Numerous people from around the country and the world converged on Los Angeles in March for an international conference sponsored by Cal State Northridge and its Center on Disabilities showcasing how cutting-edge assistive technologies can help people with disabilities.

The 18th annual Technology and Persons with Disabilities Conference, held Monday through Saturday, March 17-22, is the largest gathering of its kind in the world, said Bud Rizer, director of CSUN’s Center on Disabilities.

This year’s conference featured a keynote address by inventor, entrepreneur and author Ray Kurzweil, who has developed a range of groundbreaking speech and character recognition products, and the international premiere of a new IBM multimedia theater presentation on accessible technologies.

“We are the largest and we are the only university affiliated conference of this kind in the world,” said Rizer. The conference is a showcase for presentations, displays and demonstrations of assistive technologies, those that can help people with disabilities (physical, sensory, communicative or cognitive) function better in their daily lives.

The event began Monday and Tuesday with 20 different pre-conference workshops. Then, the main part of the conference was held Wednesday through Saturday with more than 300 different presentations.

Like last year’s event that drew 4,200 participants, this year’s Cal State Northridge conference was held at the Hilton Los Angeles Airport Hotel and the Los Angeles Airport Marriott Hotel near Los Angeles International Airport.

Rizer said registrations for this year’s conference were booked from all 50 states and more than 100 countries, including more than 100 participants from Canada and more than 50 from Japan.

“Through the conference, we generate a tremendous amount of attention for the university and its range of programs for people with disabilities,” Rizer said. “There is also providing our students an opportunity to learn the best practices in this field, and we are bringing some of the best assistive technologies to campus for our students to use.”

The conference this year had presentations covering a wide range of topics, including how people with disabilities can access the Internet, the use of assistive technologies in the school setting, making accommodations in the workplace, and the presentation included a live exchange between himself and his “cyber-self” projected on the stage.

One of the world’s leading inventors, Kurzweil has been inducted into the National Inventors Hall of Fame and received the National Medal of Technology from President Clinton in 1999, the nation’s highest technology honor. He also invented the first CCD flatbed scanner, the first text-to-speech synthesizer, and the first print-to-speech reading machine for the blind.

Also on Wednesday, technology giant IBM unveiled its half-hour theater presentation on how accessible technology can help people with disabilities master their work environments. The presentation, “Shape the Future: Information on Demand,” combining a live show and multimedia elements, was performed hourly during the rest of the conference.

As in past years, this year’s conference also featured exhibit halls at both hotels displaying products and services from more than 155 vendors. The conference’s major corporate sponsors this year included IBM for the first time, America Online, Apple, HP, Microsoft, SAP, SAP America, SBC Communications, Sun Microsystems and Verizon. ■

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Cal State Northridge and Disabilities: Educational Excellence in Action

At California State University, Northridge, the learning process involves far more than just theories and ideas. Across the campus, the university and its 32,000 students—the professionals of tomorrow—translate ideas into hands-on learning and practical research and service that benefit the entire San Fernando Valley community and beyond.

Call it educational excellence in action. Within the university, dozens of specialized centers bring focused expertise to real issues and challenges facing society. CSUN faculty and staff help students gain the skills they need to become professionals in their fields, along the way often providing direct services to the public as part of the learning process.

This issue of Community @CSUN focuses on one special area of expertise and community service among many that exist at Cal State Northridge: using technology and innovation to improve the lives of people with disabilities, whether they be CSUN students, San Fernando Valley residents, or people across the nation and the world.

Among universities, Cal State Northridge is a national leader in disabilities issues in part because of three specialized centers. CSUN’s Center on Disabilities focuses on accommodations that make classrooms, workplaces and other venues accessible to people with disabilities. The National Center on Deafness focuses on how to help people who are deaf or hard-of-hearing. And the Center of Achievement for the Physically Disabled aims to restore mobility to those with physical impairments.

These three centers, each at the cutting edge of its unique specialty, exemplify the university’s strong tradition of community service and involvement—a top university priority affirmed by CSUN President Jolene Koester. Through service to people with disabilities, and in so many other areas, Cal State Northridge is educational excellence in action.
CSUN Pioneers Classroom Voice Recognition Software

Northridge is the Only U.S. University Serving as a Full Partner in the Liberated Learning Project

Cal State Northridge, because of its leading national role in using technology to help people with disabilities, is helping pioneer the next generation of classroom speech recognition software, which translates a professor’s lecture in real time into easy-to-read text on a large classroom display.

CSUN’s participation in the project, shared between the Center on Disabilities and the National Center on Deafness, is aimed at improving educational access for deaf and hard-of-hearing students, but also has value for many others, including those with learning disabilities, physical disabilities, international students and even those just struggling to keep up.

Bud Rizer, director of CSUN’s Center on Disabilities, said Cal State Northridge is the first American university chosen as a full partner in the Liberated Learning Project, and is the only U.S. university currently using the latest version of the pioneering computer software in actual classroom settings.

“We’re benefiting all students, we’re helping faculty and we’re bringing new technologies to the campus,” said Rizer. “And we’re doing it because of who we are at Cal State Northridge. We wouldn’t have this on campus if it weren’t for all the things the Center on Disabilities and the National Center on Deafness do beyond our on-campus roles.”

The Liberated Learning Project is a joint venture between computer software and hardware giant IBM, St. Mary’s University in Canada where the project began in 1998, and several other Canadian and Australian colleges/universities where the software system already is being used in classrooms. But in the U.S., CSUN is playing a leading role.

With the start of the spring 2003 semester, two CSUN professors, lecturer Ben Mallard in the Electrical and Computer Engineering Department and professor Donna Hardy in the Psychology Department, have begun working with the software. Both have completed the preparation process and started using it in their classes.

“I’m all for anything that’s going to help students who are somewhat at a disadvantage in the learning process, said Mallard, who is using the new system in his junior-level Electrical Engineering Fundamentals class with about 30 students. “Whatever I can do to help advance this technology, I want to do,” he said.

Rizer said the latest version of IBM’s software package has several advances over prior efforts, including that it not only delivers the text of a lecture onto a hard copy display screen in real time, but also later gives students online access to an edited/corrected written transcript of the lecture and/or the corresponding audio file.

For deaf students or those with learning disabilities, the classroom voice recognition system has the potential to supplement and/or substitute for sign language interpreters, real-time captionists or note-takers. For students without disabilities, the system can serve as a study aid by giving students a readily accessible transcript of the class.

At CSUN, Mallard had to “train” his IBM-donated ThinkPad laptop computer to recognize his speaking style and then add unique engineering vocabulary to his IBM ViaVoice recognition software. Then, by Mallard wearing a wireless microphone that transmits to his laptop, IBM’s NetScribe software manages the classroom text display and post-lecture editing.

Ben Mallard noted that each instructor’s computer, once trained, can only be used by that teacher, and that the pre-editing accuracy of the voice recognition system still needs improving. Thus far in class, some students have found the presentation display distracting, but more have found it helpful. “I think more students like it than dislike it,” he said.

The Center on Disabilities at Cal State Northridge

The Center on Disabilities at Cal State Northridge is known around the country and the world for its heralded Technology and Persons with Disabilities Conference. But center Director Bud Rizer believes many people still don’t quite know the full extent of the center’s many activities.

“If there’s one word that describes what we do, we ‘accommodate’ people with disabilities,” said Rizer, describing the center’s primary work in providing direct support services each year to about 825 Cal State Northridge students with disabilities, training others across the country how to do the same, and hosting the annual conference.

Although the CSUN Center on Disabilities was created in 1993, the university has been hosting the annual conference on technology and disabilities for the past 18 years. The university also began providing support services to students with disabilities in the early 1960s—before that became a federal mandate in the 1970s.

The center assists CSUN students with learning disabilities, students who are blind and who have physical disabilities. For a blind student, that might mean translating textbooks into audio files or Braille format. For students with physical disabilities, it could mean assistance with special adaptive devices.

And for all of its student clientele, the center means help with counseling, career planning and other support.

The center also operates a special accessible computer lab that is used to evaluate and train disabled students. (Accessible equipment also generally is available in the university’s regular computer labs.) And, the center proctors exams for students with special needs, handling about 1,500 exam takings each semester.

Off campus, the center offers weeklong summer certificate programs in assistive technologies, this year at four locations around the country, and presents specialized symposiums on detailed topics such as federal laws, computer access and assistive technology assessment.

The National Center on Deafness at Cal State Northridge

The National Center on Deafness (NCOD) at Cal State Northridge, continuing its long and rich tradition, is a national leader in providing services and expertise to the deaf and hard-of-hearing community. NCOD, in Southern California and across the country.

On campus, NCOD serves more than 250 deaf and hard-of-hearing students, the largest mainstream university population of deaf students in the western United States. Each Cal State Northridge student served by NCOD has access to services including sign language interpreting, captioning, note-taking, tutoring and academic advisement.

NCOD traces its origins to the early 1960s when the university became one of the first in the nation to admit deaf students to a mainstream higher education setting and likewise became the first to employ paid postsecondary interpreters.

Since then, more than 2,000 deaf and hard-of-hearing students have graduated from Cal State Northridge. Among its community activities, the National Center on Deafness played a prominent role in the creation of the first sign language Barbie doll, has arranged sign language story telling for community children and families, and has helped four CSUN students just since 1990 become Miss Deaf America title holders.

Nationally, under the leadership of Merri Pearson, the National Center on Deafness has been awarded two large federal grants and one cooperative agreement by the U.S. Department of Education that help spread NCOD’s expertise across the country:

❑ Roles Rights and Responsibilities, called 3Ss, works with deaf and hard-of-hearing students across the United States to empower them to take an active part in their postsecondary educational experience.

❑ The Western Region Outreach Center and Consortium (WROCC) works primarily at the institutional level to ensure deaf and hard-of-hearing students have access to the range of postsecondary institutions across the western United States.

❑ Increasing Career Choices (ICC) assists deaf and hard-of-hearing students in making career choices through videos of deaf role models and career placement services.
Four-Pool Therapy Complex, Unrivaled in the United States, Offers New Hope to the Chronically Disabled

Cal State Northridge is celebrating the opening of a new $6 million aquatic therapy center for the chronically disabled that is unrivaled in the United States. The four-pool complex will offer new hope to those with serious disabilities while also training CSUN students in groundbreaking treatment techniques.

“This is truly a place where miracles will occur,” said CSUN President Jolene Koester, who will preside at the dedication of the new Abbott and Linda Brown Western Center for Adaptive Aquatic Therapy. The dedication—featuring speaker Joni Eareckson Tada, an internationally known disability advocate—will be held at CSUN on Friday, March 28.

The aquatic center’s opening fulfills a decades-long dream of CSUN kinesiology professor Sam Britten. He founded and built the university’s nationally recognized therapeutic exercise programs that have helped thousands of people through the decades. The new aquatic component will enhance the university’s existing land-based exercise programs.

“This is where my joy lies,” said Britten, one of the university’s early faculty members who will retire this spring after 45 years. “I can’t imagine having a better job or having an opportunity to spend my life in any better way than enabling people with chronic disabilities to have the joy that comes from freedom and from freedom of movement.”

Based on six months of research and travel across the country to visit other facilities that Britten undertook in planning for CSUN’s aquatic center, the professor said he knows of no comparable facility anywhere in the United States or maybe even the world.

“I know of nothing like this. This is just an unbelievable place. I get excited just talking about it.”

The new 18,400-square-foot Brown Center at CSUN consists of:

- a main 60 x 24-foot heated therapy pool with two underwater treadmills,
- a 30 x 24-foot heated pool with a vertically adjustable floor, allowing the center for the first time to expand its services to children,
- a 17 x 10-foot spa aimed at helping those with joint and soft tissue injuries, and
- a 26 x 24-foot cool water pool suited to those with multiple sclerosis and similar conditions that respond better in cooler environments.

The advantage of water-based exercise is it gives even those with serious and chronic disabilities the freedom of movement in exercise and therapy with little or no pain, compared to working on the ground. That is because the buoyancy of water provides an ideal environment for the body to function with less weight.

“We are really dealing with aftercare—after medical treatment and after rehabilitation—for people with chronic disabilities like arthritis, multiple sclerosis and stroke,” Britten said. “There are about 180,000 people with chronic disabilities in this region, and almost no one’s doing anything for them after they leave the hospital and/or therapy. But we are.”

Britten’s dream facility was made possible through $2 million in lead funding from Abbott and Linda Brown and their Ridgestone Foundation. The Browns’ original $1.5 million contribution in February 2000 was CSUN’s largest single alumni gift. The Browns will attend the March 28 dedication, which will be held on the patio in front of the new Brown Center. Keynote speaker Joni Eareckson Tada survived a diving accident that left her quadriplegic and later went through an exercise program with Britten in the late 1970s that enabled her to begin driving a specially modified van.

“Who knows the human potential?” said Britten. “We are only limited by our own expectations. It’s really up to you and up to me how far we are going to drive ourselves. If we stop striving, we stop developing. Even if the severely disabled, they have so much that remains that can be developed. But they’re generally not given the opportunity to do so.”

Britten hopes the therapeutic exercise programs at CSUN will spur a broader interest in training practitioners who can help the seriously disabled regain the maximum amount of freedom, movement and normalcy in their lives once acute medical care has been completed.

That latter care, outside of CSUN, generally is not available, Britten said.

“I’m seeing a profession develop that says, ‘No, the quality of life doesn’t need to end with age or disease or accident,’” Britten added. “With our aging population, this is a tremendous area of opportunity to reach out. That’s why the university can play such a vital role in this, because our programs are not part of the traditional medical establishment.”

With the start of the spring 2003 semester, the Brown Center already is hosting four pilot aquatic exercise classes a week with about 65 clients, both CSUN students and community members. Britten said that could increase to eight and then 16 aquatic classes within a year. Meanwhile, two classes of CSUN students now are in training to work at the aquatic center.

“This has been my dream for many, many years,” Britten said. “There is such an excitement about the new aquatic center, I can’t even tell you.”

The Center of Achievement for the Physically Disabled at Cal State Northridge

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The Center of Achievement for the Physically Disabled (CAPD) at Cal State Northridge offers unparalleled and internationally respected programs in adapted/therapeutic exercise for people with disabilities, having assisted thousands of community members and students through four decades of service.

The center’s land-based exercise programs traditionally serve about 400 clients each year through low-cost workshops at the university. Now, with the spring 2003 opening of the Abbott and Linda Brown Western Center for Adaptive Aquatic Therapy, the expanded center expects to double or triple its client base in the coming years and reduce its client waiting list.

Under the direction of founding professor Sam Britten, the center at Cal State Northridge, and the university students in training there, have brought renewed hope and restored freedom to those impacted by congenital conditions, traumatic accidents, stroke or various illnesses.

Through the years, Britten estimates the center’s exercise programs have helped perhaps 200 people with major disabilities regain freedom and mobility by enabling them to drive modified vans.

Working with students, Britten has permitted a woman with severe cerebral palsy to first regain the ability to drive and then to walk (with help) down the aisle for her wedding.

The center’s atmosphere promotes physical conditioning along with mental and emotional healing and growth. Before starting work with the center’s staff, clients undergo a careful evaluation of their physical and emotional condition.

Goals are established and motivating factors are determined. A personalized exercise program is designed leading to maximum achievement.

Customized exercise programs for clients include one-on-one assistance, follow-up evaluations and the support necessary to rebuild confidence and feelings of self-worth. The Center of Achievement for the Physically Disabled is part of the Kinesiology Department in CSUN’s College of Health and Human Development.

April 2003 • Community @CSUN • California State University, Northridge
The A.S. Ticket Office in Nordhoff Hall sells tickets to many events on campus, except for some held by outside groups. The Ticket Office is open from 9:30 a.m.—5 p.m. Mon.–Fri. For prices not given, call (818) 677-2488.

### Art and Exhibits

**Admission** is free unless specified. For more info, call (818) 677-2156.

#### Polar Exploration and Scientific Expeditions

An exhibit featuring books, photographs, scientific papers and memorabilia from the Arnold Court Collection. Court was a professor in CSUN’s Geography Department and a meteorologist with Admiral Byrd’s 1939 Antarctic expedition. Through Fri., April 11. Oviatt Library exhibition area.

#### Masks:

The Spirit of Michoacan

Mask exhibit features the art of Juan Horta Castillo. The artist’s innovative work fuses ancient Michoacan and contemporary styles with international influences. CSUN journalism chair Kent Kirkton is the curator. For information and admission prices, call (714) 788-3301. Anaheim Museum 241 S. Anaheim Blvd. Through Sun., April 13.

#### Spiritual Expressions:

Rassouli-Jenik-Mozafarian

Surrealist works by three American-Iranian artists from Southern California that share their rich symbolism of Persian mystic poetry. Through May 2003

#### Dance

**Taylor 2**

Part of the CSUNdance series, Taylor 2 is comprised of six professionals who perform Taylor’s repertory. Sat., March 29, 8 p.m. Performing Arts Center $30 front orchestra; $20 rear orchestra.

**State Street Ballet**

Part of the CSUNdance Series, the State Street Ballet performs Shakespeare’s classic “Romeo and Juliet.” Sat., April 26, 8 p.m. Performing Arts Center $30 front orchestra; $20 rear orchestra.

**American Guitar Society International Concert Series**

Guest artist Carlos Pons I Altés from Spain performs. Sat., March 29, 8 p.m. $12 general; $10 AGS members; $8 seniors and students.

#### Film

**Cinemathèque’s “Film Noir” 2003 — The Legacy of the Dark City**

CSUN’s Department of Cinema and Television Arts presents its Cinematheque spring series “Film Noir” featuring classic and contemporary classics. The screenings are free and take place every Wednesday and Thursday in the Alan and Elaine Amherst Theater, on the first floor of Manzanita Hall at the southwest corner of campus. For more info, call (818) 677-3192 or see www.csuncinemathque.com.

**Noir Hollywood & Bourgeois Crime**

Featuring “The Big Knife” and “The Big Clock.” Thu., March 27, 7–11 p.m.

**French Film Noir**

Featuring “Anascenseur pour 1932” (Elevator to the Gallows)” and “Le Double.” Wed., April 2, 7–11 p.m.

**French Film Noir**

Featuring “Le Trou (The Night Watch)” and “Monsieur Hire.” Thu., April 3, 7–11 p.m.

**Black Noir**

Featuring “One False Move” and “Deep Cover.” Wed., April 9, 7–11 p.m.

**T.V. Noir**

Featuring “The Fugitive” and “The Untouchables.” Thu., April 10, 7–11 p.m.

**British Noir**

Featuring “The Small Black Room” and “Gangster No. 1.” Thu., April 24, 7–11 p.m.

**Caper/Heist**

Featuring “Rififi” and “The Killing.” Wed., April 30, 7–11 p.m.

**Wind Chamber Music**

Julia Heinen directs. Wed., April 23, 8 p.m. Music Recital Hall

#### Music

**Admission** to all music events (unless otherwise specified): $10 general, $7 faculty, staff and students, $5 seniors, $4 students.

**Studio Jazz Band**

Gary Pratt directs. Sat., March 22, 8 p.m. Music Recital Hall

**April Fool’s Concert**

March Madness. Pat Kuhn directs. Sun., March 23, 3 p.m. Music Recital Hall

**American Guitar Society International Concert Series**

Guest artist Carlos Pons I Altés from Spain performs. Sat., March 29, 8 p.m. $12 general; $10 AGS members; $8 seniors and students.

**Faculty Artist Series**

Karen Eniu-Pershing performs works by Silfer, Bach, Kessner, Shostakovitch, Soloman and Britten. Wed., April 2, 8 p.m. Music Recital Hall

**Inti-Illimani**

Part of the Stars at the PAC series, the Chilean group Inti-Illimani performs music of the 1973 coup d’état martyr, Victor Jara. Fri.–Sat., April 4–5, 8 p.m. Performing Arts Center $25 front orchestra; $20 rear orchestra, $15 students.

**From the Studio of Julia Heinen**

Canadian students perform varied works. Mon., April 7, 8 p.m. Music Recital Hall

**The Clayton-Hamilton Jazz Orchestra**

A part of the Jazz @ Night series. The Clayton-Hamilton Jazz Orchestra is an all-star line-up of Los Angeles-based musicians. Sat., April 12, 8 p.m. Performing Arts Center $30 front orchestra; $20 rear orchestra.

**The Diamonds and The Coasters: Forever Doo-Wop**

Part of the Show of the Month in the PAC series, doo-wop groups The Diamonds and Billy Richard’s The Coasters perform their greatest hits. Sun., April 13, 8 and 6 p.m. Performing Arts Center $30

**St. Petersburg String Quartet**

A part of the Music Guild Series. The St. Petersburg String Quartet was formed in 1985 by graduates of the Leningrad Conservatory. Mon., April 14, 8 p.m. Performing Arts Center $26 front orchestra; $23 rear orchestra.

#### Theater/Performance

**The Wrestling Season**

On a high school wrestling mat, eight young men and women face off against the effects of teen innumedo and peer pressure. Playwright Laurie Brooks tackles issues of rumor and gossip in the award-winning teen play. Directed by Garry Lennon.

Fri., March 21, 8 p.m. Sat., March 22, 8 p.m. Sun., March 23, 3 p.m. Studio Theater $10 general; $7 faculty, staff, students and seniors

**The Medium and The Face**

A double-bill of modern American one-act operas. Stage direction by Eli Villanueva and musical direction by Dave Asis.

Fri., March 28, 8 p.m. Sat., March 29, 8 p.m. Sun., March 30, 3 p.m. Fri., April 4, 8 p.m. Sat., April 5, 8 p.m. Sun., April 6, 3 p.m. Little Theater $15 general; $10 faculty, staff, students and seniors

#### Planetarium Sky Tours

The Donald E. Bianchi Planetarium at CSUN hosts Sky Tour star talks exploring the splendors of the night sky. Recommended for ages 8 and above. Tickets can be ordered in advance by calling (818) 677-2488 or be purchased at the door before show time.

7 p.m. Saturday, April 5

April 19 – No show due to spring break

Donald E. Bianchi Planetarium on the west side of Science 3 Building. Recommended parking is Lot G4 along Zelaiv Ave.

$5 adults and $3 children