthplace of the U.S. women's rights movement. Without revealing their identities, Hurwitz assigned the students to search for the museum's three deaf inductees.

The students readily spotted Helen Keller, famed advocate for the rights of people with disabilities, and Juliette



Learning from one another Class members, from left, Elke Pieters, Irene Jazowick, and Michelle Lennert, listen as a fellow student makes a presentation about a famous deaf woman.

Gordon Low, founder and first president of the Girl Scouts of America. But the third accomplished woman was more difficult to locate because her exhibit's description did not mention that she was hard of hearing.

That woman is Dr. Helen Brooke Taussig, former chief cardiologist at The Johns Hopkins School of Medicine, who co-developed a surgical technique in 1944 to correct heart defects in babies whose skin color was blue due to lack of oxygen in the blood. Throughout adulthood, Taussig progressively lost her hearing and used a stethoscope attached to a large black box to amplify the sound of her patients' heart beats.

Hurwitz had a personal interest in locating this individual in the women's museum.

At age 7, she was operated on at Johns Hopkins by Taussig's partner for a congenital heart defect that, without correction, would likely have killed her by her late teens. Hurwitz and her parents spent considerable time with Taussig prior to her surgery.

After locating the cardiologist's display, the group prepared to board RIT's minivan to return to campus. Before they left, though, the students surprised Hurwitz with a gift: a plaque of "Rosie the Riveter," tireless factory worker during World War II, inscribed with messages of thanks to their teacher for offering the "Deaf Women's Studies" course.

Feedback from students—solicited by Hurwitz—included suggestions to enhance the course with additional theory and examples of successful deaf women

as well as guest presenters with more diverse backgrounds and lifestyles.

Eager to respond to these suggestions when she teaches the course again, Hurwitz also is committed to augmenting students' year-round exposure to deaf women role models on and off campus. Last year she suggested a campus visit by Marilyn Smith, executive director of Abused Deaf Women's Advocacy Services, who encouraged students to recognize and protest violence against women.

Clearly, Hurwitz's efforts are bearing fruit.

"Vicki and the classroom guest speakers made me realize that I should not be afraid to try anything," says Claudine Wanzer, third-year business technology student. "If I encounter any barriers, I won't be afraid to fight for my rights or ask others for support."

Although forced to part with her dream of becoming a professional dancer, Hurwitz—national vice president of Deaf Women United, recent recipient of the first "Deaf Woman of the Year" award from Deaf Women of Rochester, and presenter at an April deaf women's conference in Atlanta—still is dancing and dreaming.

"If I can help enhance the path to a brighter, barrier-free future for young deaf women," says Hurwitz, "then I'll be happy." ■

POINT OF PROMISE

by Kathleen S. Smith

*(Inter)National Technical Institute for the Deaf
welcomes students from around the world*



Worldly greeting Admissions recruiter Patricia Billies, left, welcomes incoming students Jagadish Dawadi of Nepal, center, and Rashmil Saxena of India.

After nearly two years of struggling to gather money for college, Sindile Mhlanga of Zimbabwe learned in the summer of 1993 that he had been awarded a financial scholarship to NTID.

Within two weeks, he lined up his passport, visa, and airline ticket and embarked on a journey halfway around the world. All he knew about NTID

were the words and images that he had seen in a college catalog sent to him by his speech therapist's sister, who lived in Pittsburgh. He felt certain, however, that NTID was the right choice for his college education.

"I carried the NTID catalog wherever I went, reading and wondering about life at NTID," recalls Mhlanga, second-year business/computer science student.



Just bikin' around South Africa's Karl Reddy, far right, enjoys campus life at RIT.

"When I arrived, I even met some of the students whose pictures I had seen in that catalog. I had read it so often that I knew their names and recognized them when I arrived!" he says.

Mhlanga is one of a growing number of deaf international students who have had the opportunity to benefit from NTID's educational programs since the Institute began accepting students from other countries in 1990. When NTID and the federal government in 1989 agreed upon an arrangement to allow NTID to admit international students, admissions recruiters began the task of identifying, recruiting, and admitting qualified applicants.

Most in that first group of students were from Canada, but in recent years NTID has accepted students from Belgium, Bolivia, Cameroon, England, Hong Kong, India, Japan, Nigeria, Saudi Arabia, Singapore, South Africa, Taiwan, and Yugoslavia. In the fall of 1994, a total of 78 international students were enrolled at NTID.

Their journeys to NTID often are grueling—both literally and figuratively—and the challenges that await them when they arrive are substantial. Many have never used sign language, let alone American Sign Language; some are overwhelmed with the academic standards; and most experience pangs of homesickness. All, however, express appreciation that they have been given

"My presence at the Institute has added another piece to the colorful mosaic that is NTID."

the opportunity to study in a new environment, one that welcomes their differences, ideals, and cultural nuances.

Mhlanga remembers feeling the cultural gap the moment he arrived at NTID. International admissions recruiter Patricia Billies also remembers Mhlanga's arrival.

"Sindile arrived on a hot summer day," Billies recalls. "He was supposed to have been accompanied from New York's Kennedy Airport, but instead he arrived alone. I was scrambling, lining up different people to help him out that day."

Mhlanga since has settled into college life, something that was not possible for him in Zimbabwe.

"I was rejected from our two national universities because of my deafness," he recalls, "and a promised scholarship to a university in England never materialized. So I was thrilled to be accepted at NTID and to receive a scholarship."

Being a student in a foreign country "has its challenges and rewards," Mhlanga says. "I've had to adapt to a different culture, learn American ways, learn to live with people of different ethnic affiliations...and learn to live with constant thoughts of home. I miss my family and friends a lot. I think that going home during the summer helped me come to terms with being thousands of miles away."

Perhaps the biggest difference that Mhlanga has found is in the amount of interpreting, notetaking, and other services available at RIT. He also is impressed with the "excellent equipment—computers, TTYs, etc.—that NTID has."

"My presence at the Institute has added another piece to the colorful mosaic that is NTID," says Mhlanga.

"Other students have asked me many questions about my country, and it makes me happy to tell them how I live in Zimbabwe.

Making International Friends

"I like to think that I am not just a student," Mhlanga adds. "I am a traveler on a journey of a lifetime."

Karl Reddy is on a similar journey. But Reddy, a native of South Africa, had one advantage: he already was attending school in the United States when the time came to consider college options. Reddy, second-year business/computer science student, was a student at Boston's Horace Mann School for the Deaf when he first learned about NTID.

"South Africa has no programs for deaf students at the college level," Reddy says. "Without a college degree, I faced a factory or 'low-skill' job at home."

It was Robert Menchel, an NTID faculty member on leave of absence to study at Harvard University, who convinced Reddy to consider NTID.

"I was already accepted at Gallaudet and at another community college," says Reddy. "But RIT has programs that connect with my interests, and I was offered a [Sasakawa] scholarship."

Reddy is impressed with NTID's services for deaf students as well as with its faculty members.

"Before I came to RIT, I never had a deaf teacher," he marvels. "Here, I feel like an equal."

Reddy has immersed himself in student life at RIT. He is a member of both the Dean's Student Leadership Advisory Group and NTID Student Congress. He also works in the school cafeteria and as a student tour guide, and he serves as a host student when Japanese students visit the Institute.

"I love to learn from all of these experiences," he says. "I also love to share things about my country, because I am proud of my culture and will keep it in my heart forever."

For Giuseppe "Pino" Martino, coming to NTID meant the culmination of

Driven by the creed, "The world is one family: All mankind are brothers and sisters," the Sasakawa Foundation of Tokyo, Japan, has given \$2 million for endowment to NTID in support of scholarships for international deaf students.

The Ryoichi Sasakawa Endowment Fund was established in July 1993 through a donation of \$1 million to enable deaf international students, particularly those from developing countries, to pursue postsecondary studies at RIT through NTID. A second agreement between the foundation and NTID was announced in March 1994, with another \$1 million gift added to the Sasakawa fund.

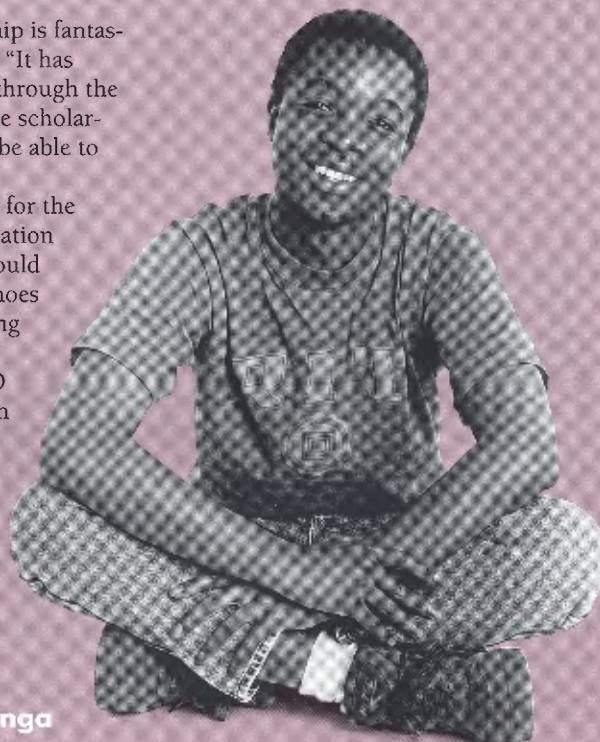
The first two recipients of the NTID scholarships are business/computer science students Sindile Mhlanga of Zimbabwe and Karl Reddy of South Africa.

"My scholarship is fantastic," says Reddy. "It has helped me a lot through the year. Without the scholarship, I wouldn't be able to attend RIT."

"If it were not for the Sasakawa Foundation scholarship, I would not be here," echoes Mhlanga. "Getting this scholarship shows that NTID has confidence in my successfully completing my chosen field of study. I am striving to live up to everyone's expectations of me."

The Sasakawa Foundation was founded in 1962 under Ryoichi Sasakawa's initiative to promote world peace through the support of humanitarian efforts, including educational programs. It supports activities worldwide in a range of areas, including social welfare, academic and physical education, health, population control, agricultural and rural development, human rights, environmental issues, hunger relief, and refugee aid. It assists organizations both inside and outside Japan.

Says Kozo Tomabechei, member of the Sasakawa Foundation's board of directors, "We hope that the RIT Sasakawa scholars will devote themselves not only to their own countries, but to the entire world as well, with global-minded behavior."



Sindile Mhlanga



A friend, indeed Susan Joseph of RIT's Center for Student Transition and Support, second from left, enjoys her work with international students.

several years of dreaming coupled with his determination to be admitted to the Institute. RIT's appeal for Martino, fifth-year civil engineering technology student from Canada, was rooted in the sign language interpreting, notetaking, and tutoring services offered. He had to convince his vocational rehabilitation counselor that NTID was a good choice for his education, since a local community college offered a much closer-to-home alternative.

But when Martino outlined the services available at NTID and his concerns about going through a program without such services, he got the green light to pursue his interest in NTID.

Like Reddy, Martino has taken advantage of extracurricular opportunities at RIT. An avid sports enthusiast, he enjoys the friendships that he has formed with the other Canadian players on his hockey team.

While Martino indulges his passion for hockey, Renaat Van Hende of Belgium pores over his computer. The fourth-year computer engineering student acknowledges that it was RIT's program in this field that attracted him to the Institute.

"I was very fortunate to be an RIT student. I had wonderful support from my academic department as well as from the international student affairs office."

Van Hende by nature is the kind of person who checks out every option, so when he began looking at colleges in the United States, he applied to several. He was accepted at Gallaudet University, California State University at Northridge (CSUN), and NTID.

"Neither Gallaudet nor CSUN had the specific program that I wanted," he

says. Although the warmer California climate was attractive to him, his father said, "Go to Rochester—the cold weather will force you to stay inside and study!"

Van Hende says that RIT's baccalaureate program is a good choice for him.

"I'm quite satisfied with the challenge of computer engineering," he says.

Van Hende has spent the past two summers serving as a Peer Advisor Leader for new deaf international students during NTID's summer orientation program, says Susan Joseph of RIT's Center for Student Transition and Support.

Joseph, like NTID's Billies, helps international students with issues related to making the transition to college life in the United States, including assisting with visas and other immigration details, discussing work options, and providing a general orientation to RIT.

"Working with students like Renaat is very exciting," Joseph says. "It has offered me a unique dimension of cross-cultural understanding that I wouldn't be able to experience otherwise."

Joseph remembers well two of NTID's first deaf international graduates: Miho Ihara of Japan, who received her associate degree in medical

record technology last spring; and Kim Hungerford of Australia, who received her bachelor of fine arts degree in industrial design from RIT in 1989.

Both women had experience with American culture, having lived in the United States for several years before attending college.



Helping hand Renaat Van Hende of Belgium, left, serves as a Peer Advisor Leader during the Institute's summer orientation program to help new international students adjust to life at RIT.

Ihara, who holds the distinction of being the first deaf international student enrolled at NTID, came to pursue her dream of a career in a medical field.

"I had a wonderful experience at NTID," she says. "My program was excellent, it matched my needs perfectly, and I found that the teachers were very friendly and encouraging. I studied hard, but I also had a good time."

Hungerford, coordinator and adjunct instructor in the interpreter training program at Cowley County Community College and Area Vocational-Technical School in Arkansas City, Kansas, attended the Colorado School for the Deaf and the Blind before coming to NTID. Her "green card" status enabled her to pursue studies at NTID one year before the Institute officially began accepting foreign students in 1990.

Hungerford's mother, a teacher of deaf students in Melbourne, belonged to an organization for hearing parents of deaf children.

She and her mother visited all of the schools that she was considering while Hungerford was still in secondary school. She was accepted into an exchange program through her secondary school a year before she came to RIT.

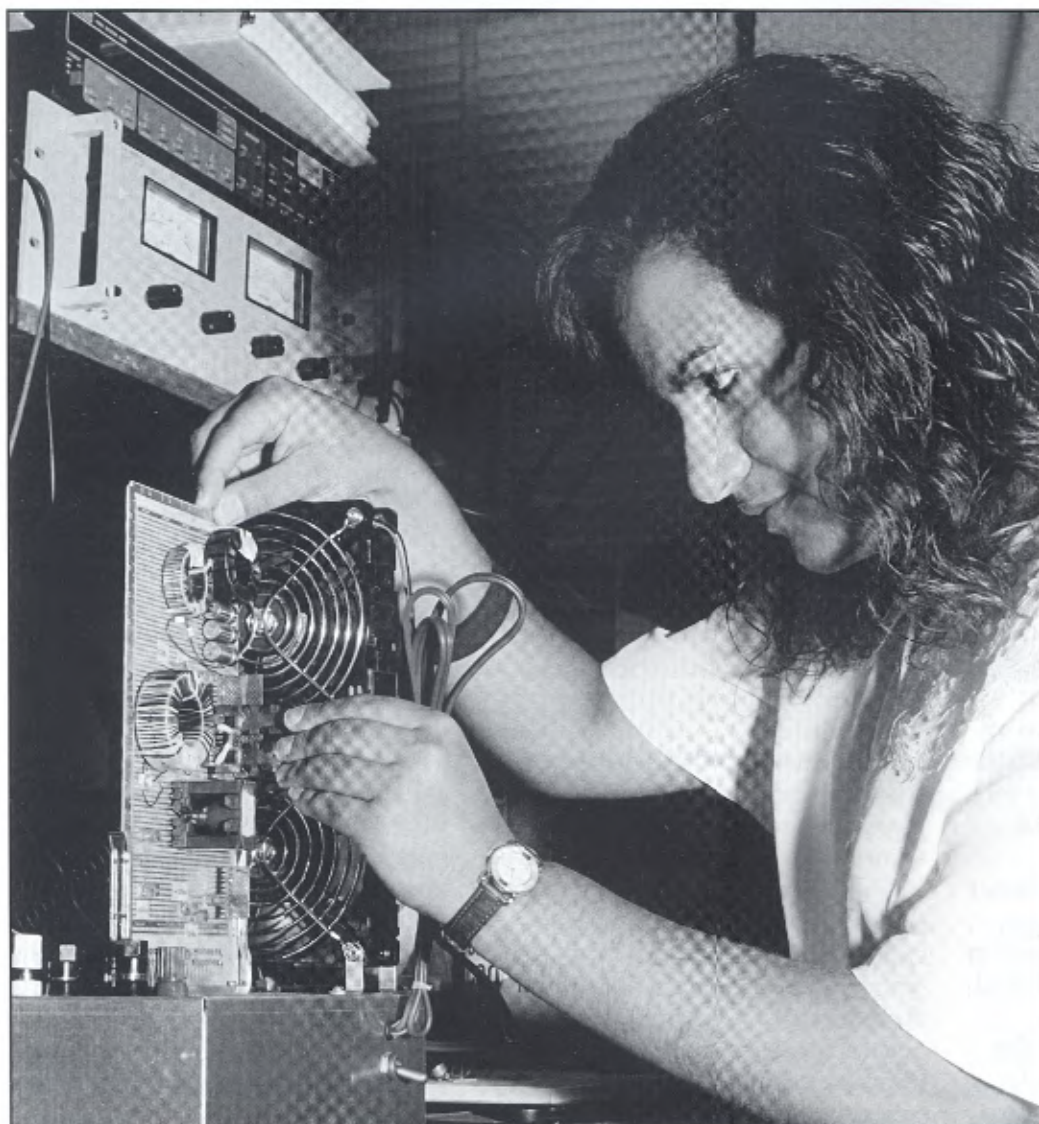
"I was very fortunate to be an RIT student," says Hungerford, reflecting on her college experience. "I had wonderful support from my academic department as well as from the international student affairs office. Many people helped me get through my college years."

According to Dianne Brooks, manager of NTID's department of recruitment and admissions, the Institute plans to continue to increase the number of international deaf students over the next several years (to a maximum of 10 percent of the student population as limited by the U.S. Education of the Deaf Act). This will allow deaf students from around the world the opportunity to earn a quality education while enriching the NTID community.

"International students have brought a rich array of ethnic, language, cultural, religious, and geographic backgrounds to NTID," says Brooks. "The presence of international deaf students has contributed much to the overall quality of campus life." ■

NASA job is down to earth

by Kathryn Schmitz



Namrita Kapur

Although Namrita Kapur, 25, didn't consider being an astronaut when she was younger, she now hopes to send some of her engineering designs out to space. Kapur, who last year became the first deaf woman to graduate from RIT's electrical engineering program, now works for the U.S. National Aeronautics and Space Administration (NASA) in Greenbelt, Maryland, designing equipment for spacecraft.

In high school, Kapur was interested in architecture. But she realized that industry demand for engineers and technicians was growing even more rapidly.

"I decided to major in engineering even though I knew very little about the field," she says. "I wanted to have a challenging career that involves many different skills and offers plenty of job opportunities."

"Science and math were my favorite subjects in high school," she adds, "and I liked to work with tools and laboratory equipment."

In her current position with NASA's Goddard Space Flight Center, Kapur works with state-of-the-art equipment and techniques. Alongside her mentor,

James Bandy, chief engineer and contractor, Kapur is designing a low-noise power supply to be used on a spacecraft that will orbit the earth and make observations of x-rays originating from any location in the universe.

She currently is learning surface mount technology, considered the leading edge of electronics, which she and Bandy are applying in their design to reduce the power supply's size, weight, and noise. She also is becoming familiar with power electronics, an electrical engineering specialty.

"During the past year, I have seen Namrita learn to apply her classroom training in more practical ways," Bandy says. "She wants to learn as much as possible about the design process. My advice to her and other engineers is to be patient. Remember to break down a project into smaller, easier parts. If each part is still too complex, break it down further into smaller parts."

Working with Kapur, whom Bandy describes as a committed team player who learns quickly, has been a positive learning experience for him as well.

"I get practice using sign language because we are working on the same design," says Bandy. "Mentoring Namrita only requires learning a few new ways to communicate, and using sign language keeps my mind fresh."

Kapur's education at RIT prepared her for her current position by providing her with the fundamentals of electrical engineering. However, her motivation for entering the field, still populated predominantly by men, arose from the examples set by her parents. Her mother is a physician and pathologist; her father, a biomedical researcher and medical school professor.

"My parents, especially my mother, have been my role models for most of my life," says Kapur, who is from



Shooting for the stars Kapur, shown here with mentor James Bandy, is on a career advancement roll at NASA.

Rockville, Maryland. "They encouraged me to work hard and do well in school, and they emphasized that education is the key to success in a career."

Kapur's success at RIT is confirmed by Dr. Rosemary Saur, chairperson of the science and engineering support department, whose chief memory of Kapur is that she was "persistent and focused." According to Saur, Kapur did well in the more advanced engineering courses after a slow start in the program.

"She was upbeat and happy after her successes," says Saur. "She had some tough times and worked hard to get through them. Namrita has a great future ahead of her."

Now, Kapur is on a career advancement roll at NASA. After completing two cooperative work experiences there in

1991 and 1992 as part of her bachelor's degree requirements, she felt confident that she wanted to work in electrical engineering at NASA and began her full-time job in July

10 years. To supplement her current on-the-job training, she began graduate studies in electrical engineering at The Johns Hopkins University last summer.

"Eventually, I might like to teach engineering and mathematics to deaf college students," she says, "or move into private industry, or maybe even start a new business."

"I enjoy engineering," adds Kapur. "It takes a lot of hard work and patience, and it can be frustrating sometimes. Even though I occasionally had doubts about myself in some of my engineering classes, I was determined to complete the bachelor's degree, and when I did, it felt great!" ■

"Science and math were my favorite subjects in high school."

1993. She recently was promoted after completing requirements for the first level of a professional intern program, which included training and an oral project report. Kapur now is participating in the second level of that program in preparation for another promotion, for which she will submit reports on her current project.

Kapur's ambitious career goals include achieving technical expertise followed by advancement into a supervisory or management position within

Media beyond sight and sound

by Beth M. Pessin

From homefront to storefront, from boardroom to classroom, technology continues to have an impact on nearly every facet of our lives.

Today, NTID researchers and educators are among those who are developing myriad applications of technologies to improve accessibility and provide increased learning opportunities to the nation's children, youth, and adults who have hearing or vision loss.

These were among the hot topics discussed and investigated in Rochester, New York, last summer during the NTID-hosted conference "National Symposium: Educational Applications of Technology for Persons with Sensory Disabilities."

In 1993, NTID applied for a grant from the U.S. Department of Education to host the symposium in order to share its expertise and demonstrate the successes of technologies for students who are deaf. In addition, because approximately one-third of NTID's student population has significant visual impairments, researchers wanted to learn more about the needs of blind students and develop technologies that might benefit both groups of learners.

"The symposium was a tremendous challenge because we were trying to bring together two diverse groups, each



A new teaching tool Symposium attendees had an opportunity to get hands-on experience with new computer programs designed for students with hearing or vision loss.

with distinct but diametrically opposed needs related to accommodation," says Dr. Marcia Scherer, NTID instructional design and evaluation specialist and chairperson of the symposium program committee.

"We took the challenge and demonstrated ideally how to meet the needs of both groups," adds Scherer.

Among the technologies shared during the July 20-22 event were NTID's computer-aided speech-to-print transcription system (C-print) research project; an American Printing House for the Blind demonstration of Nomad, a computer program that enhances pictures, maps, and graphics for people who are blind by providing speech and tactile data; and a joint demonstration by NTID and Tsukuba College of Technology, a national college for deaf students in Japan, of an experiment in which the Internet computer network was used to translate language and exchange picture, movie, and sound information.

The symposium provided many clear examples of how people with hearing or vision loss can use technology and information systems effectively. The nearly 200 symposium participants, more than 30 NTID administrators, educators, and researchers among them, not only learned about technologies, but also had a chance to try them out firsthand, according to symposium coordinator E. William Clymer, associate professor in NTID's communication research department.

"Key aspects of the symposium, including presentations by the plenary speakers, were made available within hours to interested individuals throughout the country using technologies such as the Internet

computer network and satellite broadcasts," says Clymer. "Electronic mailings also were produced."

On site, various access services were available to meet the needs of the diverse group of registrants. These included sign language interpreters, assistive listening systems, real-time captioning, sighted guides, and materials printed in Braille and large print.

"This symposium itself was a good example of accessibility," says Dr. Lawrence Scadden, senior program director at the National Science Foundation's Program for Persons with Disabilities, who was one of the four plenary speakers. "I was able to get a Braille copy of the presentations shortly after they occurred. It's very rare that conferences make resources available in alternative formats," adds Scadden, blind since age 4.

A prevailing theme of the event was that alternative computer and multimedia formats

Within just a few decades, technology—mainly computers and information systems—has introduced new ways of learning, doing business, and communicating.

"We've moved from reliance on people as mediators—a labor-intensive situation—to machines and now to systems for communicating," says Dr. Frank Bowe, professor in the department of counseling, research, special education and rehabilitation at Hofstra University in Hempstead, New York.

Bowe, who is deaf, used his own experiences to illustrate his point. In the early 1980s, he did consulting work and relied on a full-time sign language interpreter to handle phone calls. Today, electronic mail (e-mail) and facsimile machines allow him to conduct business independently.

Advances in closed captioning technology also are changing the way information is made available, according to plenary speaker Philip Bravin,

Although such technologies have improved accessibility, they are not necessarily keeping up with the fast pace of the electronic information superhighway, according to symposium presenters. However, they agree that the groundwork is being laid.

"It's important that we have a cross-disciplinary, cross-disability focus to our efforts so that we can bring together people from varying backgrounds in different disability areas and try to work out common solutions that will allow access to these systems," says Dr. Gregg Vanderheiden, director of the Trace Research and Development Center at the University of Wisconsin in Madison.

To assist the U.S. Department of Education in policy decisions and direct emphasis of future grants, symposium participants completed recommendation surveys and took part in a one-hour session, from which approximately 80 recommendations resulted.

"We must advocate for universal designs that are accessible to everyone," says Scherer, who recently was named chairperson of the RESNA (an interdisciplinary association for the advancement of rehabilitation, assistive, and educational technologies) Special Interest Group on Disabilities.

"We need to ensure that when we create accommodations for some people, we don't limit access for others. Technology should not be a possible distraction to learning, but instead should be used to unlock and enhance individuals' abilities." ■

**Within just a few decades, technology—
mainly computers and information systems—
has introduced new ways of learning,
doing business, and communicating.**

such as those that are accessible to people with sensory disabilities can be enriching for everyone.

"Learning environments go beyond the classroom," explained Scadden during his presentation. "Laboratories, libraries, and community centers such as museums all provide opportunities for learning. And with modern technologies that provide such options as distance learning, new opportunities also are available in personal residences."

As symposium presenters explained, this buffet of options is increasing at an extraordinary rate.

president of the National Captioning Institute in Falls Church, Virginia.

Adaptive forms of captioning now being investigated include color captioning, in which different speakers are represented with distinct colors; multilevel captioning, in which users can select language levels appropriate to their skills; and multilingual captioning. Other adaptive captioning forms include decoding captions into Braille and varying the size or speed of captions to increase accessibility to people with vision impairments or individuals who cannot process visual information quickly.

Pam McClain

by James Graves

Refusing to make a choice can be more decisive and more courageous than making one. Not choosing one of two alternative paths but instead straddling them both may well lead a person on a most fortuitous journey.

Pam McClain, 26, opted not to choose between deaf and hearing worlds; instead, she lives and works in both. She chose not to ally herself exclusively with either the deaf community or the black community; instead, she claims dual membership and reaps the cultural benefits each offers.

McClain's particular brand of decisiveness contributes to her strength of character and enriches her work as junior career opportunities advisor in NTID's department of recruitment and admissions, a unit that seeks out and hires recent graduates like McClain.

"Recent graduates have a fresh perspective to share with prospective students," says McClain. "Telling them what I experienced gives them a sense of what college might be like for them."

A guiding principle in McClain's life is, "If you know where you came from, you know where you're going." She quotes that axiom often in what apparently is a personal reminder of who she is, where she's been, and what she wants from life.



McClain says that such personal convictions help her when she talks to young deaf people as they consider college options. Those convictions, however, were tested when she enrolled at NTID in 1987. A native of Brooklyn, New York, she grew up in a hearing environment as the only deaf child—among six—of hearing parents. McClain arrived in Rochester knowing no sign language and having only limited awareness of Deaf culture.

"Everything was culture shock," remarks McClain, who graduated last year with a bachelor's degree in social work. "But I wanted to learn more about myself, and NTID was the place for me to do that."

McClain's new-found self-awareness shows.

"Pam has a very calm personality that somehow generates a sense of strength and maturity beyond her age, even in times of great pressure," comments Dianne Brooks, manager of the recruitment and admissions department and McClain's supervisor.

Now, halfway through her two-year appointment as a traveling admissions counselor for NTID, McClain enjoys the two- and three-week stretches "on the road," telling students—and their parents and teachers—about the opportunities that NTID has to offer. Generally, a trip will focus on a particular geographic area, with visits to a number of schools, conferences, and other recruiting events.

The travel itself is enjoyable for McClain, who recalls with amusement her first solo recruiting trip to Canada. Unfamiliar with the difference between miles and kilometers, McClain thought that 100 mph speeds were permissible, and so she experimented with faster-than-usual driving and found it most exciting.

What enriches my life:

Reading black history, especially biographies and autobiographies of black women. I read a lot of books by women authors. These women have helped me get where I am now. I read African-American writers whose messages help me to empower myself.

Most valuable student experiences:

Working as a student leader in the Ebony Club, NTID's association of black and Hispanic deaf students, and my job as a tour guide with NTID's department of special events and visitations.

If I could influence one aspect of NTID, I would:

Increase the number of black students in the student body.

The best part of my job as a career opportunities advisor:

Working with students and knowing that I'm going to have some kind of effect on their college and career decisions.

"When a Canadian student explained the metric system to me," she says, "I was amazed that I didn't get a speeding ticket!"

Perhaps because of her adventurous spirit, McClain's presentations get rave reviews from school personnel whose programs she has visited. A teacher in a mainstream school in Illinois wrote, "Pam left the students and parents eager to know more about NTID, and she inspired a bright, unmotivated learner to work hard because he learned about a college that will meet his future needs."

Most satisfying to McClain is the opportunity to offer herself as a role model for young students, especially black deaf students. She is happy to find that such young people gravitate to her quickly, eager to find out about her experiences and enthusiastic to share their own.

"I'd like to do more recruiting in the South," she says, "where there are a lot of black deaf students who really might benefit from seeing a black deaf woman like me in an outreach position."

McClain's future is bright. Not only has she begun classes toward a master's degree, she is planning a wedding next year to Bronx, New York, native Devon Christopher, an RIT graduate who works for Citibank in Pittsford, New York.

"Even though I want a career, having a family is just as important," says McClain. "I want to balance career and family. Everyone needs balance."

True to form, McClain chooses not to choose. ■



Welcoming prospective students McClain has promoted NTID across the country and in Canada, as well as "at home" during the Institute's annual open house.

View from the inside

Reviewed by Dr. T. Alan Hurwitz

Train Go Sorry: Inside a Deaf World

Leah Hager Cohen

Houghton Mifflin Co., 1994

Train Go Sorry: Inside a Deaf World is a non-fiction account of life inside a deaf world from the perspective of Leah Hager Cohen, a hearing woman who was raised at Lexington School for the Deaf in New York City. Her father, Oscar Cohen, who grew up with deaf parents from Russia, made a lifetime commitment to educating young deaf children as superintendent of the school.

The book's theme, "Train Go Sorry," refers to the American Sign Language (ASL) idiom that describes how deaf people often miss out in everyday situations simply because they either didn't hear or understand a message or because nobody bothered to explain what was happening or what needed to be done.

As an example, the author cites the ordeal of James Taylor, a young black student from a poverty-ridden home who was provided with an education at Lexington, as he tried to take a simple audiological test for a new hearing aid. The welfare system gave him the runaround, which resulted in

repeated trips to a clinic for the test and nearly led to his being a candidate for cochlear implant surgery for the wrong reason.

Cohen also tells the story of Sofia Normatov, a young deaf Russian immigrant who wanted to complete her bat mitzvah ceremony against her mother's wishes. If not for the excellent support that these two students received from the Lexington School, they might have become undereducated, underemployed, or even unemployed, and thereby completely "missed the train."

I read the book with a mixture of emotions. The author is articulate in describing her family's experiences, which closely parallel my own.

Like Oscar, I, too, am the son of deaf parents. My father's parents also were from Russia and did not speak English. My father grew up unable to communicate with his parents. He didn't receive a formal education until he was 13 years old, when his parents learned about the Iowa School for the Deaf. Because of my father's deafness, his parents did not allow him to have a bar mitzvah. I also missed that opportunity because my grandfather "excused" me from it.

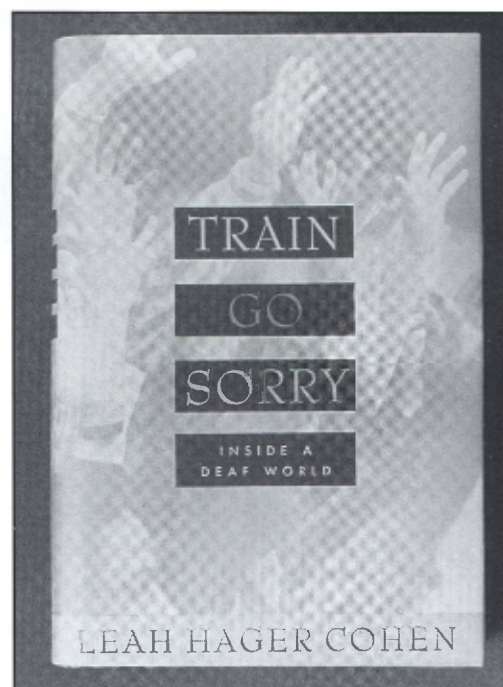
Things changed, however, when my wife, Vicki, and I finally "got on the train." We encouraged our son, who is

hard of hearing, to have a bar mitzvah, and we also provided opportunities for our daughter, who is deaf, to obtain a quality education at the Rochester School for the Deaf.

Train Go Sorry: Inside a Deaf World should be on the book shelf of everyone who wants to learn more about deaf people, Deaf culture, and ASL. This also is a timely book because of the current intense discussion about appropriate education for students with disabilities. Cohen describes the distinctiveness of a school for the deaf

as a fully inclusive environment and a viable educational placement option for many students. ■

Dr. T. Alan Hurwitz is NTID's associate dean for student affairs. In addition to his work at NTID, Hurwitz is the first deaf president of the Rochester School for the Deaf's board of directors.





Making the switch One-third of RIT's deaf students come to the Institute with college credit they've earned at other schools. Who are they and how do they feel about their decision to transfer to RIT? In the upcoming spring issue, you'll find answers to these questions as *FOCUS* looks at the lives of deaf transfer students on campus.

Photography by A. Sue Weisler



Rochester Institute of Technology

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

ADDRESS CORRECTION REQUESTED



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Courtesy The Wonder Dancers Woods & Bray

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