

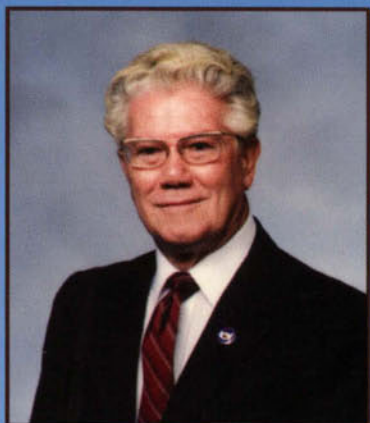


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EXPANDING HORIZONS



Behold, the Man . . .



Tim Nugent . . . admittedly has been cited by Presidents Eisenhower and Clinton, received honorary doctorates, been keynoter and honorary speaker at universities throughout the world, received beaucoup awards from local, state, national, and foreign societies; done service on rehab and wheelchair sports boards, been a director or commissioner of several research and/or rehab agencies, had a direct hand in setting the national standards for accessibility, continues to be a consultant to medical schools and agencies throughout the world, has written scads of articles and bulletins, and has helped with the production of rehab films . . . an everburgeoning list of noteworthy accolades, indeed.

But I, Book, declare this founder of the University of Illinois Education-Rehabilitation Program, the first comprehensive program of higher education for persons with severe disabilities, to be . . . the guy who patched it all together, from the mere thread of possibility through the meshwork of resistance to the fabric of fruition. . . the tailor-tinker, teacher, thinker, tender-hearted-albeit-sometimes-hard-headed team-tenablizer, an often testy tester of one's guts and texture, thresher of those guys and gals who were quasi-content to languor in sloth and thoughtlessness until they turned themselves toward triumph, thruster of the throttle, tiller-taker of many crafts in the thrill-ride of life's rapids, trampler of intolerance, temperer of transgressions, and . . . pioneer, entrepreneur, creator, counselor, innovator, motivator, perpetuator, optimist, pragmatist, referee, or, yes and yet . . . man of many labels: Coach, Mr. Rehabilitation, Mr. Accessibility . . . but mostly . . . Friend Extraordinaire.

Here then, Reader, encounter some traces of greatness, presented in loving respect and high regard, especially to honor you, dear Timothy!

EXPANDING HORIZONS

A HISTORY OF THE FIRST 50 YEARS OF THE
DIVISION OF REHABILITATION-EDUCATION SERVICES
AT THE UNIVERSITY OF ILLINOIS



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*Compiled by
The Commemorative Book Preparation
and Publication Committee*



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1998

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Dedication

To those men and women with disabilities who endured many hardships, faced overwhelming obstacles, overcame the customs of social aversion and rejection, breached the perimeters of restrictive governmental and institutional policies, proved their stalwartness in the halls of academe and the chambers of day-to-day challenge, empowered themselves and others through patience and persistence, asserted themselves to achieve a sense of personal fulfillment, and improved the lot of everyone through a demand for moral rectitude—to them, in signal honor, do I, Book, ascribe this dedication.

To Carmont Blitz in Appreciation

This publication was made possible through the generosity of Mr. Carmont Blitz, a longtime dear friend of Professor Nugent and a faithful supporter of the University of Illinois Rehabilitation-Education Program throughout most of its years.

Mr. Blitz, President of the Blitz Corporation of Chicago, is highly respected throughout the United States and many other nations in the automotive industry, particularly in the production of buses and heavy equipment. He has been responsible for many innovations and radical changes in transportation of both goods and people.

In 1951, Mr. Blitz completely refurbished two old buses given to our program by the Greyhound Corporation. He engineered and fabricated the first lifts to independently and safely accommodate those in wheelchairs while still accommodating the general public. He has done many generations of lifts over the years, each an innovative improvement. Those were just some of his contributions to the Rehabilitation Program.

Our buses were called to Washington, DC on many occasions to be viewed by members of the House of Representatives, the Senate and federal officers and to serve those with disabilities at national meetings. The federal government bought several new buses especially equipped by Mr. Blitz for the Veterans Administration. These actions led to changes that are now law and becoming more prevalent on the national scene.

Mr. Blitz was responsible for the University Rehabilitation-Education Center being given several highway buses by Greyhound Corporation over a period of many years, and which he refurbished and equipped with lifts

to accommodate our students on academic field trips, athletic trips, and special performances. He personally contributed time, talent, and materials to several generations of highway buses and also arranged for them to get free service, should they need it, on trips—no matter where they might be on the road.

Mr. Blitz served many terms on the Board of Directors of the National Paraplegia Foundation (now the National Spinal Cord Injury Association) and contributed in many other ways to the well-being of those with disabilities. He has been an Honorary Life Member of Delta Sigma Omicron, Incorporated, for many years.

The innovations and new developments contributed by Mr. Blitz to air and ground transportation greatly expedited access to those means of transportation by all people, particularly those with disabilities.

Thank you, Mr. Blitz. You exemplify the people who have made possible the history of the Rehabilitation-Education Program at the University of Illinois and assured the success of those who benefited by attending that program.

The Painting on the Cover

The oil painting on the cover titled "The University" was painted by Harold Haugaard and took five months to complete. It has won numerous art show awards including a Blue Ribbon at the State Town and Country Art Show. The buildings (left side top to bottom are Florida Avenue Residence Hall, Krannert Center for the Performing Arts, Livestock Pavilion, Auditorium and Illini Union; (center top to bottom) Assembly Hall, Memorial Stadium, Intramural Physical Education Building, Armory, Krannert Art Museum, and English Building.

Mr. Haugaard served the University as Director of Routing and Supervisor of Public Functions, respectively, from 1948 until his retirement in 1974. Prior to that he served in the U.S. Army for eleven years, retiring from Chanute Air Force Base, and as an Army ROTC instructor at the U of I for fifteen years.

Mr. Haugaard was born in Stoughton, Wisconsin, April 16, 1907, but was reared in Norway. He returned to the U.S. at the age of twenty. He is now deceased. Mr. Haugaard worked with the Rehabilitation-Education Program throughout his years. We are proud to have his painting as our cover and thank his widow, Juanita, for the permission to do so.

"This is The Way It Was"

Back in the 40s and 50s

Medical reports and referrals were usually quite dismal and even fatalistic:

"[Patient] will live by the grace of God" or, "[Patient] should not sit more than 2 hours, stand more than 2 hours, or lie down more than 2 hours."

Less than 5% of those disabled early in life had ever attended a regular elementary or secondary school. Most quadriplegics on leaving the hospital were sent directly to a nursing home. Longevity of a spinal cord injured person was usually estimated to be from 3 months to 3 years.

VA medical staffer about paraplegics flying to wheelchair basketball games - "... [T]he patients may become over-tired and suffer relapses. [They require] detailed attention by Medical Specialists."

The following documented quotes reflect some of the public's attitude toward persons with disabilities a few decades ago:

The father of an attractive able-bodied woman student dating a post-polio law student - "I suppose the University should receive credit for trying to help these poor unfortunates, but isn't there something you can do to protect our sons and daughters from these freaks?"

A mother writing her daughter - "How in God's name can a girl like you be interested, not to say repelled, by a poor unfortunate. . . .?"

A man writing to a student with a disability - "... the rehab . . . gives you an opportunity to go to school and relieve taxpayers of liability for your care . . . but it is costing taxpayers money to give you this and we should be protected against your dating or socializing with our sons and daughters."

The parent of a registering student who'd been neglected for most of his life - "I don't know why we're doing this. He'll probably die in the first semester." [Well, he didn't die!]

The University administration received many letters and calls accusing Professor Nugent of "exploiting

the disabled". Tim Nugent received many such calls himself, some very nasty. Doubt and opposition were rampant.

In 1952, Professor Tim Nugent reported on the predominant attitudes of administrators and faculty members toward persons having demonstrable disabilities being on campus, noting that they felt the disabled students would be an extra cost, an extra liability, distracting, demoralizing, present untold difficulties, and probably not put their collage education to good use.

And these comments are contained in a master's thesis, "Employment of Wheelchair Handicapped Persons in Broadcasting," by Tom Jones:

Dallas TV Station Manager - "People in wheelchairs? They should be in hospitals or nursing homes. There is no place for such people in broadcasting."

Minneapolis Station Manager - "... We have so much electrical equipment in the station I would be afraid they would be electrocuted."

St. Louis Public Affairs Director - "It's hard enough for fully trained professionals who are totally ambulatory to get about in this business. A wheelchair patient? Impossible and totally unfair to him."

Bakersfield, CA, Chief Engineer and Farm Director - "A person in a wheelchair could not handle the job without an assistant. It would be economically impractical for the station to consider hiring such a person."

Roanoke, VA, TV Program Director - "I would not show a handicapped person's wheelchair on camera because the viewer should be able to identify as fully as possible with the talent. Every handicapped person I've known has had fantastic emotional hang-ups. This is a problem I don't need."

Colorado Springs, CO, Vice President - "I would not put such a person on the air at all. The wheelchair would tell the viewer we are trying to win an audience by putting this person on the air. I don't want the viewer to think we are looking for the sympathy vote"

Perspectives

A Different Perspective - An Editorial from October 27, 1965 Champaign News Gazette. . .

REAL VALUE OF U OF I REHAB-ED CENTER

Timothy Nugent and his Rehabilitation-Education Center at the University of Illinois deserve special commendations for their many contributions to this whole community and all U of I students, not just the people who are visibly handicapped.

This weekend the Rehabilitation-Education Program will be honored at the dedication of its new center and at a local hearing of the national Commission on Architectural Barriers.

Much has been written and will be written about how the handicapped students are helped by the university and the community, about how buildings are designed or modified to accommodate the wheelchairs and other aids these students may rely upon.

But little notice has been given to how much these students and this program contribute to the entire community and the University—contributions that transcend the program itself and the students and people directly related to it.

There is no scientifically correct way to measure the effect these individuals have had on the community and the attitudes of all who come in contact with them.

But a paraplegic can shop in Lincoln Square, study in a library, go to a downtown movie, and worship in the church of his choice with little or no ceremony. He is accepted as a person by the entire student body and the whole community.

There are few cities where he can move and act so freely without being looked upon as a phenomenon or spectacle—someone to be pitied and solicitously waited upon.

But the average U of I student and C-U resident knows better. We know that these students are almost wholly self-sufficient. That in many instances they can take better care of themselves than we do. That in the few times when they do need help, they will ask for it just as we do.

This is the real contribution of the Rehabilitation-Education Center—not the education of the relatively few students under its administration each year, but for the world to accept them as people and useful citizens.

This, they have proved they are.

A Different Perspective - By Way of a Limerick-Song, written by Bill DeLoach in 1963. Saul Morse sang this song at the National Convention of Easter Seal Society; it was also sung by Don Feldstein at the DSO Banquet, November 2, 1963. Bill DeLoach also wrote many other clever parodies while attending the U of I.

[To the tune of . . . "Camp Granada"]

LETTER FROM A STUDENT

Hello parents, so how are you?
Please don't let this letter jar you.
College will be entertaining
If I manage to survive functional training.

We do everything unaided
And get rehabilitated.
To my class is too much distance,
But we're not supposed to need any assistance.

I have bruises, I can feel there,
Where I fell out of my wheelchair.
It's these ramps that have got me whipped —
They are steeper than the pyramids in Egypt.

I hate eating cold potatohs,
I hate clumsy elevatuhs,
And I feel so broken hearted,
As I push up when the bus has just departed.

Take me home, oh mother, father —
Independence is a bother.
Mr. Elmer has no mercy
He drives us like slaves in therapy.

Take me home, I promise to get up by twelve
I'll turn the TV on myself
Oh, please don't make me stay —
I'm bushed—'cause here no one gets pushed.

I tried prune juice, what disaster.
Then I lost my right front caster,
And a speeding bike just hit me,
Why oh why can't I go back to New York City?

Wait a minute—hi ya honey,
You're a freshman? Hey, that's funny.
Gee, today may turn out sunny.
Disregard this letter, folks, but please send money!!



I am Book . . .

Reporting to you, Reader, in words inscribed by active minds associated for many months in doing the dither while overcoming the angst of assembling my contents.

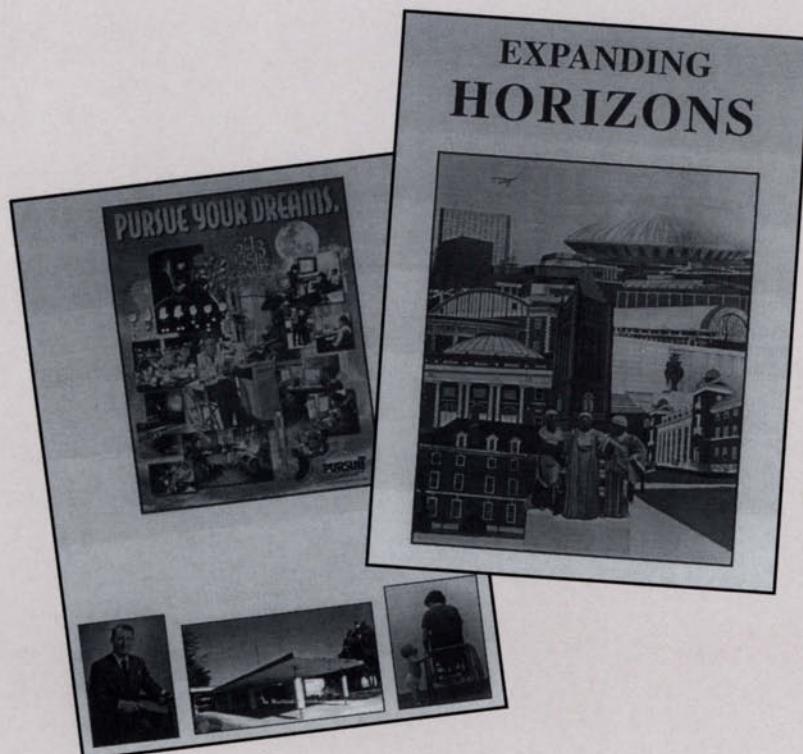
The minds collective of which I am offspring bore me from conception in 1996 through formation and “Quest”-tration in 1997 to binding form in early 1998.

Anonymous I, your interlocutor, invite you to scan my pages, poke your mind to evoke reveries, and discover anew the astounding deeds and doings—indeed, the high drama—that mark the birth and development

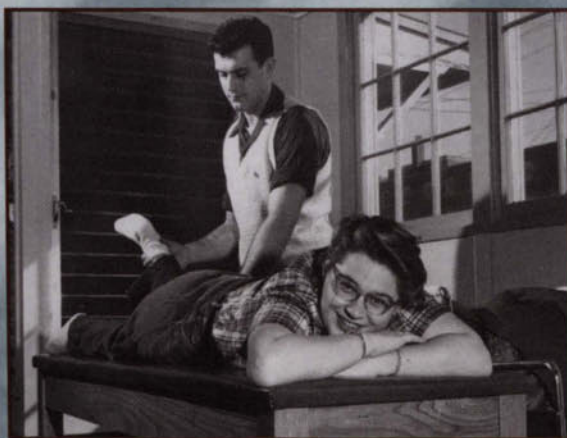
of the Rehabilitation-Education Program for students with disabilities at the U of I.

Find, if you will—or must—evidence of foibles, frolics, frenzies, frustrations, and follies, but don’t overlook the independence and significance of progress of the students: important posts not excluding parenting, publications, patents, professional positions, prizes, and plentiful proofs of personal push.

I, Book, here celebrate your lives, students, staff, and alumni, and declare, as was heard at a U of I commencement, “You done good, guys!”



The Vision





(*Epigraph*) - But the bravest are surely those who have the clearest vision of what is before them, glory and danger alike, and yet notwithstanding go out to meet it.

Thucydides, *Funeral Oration of Pericles*

One sees the future through the prism of the present in reflection on the kinetics of the past. Many persons easily attribute the successes and achievements of the U of I Rehab Program to Tim Nugent's "visionary idea," his "sense of vision," or yet simply, his "vision." Although a heavy dose of foresight, goals, objectives, and pathways to attainment is implicit in what one calls "the vision," for Tim it simply wasn't so—just ask him.

Oh sure, he had a focus, an underlying principle, an impetus to heed a "call to duty." But that focus/principle/call was formed in the crucible of doing service to his community, college, country and . . . those having disabilities.

Historians question whether greatness derives from the Zeitgeist—the overall cultural and intellectual spirit of a given age—or from the individual attributes of the person to be called "great." However, most would conclude all greatness reflects the performance of the person whatever the Zeitgeist. And so, all call Tim a "visionary" because of the more than a half-century of principle-guided action.

What principle? . . . you ask. And the answer: Education! After World War II, a sustained sense of patriotic pride impelled some to seek means for lifting veterans with disabilities beyond what were then the traditional roles and confinements in settings of general hopelessness. A few—the visionaries—were concerned about helping meet the individual needs of the disabled—opening opportunities challenging them to achieve spirit and substance in their lives.

The destiny of the paraplegic had been one of passivity—the intellectual numbing of absolute boredom. No consideration was needed, many authorities of the time thought, for the mind or what that person could do for himself or herself—much less for society.



Tim was of a different persuasion. And chance and happenstance led him to an opportunity to affect many lives—in truth, all lives. His vision, he'll tell you, was not of whole cloth at the start . . . or even now after 50 years of his shouldering the wheel. No, he saw that opportunity as a groundwork for the principle that education could set the sights of persons with disabilities on the stars rather than on the ceiling of a secluded room.

So, the vessel of the so-called vision was to be a sort of amorphous bubble of possibility. Few authorities believed that the bubble would do other than burst . . . and confirm their beliefs that the vision itself had little promise, but bore a great expense in time, personnel, and money.

Yet, the infant vision had qualities of adaptability, creativity, and just enough obstinacy to prove its mettle. It grew, Tim's idea-vision, from that education-centered proposition into a mature, vital, influential perspective.

The Visioner—let's call him that in this context—formed his education precept into a multiduty tool for prying open doors, catapulting acquisitions over seeming—sometimes screaming!—obstacles, leveraging funds from non-University sources, and hammering away at ignorance and negative attitudes.

And he put the maturing vision to probing other possibilities. Shouldn't even persons in wheelchairs have access to public buildings and other accommodations?—you bet, and how about some standards while we're at it!

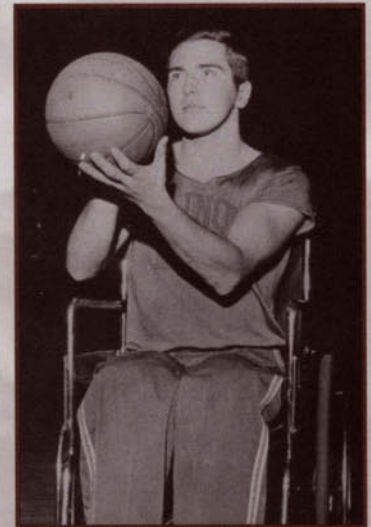
Even persons with disabilities need some diversions and recreations, something to challenge them to the fullest whatever the degree of disability, so what about sending them into sports?

Thus, although the vision began as an education-confined concept, it stretched to grasp, test, modify, adapt and assimilate ideas that were beyond its early horizon.

Tim Nugent, The Visioner, saw a great need and, in meeting and overcoming the resistance and denials of unmindful persons, nurtured the vision to see it grow and become manifest in the achievements and the political, academic, and commercial notability of the multitude of his "Visionerees."

For his was—is!—a boundless vision.

The History





The History



In the timeless set of my perspective, *I, Book*, bespeak much that in the wake of Present has become precipitated as Past. All know that the dynamics of *now* transforms, like the titles of a continuously laid mosaic, to become a residue labeled *then*, heralded as History. That residue, objectively immutable, lies beyond the touch of Present except as drawn from whatever evidence persists of the residue or can be approached by the bridge of memory.

The trouble is, although the actual factual *truth* of experience must itself be unchangeable, the memory of the event or action assumes different qualities that can alter the What-Has-Been to better accommodate What-One-Would-Prefer-It-to-Be. *I, Book*, prefer not to report on my own accommodations in this matter.

Honesty notwithstanding, hyperbole too often tempers the memory of those for whom the truth would rest dully on the mind and therefore invites embellishment. And language, too, helps to modify

cold truth and convert it to warm imagery if not actual hot thrall. Consider that, until rather recently, *cripple* satisfied the public's need for a label under which to cubbyhole anyone whose gait or fate was seen as "beyond the accepted limits of normalcy."

When one sits among those who participated in *The Program*, whether during its early days of crude facilities and demanding routines or in more recent times of facing the abundance of modern challenges, one finds a consistent line cast into the pool of reflections on the past.

Here, even in the wheely, hobbly, sense-affected circumstances of the Present, does each cripple/gimp/wheelchair-bound and present physically disadvantaged person extend the self toward Yet-to-Be to form the sensational residue of Triumphs- That-Were, Truly.

Now, then, do I retrieve some of that residue to titillate and tantalize you, reader.

1948-1998

In the Beginning. . .

The germ of the idea started with a proposal from the deputy commander of the American Legion in 1947 to University of Illinois President George Stoddard. Stoddard was intrigued enough to form a committee to study the request.

The committee thought it might be possible on a limited scale, and the toehold was gained. The University of Illinois campus in Galesburg was opened to veterans and non-veterans with disabilities.

It was an experiment on a campus that was itself an experiment. Galesburg was established to help accommodate the teeming influx of World War II veterans taking advantage of the GI Bill.

The Galesburg campus unit was additionally favored because it had been a hospital before the U of I acquired it—specifically the Mayo General Hospital. It consisted of 115 one-story buildings (with wheelchair ramps) connected by enclosed corridors.

What better place for the paraplegics to attempt to further their education. For what purpose, no one knew. Up to then the disabled spent their time in hospitals or at home. Few of them sought employment outside the home. Fewer still enrolled at a major university.

Of course, physical barriers caused colleges to shun the handicapped—and vice versa. But the biggest barrier was public ignorance of what was possible. That ignorance extended to the disabled as well. No one knew the possibilities because they never had been tested.



The Galesburg campus—formerly the Mayo Army General Hospital—was the site of “The Experiment.”

HIGHLIGHTS 1948-1949

- The Rehabilitation Program had its beginning on the Galesburg Campus of the University of Illinois.
- Bowling, swimming, basketball, and many therapies were initiated.
- *Delta Sigma Omicron* Rehabilitation Service Fraternity (DSO), made up entirely of students with disabilities, was founded in November of 1948 and incorporated under Illinois Law in May, 1949.
- The first National Wheelchair Basketball Tournament (NWBT) was held in April of 1949, which led to the founding of the National Wheelchair Basketball Association (NWBA). The original teams were the U of I *Gizz Kids*, the Kansas City Bulldozers, the Hannibal (MO) Rockets, the Minneapolis Rolling Gophers, the Evansville (IN) Rolling Rockets, and the Chicago Cats. The *Gizz Kids* took 3rd.
- In late April, word was received that the Galesburg Campus was to be closed and possibly converted into a State Geriatrics Research Institute.
- Led by Tim Nugent, approximately twenty cars driven by students with disabilities converged on the Capitol of Illinois to convince the Governor that the Galesburg Campus should remain open. They were refused an audience with the Governor but had generated statewide attention and considerable support from veterans organizations (a story in itself).
- Because the Main Campus of the University of Illinois was adverse to the students' coming to Urbana/Champaign, the students then made a visit to the Main Campus to argue their point and to demonstrate their capabilities. They rigged ramps over steps using planks from paint scaffolding, etc.
- The students from Galesburg were allowed to come to the Main Campus because they had been promised two years of college, but no other students would be allowed to enter, and it was considered an experiment with considerable adversity and no budget.





HIGHLIGHTS 1949-1950

- The Rehabilitation Program was housed in a tar paper U.S. Army surplus barracks with a space heater and no insulation.
- Similar barracks served as housing for our single male students along with hundreds of able-bodied students because of the great influx of students following WW II. After a big battle, our women students were allowed to live in the new Lincoln Avenue Residence Hall.
- Because there were no facilities and so little time, the 2nd National Wheelchair Basketball Tournament was held in Hannibal, MO, where an armory with a concrete floor was turned into a basketball court and most of the participants were housed in the storage room behind a restaurant of an old hotel using triple deck bunks (and most players were traumatic paraplegics). The U of I Gizz Kids took 2nd.
- Ramps were initially built into Lincoln Hall and Gregory Hall, both academic buildings, the Coffee House which served as the dining facility for those in the temporary barracks, known affectionately as the Parade Ground Units (PGUs).
- The first Wheelchair Football Game was played on October 22, 1949 at the University of Illinois Armory, with the Blues winning.
- DSO became very active in helping to promote the program as a permanent part of the university, in public education and fund raising in support of its many missions.
- Angie Tsevelekos spent 36 hours studying for a Chemistry exam.
- The deaths of Ted Leslie, our youngest member, and Harold Scharper, our oldest, married veteran and our first and most enthusiastic paraplegic student were tragic events. The Ted Leslie Memorial fund and the Harold Scharper Achievement and Service Awards were established in their memory.

Harold Scharper, First Full-Time Paraplegic Student



Harold Scharper was the first paraplegic to make the commitment to be a full-time student.

The colossal precedent of what happened in Galesburg is difficult to comprehend in these days of accessibility standards, curb cuts, handicapped parking tags, wheelchairs in TV soaps and commercials, and wheelchair athletes adorning Wheaties boxes. But this was the 1940s. It was indeed a revolutionary idea.

Therefore, it needed a revolutionary to give the program any chance for success. Dean Chauncey Louttit of the Galesburg Division may or may not have been looking for a revolutionary as he went about selecting someone to head the new program, but he got one. He chose 24-year-old University of Wisconsin doctoral candidate Timothy J. Nugent.

The Galesburg experiment got off to a slow start. There were a few part-time students that first year, but only one full-time student. Harold Scharper enrolled for the start of the 1948 spring semester. Possibly it was as difficult for persons with disabilities as it was for the public in general to break through the shackles that eons of apathy had imposed.

Nugent blamed the problem on a lack of information about the program. For one thing, the University had not allowed a great deal of publicity, fearing it might be thought that the Galesburg campus served persons with disabilities exclusively.

So Nugent went to work getting out the word. By the fall of 1948, 13 students with disabilities were going to class full time.

In the spring of 1949, more students enrolled and they formed their own service fraternity, *Delta Sigma*



The original Gizz Kids—(standing, left to right) Bob Anderson, Mgr., Homer Lawder, MD Director of Health Services, Tim Nugent, Coach and Director of Rehabilitation Program; (seated, left to right) Jack Chase, Harold Scharper, Joe LoPresti, Ray Crigger, Bob Waller, Shirley Sayers (cheerleader), Don Swift, Harris Hjelter, Les Blankenship, Al Oelschlegel, and Harold Drake.

HIGHLIGHTS 1950-1956

- DSO has assets in excess of \$10,000 and has had a positive influence upon thousands of persons.
- The *Gizz Kids* began playing wheelchair baseball, playing against fraternities and varsity teams.
- The Whites beat the Blues in a final wheelchair football game 20-7 to claim the title.
- The 3rd NWBT was held at the U of I with the *Gizz Kids* taking 5th. The *Gizz Kids* won their First National Wheelchair Basketball Championship in New York in 1953, took 2nd in 1950 and 1952, 4th in 1954 and 3rd in 1955. Professor Nugent and two undergraduate assistants, Don Townsend and Duane Haas, painted the floor of the Mens Old Gym Annex, which had been used as a dormitory right up to Tournament time.
- During a between-semester *Gizz Kids* Annual Tour, the men's bus broke down after going only 30 miles; the players were transferred to the cheerleader's bus and went on ahead, leaving the cheerleaders to catch up.
- The *Gizz Kids* lost both games in Kansas City but enjoyed a sing-along at the piano bar across from their hotel.
- The team's bus again faltered on the way to Grinnell, Iowa. After the team beat the Omaha team, the cheerleaders stayed behind while the team took their bus to St. Louis.



HIGHLIGHTS 1956-1957

- At a candlelight service in October, 32 new members of *Delta Sigma Omicron* were honored.
- At the annual awards banquet at the Illini Union, Jack Whitman was toastmaster, Tom Jones gave a humorous reading, Andrea Hansen sang two selections, and Dean Nosker imitated Elvis Presley.
- The social calendar included invitations to the Urbana Policeman's Ball, a picnic dinner at Kickapoo State Park, and a Christmas celebration at the Moose Lodge in Champaign.
- On August 8, 1956, Dwight D. Eisenhower, President of the United States, cited Timothy J. Nugent for "distinguishing service in encouraging and promoting the employment of the physically handicapped."



Omicron (DSO). One of DSO's first projects was sponsoring the First National Wheelchair Basketball Tournament. An outgrowth of that first tournament was the National Wheelchair Basketball Association (NWBA), with Tim Nugent named Commissioner.

Things were looking up. That slim toehold to the future was becoming firmer . . . until Governor Stevenson announced the Galesburg Campus would close. Its facilities were to be transferred to the Public Welfare System.



Three of the early students at the U of I program helped launch the *Gizz Kids* Wheelchair Basketball team to defend the University honor at the first NWBA Tournament. (Left to right) Les Blankenship, who became Assistant Commissioner of the Vocational Rehabilitation Administration in Washington, DC; John Makris, who became a veterinarian; and Ray Crigger, who became an attorney.

MARCH ON STATE CAPITAL . . .

Nugent and some 30 students staged a march on the state capital in Springfield to try and dissuade Governor Stevenson. He avoided them.

The Division of Public Welfare Department in Springfield suggested the disabled students might be able to continue schooling in an "isolation ward" of the Mayo Hospital.

Not exactly a breakthrough in advanced education for the handicapped, the students objected. They sent out questionnaires to state and private universities and colleges asking whether they would be accepted—either on an individual or a program basis. Eventually, response came from the institution that initiated the program in the first place. On May 4, 1949, the University of Illinois initiated plans to accept 14 of the wheelchair students from Galesburg for the fall semester in Champaign-Urbana.

RAMPS TO THE CLASSROOMS. . .

To accommodate the new students, the University authorized ramps to make six classroom buildings accessible. The buildings included Lincoln Hall, Gregory Hall, Noyes Laboratory, the Natural History Building, the Library, and the Illini Union.

At the same time, ramps were built onto two Parade Ground Unit (PGU) barracks.



Fighting to move the program to the Champaign-Urbana Campus didn't consume the entire time and attention of some of the first students. Ron Smoot, Bobby Anderson, and Les Blankenship still had time for a picnic.

The Rehabilitation Center was housed in one of the tar paper U.S. Army Surplus barracks with space heaters and no insulation.

Similar barracks served as housing for single male students with a disability, along with hundreds of able-bodied students because of the great influx of veterans following World War II.

After a big battle, women students with disabilities were allowed to live in the new Lincoln Avenue Residence (LAR).

So there Nugent and his charges were in the fall of 1949—clinging onto another toehold. But this one was on the main campus of the University of Illinois. It's easy to imagine the trepidation they must have felt and the trepidation with which many or most of the able-bodied students must have accepted them.

HIGHLIGHTS 1957-1959

- Known as "Frat Rats," 12 men and one woman in the Rehab Program had joined Greek fraternities or sororities.
- Ramps are everywhere now, elevators are more accessible and many desks have been raised slightly to accommodate wheelchairs.
- The degrees awarded the 1958 Program Grads included: BA in psychology, BS in education, BA in English, BS in journalism, BS in economics, and BA in Latin-American Studies.
- Orientation Week included placement tests, a DSO picnic, more placement exams, class-schedule planning, preregistration, learning the secret operations of the elevators, meetings with the Rehab Program's staff, and a concluding outing at Lake Springfield sponsored by the Disabled American Veterans, Springfield Division.
- The *Gizz Kids*, flown by the Navy to California, ended their season taking second place in the 11th National Wheelchair Basketball Tournament.
- The Muscular Dystrophy Association awarded the *Gizz Kids* a citation, signed by comedian Jerry Lewis, Mrs. Lou Gehrig, Mr. James A. Farley, and others for "distinguished service in the search to find the cause and cure and in giving hope, comfort and service to those afflicted with muscular dystrophy." Over the years, the *Gizz Kids* had contributed more than \$15,000 to agencies such as the American Cancer Society, National Polio Foundation, and the Muscular Dystrophy Association.
- Four DSO women were married recently—or were soon to be.
- The new residence halls included TV, private phones, lounges (with upholstered furniture!), and maid service.

Originally, one PGU was ramped to serve as the Student Rehab Center (photo A)—with Tim's office on one end and Chuck Elmer's therapy gym on the other. In the 1950's another PGU was remodeled (photo B) to house the Rehab Center staff.



Photo B ↓

Photo A →



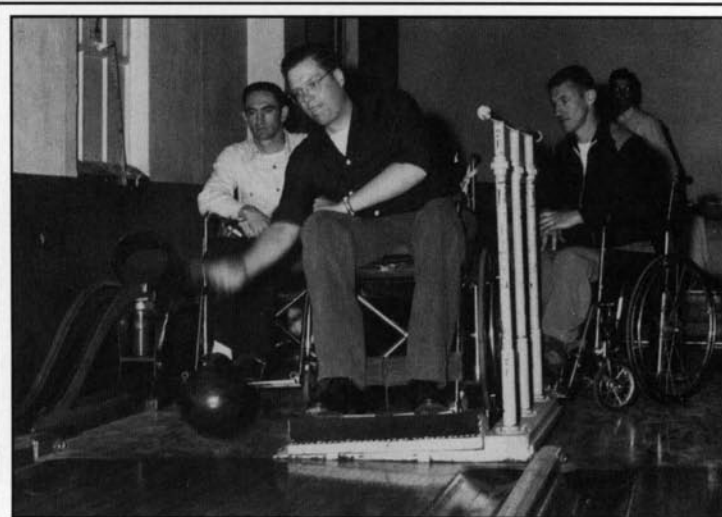
BUT IT WORKED!

"Here at Champaign-Urbana, we were faced with something altogether new," wrote Lysander Thompson in the first issue of *Sigma Signs*.

"In these surroundings, our plan was an untried quantity. Before us lies a future that will be good or bad in direct proportion to our individual contribution. A little constructive thought and effort can favorably influence the future of all of us."

But already they were looking ahead. "With the support of the membership, we hope to be able to spread our 'idea' to colleges and universities throughout the country. We believe we have something worthwhile—and we want to share it with others."

It was! They did!



The first student to enroll full-time, Harold Scharper (right) watches as Al Oelschlegel (center) tries for a strike in bowling. Les Blankenship looks on.

Life for the students with disabilities at the U of I held many challenges. One of these challenges, living in the PGU's, is recalled by a PGU inmate . . .

It was my first day at college. Neither my parents nor I had ever been on the U of I campus. But, we eventually found ourselves parked on the street between Huff Gym and Clark House.

It was a beautiful September day. A few fluffy white clouds and a brilliant azure sky backlighted the orange-tinted brick of the student dorms. My Mom looked at the block-long row of buildings. They were sturdy and collegiate, fitting domiciles for her son.

But when Dad went into Clark to ask, they told him he was off by a block. The Parade Ground Units (PGUs) were on the other side of these dorms.

I can't come up with an analogy to explain the difference in housing we experienced in moving just one block west. If I could, it would somehow parallel Mark Twain's "lightening/lightening bug" treatise. We had barely turned the corner before Mom was ready to take me back home.

What were the PGUs? Picture two city blocks of military green, 30 by 100 foot World War II era tar paper barracks shipped up from Fort Benning, GA. They were a stopgap measure to meet the tremendous demand for student housing for returning GIs.

Six of the barracks were ramped, a concession to Tim's improbable idea of sending people in wheelchairs to college. Our group of units housed single men. An area farther west toward the present-day Rehab Center contained similar barracks for married students. A couple of those also were ramped.

Each PGU "dorm" consisted of eight rooms housing a mix of up to 16 able-bodied and disabled students. There was a large, three shower, three toilet, four sink bathroom in the middle.

The buildings were hot in the summer and often breezy in the winter. There were four oil stoves to ward off the winter cold brought in by those breezes. They often failed that task. At times, snow blew under the barracks doors faster than the stoves could melt it. (OK. That's an exaggeration. Actually, I can only remember one or two times that snow blew under the door—and it melted almost immediately.)

Since the barracks stood only about two feet off the ground, they were easy to ramp for wheelchairs. That set them apart from 95% of the other student housing and nearly all of the University's class buildings.

I remember that one of the students in each PGU was an upper classman . . . a counselor put there to keep a lid on our youthful exuberance. But, that memory is vague at best for my first two years. And, as a junior and senior, I don't remember a barracks counselor at all. If we had one, he had sense enough to keep quiet about it. The PGUs offered independent living at its best.

In any event, our propensity to party and occasionally (very, very occasionally) knock holes in the plasterboard walls went fairly well unchecked by internal supervision. Of course, penetrating that hard plasterboard with a fist was no symbol of manhood. Legend has it that a healthy leg spasm once sent a foot through the wall under the sink.

Two of the three showers featured vinyl covered seats. They were enclosed by tin on three sides . . . the kind of tin that makes a lot of noise when an M-80 explodes. That only happened once . . . as a joke on Don Wally, who was on the far end toilet at the time. Somehow, he kept his seat. But, after the tin quieted its vibrating, he said we might be on to a non-medicinal cure for constipation.



HIGHLIGHTS 1959-1960

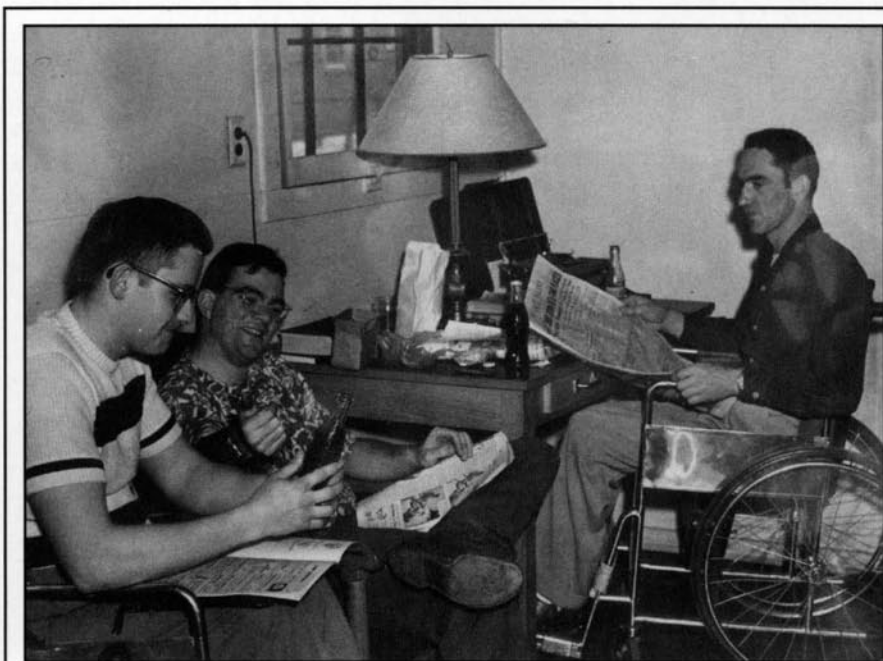
- A proposal for a new rehabilitation-education center, prepared by Prof. Nugent, has been under consideration by U of I President David D. Henry's advisory committee.
- The "dream" is to have the Center include administration, counseling, physical therapy and functional training, occupational therapy and prosthetics, medical services, recreation and athletics, services to the sensory impaired, and facilities, equipment and transportation.
- The heart of the "dream center" is a gymnasium, but also hoped for are adequate dressing rooms and showers, a nearby swimming pool, and a special hydrotherapy pool.
- Other center inclusions will be a library, speech and hearing rooms, and office space for 17 full-time and 20 part-time staff members.
- A Braille and tape library is planned for the Rehab Center.
- The U.S. Office of Rehabilitation is financing visits to the U of I campus by representatives of colleges throughout the nation, to encourage their participation in similar programs.
- The Scharper Service Award was shared—for the first time—by husband and wife, Glen and Sylvia Bellows.
- A \$20,000 research grant was received to develop standards for all buildings and facilities used by the public to render them accessible to permanently physically disabled persons.



If the PGUs were ill-favored, the grounds around them matched suit. There were lawns between barracks, but not much of what was green qualified as grass. In fact, my agronomy class assignment to identify and collect at least 10 noxious weeds was 80% accomplished from the “lawn” in the back of our barracks.

THE INMATES. . .

Of course, Tim and the staff were not elitists. Their offices were housed in the same type of barracks that we called home. Tim’s offices were on the west end of the building. Chuck Elmer’s therapy room covered the east end.



Despite plasterboard walls, windows and doors that leaked air and less than elegant decor, the PGU’s were home to students like (left to right) Ron Smoot, Don Townsend, and Les Blankenship.

A rectangular parking lot was connected to the Rehabilitation Center and three of the housing units. There was a tall utility pole just north of the parking lot. I remember that pole because somebody attached a rope to the top of it one evening when Bob Freres left his wheelchair in the lot while he and Mike O’Mara drove to the Steak and Shake for a snack.

With the help of two of our able-bodied PGU mates, Bob’s chair was tied to a rope and ceremoniously run up the pole while the rest of us sat and saluted it. Bob couldn’t find his chair—until O’Mara looked to the heavens.

My freshman year “dorm mates”—Mike O’Mara, Bob Freres, Don Wally, Marv Lapicola, Tom Proul, Tom Linde, Bruce Weimer, and some others I’ve forgotten—were your normal mixture of the good, the bad, and the ugly. The group displayed varying degrees of study habits and apti-

tude. Weimer, Wally, and Lapicola did pretty well . . . but they were majoring in cream puff accounting courses. I had enough trouble with freshman rhetoric to almost earn my ship-out papers. Of course, Linde was an absolute genius. . . .

I won’t say what category O’Mara and Freres fit into, but they seemed to have more fun. For one thing, their weekends lasted longer than for the rest of us.

One Sunday evening, when we shuffled off to the library and back to the books, Mike and Bob gave in to the urge to slip out of Champaign (which was dry on Sunday) to the small town of Ivesdale. The objective: a couple more *Budweisers* before getting back into the old study grind. . . .

Some of those trips were memorable . . . at least to Tim. One night on the way back from Ivesdale, Bob drove off the road, through an electric fence and into a cow pasture. When he couldn’t find the spot he came in, Freres made another hole to get out. When the cops stopped them, Bob’s car trailed an infinite length of wire from the rear bumper. Another Sunday night call to Tim. . . .

Once you start with O’Mara, it’s hard to stop. On basketball trips, Tim was a stickler for everyone being ready to leave when the bus arrived. Everyone usually was . . . except O’Mara. Like the time O’Mara stayed in the sack the morning after an after-game banquet at Chicago’s Congress Hotel that ran late. Tim said we’d leave at 8:30 a.m.

“You damned freshmen don’t know shit,” O’Mara snorted when we tried to roust him. “You’ll learn we hardly ever leave on time.” (Deftly ignoring the fact that he was usually the reason for late departure.) “Look down in the street. Is the bus there yet?” It wasn’t. “Wake me when it’s here,” said O’Mara. And, of course, he was late again.

But Mike O’Mara staged a major coup that will always rank at the top of my envy list. I still wish I had been with Mike on that basketball trip to Kansas City in 1953 when he and Chuck Chapman decided on an impromptu visit to former President Truman in his downtown office. I’m not sure how, but they talked their way in to see Truman and actually had a nice chat with him. That’s the day that O’Mara told Truman, “Sir, you’re now talking with the man who, with any breaks at all, probably will be the first Roman Catholic President of the United States.”

Expanding Horizons

Our PGU did contribute to history with a heroic ballad about Tim Nugent. The joint effort between O'Mara, Freres, Hal Reickers, and Chapman, was sung at a banquet by that quartet, "The Defective Four"—with Freres on the ukulele. To the tune of the then popular Ballad of Davy Crockett, they sang:

Timmy, Timmy Nugent
King of the DABs

Born in a brewery in Milwaukee
Drunkenness state in the land of the free,
Drinks more beer than Bob Freres,
Rehabilitated when he was only three

Timmy, Timmy Nugent
King of the DABs

I don't remember the rest. We'll have to get it from Chapman—or maybe Tim Nugent remembers.

A last comment on the PGUs. Don't get the idea I shared my Mom's viewpoint about barracks living. Oh, I wouldn't have turned down a stately dormitory that initial day. But the first fellow I met in the barracks was Hal Reickers, whom I had known during our stint in Warm Springs. He put me at ease. Anyway, if I couldn't be a Gyrene, I could at least live like one. The barracks were fine with me. And that opinion held during my entire four-year experience with them.



One PGU became the Canteen where students conducted the really important business of attending college—like talking football, baseball, and girls. (Above, left to right) Glen Meyers, Tom Joyce, and Jim Seybold. Chuck Chapman (left) was one of the balladeers of the PGUs who immortalized the early years in song.

THE FIFTIES

At the start of the 1950s, the Korean War was raging. More men were coming back with permanent disabilities. Many chose college, and a natural choice was the U of I, where the Rehabilitation-Education Program was gaining momentum. The vaccine for polio wasn't available until 1954. Up to then, polio epidemics scourged the country, with particularly devastating results in 1951 and 1952.



In the 1950s Delta Sigma Omicron grew to a membership of over 40 people and sponsored Beta Chapter at the University of Florida.

Through it all, the Student Rehab-Education Program at the University was gaining momentum and public attention. By the spring of 1954, over 90 students were enrolled in the program and 170 more had applied for consideration for the fall semester.

In 1955, the University architects agreed to see that all future U of I buildings would be designed to accommodate students with disabilities. Another major step forward came in 1955 when the Rehabilitation Program was added (in part) to the University budget.

Students with disabilities with cars had been car pooling their fellow students to class since 1949. However, in 1952, two buses with hydraulic lifts made their debut on campus. The infamous "Blue Bulls" snorted and wheezed their way into history . . . and laid the groundwork for accessible metropolitan transportation systems now available to people with disabilities across the country.

In 1956, the Blue Bulls were replaced. Newly-designed hydraulic lifts were installed in two brand new GMC buses. In 1958, two Marmon-Herrington buses joined the fleet.

Delta Sigma Omicron continued to grow in members and project scope. Thirty-two new members were added in 1955 alone. That same year, Beta Chapter of *Delta Sigma Omicron* was established at the University of Florida. The Chapter sponsored a wheelchair basketball team, and the Florida Gators joined the other 38 teams making up the National Wheelchair Basketball Association.

The Rehabilitation-Education Center engaged in research programs designed to make the world more accessible to persons with disabilities. The goal was an assault on architectural barriers. Results of that research on wheelchair accessibility in home design, particularly in kitchens and bathrooms, still stand as the standards for today.

How steep should ramps be for access by persons with disabilities, with varying degrees of disabilities? What materials provide the best traction and durability? Those standards were set through research conducted on the "ramp that led to nowhere."

The ramp was built outside the Rehab Center and was adjustable to heights up to one story. Researchers changed its slope and length by raising or lowering the ramp and pounding pegs in predrilled holes in the vertical posts at one-inch intervals to secure it. Rehabilitation-Education



The car pools that Tim organized each night were replaced by the "Blue Bulls," buses that took students to class. Fay Fergusson, observing a student use the lift, served as bus driver, then as Supervisor of Transportation.



Four of the earlier Gizz Kids cheerleaders get ready to board a "Blue Bull" shortly before the buses were traded in for GMCs. (Left to right) Katie Neimeyer, Lola Lange, Mary Lou Meinert, and Phyllis Voy.

student volunteers and alumni provided the muscle on the ramp along with others young and old.

SPORTS PROGRAM GROWS

Sports competition flourished and grew in scope during the 1950s. The first wheelchair softball game was played in the U of I Armory in 1950. That came on the heels of the first wheelchair football game played between the Blues and the Whites on October 22, 1949. The Blues won.

Because there were no facilities and so little time, the 2nd National Wheelchair Basketball Tournament was held in Hannibal, MO, where an armory with a concrete floor was turned into a basketball court. Most of the participants were

housed in the storage room behind the restaurant of an old hotel using triple-deck bunks (and most players were traumatic paraplegics). The U of I *Gizz Kids* took 2nd!

In 1954, Canada became the first foreign team to play in the NWBT. Far-sighted planners of the time began to believe there might eventually be an annual wheelchair sports competition—which they suggested could be called the PARALYMPICS.

The 3rd NWBT was held at the U of I with the *Gizz Kids* taking 5th. Professor Nugent and 2 undergraduate assistants, Don Townsend and Duane Haas, painted the floor of the Men's Old Gym Annex, which had been used as a dormitory right up to tournament time.



One of the early "Gizz Kids" teams (1954) that began to dominate NWBA play.

THE SIXTIES

The Rehabilitation-Education Program made huge strides in the 1960s. On May 17, 1961 University of Illinois trustees authorized an application for a \$300,000 grant to cover one third of the cost of constructing a new Rehabilitation-Education Center on the Champaign-Urbana campus.

The new facility would replace the two PGU barracks which housed 37 full- and part-time staff members.

The Student Rehabilitation Program had been granted Divisional status under the College of Physical Education.

The program had a name and it had a home after undergoing many name changes since moving to the Champaign-Urbana campus in 1949.

By June 1966, the program could boast of 381 graduates—many with advanced degrees.

In 1967, due in great part to the research and lobbying by Nugent and his staff, House Bill 2416 titled, "An Act to Provide Facilities for the Handicapped in Buildings Open to the Public," was enacted by the State of Illinois.

Sports continued to advance in events and in outreach. The U of I sent wheelchair athletes to the 1960 Paralympic

Games in Rome . . . the first time the Paralympics were held on the regular Summer Olympic site.

That same year saw the formation of the Champaign-Urbana Black Knights wheelchair basketball team, which consisted almost entirely of graduates and former *Gizz Kids* players.

In 1962, U of I Program graduates made up 13 of the 17 American wheelchair athletes selected to tour the Republic of South Africa and Northern and Southern Rhodesia. The month-long tour of 33 cities and towns in the African countries featured daily athletic exhibitions in a number of wheelchair sports including football, basketball, track and field, archery and swimming. (See South African Tour narrative, "*African Safari*", p. 17.)

In 1964, a large contingent of U of I students and alumni competed in the Paralympics in Tokyo, Japan. In 1968, the Program's best athletes qualified for the U.S. Team to the Paralympics in Israel. In 1969, the *Gizz Kids* toured Hawaii to demonstrate the scope of wheelchair athletes and the skill level that was being achieved.

A broader issue in all of these international travels was to expand the story that U of I graduates had spread across the United States since the late 1940s—to show what was possible once the barriers and prejudices were broken down. How well this second purpose was being fulfilled is vividly apparent in the letters the athletes sent home.

Johannesburg, 1962: "In South Africa, we visited the Baraguaneth Native Hospital outside Johannesburg. The



A grant obtained under the Hill-Burton Act was the start of the project that would result in a new building to replace the PGUs as home of the Division of Rehabilitation-Education Services (DRES), during the 1960s. (This photo was taken in 1997).

HIGHLIGHTS 1960-1962

- The number of students registered in the Rehab Program has reached 163, of whom 101 are in wheelchairs.
- The Program added two new buses with hydraulic lifts.
- U of I Trustees authorized an application for a \$300,000 grant for one third of the cost of the new Rehab Center.
- In October, Prof. Nugent traveled to Sweden to accept the first Patrik Haglund Lectureship from the Swedish National Central Committee on Rehabilitation. Prof. Nugent gave four lectures in participating in the gathering of rehab experts from 30 nations
- *Parade* magazine did a picture story on the U of I Rehab and Education Program.
- TV news clips for the American Standards Association campaign were filmed at the University.
- The people of Rhodesia and South Africa paid all expenses to transport 17 wheelchair athletes—13 from U of I—and nine able-bodied assistants to their countries to demonstrate what persons with paraplegia can accomplish.
- Therapy is mandatory for freshmen and sophomores to satisfy their four semester hours in physical education credit required for graduation.
- The annual between-semester basketball tour covered more than 1,550 miles. Nine games were played in as many cities.
- For the first time, U of I women were practicing javelin, discus, table tennis, archery, bowling, and swimming for the National Wheelchair Games.
- To compete in the Games, 27 wheelchair Illini went to New York.
- The Rehab Program served 25 students with visual impairments during the academic year.
- For the first time, the unofficial team title at the International Wheelchair Games in Aylesbury, England, was won by the U.S. team, including several athletes from the U of I.

people of South Africa were more hospitable and accepting than you would imagine. Most of the time we stayed in their homes. At Baraguaneth, we broke the ice and the rules by encouraging the native patients out on the grass basketball court to shoot baskets with us."

Israel, 1968: "As a team member, I was privileged to tour various types of agricultural settlements . . . the Kibbutz and the Machaibi . . . with the Head Agricultural Extension agent for Israel. We visited homes, ate with them and discussed the agricultural similarities and differences in our two countries. I learned more that day about agriculture and about people than I ever have in my life—and I never opened a book!"

Athens, Greece, 1968: "I believe the people in Athens have never seen a wheelchair except in a hospital. Their stares are so void of discretion! And some of them turned around and followed us. One lady came close to hysteria when Carl Suter popped a wheelie and bounced down the step out of her store."

Rome, 1968: "I think we completely blew the minds of everyone who saw us. I guess the time I felt most like the whole world was watching was when we hailed a cab in the middle of the city to take us back to the hotel, whipped into the car and rode off. I think we're all show-offs at heart."

Hawaii, 1969: "How can I sum up this experience? Would it be in the lovely 80 degree weather and sunny skies of Hawaii, or the unusual foods or the friendliness of the people? To me, it was all of these and one thing more . . . the effect we had on many lives which will be changed because we, the *Gizz Kids*, came, giving the greatest gift of all . . . examples of how truly exciting you can make life whether you walk through it or go through it on a set of wheels. Yes, it is great to be a *Gizz Kid*, an ambassador continually engaged in a 'Mission Possible'."

AFRICAN SAFARI, WITH WHEELCHAIRS

In her book, *If It Weren't for the Honor, I'd Rather Have Walked* (1996, Brookline Books, Inc., Cambridge, MA), Jan Little presents many poignant anecdotes and personal insights on the African trip taken by a group with connections of the U of I Rehab Program. Here are excerpts from her book:

In early 1962, rumors started circulating that we'd be heading for Africa. A man named Tom Knowles, a travel agent in Grahamstown, South Africa, was a paraplegic. The attitude of the public in South Africa toward people with disabilities annoyed Tom. He was determined to educate the public that people with disabilities were strong, capable, active individuals.

His friend, John Powell, had left Rhodes University in Grahamstown to teach at the U of I. When John told Tom about the Illinois *Gizz Kids*, Tom decided that running the



HIGHLIGHTS 1962-1967

- The bus broke down during the between-semester basketball tour, and the entourage spent the afternoon in a firehouse playing bridge and drinking coffee.
- In track and field, U of I women won the first annual women's title.
- Of the 29 U.S. Team members who competed in the International Games at Stoke-Mandeville, England, 12 were U of I wheelchair athletes or Rehab Program graduates.
- At least 12 campus honorary societies have initiated disabled students into their memberships.
- In the fall of 1965, the Division of Rehabilitation-Education Services moved into its new home on the western edge of the U of I campus.
- *Sigma Signs*, produced by and financed through the efforts of students in the Rehab Program, has a circulation of 5,000 copies distributed internationally.
- Bachelor's degrees were awarded to Rehab Program students in dairy science, social studies, speech correction, economics, painting, psychology, English, history, communications, education, chemistry, electrical engineering, microbiology, agriculture, political science, and mathematics, with master's degrees awarded in vocational rehabilitation and counseling, accounting, history and physiology. One student received a law degree.
- U of I athletes were a significant percentage of the U.S. Team which competed in the Paralympics in Tokyo, Japan.
- By June 1966, a total of 381 students had graduated through the Rehab Program, including those with advanced degrees.
- All graduates—100%—were employed, in positions having salaries averaging more than \$6,000 per year.
- Wheelchair fencers trained during the spring and fall.
- At the National Wheelchair Games in New York, U of I had 24 men and nine women participate.
- After the annual Springfield picnic, sponsored by the DAV, one bus broke down on the way home, stranding 19 picnickers near a cornfield. They sang, joked and ate popcorn until rescued by the other bus.
- The new Rehab Center was officially dedicated on October 28, 1966.



Gizz Kids around South Africa would be a great way to call attention to the abilities of people who'd crashed cars, had polio or in other ways qualified to use a wheelchair for the rest of their lives.

Who would be on the team was determined by a process that was mysterious and unknown to those of us who were chosen. The rules were that every member had to be a college graduate and employed. Fourteen men and four women representing a cross section of geographic origin, occupation and disabilities would make up the team which would demonstrate sports, lectures and public relations. Our



Adventures in Africa included play . . . (top) Jack Chase, a minister, participated in dancing of a more pagan nature with a medicine man; (lower) basketball with Africans on a field.

ages ranged from me—the baby of the team at 21—to Bob Hawkes—well into his 40s.

The team members were: Carl Cash, Labor Market Analyst, Richmond, VA; George Conn, Alumni Services Field Secretary, Northwestern University, Evanston, IL; Chuck Dahncke, Social Security Claims Adjuster, Danville, IL; Reverend Jack Chase, Pastor, Four Square Church, St. Maries, ID; Wally Frost, Teacher, Artesia, CA; Bob Hawkes, graduate student, U of I; Louise Jones and her husband, Tom, sportscaster and writer, WCIA-TV, Champaign; Fritz Krauth, accountant, Long Beach, CA; Dick Maduro, City Clerk and Treasurer, Madeira Beach, FL; Dean Nosker, assistant editor, College of Agriculture, U of I and his wife and mother of two kids, Lola Lange Nosker; Paul Sones, graduate student, MIT, Boston, MA; Harry Stewart, lawyer, Chicago, IL; Don Swift, Placement Officer, Non-Academic Personnel, U of I; Frank Vecera, commercial artist, Los Angeles, CA and Donna Weisinger, secretary, IBM Corporation, Oak Park, IL.

We'd become wheelchair users in a variety of ways. Donna, Louise, Jack, Lola, Dean, Wally and I had polio. Carl, George, Frank, Harry and Dick had become traumatic paraplegics in automobile accidents. Don had been wounded in the attack on Anzio in World War II. Bob had risked his life to rescue a boy in an accident with a tractor at the residential school he headed in Maine. Paul had exited through the canopy of his jet plane when it failed to open as he was in training at the Air Force Academy.

Even Tom Knowles didn't expect 18 people in wheelchairs to tackle Africa without some back up, so several people not in wheelchairs were chosen to accompany the team. They were: Chuck Elmer and Gibb Fink and Bob "Sergeant

HIGHLIGHTS 1967-1968

- The annual DSO Awards Banquet drew 400 or more attendees, so it became a separate weekend of planned activities for parents, students, and special guests.
- Tom Hancock, philosophy major and senior resident and finance manager of Tanbrier House, received the Harold Scharper Achievement Award.
- Tanbrier House, a pilot project of the Rehab Center, had the highest collective grade-point average of any University residence.
- Joanna Cornett, former DSO secretary and vice president, U.S. team member at Stoke-Mandeville, England games, and editor of *Sigma Signs*, received the Harold Scharper Service Award.
- DSO and the American Businessmen of Champaign co-sponsored a new Boy Scout Troop (133) to provide normal scouting experiences and other benefits for handicapped boys.
- The *Gizz Kids*—in their hydraulic-lift-equipped bus—were officially received at the White House by Vocational Rehabilitation Administration and other officials.
- Sherrill Peterson, a U of I student, received the 1968 National Scholastic Achievement Award from Recording for the Blind, Inc.
- The Rehab Program received a new Rambler for use in the Driver's Ed program.



Bilko" Wright from the U of I SRC; Paul Luedtke, co-owner of Carter's Mayflower Moving, Urbana, IL; Charlie Ryder, physical education teacher and U. S. National Wheelchair Sports official, Long Island, NY; Jim Nugent, freelance writer for Walt Disney Studios, Los Angeles, CA—and Tim's brother—and Roger Ebert, who was warming up as a film critic on the staff of the Champaign-Urbana *News Gazette*. Dr. Echo Dell Pepper—who'd always wanted to see Africa—and Chuck Dahncke's wife, Adrienne, who had been one of my roommates in college—were added to the roster to help close the gender gap. We all wanted Henry Bowman to be part of the team, but South Africa would admit no blacks.

At the last minute, Lola's father died and she chose to remain at home and support her mother.

The group was scheduled to leave in June right after the close of the National Wheelchair Games in New York. May was an unsettling month. Although Tom Knowles had pushed over 200 miles from Grahamstown to Durban to raise funds, he hadn't raised enough. We thought the trip was off. Tim borrowed funds. The trip was on. No airline could be found to carry 17 people in wheelchairs from New York to Johannesburg. We thought the trip was off. Alitalia Airlines welcomed us. The trip was on. What about visas? The trip was off until the South African Consulate in Chicago convinced the U.S. Consulate to put the trip back on . . .

. . . Paul Luedtke, trained by years in the moving industry, "cubed the area" of our most likely transport in Africa and set the rules for what we could take on the trip—one suitcase apiece—weighing no more than 35 pounds. After all, we had to carry our wheelchairs and athletic equipment, not to mention enough parts and tools to make sure the wheeled equipment would make it through the trip.

Louise and I panicked. Thirty five pounds in one suitcase was OK for a weekend, but six weeks? It's winter in South Africa. What is winter like in South Africa? What do they wear in South Africa? Could we buy make-up there? Had tampons reached South Africa—or did women still use leaves?

"One suitcase," Paul repeated. "Or you stay home."

Our first demonstration of sports that afternoon at the Wanderers Club athletic field was well received.

When the guys decided to play football as an encore, we discovered that a rugby ball is a poor substitute for a football. The round ends made the ball almost impossible to pass. The matter was corrected two days later when an incoming Lufthansa Airline crew surprised us with a real American foot-



Adventures in Africa included play . . . (top) Chuck Dahncke meets the Chief; (lower); natives at Baraquaneth Hospital were eager spectators at a basketball game.

ball that they'd picked up for us in New York. My sweet little double-recurve, 25-pound-pull fiberglass archery bow had been left behind in New York. Dick Maduro loaned me his spare 40-pound pull steel bow. For the rest of the trip, it was a toss-up whether I was going to shoot the arrow or the bow was going to fling me in the other direction.

Our teams had always played basketball on hardwood and football on packed dirt. We immediately learned to play on a combination of grass and loose dirt. Because Lola had been forced to cancel the trip, we were short one girl for the square dancing routines. After a discussion among the male team members, Bob Hawkes "volunteered" to fill in. Gibb and Tom Knowles came up with a platinum blond

wig and some pretty astounding falsies, Adrienne did a quick make-up job and our sex symbol, Roberta, emerged. He had an advantage over Donna, Louise and me, in that he was strong enough to leap the ruts in the field as we did *Allemande Left* and *Do Si Do* . . .

. . . Our first week fled by with daily trips to the surrounding towns. We soon discovered that we were celebrities—something new after being considered a freak show in the States. Children swarmed around us begging for autographs—and the coins in our pockets. Businessmen from General Motors, Standard Oil, Pepsi and other U.S. firms entertained us, eager for news from home.

A new activity was added to our schedule. Doctors who saw our exhibitions pleaded for us to split up and

visit their hospitals. We must have covered every children's hospital in the country. The native children with bone tuberculosis and rickets, we were told, were indications that health care for natives was still very poor.

We even picked up camp followers. One man followed us around with bottles of water from Lourdes, intent on curing us all of our disabilities until Bob Wright lost his temper and chased him off with logic only Wright could have come up with—"If you cure them, what will I have for a wheelchair team, you idiot?"

Our itinerary was working us southward until, when we reached the edge of the Kalahari Desert, we would fly to Cape Town. As we approached Grahamstown,



Academics, employment, architectural accessibility, all were achieved in the first years of the Rehabilitation-Education Program. Perhaps the most important gain for people with disabilities, however, was the change in attitude about disability. When Ron Stein was named the outstanding athlete of the year, old stereotypes fell. Ron's wife, Jan, and his child admire the trophy.

Tom Knowles' home, the transportation gremlin—who obviously was an invisible member of the team—struck again. Our bus blew a tire, then a second. Swearing, our able bodied men roused themselves from their naps and went to change the tires. They soon returned.

"The jack they're carrying wouldn't lift a Volkswagon," Chuck swore. "It doesn't matter, though. There's only one spare tire."

Paul Luedtke trudged off to find help. A bus sent out from Welkom—the next city we were to visit—actually got into our sight before it belched a puff of smoke and died. Fortunately, the Mayor of Welkom was following in his car so he could go back and rouse the citizens of the town to come rescue us with their cars. . .

. . . The logistics were overwhelming—if we'd thought about them before carrying them out. Seven men carried the 14 of us, who could not walk at all, off of planes and buses, a tribute to their physical condition. Of course, Roger Ebert weighed about 110 pounds at the time even though he held his own at the feasts provided for us. Paul Luedtke had swiped a trick from the moving trade and numbered each piece of luggage and equipment. Knowing our numbers, we were expected to dump our belongings in the proper order in front of any means of


transport we were using that day. If a number was missing, Paul knew the culprit. "We don't move 'til all the numbers are in line." We never lost a piece of our belongings, which included six spare wheelchairs, 25 suitcases, six bags of sports equipment, a portable display, four archery sets, three complete sets of uniforms for the team and a set of portable stairs for Jack Chase to use to demonstrate how to go up and down steps on the rear wheels of the chair.

Probably more remarkable was that we were all speaking to one another when we arrived at Salisbury. Having lived for 40 days in proximity closer than a refugee family of 25 in Hong Kong, we'd naturally had a few spats. But the pressure of our schedule didn't allow much time for arguments. Other than a few upset stomachs and minor sprains, no one had sustained any injuries. We sure knew each other's habits, likes, and dislikes after living together. How, we asked, could Chuck Elmer possibly drink lukewarm Pepsi when he first got up in the morning.

"As the sun sets over the Rhodesian hills, we board our Alitalia Boeing 707 and bid farewell to our many friends. . ." Tom Jones' recording session for his TV documentary was cut short by the rest of us throwing whatever was handy to shut him up so we could go to sleep.



The troupe that toured South Africa pose in front of a bus in Johannesburg.

 HIGHLIGHTS 1968-1970

- Professor Tim Nugent received the W. F. Faulkes Award, the first and highest honor established by the *National Rehabilitation Association*.
- The Paralympic Games were held in Israel, with 16 men and women from the U of I participating and later visiting Athens and Rome.
- The *Gizz Kids* won the 1969 Wheelchair Basketball (NWBT) and traveled to Oahu, Hawaii, to participate in basketball, track and field, archery, swimming, square-dancing, and musical presentations. As a special project during summer school, DSO sponsored a trip to the Champaign County Fair.
- The *Gizz Kids* again won the NWBT in 1970.
- Tim Harris and Ron Stein were inducted into the Wheelchair Hall of Fame.



Through the years, staff members of the Division of Rehabilitation-Education Services were a critical part of the success. . . (seated left to right) Chuck Elmer, Eden Nicholas, M. Dale Kinzie, Martha Boose, Tim Nugent, Joe Konitzki, Gibb Fink, Frank Maglione, and Stan Labanowich.



A milestone for the Division of Rehabilitation-Education Services was reached in 1965 when the new Rehabilitation-Education Center, located on Oak and Stadium Drive was dedicated. At the left, University of Illinois President David Dodds Henry opens the ceremonies, as Tim Nugent, College Dean King McCristal, and representatives of federal and state agencies look on.

After 38 years of service, Tim retired. Numerous ceremonies were held to honor him and his achievements.



This oil painting of Tim Nugent which hangs in the lobby of the Rehabilitation-Education Center, was presented to the center at the time of his retirement. The artist was Billy Morrow Jackson, who conceived Tim's shadow to be a wheelchair.



Sue Suter, Director of the Illinois Department of Rehabilitation Services, honored Tim and his work.



Governor Jim Thompson presents Tim with a special citation and declared September 7, 1985 "Tim Nugent Day" in Illinois as Dean Robin Herron and 70,000 spectators watch in Memorial Stadium.



Don Swift (right) brought back a happy memory at Tim's retirement celebration.



Photos: Top row, left to right: Justin Dart (left) honored Tim on behalf of the President of the United States; (left to right) Dr. David Dodds Henry, President of the U of I, and The Honorable Otto Kerner, Governor of Illinois, supported Tim and his program; Roger Ebert (right) nationally-known film critic has been a friend of the program since the 1960s. Bottom row, left to right; Frances Best Watkins, member of the U of I Board of Trustees receives her Honorary Life Membership to DSO; Curt Beamer (right) has recorded the history of the program with his camera. He and Tim at the National Naismith Memorial National Basketball Hall of Fame in Springfield, MA.

HIGHLIGHTS 1970-1975

- A few women in wheelchairs and some of their able-bodied friends organized a women's basketball team—which, of course, led to the nationally acclaimed *Ms. Kids*.
- A National Student Occupational Therapy Rehabilitation Workshop was held at U of I, when students from other universities toured the Rehab Center.
- The January wheelchair semester break tour—players, cheerleaders, squaredancers, staff—included Hammond, IN, Lansing, MI, Canton, OH, Johnstown, PA, Harrisburg, PA, and East Orange, NJ.
- The 25th Anniversary of the Rehabilitation-Education Center was commemorated.
- The *Gizz Kids* trouped to Florida in 1972, through Virginia and the Carolinas in 1973, and through the White House in Washington, DC, also in 1973.
- Recreation and athletics for students with visual impairments included swimming, ice skating, judo, and bowling, a special guide-rail being used in the latter sport.
- During an Alumni Homecoming Weekend, the annual football match was held at the Armory—alums beating the students 26-8!—and a lighted globe was presented to Tim Nugent, “to symbolize the far-reaching effects of your work.”
- Alumni of the Rehab Program now live in 20 foreign countries.
- *Gizz Kid* archers Lynn Boyle, Mary Wolfe, Sue Hagel, and Dan Dropko were all selected to compete as representatives of the United States at the 4th Pan American Wheelchair Games held near Lima, Peru.
- The Hal Hagler Chapter of the Disabled Veterans of America held its annual outing for Rehab Program students and staff at Lake Springfield.

THE SEVENTIES, EIGHTIES, AND NINETIES

Following the retirement of Tim Nugent in 1985, Joseph Larsen took the helm. Dr. Larsen worked tirelessly until his untimely death in 1989 to create an academic program in rehabilitation to balance the extraordinary service programs of the Division. In 1990, Dr. Paul Leung was named Director of this expanded unit comprised of both service and academic programs in rehabilitation. Dr. Leung served as Director until 1994, when he resigned his post to pursue his research and teaching interests full time as the head of the School of Disability Studies at Deakin University in Sydney, Australia. Following Dr. Leung's departure in 1994, the Division underwent a substantial reorganization, which resulted in the transfer of the academic programs in rehabilitation to the Department of Community Health in 1997. At that time, Brad Hedrick became the Division's



Dr. Joseph Larsen (above) guided the Division of Rehabilitation-Education Services after Tim's retirement. He served from 1985 to the time of his death in February, 1989. Dr. Paul Leung (right) served as Director from 1990 to 1994.

HIGHLIGHTS 1975-1980

- Nine students—three women and six men—blind, wheelchair and cerebral palsied, from the U of I participated in the first study abroad program for the permanently disabled student, jointly sponsored by the University of Stockholm and DRES, with help from the World Community Service Committee of the Champaign, Illinois Rotary Club.
- Four hundred wheelchair athletes representing 35 states, pushed into the U of I Armory to open the 19th National Wheelchair Games.
- A play exploring society's attitudes toward disabled persons was presented "in an irreverent, satirical, humorous light" by students of the Rehab Program.
- Tim Nugent received an honorary Doctor of Humanics degree from Springfield College in Massachusetts.
- Dwight Johnson was the first paraplegic to learn to fly at the University's Institute of Aviation.
- Mark Curley, a quadriplegic, was enrolled in the Institute of Aviation, using a Hoyer lift to get him into the flight simulator.
- At the Second National Wheelchair Marathon in Boston, the first and only woman participating was U of I freshman Sharon Rahn. (Her time was 3:48:11!)
- The DRES and DSO co-sponsored the First National Intercollegiate Wheelchair Basketball Tournament.
- The Third National Women's Wheelchair Basketball Tournament was held in Champaign-Urbana in March 1977, with the Canadian team finishing first and the U of I team second.
- U of I student Hans Peter Brass, from Saarbrücken, Germany, competed in the first annual U.S. Association for Blind Athletes tournament at Western Illinois University, entering the swimming and racing events.
- Robert C. Hawkes, DRES alumnus, reported that he had been appointed Director for the Maine White House Conference on Handicapped Individuals—at which the keynote speaker was Tim Nugent.
- DRES alumna Bruce Aldendifer McDaniel noted that she was the featured attraction as a "living rehabilitation model as I traveled alone, grocery shopped, and entertained"—during stays in such countries as Germany and Iran.
- The *Gizz Kids* performed lively "audience participation" wheelchair square dancing and jousting during the First Annual Wheel-A-Thon of the National Paraplegia Foundation, Chicago Chapter.
- The *Gizz Kids* ended their season with a 28-8 record, taking the Intercollegiate Wheelchair Basketball Championship.
- The Beckwith Living Center, designed for students with the most severe disabilities, was approved by the U of I Board of Trustees; it will replace the Tanbrier Project House.
- For 10 days, and traveling 2,000 miles, the *Gizz Kids* visited Little Rock, AR, Memphis, TN, Jackson, MS, New Orleans, LA, Atlanta, GA, and Lexington, KY.



HIGHLIGHTS 1980-1983

- Tim Nugent received a doctor of laws degree, *honoris causa*, from Mount Mary College in Milwaukee and a special award from the President's Committee on Employment of the Handicapped.
- Four U of I wheelchair athletes participated in the Olympics for the Disabled in Arnhem, Holland: Sharon Rahn Hedrick, Barbi Baum, Brad Hedrick, Betsy Pyle.
- On 22 April 1982, President Reagan accepted the Honorary Chairmanship of the VII Paralympics, Prof. Timothy J. Nugent being among those present in the Oval Office for the announcement.
- On 12 May 1982, the Guy M. Beckwith Living Center, built with funds from a bequest in Mr. Beckwith's will "for the development of a unique educational housing facility," was dedicated. Among those attending was Mr. Beckwith's widow, Wilhelmine Hursh.
- Five teams, including one from the U of I Rehab Program, met in Champaign for the Midwest Wheelchair Football Championship.
- The contract for the VII World Wheelchair Games (Paralympics), to have been held under the auspices of the U of I, was terminated.
- A Luau Night at the Rehab Center featured a concoction called "Tropical Stacky Uppi."
- A Saturday fishing excursion to Lake Shelbyville included exaggerated catches by Joe Gerardi, Mike Pallis, and Karen Wold.
- Ten athletes and 3 coaches from the Rehab Program participated in the 27th National Wheelchair Games in Honolulu.
- Goal Ball, sanctioned through the U.S. Association for Blind Athletes, began in earnest as part of the DRES sports program.



4th Director. To the Program's credit, throughout this somewhat volatile period characterized by considerable organizational and administrative change, it successfully maintained its focus on expanding opportunities for students with disabilities on the Illinois Champaign-Urbana Campus.

EXPANDED OPPORTUNITIES

Students with disabilities now have many more options for inclusion and participation in integrated social and recreational programs than their predecessors. In addition, *Delta Sigma Omicron* continues to serve

as vital a role as it played in the program's early years, by fostering the development of individual and collaborative self advocacy skills by students with disabilities. *Delta Sigma Omicron* serves as a place where people with different disabilities can learn to work cooperatively as an effective political aggregate. Integrated education has limited student contact with people with similar disabilities, and thus has diminished their opportunity to learn how to cope with situations arising from their disabilities.

As in the past, DSO continues to play a vital role in providing students with experiences that reinforce the importance of working together to solve problems more effectively. Through DSO, students consult with one another on access problems and collectively formulate and implement problem-solving strategies to eliminate barriers to access.

DSO has continued to sponsor such activities as:

- the annual DSO/Harold Scharper Awards Banquet and the Holiday Party for Youth with Disabilities;
- the presentation of the DSO Distinguished Teaching Award to UIUC faculty who demonstrate excellence in the support of students with disabilities;
- the partial sponsorship of the DRES sports program;
- the organization and execution of the Wheel-A-Thon;
- collaboration with the Vice Chancellor of Student Affairs in the organization and execution of a campus accessibility walk;
- and the publishing of *Sigma Signs*.

Pursuing these activities gives students the opportunity to hone their leadership and social skills and learn coping strategies from others with similar disabilities. Many, for whom this is the first time they have worked with people with similar disabilities, acquire an appreciation for the importance of cross-disability collaboration.

Throughout the 1980s and 1990s, the Division continued its rich tradition of leadership in sports for people with disabilities. Illinois athletes have continued to distinguish themselves and the Program through their accomplishments. Since 1981:

- the men's basketball teams have won seven national collegiate championships;
- the Illini women advanced to the finals of the National Women's Wheelchair Basketball Tournament in 14 of the last 17 years, winning seven championships;
- in wheelchair racing, the program has advanced three women and two men to the finals of the 800 meter and 1500 meter Olympic Wheelchair track events held in conjunction with the Summer Olympics, accumulating 2 golds, 3 silvers and 1 bronze.

As in past years, the USA Paralympic Teams continued to be comprised of an extraordinary percentage of former and current Illinois athletes. DRES, in cooperation with



HIGHLIGHTS 1983-1985

- "Fergie" (i.e., Fay F.) Fergusson, for 29 years Rehab Program transportation operator, retired on 31 August 1983.
- Tim Nugent retired as Director of the Rehab Center effective 1 September 1986.
- The afternoon of 2 December, Santa Claus (aka Jim Tasic) made his yearly pre-holiday visit to the Rehab Center for the annual Disabled Children's Christmas Party.
- Sharon Hedrick was named the first wheelchair athlete to receive the Southland Olympia Award, given for both athletic performance and dedication to the amateur ideal.
- On 18 and 19 August 1984, a total of 29 Midwestern wheelchair tennis players and one Swedish tennis player participated in the Second Annual University of Illinois Wheelchair Tennis Championships.



DSO, also obtained support from central campus to grant student athletes with disabilities a percentage of the talent/tuition waivers (\$55,000 annually, adjusted for inflation) previously limited to the University's able-bodied athletes. In addition, cooperation between the DRES Office of Recreation and Athletics and the Division of Intercollegiate Athletics (DIA) has resulted in joint projects with Academic Services of the DIA, and greater participation by the DIA in the marketing of the Program.

The pioneering commitment to preparing students with severe disabilities for college attendance, graduation, and successful careers has expanded in the decades of the 80s and 90s. Discussions with the disability service directors at other colleges and universities have indicated that students with the most severe physical disabilities, who require assistance in the performance of activities of daily living, continue to be under-represented on other campuses. While other universities rarely have even five such students living in University residence halls, at the U of I, 15-20 students with such disabilities reside in Beckwith Hall alone, and another 5-10 reside in other private or University housing.

Contemporary post-secondary disability rights leaders have periodically questioned the validity of Beckwith Hall services, on the grounds that Beckwith fosters the segregation of students with severe disabilities with regard to



Chuck Graham, the first University of Illinois student in a wheelchair to be elected to the Homecoming court, and his escort Sunya Tweenen.



In 1988, Illinois wheelchair athletes joined the USA Team to the Paralympics in Seoul, Korea. If the Illinois athletes had been a separate team, they would have placed 24th among the 66 nations represented in terms of total medals won. Sharon Hedrick, second from left, played on the first ever USA women's basketball team to win the Paralympic gold, while Ann Cody, fourth from the right, won 4 silver medals in track and field.



Sharon Hedrick, Gold Medalist in the 800 meters during the 1984 Summer Olympics in Los Angeles and the 1988 Summer Olympics in Seoul, Korea is congratulated by Chancellor Mort Weir during the unveiling of a permanent plaque commemorating Sharon's achievements at the U of I Intramural-Physical Education Building.



Christmas comes but once a year. . . and in this picture it is a special time for children with disabilities of the community.

housing, and restricts self-determination and empowerment. However, in truth, students with such disabilities are often ill-prepared at the time of high school graduation to deal with the complexities involved with entering college and living independently. They are suddenly expected to be able to handle both the rigors of academic life and to acquire the knowledge, skills, and experience necessary to successfully live independently. At Beckwith Hall, students have the opportunity to participate in training to improve independent living and to learn to hire,



A couple of handsome gentlemen. . . Paul Sones (left) and Jack Whitman enjoy the punch line from one of Jack's many stories.

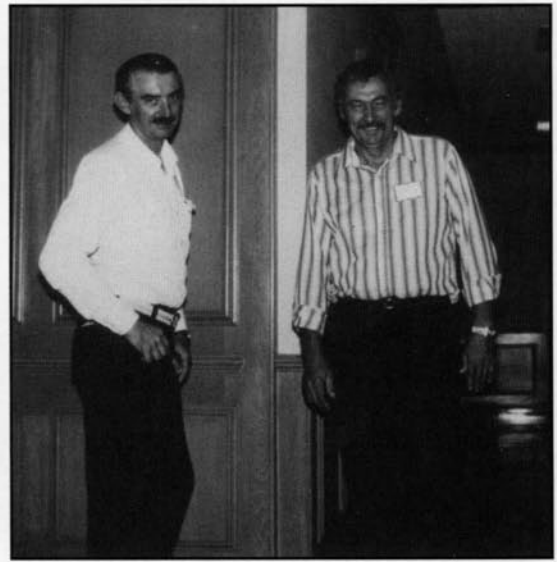


HIGHLIGHTS 1985-1986

- A master's degree program in rehabilitation engineering was under development through the Rehab Center.
- Illinois Governor James Thompson declared 7 September 1985 to be Tim Nugent Day, announcing the honor during halftime at the Illini vs. Southern California football game.
- The Nugent Alumni Retirement Committee gave Tim a new Chrysler convertible (which he still drives) . . . as well as a radar detection unit (which he still needs!).
- "The Ms. Kids Shuffle" was sung by the team at the 12th National Women's Wheelchair Basketball Tournament, the Ms. Kids then winning the championship.
- Susan Suter, Director of the State of Illinois Department of Rehabilitation Services and former U of I student, was first speaker in the DRES "Role Model Series."
- The Rehab Center's computer lab acquired four paperless Braille writers, or VersaBrailles.
- Joseph R. Larsen was named Director of the Rehab Center.



train, schedule, and manage personal attendants through sharing these tasks with Beckwith management. A disability management team comprised of the student, a physical therapist, an equipment specialist and Beckwith management, work collaboratively to determine a plan for improving each student's personal management of his/her disability. The Beckwith goal continues to be to help residents acquire the knowledge and skills necessary for success transition to mainstream University or private housing prior to graduation.



This picture of Robert Corum (left) and Boyd Smith (right) was taken in 1982. Both drivers still work at the Rehab Center.

Regarding the Division's accessible transportation services for persons with disabilities, the vehicles operated by DRES today are a substantial improvement over the old "Blue Bulls." The problems of amortizing the cost of the fleet to allow replacement of buses has been much improved through the development of an ongoing partnership with the Champaign-Urbana Mass Transit District. This partnership assures that the Division will be able to replace its current bus fleet within seven years. In the future, buses will be replaced as needed.

EDUCATIONAL OUTREACH

Disability education and outreach to the campus is the Division's foremost task to achieve the Program's ultimate objective of empowering persons with disabilities, fostering true assimilation, and providing accessibility. To reach this goal, campus-wide involvement on disability issues is imperative. Increasingly, the Division is becoming less of a direct service provider, and more of an educational resource for the campus. For example, much work has gone into the development of improved media related to disability services at the UIUC or disability in general. Presently, the Division:

- publishes a Disability Resource Guide for students, faculty and staff;



Pictured here is one of the fourth-generation Rehab Center buses.



DSO activities include holding the annual Wheel-A-Thon (top two photos); organizing, and attending seasonal parties, picnics and Luau's!!

- performs departmental workshops;
- hosts a campuswide seminar series on disability;
- publishes a campus-wide Disability Newsletter;
- maintains an extensive World Wide Web homepage; and,
- coordinates a Campus-wide Committee on Assistive Educational Technology.

To ensure that people with disabilities will have access to technologies in the changing UIUC system, the Coordinator of Assistive Communication and Information Technology has worked toward the creation of a subcommittee of the campus Educational Technologies Board on accessible educational technologies. DRES has obtained several grants to initiate the development of a distributed network



HIGHLIGHTS 1986-1987

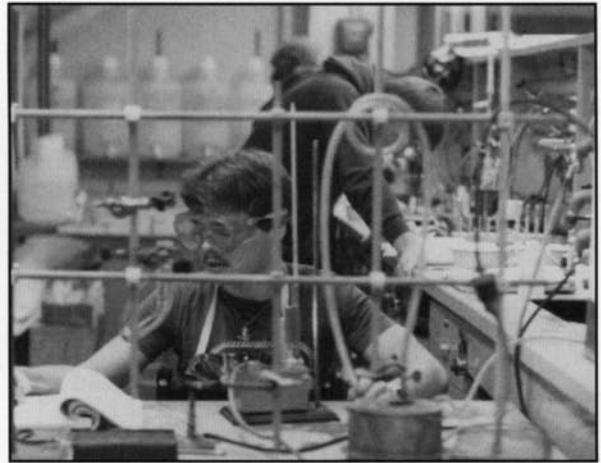
- Dr. Frank Maglione, Jr., retired after 26 years of service, mostly as a rehab counselor.
- More than 250 children attended the annual Christmas Party.
- A DRES-sponsored day-long information workshop to recruit disabled high school students was held in Oak Brook, attracting 54 persons from the Chicago area.
- A job-placement conference, co-sponsored by DRES and the Illinois Department of Rehabilitation Services, drew 130 persons.
- The local American Legion treated three area wheelchair basketball teams to a "chicken and biscuits" dinner—for the 34th year!
- The men's and women's wheelchair basketball teams dropped the names "Gizz Kids" and "Ms. Kids", respectively, adopting "Fighting Illini" inasmuch as the players now earn varsity letters from the University.
- The U of I Women's Basketball Team won the 12th National WC Championship in Chicago.



of assistive computer technology that may be used in dormitories or class areas. This avoids potential segregation resulting from students having to use computer access technology available only at the Rehab Center.

Although the prime target of the Division's educational efforts is the campus, its leadership continues to be recognized nationally and internationally. During the past three years alone, the Division's academic professional staff were invited to present papers on current DRES research and/or programs related to adapted sports and exercise, physical therapy, assistive information technology, learning disability, and the organization of post-secondary disability services, at 14 national and 4 international professional and/or scientific conferences.

Activities of the Office of Recreation and Athletics are typical of the Division's national and international outreach. To foster opportunities for persons with disabilities to pursue athletic potential as well as health and fitness objectives, Division staff and student athletes have traveled to Brazil, Ecuador, Japan, and the former Soviet Union to assist in the development of wheelchair sports programs and physical education curricula for people with disabilities. Additionally, the Office has been instrumental in developing a formal coaches education in wheelchair sports in the United States. The most



Changes in thoughts and ideas gave way for opportunities for many students, in many areas, including chemistry for Mike Pallis.



Matt Mannos and Kevin Kage make the most of the Computer Lab at Beckwith Hall. The Computer Lab provides on-site assistance for all students and staff.

widely read instructional texts on wheelchair basketball and wheelchair track and field were authored by Division staff.



The U of I All Stars in an open Invitational Wheelchair Football Tournament game with the Springfield Spoke Jockeys.



HIGHLIGHTS 1987-1989

- The master's degree program in rehabilitation with concentration on administration and counseling was established.
- The total of research grants from various federal and state agencies totaled \$454,161 as of 1988.
- Rehab Center staff travelled to Florida, Philadelphia, Pittsburgh and Kenya to promote the U of I Rehab Program.
- The Pal Program was established to bring together students and children with disabilities from the Champaign-Urbana area.
- DRES Director Joseph P. Larsen died February 17, 1989. A scholarship was established in his name.
- The first master's degree in rehabilitation was awarded to Kristin Jirik Sorenson.
- U of I athletes participated in the Paralympic Games in Seoul, Korea.
- The Fighting Illini Men's Wheelchair Basketball Team won their third straight national championship.
- To invite other universities to establish DSO Chapters, Rehab Center staff attended the Association on Handicapped Student Programs in Postsecondary Education Convention.
- Long-time Assistant Director, Joe Konitzki retired.



Curt Beamer, here with a former U of I student, Scot Hollonbeck, has been the resident Rehab photographer for many years.



1986 National WC Championship winners. . . (back row) Brad and Sharon Hedrick, (front row, left to right) Ann Cody, Maria Gotfryd, Barb Yoss, Mary Gramsas, Sherry Ramsey, and Linda Mastandrea.



HIGHLIGHTS 1989-1990

- After 33 years as Supervisor of Physical Therapy, Chuck Elmer retired.
- Brad Hedrick, Supervisor of Recreation and Athletics, spoke at the First Conference on Physical Culture and Sport for the Physically Disabled in Russia.
- Jean Driscoll, one of the U of I athletes competing in the Chicago Marathon, shattered the women's record with a time of 1:43:1.
- Both the men's and women's wheelchair basketball teams won the national championships.
- The John D. Schneider Charitable Trust and the State of Illinois helped fund the DRES Driver's Education program.



Furthermore, the coaches in the Division's Office of Recreation and Athletics, in conjunction with the American Sport Coaches Association, developed a Coaches Education Program for Wheelchair Sports-USA. To date, the program has completed 20 instructional workshops and has trained over 200 coaches.

The Division worked to develop the first Disability Service Directors Group with representatives of all Big Ten Universities and the University of Chicago. The subgroup will meet formally twice per year and will be used to stimulate cooperative problem solving and to improve disability access and services on all of the campuses represented.

The Division has also developed a range of summer camps for youth with severe disabilities. Two of the camps focus on new knowledge and skills in wheelchair sports



Shown here (above) is the U of I contingent at the 1983 National Wheelchair Games in Honolulu, Hawaii.



Every year, many of the U of I athletes with other people of the community get involved in racing for health. . . The Christie Clinic race.

while another concentrates on acquiring the necessary knowledge and skills to use technology.

The Summer Wheelchair Sports Camps for Youth with Disabilities have been held for ten years and have served more than 300 children. These camps offer youth with disabilities the opportunity to attend summer sports camps that are rich in sports instruction, just like camps available for their peers and siblings without disabilities.

Summer technology literacy camps, similar to the "computer" camps enjoyed by all children, are slated to

begin during the summer of 1998. These camps will be targeted at improving technology literacy among "high risk" high school students with blindness and/or severe upper extremity disabilities. The goal is to help these students identify the assistive and information technologies that best meet their needs, and to assist them in becoming proficient in the use of these technologies long before they enroll in a college or university.

The Division recently collaborated on two public information efforts. An award-winning documentary en-



Brad Hedrick provides one-on-one basketball instruction for a summer wheelchair sports camp participant.

HIGHLIGHTS 1990-1992

- The Americans with Disabilities Act, assuring people with disabilities equal access to buildings, transportation, telecommunications, employment and services was signed by President Bush on July 26, 1990.
- Quad Rugby was featured in *Sigma Signs* as the sport swept the nation.
- The Fifth Annual Job Placement Conference for College Students with Disabilities, held in Springfield, IL, attracted over 300 people.
- The Annual Student Laureate Educational Achievement Award was presented to graduate student Jean Driscoll.
- The third DSO Chapter was established in November 1990 at Waubensee Community College.
- Ronald McDonald, mascot of the McDonald Corporation, was MC for the annual DSO Christmas Party for disabled children.
- Steve von Nordheim, U of I student, joined the ranks of skin divers with disabilities.
- Jean Driscoll was named Amateur Sports-woman of the Year by the Women's Sports Foundation.



titled *Against the Wind*, depicting the training regimen of Jean Driscoll as she prepared for the Boston Marathon, and highlighting the impact of the Division's unique



Marty Morse gives instruction in track techniques to a young camper.



(1997) University of Illinois Summer Wheelchair Sports Camp
Basketball Campers and Staff.



(1997) University of Illinois Summer Wheelchair Sports Camp
Track and Field Campers and Staff.

The Annual "Kids Camp" started in 1987 with just 18 attending; however, in 1997 over 60 young people attended. This camp helps introduce those with disabilities to sports and also makes them aware of the opportunities there are if they are willing and dedicated to an education.



Jean Driscoll, 7-time Boston Marathon winner. These two photos were taken at finishing line at her seventh win. Photos courtesy of Fay Photo.

wheelchair sports programs was produced in cooperation with WILL-TV. *Gifts Beyond Healing*, a video tape, produced through the generosity of the Hollister Corporation, depicts the very personal impact of disability on the lives of former students with disabilities and their families, and the critical role the Division played in helping them to earn their college degrees and, more importantly, to rebuild their lives. Both films have been shown nationally, and brought kudos to the Division and the University from all corners of the country.

In yet another outreach effort, the Division managed Project PURSUIT, a program funded by the National Science Foundation to stimulate increased enrollment of students with disabilities in university curricula in science, engineering and math to prepare them for employment in these lucrative and promising 21st century career fields. PURSUIT is a multi-faceted program designed to encourage students with disabilities to pursue their academic and professional dreams, and to concurrently encourage cur-

HIGHLIGHTS 1993-1995

- Danny Elam retired after 16 years at DRES.
- Ten persons from seven East Asian countries toured Beckwith Living Center, DRES facilities and the nonprofit PACE Center for Independent Living under sponsorship of the U.S. Information Agency.
- Project PURSUIT was established to encourage and assist students with disabilities to pursue careers in engineering, science, and mathematics and has become a frequently visited site on the World Wide Web.
- Every U of I student is now issued a "ph" (personal handle) and a password enabling them to access the Internet.
- The Rehab Center Adaptive/Assistive Lab helps students learn to use computers for research, e-mail, taking tests and general purposes.
- The Fighting Illini men's wheelchair basketball team wins its sixth national title in ten years.
- After external review, DRES' two functions were organizationally separated. The graduate program in education joined the Department of Community Health and the student services continued to be housed under the College of Applied Life Studies.
- DSO used a 3 on 3 wheelchair basketball tournament to raise money for the National Spinal Cord Association.
- Twenty-nine persons, aged 10 to 21, participated in the Illinois Summer Wheelchair Sports Camp organized by DRES staff.
- UIUC and DRES created the University of Illinois Wheelchair Sports web page—the first in the US.





HIGHLIGHTS 1996-1998

- 1996 - Paralympics were held in Atlanta, GA. Several members of the U of I Track and Field and Basketball Teams participated in the games and won medals.
- In 1997 Brad Hedrick was assigned the position of Director of Rehabilitation-Education Services.
- In 1997 at the Annual AHEAD Conference, held in Boston, the Division of Rehabilitation-Education Services and DSO placed first and second for two publications, e.g. 1st place for the 1996-1997 *U of I Guide to Athletics for Students With Disabilities*, and 2nd for *Sigma Signs*.
- Robert Hill was awarded the Pamela Borelli Leadership Award.
- Ron Phelps was awarded the Harold Scharper Service Award.



Dean Michael Ellis (left) presents Robert Hill (right) with the "Pamela Borelli Leadership Award".



Ron Phelps (left) former President of the Beckwith Hall Student Government, is presented with the Harold Scharper Service Award by Brad Hedrick (right), Director of Rehabilitation-Education Services.

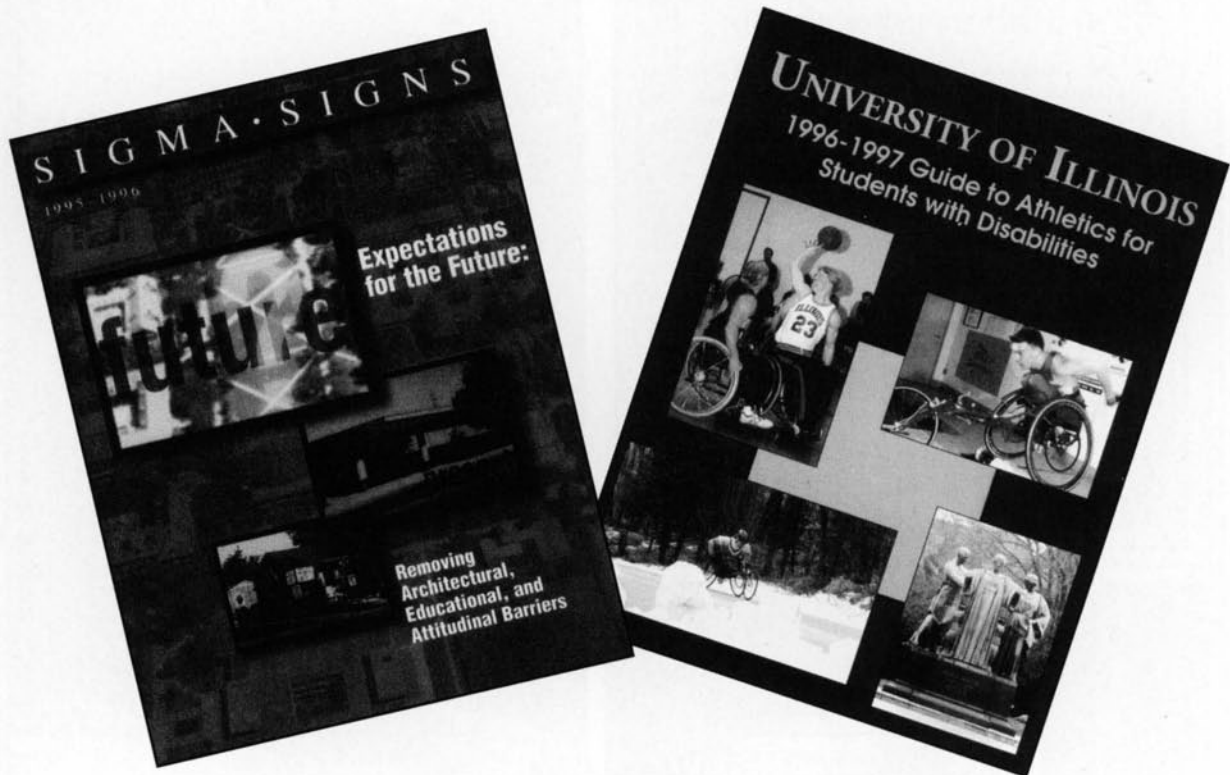
ricula in these fields to improve disability access within their programs. PURSUIT offered:

- (1) workshops for students with disabilities, families, professionals and educators who work with students with disabilities;
- (2) limited grants for high school and college level educators to underwrite the cost of making their courses, laboratories, classrooms and computers more accessible to students with disabilities;
- (3) access to role model mentors with disabilities employed in the fields of math, engineering and science;
- (4) peer support for high school and college students with disabilities who wish to learn how other students with disabilities meet the challenges of campus life;
- (5) electronic mail for students who want to communicate with others around the state, nation and world;
- (6) Internet access for anyone interested in learning about what the 'information superhighway' provides for those interested in issues of disability, science, math, engineering, computers, assistive technology, and;
- (7) access to summer camps dedicated to the exploration of science, engineering, math, and computers, for students with disabilities.

The vision of the Division's second Director, Joseph Larsen, fostered creation of a graduate program in rehabilitation and rehabilitation counseling in 1988. The program grew steadily and continued to be administered by the Division until 1995, when it was reconstituted as an academic component of the Department of Community Health. In spite of reorganization, the Division will be presented with many opportunities to provide the formal teaching role envisioned by Nugent many years earlier. The staff of the Division expects to reestablish cross-disciplinary teaching relationships with its colleagues in rehabilitation, kinesiology, leisure studies, special education, and engineering, as well as others. As a result, curricular options for undergraduate and graduate students with interests in disability, rehabilitation, or related fields will be expanded, thereby fostering access to a larger volunteer pool, facilitating DRES research and educational outreach efforts, and introducing an alternative source of funding for program enhancement.

APPLIED DISABILITY RESEARCH

Historically, one of the most significant factors contributing to the Division's success was the fact that its staff conducted applied disability research directed at



In 1950 the first copy of Sigma Signs, magazine of Delta Sigma Omicron (DSO) was published (see article on page 39)—the layout may have changed since then, but not the hopes and dreams of students with disabilities.

Later, another publication was created—this one a guide to sports, entitled: U of I Guide to Athletics for Students with Disabilities.

In recent years in conjunction with their annual convention, the Association on Higher Education and Disability (AHEAD) sponsors a media contest. In 1997 DRES submitted a copy of these two publications— (above right) U of I Guide to Athletics for Students With Disabilities which placed 1st, and (left) Sigma Signs, which placed 2nd.

solving significant “real world” disability-related problems that stymie achieving independence and the reaching of one’s full potential. The Division continues to co-sponsor research activities.

Recent examples of ongoing DRES sponsored research include:

- the longitudinal assessment of the physiological effects of long term participation in physical activity by persons with severe physical disabilities;
- the identification of factors associated with life long participation in physical activity among persons with severe physical disabilities;
- the development of a computer-controlled, multi-variate wheelchair ergometer;
- the assessment of the vocational outcomes among UIUC graduates with disabilities;
- the development of an accessible Virtual Campus Interface which serves as the entry point for more than

100 UIUC courses using the World Wide Web;

- collaboration with CyberProf to develop an accessible learning environment capable of simulations and testing.

Of course, no discussion of the past or present research activities of the Division would be complete without noting the imminent creation of the Timothy J. Nugent Endowed Professorship in Rehabilitation. This achievement, which has resulted from the philanthropic support of a number of alumni and friends, marks the first endowed professorship in intergated rehabilitation science in the world. Certainly, this benchmark achievement will serve to perpetuate the Division’s legacy of applied research achievements, and serve as a catalyst for interdisciplinary disability and rehabilitation research across the UIUC campus, and in concert with faculty of other universities.

BRIEF HISTORICAL HIGHLIGHTS OF DELTA SIGMA OMICRON—ΔΣΟ

Delta Sigma Omicron has a long, proud and distinguished history. It was founded in 1948 and incorporated in 1949 in Illinois, long before individuals with disabilities received any public or media attention and long before there were any meaningful State or Federal laws. Delta Sigma Omicron (DSO or ΔΣΟ), through its programs and membership, played many significant roles in bringing about some of the legislation and benefits that now exist.

It was the first fraternity dedicated to education, research, and service in rehabilitation, made up entirely of achieving individuals with disabilities. It pioneered in many areas of concern, such as education, employment, accessibility, transportation, sports, and recreation on behalf of those with disabilities.

Delta Sigma Omicron is a *coeducational service fraternity* and is not in competition with social and professional fraternities or sororities. Our members have been and continue to be active in many social and professional fraternities and sororities. Many social and professional fraternities and sororities have entered into cooperative programs and activities with Delta Sigma Omicron.

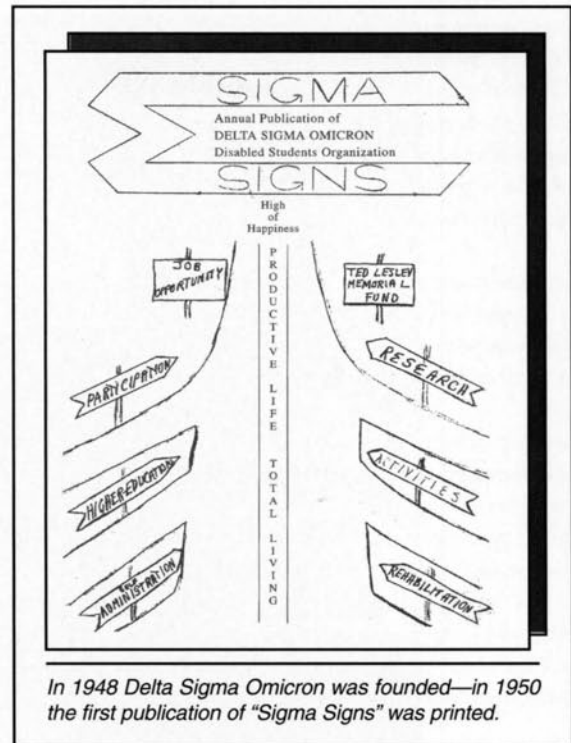
The principal founder of DSO was Dr. Timothy J. Nugent, in concert with a courageous group of students with disabilities, one woman and several men, most in wheelchairs and most veterans of World War II. It was founded at the University of Illinois. The original board of Directors included Harold A. Scharper, Donald W. Swift, Harold Drake, Harris Hjelter, and George Steinmann. Donald W. Swift was the first president and Tim Nugent served as advisor and secretary to the board.

DSO was an integral part of the first comprehensive program of higher education for those with disabilities world-wide and normal educational opportunities for those with disabilities in elementary and secondary schools.

It cosponsored the First National Wheelchair Basketball Tournament in the spring of 1949 and shared in the growth and development of the National Wheelchair Basketball Association and other sport activities for those with disabilities.

Throughout the years it has contributed over a hundred thousand dollars to education and to countless charities throughout the United States on behalf of those with disabilities.

In 1950, DSO began the publication of *Sigma Signs*, an annual publication that told of the achievements and activities of students with severe disabilities



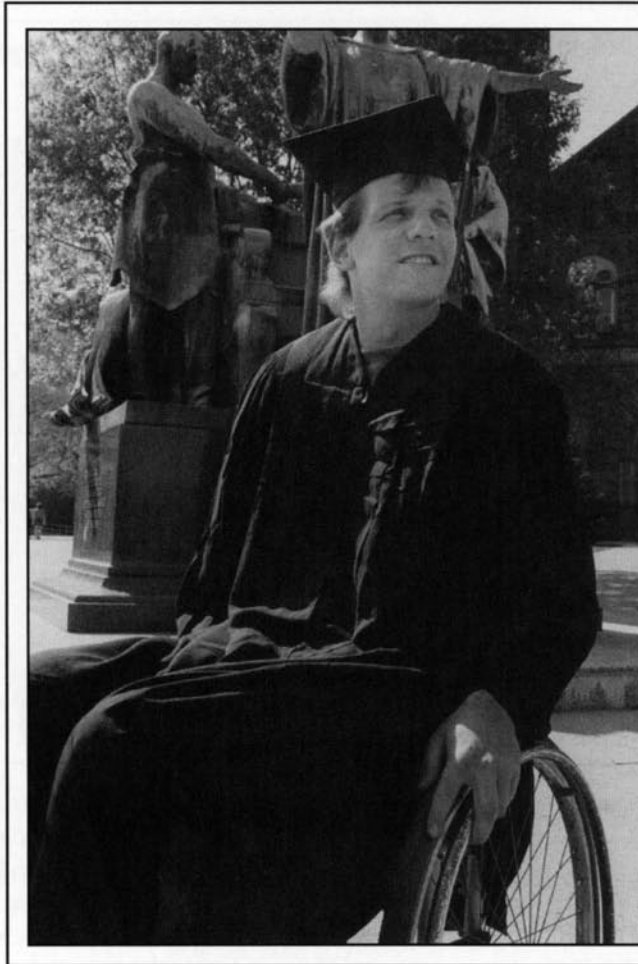
attending university in a positive way. It became a strong force for motivating other individuals with disabilities and also public and professional awareness and education. From the beginning *Sigma Signs* has been widely distributed to hospitals, rehabilitation centers, schools, government offices, and professionals as well as individuals with disabilities. It now also serves as a means of keeping in touch with alumni and friends around the world.

During the fifties, the United States Information Agency distributed *Sigma Signs* to countries throughout the world because of the high regard it had for the stories and messages it contained. Concurrently, "The Voice of America" (the broadcast network that reaches around the world, including Iron Curtain Countries) interviewed members of DSO along with faculty, for programs to be broadcast. Although, initially, and for some years *Sigma Signs* contained only news of Alpha Chapter and its Field Chapters, it now includes news of chapters on other campuses.

In 1957, DSO initiated a monthly newsletter, *The Spokesman*, which was intended to maintain communications among chapter members and to inform them of current opportunities and activities that may be of interest to them.

The "Motto" of DSO was and still is. . . *to exercise our abilities to a maximum so as to minimize our disabilities, that we may live most and serve best.*

DSO's purposes as stated in the Articles of Incorporation are broad and are as meaningful today as they were then, and they have been and are being fulfilled:



In 1986 Pat Daley graduated from the U of I, and here we see him proudly posing for a family portrait in front of the Alma Mater, a tradition that has been repeated by many students with disabilities in the past 50 years.

1. To promote the social and recreational welfare of its members and all people with disabilities everywhere.
2. To explore, encourage, and promote, in particular, educational possibilities on a higher level for people with disabilities, and to promote all phases of their school life.
3. To make known the opportunities and possibilities that exist through the media of higher education to persons with disabilities throughout the country.
4. To investigate job, recreational, and social opportunities for its members and all people with disabilities everywhere.
5. To stimulate research and actively contribute to research for the benefit of people with disabilities everywhere.
6. To act as an educational body for individuals with disabilities and the public, alike, as to what can and should be done in procuring for them the opportunities for normal pursuits.
7. In furtherance of the above purposes, the corporation shall have the power to acquire, hold, procure, and maintain equipment that would better facilitate the activities of people with disabilities everywhere.

DSO and its chapters shall be a means of unified identification, self-expression and self-administration of its members in the pursuit of its purposes and the realization of its programs and activities.

DSO has many outstanding programs in addition to those already mentioned, a few of which are as follows:

1. A Hospital Visitations Committee that works in cooperation with resident medical and paramedical staffs with particular interest in newly disabled individuals or those with difficulties, including in-service-training of staff;
2. A Speakers Bureau that carries our positive messages to students and faculty of elementary and secondary schools, and colleges, service clubs, and other campuses and any number of professional and volunteer organizations;
3. Sponsorship of special events for young children with disabilities (preschool and early elementary years) such as the Annual Christmas Party, which is a fun event while presenting the young children with positive role models;



Santa gets a big hug from a child at the annual Christmas Party for children of the community, organized and sponsored by DSO.

4. Sponsorship of the Annual Awards Banquet at which students and alumni are recognized for their achievements, their service and their quality of life. This Banquet also recognizes friends, supporters, and contributors to our programs;
5. Sponsorship of an Annual Wheel-A-Thon in which able-bodied individuals from across campus, including those from other fraternities, sororities, and student groups, are encouraged to participate along with our wheelchair athletes;

6. Sponsorship and/or cosponsorship of many athletic and recreational activities such as goal ball, bowling, track & field, and swimming for the blind; quad rugby, football, basketball, tennis, softball, track & field, swimming, road racing, weight lifting, bowling, archery, target shooting, table tennis, square dancing, and cheerleading in wheelchairs. Almost all of the above include both men and women;
7. Sponsorship of many social activities such as reunions, picnics, parties, special excursions, and field trips;
8. Sponsorship of individual members in campuswide, community, state, national, and international programs.

DSO has been financially solvent throughout its history, while at the same time, as stated earlier, had contributed considerable funds to worthwhile charitable causes. There have been some difficult times but our success in winning them over is testimony to the strength of Delta Sigma Omicron— $\Delta\Sigma\text{O}!!$

DSO, indeed, has a proud history. It is truly a pioneering program that has stood the test of time. It has been a force for getting things done, before there was legislation on behalf of those with disabilities.

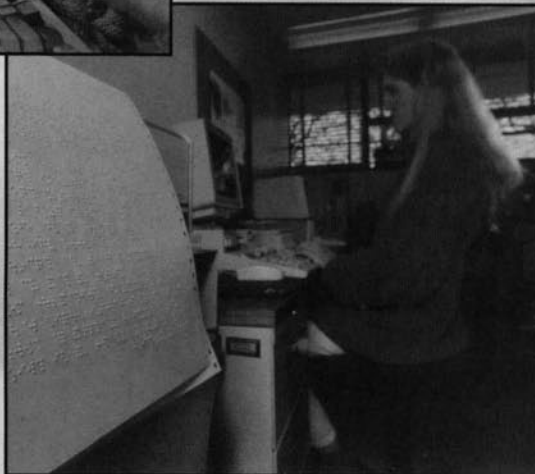
DSO must continue to represent the aspirations, interests, talents, and skills of those individuals with disabilities, and lead the way in meeting their needs.

The founder and Director of the University of Illinois Rehabilitation-Education Program relied heavily on Delta Sigma Omicron. At times the two were almost synonymous.



Bonnie MacDonald (in front) an able-bodied participant, and Pat Bowen (behind), a member of the Women's U of I Wheelchair Basketball and Track team, take part in raising funds at the 1997 Wheel-A-Thon.

The Research



The Research




Within the universe of problems exists an arena, a *field* of intellectual and pragmatic interplay, where ideas arise, means and concepts are tested, and—occasionally—solutions reveal themselves, or are serendipitously, happened upon. Above the arena flies the standard bearing its name and admitting its allegiance and commitment: RESEARCH.

Ever since Alley Oop (or his sibling) invented the wheel, humankind has been moving forward, observing and circumventing obstacles, divining correlations, and finding facility and purpose in paradigms, algorithms, and analytical designs. Yet only recently—surely during the past 50 years—have those in the research arena thought to actualize and optimize possibility for persons historically seen as disabled, handicapped, or invalided—or today known by some as “physically challenged.” Through innovation and determination, possibility has evolved to manifest true accessibility, enabling availability if not certainty of op-

portunity to secure acceptance of, and regard for, such persons.

What angle is best for a ramp? Let the gang do some research and confirm the optimal settings. What’s the basal metabolic rate for a person with paraplegia or quadriplegia? How can people in wheelchairs get into and out of a bus? Where should the prostheses be placed when an amputee drives a car? The threshold of research generally forms from a question.

In this section,  ***I, Book***, report to you, Reader, some of the niggling and super-duper projects encompassed by, and products resulting from, research done within or as part of the U of I Rehab Program. . . . And Alley Oop would be impressed with how far students with disabilities can go, now that a seat attaches to forms of his discovery and the students themselves can proceed to sites and settings throughout the world, undaunted by their “challenges.”

As men and women with disabilities moved out into the mainstream of life, it often had to be proved that they could do what they had just done. . . .

In the passage of time, many have tended to forget the contributions the U of I Division of Rehabilitation-Education Services made to research. U of I did not find a way to regenerate a severed spinal cord—or develop a vaccine to prevent polio—or create invisible braces that weighed nothing and let people walk with a gait indistinguishable from a ballet dancer. The applied research conducted by the Rehabilitation-Education Program simply made life easier, more enjoyable, and more productive for millions with disabilities worldwide. The U of I research focused on how people with disabilities could best use their abilities to compete in a society that had so long assigned the role of invalid to those with limitations in mobility, sight, or hearing.

If people with disabilities could earn an education, get jobs and go out in the community, then it stood to reason that the community had to eliminate some of the architectural barriers that restricted the freedom of those people. Illinois had enacted one of the earliest pieces of legislation to allow persons with disabilities access to public buildings. In the early 1960s, the U of I was chosen as the entity that would conduct the necessary research to develop the accessibility standards that would become the American National Standards Institute (ANSI) Standards A117.1.

Tim and his staff frequently built the movable walls, adjustable ramps, and other test modules that were used to determine such accessibility standards as:

- how wide and how deep should a toilet stall be?
- how wide must a hallway be to allow a wheelchair to turn around? For two wheelchairs to pass? For a wheelchair to be able to turn into a doorway?
- what are the characteristics of curb cut-outs? Slope—texture—sidewalls?
- how can people in wheelchairs and people who walk share the same shower stall, yet accommodate the needs of both? What about drinking fountains, pay phones and service desks?
- what kind of stairs are safest for people with mobility limitations? . . . and on and on until every feature of public buildings, sidewalks, theaters, arenas, and railway stations was examined and quantified.

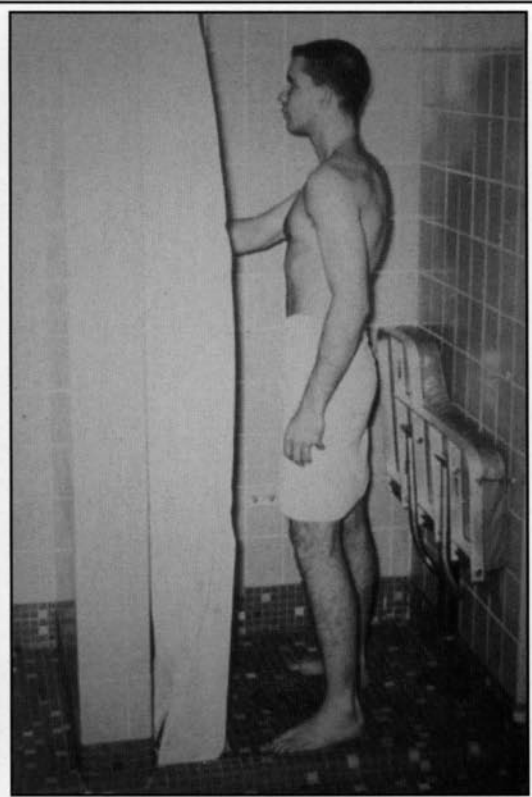
If women—and men—were to live independently and prepare food for themselves and their families, what would make kitchens more usable? So, the research directed by Helen McCullough was initiated to determine the optimal design for kitchens usable by people in wheelchairs or people with sight limitations.

A lot of people with disabilities got tired of hearing doctors say, “Pushing a wheelchair doesn’t expend as much energy as walking—that’s why we put folks with cardiac conditions in wheelchairs.” So Kenneth C. “Casey” Clarke hooked volunteers to devices that measured the amount of oxygen consumed as they pushed—on level surfaces, up ramps, on treadmills. And what do you know? Energy is consumed while pushing a wheelchair.

“Well, we can’t insure these folks who drive around using some cockamamie device to push the gas pedal and



One of the early redesigns of a drinking fountain, changing the location of the spigot and control, with a receding front wall, so that people standing or sitting could enjoy a cool drink was a part of the U of I research in the 1950s.



A seat, designed to give a person with paraplegia or quadriplegia a safe secure setting in which to take a shower, was built to fold flat against the wall to give an able-bodied person room.

brake when their legs are paralyzed. It just ain't safe!" said the auto insurance companies. So the U of I conducted studies of how people with disabilities drove, and how few accidents they had.

Sports were considered fun and a chance to compete by those who played them. Sports were useful as public relations vehicles to get the public to forget about the disability and become involved in admiring the skills of the wheelchair athlete. But, what were the quantitative benefits of sports—could you really measure what good things happened because Don played basketball and Phyllis swam competitively and Ellen practiced the javelin until she could win medals? The studies about the benefits of sports gave the country some positive measures.

In many cases, the staff and students at the U of I found themselves doing first and proving the facts later. Buses worked on the U of I campus—but a study on how people with disabilities could be transported in the same vehicles as the general public was needed to convince others.

It was observed that people who had strokes and were paralyzed on the dominant side of their body learned to do everything with the other side of the body. Dean Trembly's doctoral work studied how and why this occurred.

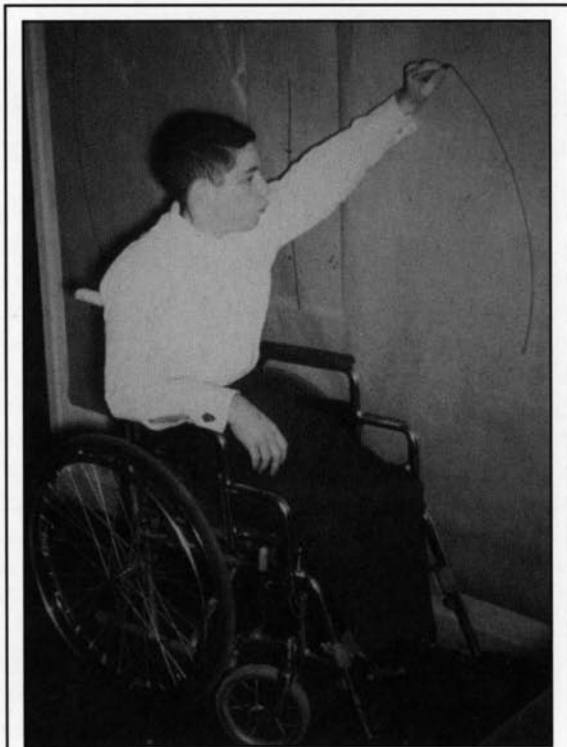
As the years have passed, other institutions have encouraged studies about many aspects of the lives of people with disabilities. But the U of I was the first to say, "These

guys and gals are doing it—now let's produce some nicely scientific materials about how they're doing it."

Research ⇌ Education

Throughout its fifty-year history the Rehabilitation-Education Program has conducted cooperative research with many departments in several colleges within the University in the scientific, sociological and vocational arenas. As one example, the "honors" class in engineering would meet at the Rehabilitation Center, not only to view what existed, but to hear the staff of the Center describe specific problems of specific disabilities and general concerns. After discussions, the class would select a problem or two that they would make their project for the semester. Many good results were realized. As another example, occupational therapy students did specific portions of their laboratory work in the Center and would conclude the semester by having the various adaptive devices they had fabricated, critiqued by the faculty and staff of the Center and quite often by the specific student for whom they had tentatively prepared the device.

Also throughout its history the Rehabilitation-Education Program staff taught portions of many courses in several colleges of the University. Several courses were taught in the



This photo illustrates research to determine the pure vertical reach of individuals in wheelchairs.

Center and faculty of other academic departments were housed in the Center. Undergraduate and graduate students of several academic departments did their practicums and internships in the Center.

It is also notable that graduate students, both doctoral and masters, from other major universities who were interested in doing research regarding those with disabilities, came to the U of I Rehabilitation Center to conduct their studies because it was the only place where it could be done at that time. Some set up residency for months.

During the early years, when faced with unprecedented problems upon which the staff had to act, they would follow up with specific research to determine whether the course of action was justified.

Also, during our early years when the program was not yet accepted and attitudes were negative, the Director had to enlist and encourage students from other academic units, quite often graduate assistants working in the Center, to do specific research for their masters thesis or doctoral dissertation. Much good came of this. Some of these studies were actually used as evidence in court cases. Over the years, these areas of concern have become recognized and professionals of many disciplines are working very hard on them both within and without the U of I Rehabilitation-Education Center.

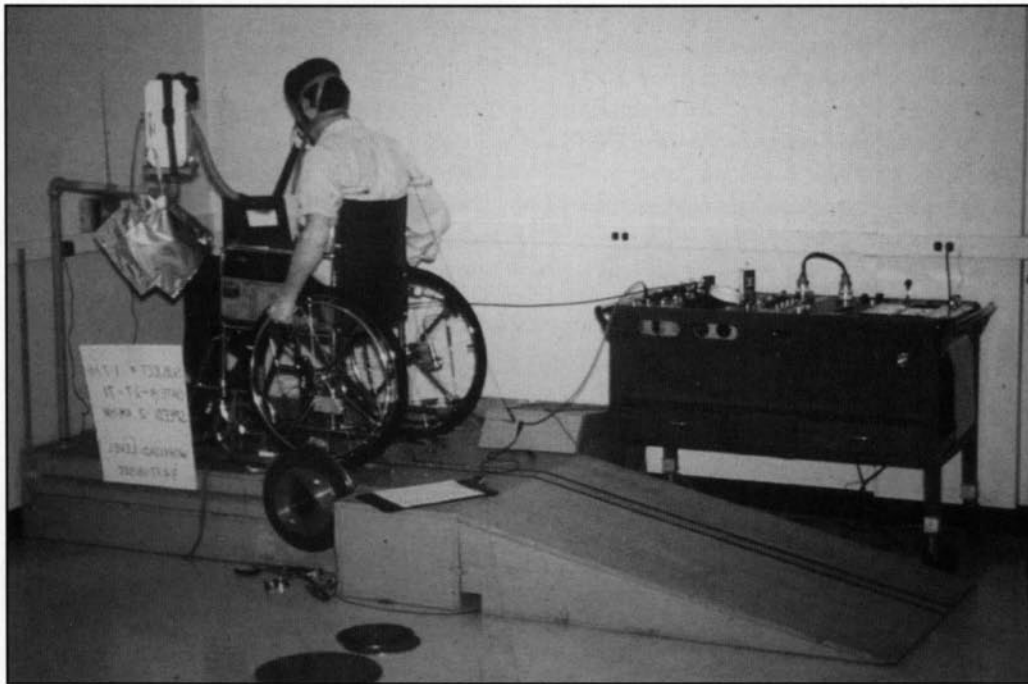
Graduate students with various disabilities did many significant studies for their masters theses and doctoral dissertations on disability and rehabilitation.

These early efforts were a unique and meaningful bonding of research, teaching, and service, and made it possible to cultivate new areas that had been overlooked or neglected.

Although the research that has received the most attention is the research that led to ANSI Standards on the Assessability of Buildings and Facilities, it was preceded by many elementary studies and years of practical experience. It was done under the auspices of the American Standards Association (now the American National Standards Institute) and sponsored by the National Easter Seal Society and the Presidents Committee on the Employment of the Handicapped. Approved as a National Standard (ASA A117.1, now ANSI A117.1) it has, over the years been enacted into laws and codes at local, state, and national levels. However, many other areas of research were taking place, beginning back in the fifties.

Some examples are (some abridged titles with investigators names in parentheses):

A Comparison of Physically Disabled and Able-Bodied College Groups by Measures of Level of Aspiration (Greenblatt); A Study of Disabled Graduates of the University of Illinois in 1956 (Lasko); Adult Cerebral Palsied and the MMPI (Linde); A Study to Determine the Specification of Ramps (Elmer); A Sociological Study of Handicapped Adult Clubs (Starr); A Critical Time Study and Skill Analysis of Various Disabilities in the Routines of Daily Living (Sexton); A Comparison of Severely Handicapped and Able-Bodied Drivers (Gart); A Survey of the Problems of Adjustment of the Physically Handicapped—from Bed to College (La Chappelle); The Rotometer and Its Use by Disabled Students (Tipton); The Prediction of College Success of Severely Disabled Students (Rickard); A Pilot Study Regarding Health Knowledge Inventory for Traumatic Paraplegics (Brasile); Dogmatism and Reported Student Attitudes Toward the Disabled (Genskow); The Influence of Orthopedic Disability and Conformity Behavior (Linde); Cross Dominance of Hand and Eye in Relation to Poleomyelitis (Trembly); A Study of the Development and Operation of a Transportation System for the Severely Physically Disabled (Fink); Indices of Employer Prejudice (Rickard); Caloric Requirements of Traumatic Paraplegics (Clarke); Perceptual Modes and Familiarity in Social Acceptance of Physically Disabled Students (Webb); Evaluation of Bowel Management Techniques Employed By Paraplegics and Quadriplegics (Cooke); A Study of Portrayal of Physical Disabilities in Popular Magazine Fiction



University of Illinois research measured the energy expenditure of wheelchair propulsion in the lab and in activities of daily living.

(Little); An Analysis of Activities of Daily Living of Spinal Quadriplegics at the University of Illinois (O'Rourke); Satisfaction with Social Relationships of College Students Who Are Disabled (Dunn); Body Concept and Self Esteem in Disabled and Non-disabled Groups (Genskow); An Experimental Study of the Use of Tactual Maps as Orientation and Mobility Aids for Adult Blind Subjects (Maglione); An Ideal Kitchen Environment for Paraplegics (Wedeking); Responses of

Quadriplegic Subjects to High Ambient Temperatures (Totel); Draining of Eccrine Sweat Glands in Paraplegics (Johnson); An Ergonomic Analysis of Wheelchair Wheeling (Brauer); Employment of Wheelchair Persons in Broadcasting (Jones); and, Effects of a Film, A Discussion Group and a Role Playing Experience on Architecture Students' Attitudes, Behavioral Intentions and Actual Behavior Toward Barrier Free Design (Fay).

The aforementioned is an indication of the scope and diversity of the research that was completed in the fifties, sixties, and early seventies, with the most recent of those listed being in 1973. There were many other areas of concern and investigation.

The Ramp That Led to Nowhere. . .

It stood outside the old Rehab Center in the 1950s . . . a ramp that wasn't attached to anything. There seemed absolutely no reason to ascend it unless you simply wanted to reach a 10-foot platform to look at the surroundings.

To the uninitiated, it was *"the ramp that led to nowhere."* But, the rehab students involved with the research it fostered, knew better. The idea was to study how much ramp slope and how long an incline people with varying degrees of disability could negotiate.

To the guys active in wheelchair sports, it was a lark to beat each other's time to the top. A couple of them even managed to go backwards up the contraption on their back wheels.

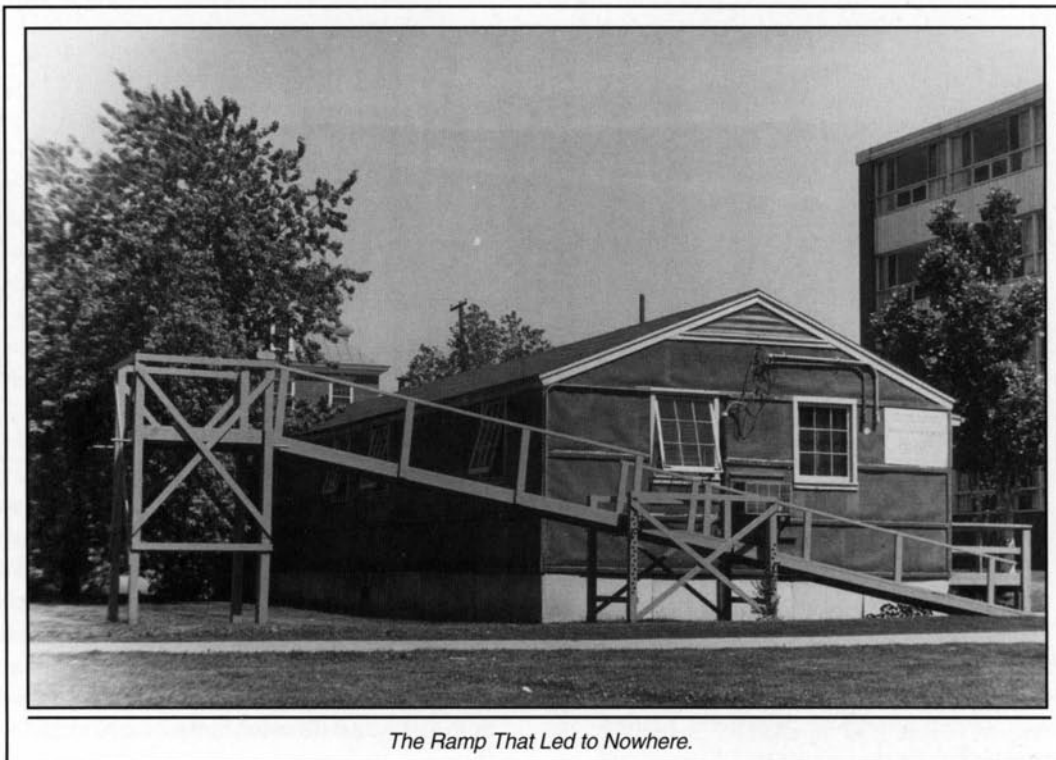
Of course, exhibitions like that were superfluous. The ramp was adjustable. It could be set at a length and/or pitch even the most ardent show-off couldn't



Research was done to create "An Ideal Kitchen Environment" for a person with disabilities. Glen and Marge Perkins are shown here.

handle, or lowered to a slope accessible to those with more severe disabilities.

So the studies progressed, with scores of rehab students and other participants. And the results were accepted and published by the American Standards Association and are still in use today. . . . The "ramp that led to nowhere" was, in reality, "the ramp that led to the future."



The Ramp That Led to Nowhere.

From "The Ramp to Nowhere" to "New Horizons"

The "Ramp to Nowhere" ultimately afforded access to everywhere. However, the access gained through the development and application of architectural accessibility standards could be rendered moot by the development and deployment of inaccessible information technologies, and/or by inadequate attention to the issue of technology literacy by persons with disabilities.

As the 21st century "age of information" approaches, proficiency in the use of "state of the art" information technologies will constitute a new literacy skill which persons with disabilities will need throughout their lives if they are to remain maximally independent and economically productive. The information revolution is transforming the way people in our society work, learn and recreate. Jobs that require physical labor and skills have given way to jobs that require that people gather, transform, and create information over electronic networks spanning the entire world. Information technologies are dramatically transforming classrooms through the creation of virtual discussion groups, real time evaluation of homework, and World Wide Web-based simulations of experiments and models. Indeed, the ability to use information technology has become a new literacy skill, and people without information technology skills are going to find themselves at a severe competitive disadvantage, educationally and vocationally, relative to those individuals who have such skills.

Unfortunately, our current educational system often fosters dependent literacy for persons with disabilities. For example, many students with disabilities are facilitated in reading and writing via surrogates, even though computers and assistive technologies are available which can readily accommodate independent literacy. For example, most secondary school districts do not provide technology which allows students with blindness to independently access symbolic equations and graphics. In lieu of this accommodation, the surrogate model is frequently employed because it is convenient for educators, it does not require that students be "burdened" with learning to use new

technologies, educators are not knowledgeable of the technological options available, or the school district lacks the funds to purchase the necessary assistive technology. In attempting to address these concerns, the Division is studying the efficacy of using residential summer technology training programs for youth with severe locomotor and/or visual disabilities, to enhance technology literacy among these "at risk" youth. The goal of these programs will be to enable them to use a wide range of computer and assistive technologies, and to ensure that they are fully prepared to obtain a 21st century college education and be employable in an information-centered marketplace upon graduation.

To address the problems related to the inaccessibility of information technologies, the Division is currently working to develop an accessible version of the Virtual Campus Interface which serves as the entry point for more than 100 UIUC courses using the World Wide Web. DRES is similarly collaborating with the developers of CyberProf to develop an accessible learning environment capable of simulations and testing.

In keeping with the University's pioneering role in advancing access to the Internet via the World Wide Web (WWW) browsers of Mosaic and Netscape, the Division is also engaged in two disability-related WWW projects. First, Dr. Jon Gunderson, the Division's Coordinator of Assistive Communication and Information Technology, is



Beckwith resident operates computer with voice-activated technology.

Division of Rehabilitation-Education Services

<http://www.als.uiuc.edu/dres/dres-home.html>

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

Division of Rehabilitation-Education Services

Welcome to the Division of Rehabilitation-Education Services (DRES), and welcome to the University of Illinois. DRES is dedicated to the coordination of services and assistance in support of facilitating the higher education of students with disabilities. The Division of Rehabilitation Education Services is located in the Rehabilitation Education Center at **1207 S. Oak St.**, Champaign, IL 61820. Telephone (217) 333-1970.

NEW! Teaching Students With Disabilities The definitive quick guide for those who are new to working with persons with disabilities.

NEW! Campus ACCESS Town Meeting A Town Meeting For Wednesday, April 8, 1998 11 a.m. — 2 p.m. Illini Union Courtyard Cafe. This committee has drawn a lot of people from different departments together to help awareness and services for disabled students and employees of the University of Illinois.

Coming in April, the Divisions **50th Anniversary Celebration and schedule of events.**

Services for Students with Disabilities

- **Disability Resource Guide** For Instructors, Co-workers, friends, and Persons with Disabilities
- **ADA Accessibility Information** of U of I Building and Facilities Accessibility Maps
- **Transportation** DRES Transportation Services
- **Wheelchair Sports** Check out our World Class Wheelchair Athletics Program
- **Beckwith Hall** Provides Assisted Living for U of I Students With Disabilities

Additional Information

- **UIUC Disability Services Newsletter** Quarterly News on Disability Issues affecting the U of I Community
- **UIUC Info Tec Access for Persons with Disabilities** A website designed exclusively for educating people on the use of adaptive technology
- **Delta Sigma Omicron** Service Fraternity
- **Sigma Signs** Annual DSO/DRES Magazine
- **Directory of DRES Student Services and Staff**
- Two **DRES publications win international** awards
- **Disability Related Links of Interest Page** A page dedicated to linking you to the best disability information on the Web

| DRES Site Index | Wheelchair Sports | Beckwith Hall | DRES Staff and Services Directory |

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This is what you can expect to find when "you" visit us on the World Wide Web.

directing the World Wide Web Consortium working group responsible for the development of User Interface Guidelines for WWW browsers. This project is the "cyberspace" equivalent to the development of architectural standards for ramp grades, doorway widths and turning radii. The goal of this endeavor is to formulate the policy and operational guidelines necessary to make future WWW browsers accessible to persons with disabilities.

Coincidentally, the paltry number of individuals with disabilities employed in science, engineering, and math (SEM) disciplines which are technologically sophisticated and which are primarily responsible for the creation of these technologies, has also served to worsen this dearth in the development of accessible information technologies. In response to this problem, the Division sought and received National Science Foundation funding for Project PURSUIT. This \$500,000 project, for which former Division faculty members Mark Strauss and Reginald Alston served as principal investigators, sought to stimulate increased enrollment of students with disabilities in university curricula in SEM, and subsequently, employment in these lucrative and promising century 21 career fields. Although the legacy of PURSUIT is yet to be determined, it has clearly improved the accessibility of SEM programs at the U of I, and the awareness of SEM faculty regarding the information technology needs of persons with disabilities.

OTHER CURRENT RESEARCH INITIATIVES

During the past decade, the Division has continued this tradition of applied disability research areas in such as exercise and sport physiology and biomechanics, rehabilitation engineering and through the performance of vocational outcome assessments of its own alumni with disabilities. With regard to exercise and sport physiology, the Division continues to engage in collaborative research to determine the short- and long-term physiological consequences of physical activity among persons with severe physical disabilities. According to Healthy People 2000, published by the US Department of Health and Human Services, individuals with disabilities are at greater risk of incurring debilitating chronic health problems than any other segment of the general population. Not surprisingly, the report identifies a remedy espoused by Division staff for 50 years, that the pursuit of physical activity by persons with severe physical disabilities is an efficacious way to reduce the incidence and severity of these health problems, to ameliorate their poor health risk status, and to improve their overall quality of life. Recent studies supported by the Division have been directed at furthering our understanding of the short- and long-term consequences of physical activity upon the sport performances and lifelong health and fitness of persons with disabilities.

In 1992, the Division conducted a study of its 577 UIUC graduates with disabilities between the years of 1952

and 1992 to ascertain the extent to which participation in adapted sports and recreation while attending the University of Illinois was related to continued participation in vigorous physical activity later in life. Results revealed that the single strongest predictor of current physical activity among U of I alumni with disabilities was the level of participation in adapted sports and recreation while attending college.

U of I faculty and doctoral students in kinesiology, in concert with Division staff, have continued to build upon the Division's early physiology studies with students with disabilities. The overarching purpose to these projects has been to assess the extent to which participation in the sports programs of the Division enhances strength, cardiovascular fitness, lean body to fat body ratios, kinesthetic awareness and skill, coordination, and improved independence in the performance of daily living activities.

Currently, one study is being conducted to determine the validity of using a portable accelerometer, worn on the wrist, to measure energy expended in wheelchair locomotion over a range of speeds. Research is also underway to develop and validate a survey instrument for the assessment of physical activity in epidemiological studies of physical activity and health in individuals with loco-motor disabilities. In another study, Division staff and UIUC faculty are monitoring the effectiveness of a one-year strength and endurance training cycle on maximal aerobic capacity, muscular strength and endurance, and performance on a 10 kilometer wheelchair roller test.

Work continues in the development of a field test comparable to current laboratory tests used to predict aerobic power and capacity during wheelchair locomotion, plus research to validate the use of a computerized metabolic unit, developed for bicycles, with upper body hand-cycles. Ultimately, these tests and devices will be used to assess the training effect of a wide range of exercise and mobility devices for persons with locomotor disabilities.

A doctoral study by a Division staff member investigating the relationship between lean body mass, resting metabolic rate, and peak oxygen consumption, in persons with spinal cord injuries and able-bodied subjects is also underway. The goals of this research are: to determine the extent to which the existence of a spinal cord lesion and variation in the location of the lesion impact these variables; to examine and compare any differences in bone mineral density between spinal-cord-injured and able-bodied individuals; to compare the effects of lesion level and gender on these differences; to examine the appropriateness of established methods of measuring body composition for use with spinal-cord-injured individuals; and to assess current nutritional standards and how any changes in resting metabolic rate and body composition following spinal cord injury may affect the appropriateness of these standards for use with the disabled population.

The Division is also engaged in electromyographical and kinematic studies of sport-specific wheelchair propulsion. In the first, individuals in racing wheelchairs are subjected to different ramp inclinations in order to assess variation in muscle activity and trunk inclination adaptations on various ramp slopes. In a wheelchair basketball related study, researchers are using electromyographical and kinematic techniques to assess muscle activity when players tilt or jump their wheelchairs during a game. The purpose of the latter study is to ascertain whether such skills may be differentiated according to the players' classification and ultimately whether such behavior should be classified as a "physical advantage foul."

In 1997 Marty Morse, the Supervisor of the Office of Recreation and Athletics, coordinated an interdisciplinary research project that involved world-class researchers from Engineering, Kinesiology, and Rehabilitation. Information and data from this research enabled U of I Wheelchair Athletics to remain on the "cutting edge" of high performance.

The system that was implemented was the use of the D & J Roller System with video interface. Experiments were made with various programming options of the D & J system to allow Wheelchair Track and Field athletes the opportunity to race against terrain and wind conditions that are similar to those they would race in during all track and field seasons. This program enhanced not only performance but

provided a fun training environment for racers who are forced to train indoors for five months a year because of harsh central Illinois winters.

In all of these exercise and sport science research projects, the Division hopes to improve our knowledge of how best to improve and maintain the physical health, fitness and wellness of persons with severe disabilities. In so doing, the Division will not only be able to improve athletic performance of persons with disabilities, but their long-term quality of life as well.

In terms of engineering and assistive technology research, the Division has worked with the faculty and students of the U of I's nationally ranked undergraduate and graduate curricula in engineering, to develop assistive technologies which have the potential to improve the functional independence of persons with disabilities. For example, the Division is working to diminish the disabling influence of time, distance, and context, by developing an online access guide to campus. The guide is being created to provide graphical data for sighted users which will accommodate navigation to any room of any specified campus building. The guide, which will be based on the World Wide Web, will also include textual directions for students with vision disabilities, and it is hoped that it will become a model for similar WWW-based navigational maps in other environments.

To enhance the transfer of engineering knowledge to



obtained funding from the National Science Foundation and the Rehabilitation Services Administration between the years of 1985-1995, to support applied bioengineering research and graduate level training in fields related to rehabilitation. Through these grants, over 50 engineering projects were completed which specifically addressed the needs of individuals with disabilities throughout East Central Illinois. One of the projects, a robotic feeder, was developed for an individual with a disability, incapable of eating without assistance. Utilizing the device, he was rendered capable of feeding himself from serving trays. Notably, the device placed second in a national engineering project competition. Another of the projects involved the development of a computer controlled, multivariate wheelchair ergometer or roller system. This system allows DRES staff to precisely and independently measure the power output in both arms while propelling a wheelchair. Using this equipment, the staff can assess asymmetry in both biomechanics and work output, and prescribe exercise and/or biomechanical changes to improve propulsive capabilities and/or efficiency. Such data are not only essential in preparing world-class athletes for competition, but also help to diminish chronic injuries and improve everyday wheelchair mechanics which enhance lifelong independence and quality of life. From the standpoint of training, these projects produced 10 graduate students with training in

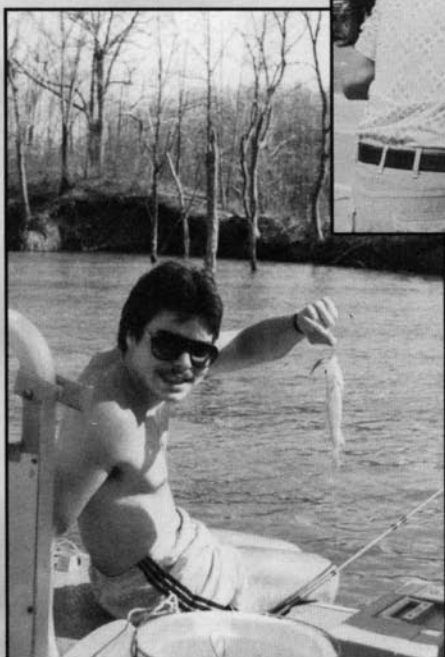
rehabilitation. Most of them obtained employment in areas related to rehabilitation engineering, and one recently became the head of assistive technology for the Illinois Office of Rehabilitation Services.

Finally, in an attempt to measure objectively the economic consequences of a U of I education for alumni with disabilities, the Division turned its investigative eye on itself in 1992, to study the vocational outcomes of graduates with disabilities served by the Division from 1952 to 1992. The study was designed to measure the long-term economic consequences of a U of I education. Results revealed that a UIUC education has a comparably robust effect on the annual income of graduates with disabilities as it has been demonstrated to have within the general alumni population. It has been estimated that a differential of 15 percent or greater in annual income exists between full-time employees with and those without disabilities. However, in the latter study, the salary gap between University of Illinois graduates with disabilities served by the Division and their able-bodied cohorts, when matched by age, gender, and major, and when health status effects were controlled, was statistically insignificant. In light of the dire economic status of most individuals with disabilities, this is a most remarkable finding, and one that serves to empirically validate the tenets upon which the Division was founded a half-century ago, that educational access makes all the difference!



Tracey Ferguson working out on Rehab's indoor resistance roller system.

Significant Firsts





Significant Firsts




Care must be used in declaring an event or achievement to be a “first,” for firstness bestows a sort of popular honor, notability, with value upon things, persons, and events purported to be just that, *first*. The public’s need for knowing about, or associating with, anyone or anything “first” gives impetus to embellishment, e.g., “I knew him to be the first to do a bona fide wheely.”

A paradox arises from a phenomenon that might be called the Promiscuity of Firsts, wherein the proliferation of declared “firsts” diminishes the true value of firstness while obliging the public to recognize, and journalists to pursue, the common foci of “first-done,” “first-to-do,” and “first-to-have-it-have-been-done-to.” Increasingly in recent times, *first* has come to imply association with other qualities or values: originality, primacy, leadership, being record- or ground-breaking, never-before, or simply tops.

Added to the firstness paradox is the fact that the scientific community regards itself as guardian of the word *significant*, taking it to mean “probably caused by something other than mere chance.” When one denotes a “significant first,” therefore, that *first* must be

more than merely a casual or inadvertent aspect of record-keeping.

Myths arise from the purport of firsts because attribution is tenuous. Dropped from published articles are such qualifying phrases as “apparently. . .” and “from all available evidence considered to be (the first). . .” Then, too the limits of firstness are often nonspecific. Does the declared “first” have geographic limits and does it apply to both genders and everyone of all ages, all history?

Here,  **I, Book**, report some of the truly “significant firsts” (using noun and modifier advisedly) pertaining to the U of I Rehab Program. In one sense, each person in DRES bears qualities of firstness, individual differences, and difficulties, necessitating unique (first-time!) approaches to accommodations and resolutions.

When Costello questions Abbott, “Who’s on first?” then, know that you can reply thus: DRES students have been both ‘on’ and ‘first’ in many ways.” See the following pages for examples. . . .

The Significant Firsts

The Innovations

Over the years, thousands of men and women with disabilities have attended the Program on the U of I Urbana campus. When they left the campus they took with them:

- ¶ the confidence that they could live with independence and dignity
- ¶ the skills to become part of their profession—and community
- ¶ the determination to live life to the fullest.

The Program at the U of I changed not only the lives of those who attended it, but the lives of people with disabilities (PWDs) in this and other countries. In the early days of the program, people with disabilities who were admitted to the U of I found entirely new prospects for career, family life, and community service. Families of people with disabilities soon learned from the U of I example that their sons, daughters, wives, and husbands need not live their lives in back rooms or sheltered situations, and instead would assume their traditional roles and provide care for other family members.



Family life weaves academics, careers, sports, and recreation for U of I students and alumni. At top left, Mike Pallis and Jane Carrington enjoy a sunny day in the park. Top right, Barb and Terry Surber comfort their West Highland White Terrier. Lower left, Debbie Tate helps this youngster decorate the tree at the DSO Christmas party. Lower right, Jeff Hatelly gives his son a welcome ride.

Expanding Horizons

In an era when, if an occupation was even considered for a man or woman “confined” to a wheelchair, the occupation usually involved tasks such as engraving, watch repair, light office work, or sheltered employment. The program at the U of I knocked down not only the walls of limited expectations about people with disabilities, but whole horizons. While the rest of the world was questioning whether people with paraplegia could be productive, at the U of I, people paralyzed from the neck down became professors, salesmen and saleswomen, politicians, architects, and community leaders in many meaningful ways.

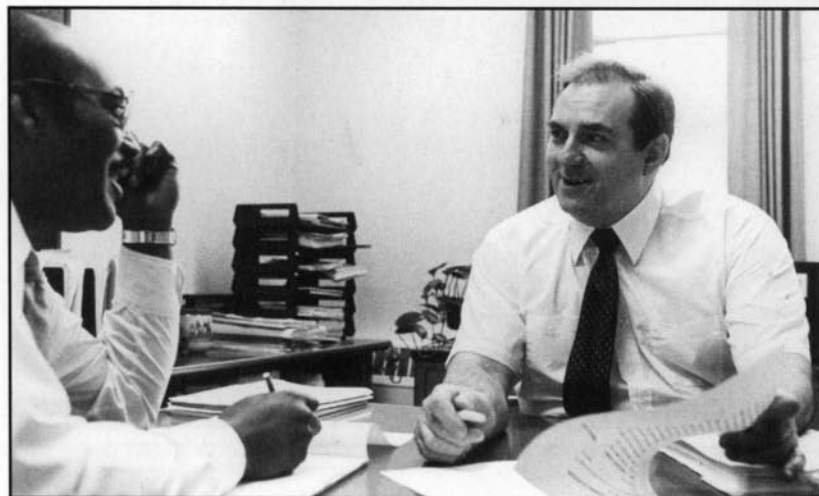
Although it would be the decade of the 1970s before federal programs would stop saying, “Hey! We’ve got this farmer who was run over by his tractor. Everybody knows

he has to study accounting,” and start saying “Hey! Maybe this guy could be something other than an accountant—like a farmer.” Yet, in the early 1950s, Tim Nugent and his band of merry men and women who shot across the U of I campus in wheelchairs thought they could be anything they wanted to be; and they were.

One fellow who was run over by his tractor carried on to become an administrator, an educator, and a Paralympic competitor at age 75. An Astronaut trainee figuratively dusted himself off after falling thousands of feet into the desert without a parachute and went on to earn his degree. An Air Force cadet, who exited his plane at the Air Force Academy through the canopy, earned his aeronautical engineering degree and went on to have a long career designing aircraft.



Tom Jones at the mike covered sports for WCIA TV in Champaign—then competed in wheelchair sports in his spare time.



Don Swift (right), the first person in a wheelchair to graduate from the U of I, was a Personnel Officer for Non-Academic Personnel at the U of I in addition to playing sports and being one of the first wheelchair football officials to use a wheelchair.



Jack Whitman (left), successful radio sales manager and one of the world's best wheelchair archers almost equaled able-bodied archery records. Bob Hawkes, a person with high-level paraplegia and an accomplished archer, became director of the Speech and Hearing Center of Bangor, Maine.

And there were women who scoffed at stereotypes. Most of them never got around to dwelling on the stereotypes for women with disabilities—they just went ahead and ignored the fact that only certain professions were OK for “girls”—with or without disabilities. They became college professors, corporate executives, financial experts—and in one case, a scientist in the space program—at a time when even men weren't considering space as a career—and a pilot of her own private plane.

The innovations of the U of I were not medical treatments. They were not sociological studies. They were not advanced technology.

The innovations of the U of I were in the minds and hearts of people who believed that PWDs only needed the chance to succeed. The people who believed were veterans of the war. They were kids who'd had polio or been injured in childhood accidents. They were the few stubborn souls, Tim Nugent, his staff and a few University and Vocational



People with disabilities quickly took advantage of the opportunities offered at the U of I (right) Sue Johnson-Smith speaks to a group of children; (left) Tom Brown a master of the flute, entertained many.



Jack Genskow used a power wheelchair and rocking bed to compensate for the paralysis from polio, but earned his PhD and was a psychologist at Sangamon State University.



Norma Francis Van Selow became an accomplished artist.



Visually impaired students traveled independently and pursued many curricula.

Rehab citation officials, who believed PWDs could do anything they set their minds to.

The theory was valid. People with disabilities became medical doctors, engineers, architects, professors, teachers, ministers and missionaries, marketing and sales executives, radio and TV personalities, homemakers, secretaries, lawyers, purchasing agents. They spread through every imaginable industry and business, multiple classrooms, hospitals, laboratories and lecture halls. Graduates of the U of I Program went to Washington, just like the fictional Mr. Smith. They also went to the Senate and House of Representatives of many states. And even if they didn't graduate from the University, if they were there more than a week or two, they "graduated" from the Program. Those who did not take U of I degrees took skills, confidence and knowledge that led them to success in business and industry.

For the first decade or two, the U of I Program was regarded by outsiders as a fluke—repeated strokes of luck—

the delusions of a mad man. But, the Program moved from Galesburg to Urbana. The experiment of exposing people with disabilities to a college education kept producing perfectly replicated results. Those people with disabilities—not realizing their limitations—kept going forth into the world and living normal lives.

The outside world began to take notice. The U of I Program added the role of exporter to those of educator, coach, athletic league administrator, fund developer and legislative advisor. The Program exported proven theories that enhanced life for all people with disabilities—and the world in general.

It's impossible to assign ranking of importance to the U of I exported commodities. Those who had the chance to see the world as wheelchair athletes would choose one thing—those who made fortunes as engineers would choose another.

The U of I Program introduced. . . .

- A comprehensive program of higher education for those with severe physical disabilities, which became the model for other programs nationwide;
- Formal study abroad for those with blindness, spinal cord injury, cerebral palsy, and other conditions, with the first program in Aix-en-Provence, France;
- International tours to demonstrate the skills of people with disabilities in Africa, Southern and Northern Rhodesia, and many other foreign countries, and far-off places like Hawaii;
- Collegiate wheelchair basketball for men and women;
- The National Wheelchair Basketball Tournament;
- Bus transportation that accommodated people with disabilities alongside the general public, with equal ease and safety;
- University Varsity Letters to athletes in wheelchairs;
- An independent living center for those dependent on respiratory devices and/or some attendant care, at least initially;
- Wheelchair football and baseball;
- The first woman wheelchair athlete to be named "Outstanding Amateur Woman Athlete of the Year" (Jean Driscoll, selected by the National Women's Sports Foundation);
- *Delta Sigma Omicron* rehabilitation service fraternity;
- Woman athlete in a wheelchair to win seven Boston Marathons;
- Intercollegiate wheelchair basketball for men and women;
- Selected a wheelchair athlete (a woman) as the Athlete of the Year in competition with all able-bodied athletes and selected by able-bodied varsity athletes.
- Sports model wheelchairs.

And other important “Firsts” from the U of I Program

Architectural Accessibility Standards

One U of I export that has had an impact on nearly every citizen of the U.S. is the work conducted in the early 1960s that resulted in the first standards to make buildings and communities accessible for people who used wheelchairs or had sight or hearing impairments. Using an amazingly small amount of funding from the National Easter Seal Association, Tim Nugent and his staff set forth to develop ANSI A-117A (1961) for the American National Standards Institute (ANSI), which at that time was called the American Standards Agency (ASA). Tim’s staff consisted of one full-time project director and everybody else on the somewhat beleaguered Rehab Center staff. After all, why couldn’t the supervisor of physical therapy conduct a few studies on the proper pitch for a ramp after he finished threatening students with dire consequences of shirking exercise? (For more on the “Ramp to Nowhere,” see page 48.)

Wheelchair Athletics

Thanks to a great extent for the development of antibiotics and new methods of battlefield surgery, the end of World War II saw people with spinal cord injuries living, rather than dying within months from pulmonary and urinary tract infections. Sitting in Veterans Administration hospitals and weaving baskets was not much to the liking of some of the lads who survived, but now used wheelchairs. Wheelchair basketball was born.

Tim Nugent and his band of merry men did their usual thing. If wheelchair basketball was going to be played, Illinois would play it like no other team. Even the name of the team was what we now call “in your face.” The *Gizz Kids* took their name from the leg urinals worn by some of the guys with spinal cord injuries. That the name was close to the famous *University of Illinois Whiz Kids* team of that era was probably the least of the coincidences but effective.

If you’re going to play basketball, it’s no fun unless there is cut-throat competition with teams of equal skill. Sometimes, the *Gizz Kids* and their opponents had to travel several thousand miles to conduct a season, but what resulted was the National Wheelchair Basketball Association (NWBA). Like its counterpart, the National Basketball Association (NBA), the NWBA had early periods of growing pains. For one thing, getting to tournaments was impossible—until Tim buddied up to some Air Force generals and pointed out that these brave men had given their legs for their country. Now, could the Air Force give just one or two little planes that were flying around the country empty anyway—and a few beds in a base barracks—maybe two or three meals a day—a few officials. Other than that, the NWBA would conduct the tournament with no outside help. Besides, the guys playing had all been airmen (except when the tournament was being held at a Marine base, when the teams all retroactively switched their service records to the Marine Corps.)



Basketball players come in all sizes, including Bill Simmons (left) and Anderson McCullough (right).



Dean Nosker excelled in baseball, football, and basketball.

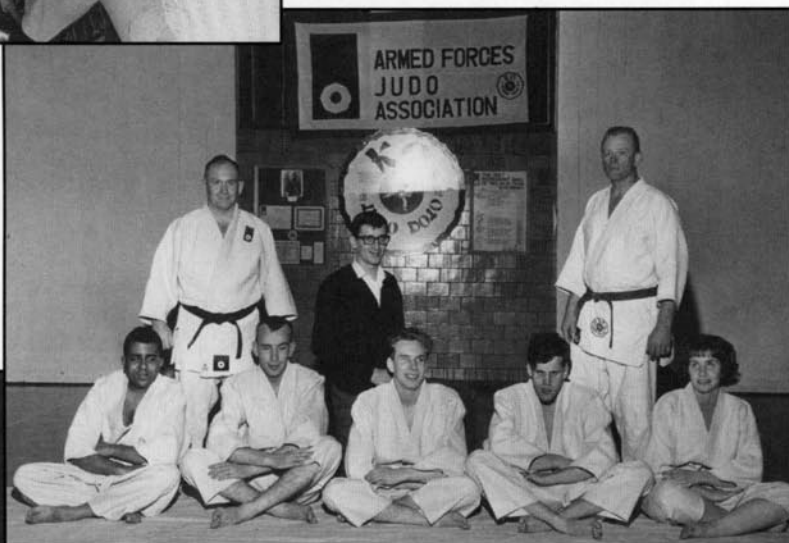


Sports at the U of I grew each year—and even if they weren't the first in the nation—opened new horizons in football, women's basketball, field events, and track.

Illinois, with its bright orange and blue uniforms, its big orange and blue bus, that frequently made it all the way to its destination, left its mark on wheelchair sports for all time to come. Although Illinois was not the first organization to send teams to the National Wheelchair Games held each year in New York, the extensive training and level of the abilities of the Illinois athletes challenged other teams. Illinois athletes broke records each year and won 10 to 12 National Championships before the National Championship was discontinued.

One of the first wheelchair athletes to perform in a demonstration race at a regular Summer Olympics was Illinois' great woman track star, Sharon Rahn Hedrick, who was watched by millions of TV viewers as she competed at the 800 meter at the 1984 Olympics in Los Angeles, California and the 1988 Olympics in Seoul.

Even the Sports Illustrated magazine of the wheelchair sports world, *Sports 'N Spokes*, was founded and is published by a Illinois alumnus (Cliff Crase) who once wore the orange and blue to earn the right to wear red, white and blue in international wheelchair sports competition.



... fencing, judo for the blind, square dancing, and tennis.



Retired Greyhound over-the-road buses, with the interiors redesigned by Carmont Blitz, carried Illinois teams to regional and national track and field meets. Illinois didn't have the first track and field team—but the quality of Illinois teams raised the level of competition.



Sharon Hedrick became the first wheelchair athlete to win an Olympic Gold Medal when she won the 800 meter wheelchair exhibition event at the 1984 Regular Summer Olympics in Los Angeles.

The Blue Bulls

At first there were two modes of transportation, push to class or schedule a ride with someone who had a car. It got to be pretty hectic for the car owners. Tim worked out a schedule each night for the next day, to make sure those who needed a lift got one. Car owners found Tim's schedule on their bed when they awoke in the morning. "The guys drove me to and from class," remembers one of the women alumnae. . . .

That's why the campus appearance of two used buses with wheelchair lifts was greeted with enthusiasm. They were the first of their kind . . . at the U of I or anywhere in the world for that matter. They became the work horses of

than having to push to class on a cold day. And, on trips, they circumvented the need to stuff players, coaches, managers, cheerleaders, wheelchairs, basketballs, luggage, and who-knows-what-else into University car pool station wagons.

The buses were roomy, with seats on one side removed to allow wheelchair access to the remaining row of seats, and to accommodate storage. Winds tended to seep in around the well of the wheelchair lift. And, on winter trips, those breezes could be uncomfortable—but certainly not intolerable.



Dean Nosker disembarks from one of the original Blue Bulls as two of his fellow students wait to enter.

transportation to classes and on road trips. They were the "Blue Bulls."

Except for some orange trimming, the two buses were painted dark blue. That accounts for the "Blue" in their names. No one's sure how the "Bulls" came about. But anyone who ever heard them snort to a stop or bellow off from a standstill, knew the moniker fit them perfectly.

The alumni who rode those buses might still joke about them, but usually with affection. The Bulls were better

Of course, in those days, the University focused considerable attention on separate facilities for the sexes. Just as women students had housing separate from the males, they also had a separate bus on road trips. The students cleverly labeled them the Women's Bus and the Men's Bus. And on every trip some wag in the back of the Men's Bus would shout to the driver, "Hey, Don! Why don't you speed up and pull abreast of the Women's Bus?" It got a laugh every time on every trip.

Of course the original Blue Bulls were secondhand. And, like all used automotive things, they did at times break down. One of the more famous occasions was on a basketball tour through cold, wintry Iowa when the Men's Bus threw an engine rod.

The first hint of trouble came as the bus made a series of lurches. That was followed by the smell of hot oil and a directive by one of the able-bodied coaches to "run for your lives!" Of course, it wasn't a big fire, so instant physical rehabilitation wasn't required to save anyone.

However, highway assistance was needed for the bus. It came from a new car transport which towed the athletes with police escort into Grinnell, Iowa. Seems the length of the bus and the car transport together exceeded every regulation the State of Iowa highway department had. After an overnight stay, the men confiscated the Women's Bus for the drive to St. Louis and a scheduled match up with the St. Louis Rams. The gals stayed in Grinnell until the bus was repaired. (One team member from that era swears the whole event altered the course of his love life because the cheerleader he had worked up nerve enough to ask for a date changed her mind after the long layover in Iowa.)

The venerable Blue Bulls were retired in 1956, replaced by two new GMCs onto which mechanics transferred the original hydraulic lifts. In 1959, two additional Marmon-Herrington buses were added to the "fleet" and there have been a number of updates since then. All of these new buses have featured hydraulic lifts based on the design that Tim Nugent and Carmont Blitz put together in 1952. Mass transit buses across



The 1956 GMCs and Marmon-Herrington buses were the first to have wheelchair lifts and steps at the front door so that ambulatory and wheelchair individuals can enter and leave quickly and safely.



Three long-standing drivers (left to right) Boyd Smith, Bob Jinks, and Fay "Fergie" Fergusson stand in front of the fifth-generation Rehab Center buses.

the nation use lifts with the same or similar design. It's hard not to imagine that somewhere in that great transportation shed in the sky, the Blue Bulls must be looking down at all of this with pride. . . .

Accessible Transportation—Part II

Special Adaptations for Personal Vehicles

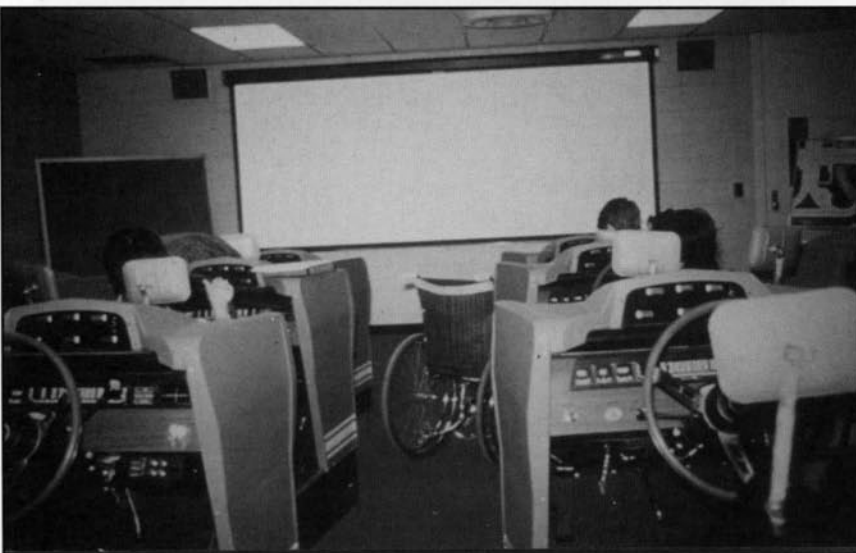
Veterans of World War II and the Korean War figured out how to put hand controls on cars so the accelerator and brakes could be controlled by pushing on a handle mounted on the column of the steering wheel. In fact, some of these veterans started the first production/distribution companies to market hand controls.

So, it was not another first that students with disabilities at the U of I drove their own cars. But the U of I attitude of

“Why Not?” meant that anyone who really wanted to drive could be accommodated. Some of the refinements of hand controls, such as zero-resistance steering, were developed elsewhere, but combined by U of I students and staff to give independent mobility to people whose paralysis was extensive in their arms and shoulders as well as the rest of their bodies.



Sue Johnson-Smith demonstrates a zero-resistance steering mechanism and a console on which extended handles allow her to control lights, turn signals, windows, and other electrically-controlled features of the van.



The Driver's Education Laboratory at the Rehab Center allowed students to learn the elementary actions of driving, a significant improvement over the days when Chuck Elmer sometimes had to fish student drivers out of ditches when they panicked on their first time at the hand controls.

Jill

Sure, “quads” driving weren’t that unusual. People with extensive paralysis in all four limbs had learned to drive at places other than the U of I. But, a woman named Jill Smith set some precedents when she took up driving.

Jill, who was born without legs and only a short portion of her arms, like most children with amputations, found that prostheses got in her way. Although dependent on her parents for the first 17 years of her life, at the U of I she learned to dress, bathe, and handle all the activities of daily living without prostheses. She decided another thing she needed to do was drive. After all, she needed to get on with her career, which would include public education and promoting accessible housing and transportation in Chicago, while employed at Access Living, an independent living center. Then she would move to Florida, where, in March 1985, she was hired by the Abilities Rehabilitation Center to conduct a survey to determine if the Center was doing everything possible to prepare their clients to lead productive lives.

Jill found that a critical need in Florida was education of able-bodied children about disabilities. To help change atti-

tudes of school children about disabilities, Jill developed a program, “Just Like Me”. When she visits schools, the children get to ride with her in her power wheelchair, play with “Alice” dolls—which, like Jill, have missing arms and legs—and sing songs about how little difference a disability makes.

Jill’s quest to become an independent driver was aided by the U of I Drivers’ Education program, which includes evaluation of the potential driver’s physical and cognitive skills. Students were taught in three phases: classroom, driving laboratory, and behind the wheel. Jill had the advantage of the U of I’s specially equipped van, in which controls and driver’s position can be customized to the individual’s needs.

Jill’s van was equipped so she could enter, get behind the wheel, and drive. Jill was right. She did make good use of the van. Between 1985 and 1988, she logged over 9,000 miles on her van, visiting over 60 schools in four Florida counties and talking with over 45,000 children.



Driving independently was a skill that Jill Smith knew she needed to achieve her goals. Through the U of I Driver's Education Program, she learned to transfer from her wheelchair to the car and move into driving position. Because Jill does not use prostheses, adaptations were attached to the steering wheel, into which she could place her residual limbs and totally control acceleration, steering, and braking. Rods beside her head were used to operate turn signals and the dimmer switch.

Independent Living

How much the disability of a person handicaps him/her is a matter of perspective. Then, there is the matter of whose perspective we're talking about. When the Student Rehab Program started in Galesburg, Illinois, in 1948, the public perceived people like Harold Scharper, Don Swift, Bob Kaloupek, Shirley Sayers, and Les Blankenship as pretty nearly totally handicapped by their disability. What could they possibly do in terms of making a living, raising a family and living independently? Of course, the perspective that really mattered was that of the aforementioned folks. They became convinced that they were perfectly capable of doing anything they wanted, and they were.

Perhaps it was because of advances in medical treatment, perhaps it was the public education that had taken place, whatever, in the 1950s, some people with disabilities decided they would be students at the U of I. But, they could not independently care for all their activities of daily living. Where once Tim Nugent had maintained an iron rule that a person be able to care for his personal needs or be willing to learn how to do so to be admitted to the U of I, he had revealed his marshmallow interior and let nearly



Evelyn Mulry Moore was one of the students to survive "Hell Week" and earn her place in U of I history. When she was discharged from a major rehabilitation center, she was told she'd need 24-hour attendant care. When she arrived at the U of I, it took her nearly that long to get out of bed and dressed. In addition to earning her degree, she won gold medals in international sports competition, married, raised two children and became the manager of a Champaign County welfare agency.

anyone who wanted the chance to be a student try to become independent after arrival on campus. Knowing Tim, he probably supervised a few lessons in how to get in and out of bed or—or in some cases, trouble!

But people with more severe disabilities wanted a chance. "OK," said Tim and his staff. "You get to come to campus a week early and stay in Garner Hall. Chuck, Gibb, and Jan will teach you to do everything. If you make it, you're in." The graduates of that early Hell Week went on to become independent, well-employed citizens.

But then the envelope was pushed once again. A student with exceptional qualifications who could only use one hand on the joy stick of his powered wheelchair and another of similar severity of disability came to see Tim. Tim recognized that their only salvation was in higher education coupled with the opportunity to learn skills of coping, a concept of self and responsibility for self. It was not to be a program of care and support, but a program of self management with instruction in how to achieve it. Fortunately, about that time a new nursing home had been built in Champaign and still had an entire wing unoccupied. Tim and the owner of the home, Durward Judy, an attorney, got together and agreed upon the plan.

The first year of this new program in independent living was in a new nursing home. Greenbrier in Champaign allowed four or five students to live at the home and have assistance in dressing, hygiene, and eating. The students were picked up each morning by a U of I bus and taken to campus for a full day of classes, physical therapy, and socializing. It was better than nothing. It was not as good as being in a setting that was on campus and was not shared by geriatric residents.

The following year, an old three-story house just off campus on East John Street was remodeled to be the residence for students who needed some attendant care in the morning and evening, but who could attend classes and other activities during the day. The house was dubbed "Tanbrier," a reference to the color of the exterior paint and the opportunity it proved to escape from the nursing home environment of Greenbrier. The first floor of Tanbrier, where the "Tanbrier" men lived, had bedrooms, bathrooms and a large communal area in the center. The second and third floors were used for apartments and rooms for premed students, who provided attendant care. One of the apartments was for a married premed student, whose wife became the chief cook. Rent for the premeds was adjusted according to their services.

Finally, in 1981, Beckwith Hall a state-of-the art residence was built. Beckwith was designed to allow students to live in settings very similar to the apartments to which they would someday "graduate." Attendant care was avail-

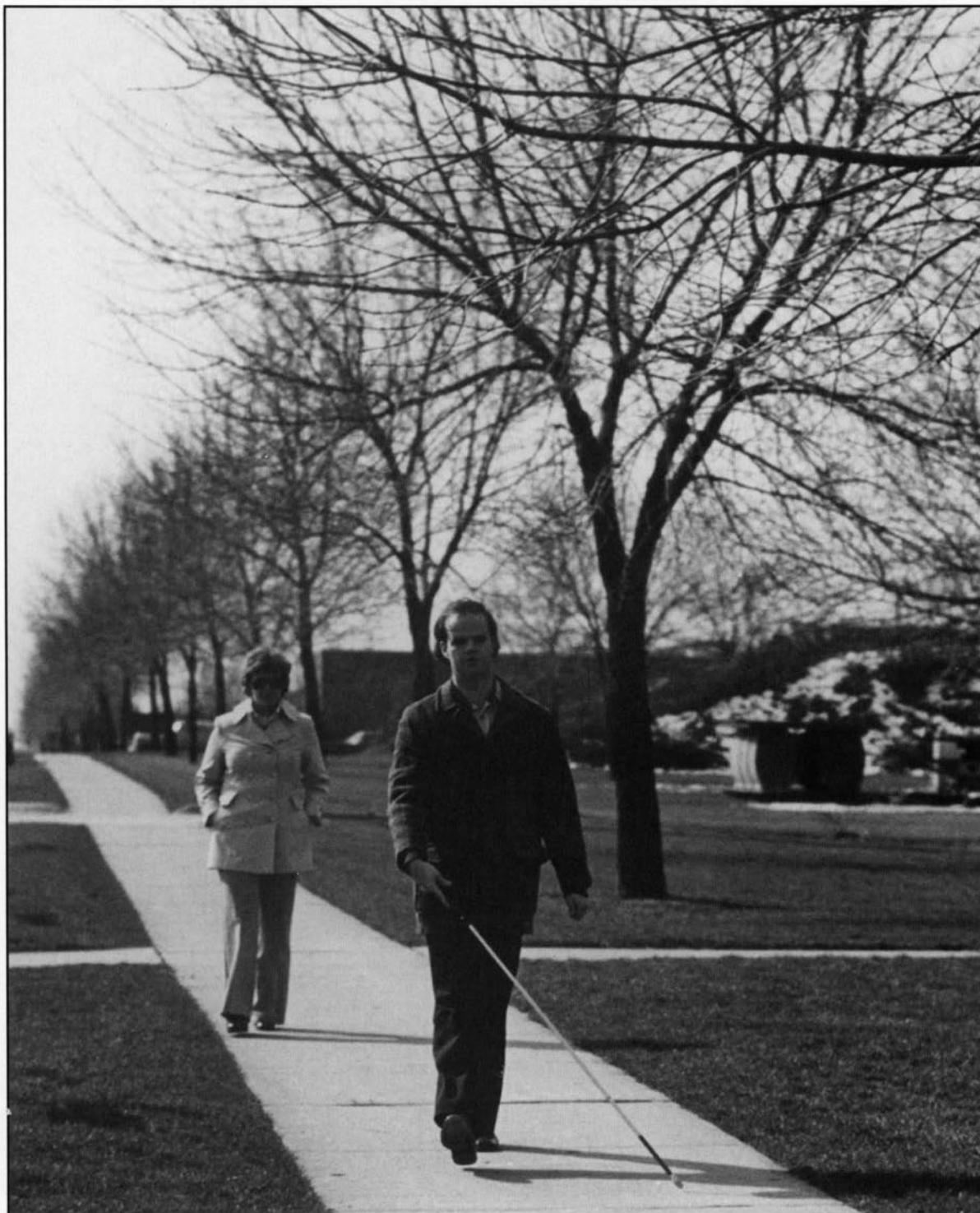
able when needed. And women could live at Beckwith. Tanbrier's accommodations had been a bit too intimate for comfortable mixed-gender living at that time. Like Tanbrier, Beckwith was governed by the residents, who made the decisions about budget and administration of the facility. Has it been successful? In addition to the stu-

dents who have graduated and gone on to careers, the Beckwith residents have annually raised funds to support disability-related groups and issues. They also conduct a mentoring program that enables high school students with disabilities to spend some time at Beckwith and learn what college life would be like.



The Independent Living program on the U of I campus began in a nursing home named Greenbrier (above). To get closer to campus and give the students more control of their living, it was moved to Tanbrier (right). Today, students who need some assistance, live in Beckwith Hall (below) in the heart of campus.





Independent living means different things to different people. Jann Floyd, Supervisor of Services for the Visually and Sensory Impaired, provides orientation to John Huffman so that he might independently move around the U of I campus.

Blueprints for University Programs and Services for PWDs

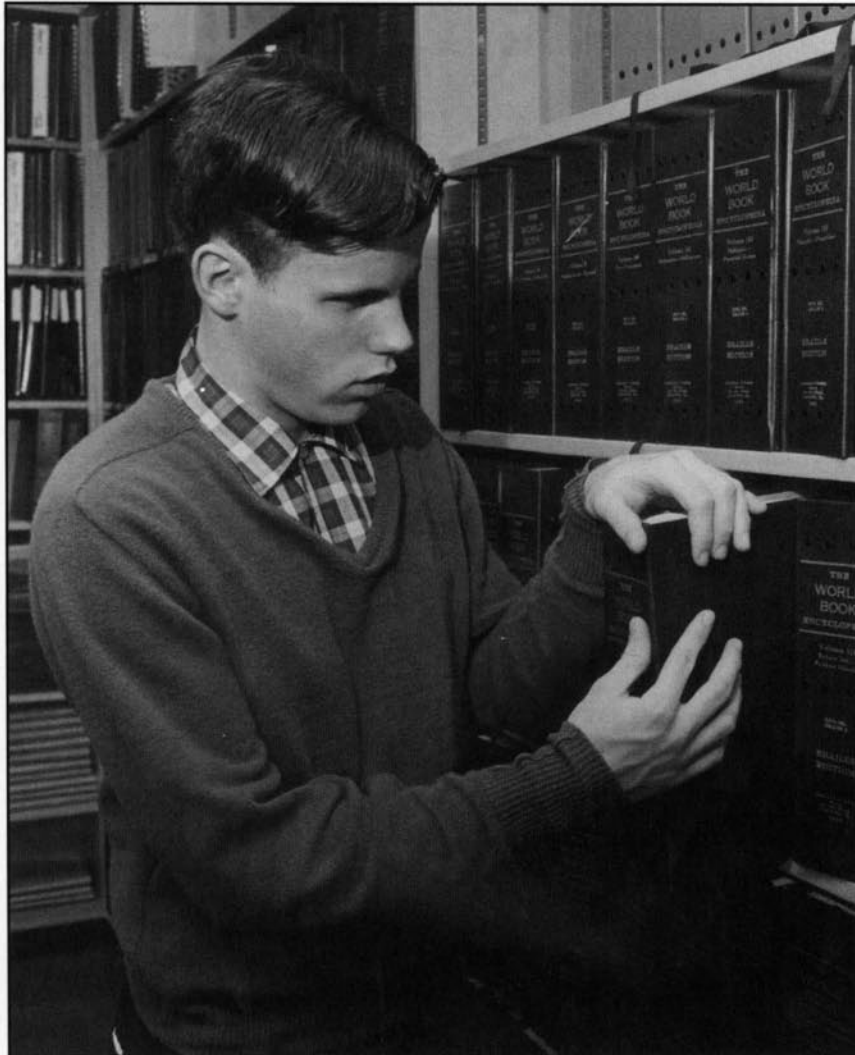
Recently, while writing an article for *Exceptional Parent* magazine on how parents can help their high school students with disabilities prepare for higher education, Jan Little delved into today's favorite writer's tool—the Internet. Her request to find the topic “university service for people with disabilities” resulted in a list of over 400 colleges, junior colleges, universities, and professional schools having some types of services for students with disabilities. Aha! she said. Surely the “net” has given me one of those “sounds like” responses that happen so frequently. She didn't check all 400, but spot checking showed that the majority of the programs included assistance in obtaining accessible hous-

ing, transportation, reading services for the blind, and recreation services. Some were very extensive. Some were almost “in name only.” They had one thing in common. All had their genesis in a tarpaper shack on the Parade Grounds Unit at the University of Illinois.

When one reads the philosophy of these services for students with disabilities, one statement is consistent across the lot of them—“students with disabilities should be given the opportunity so that they may attain their highest degree of independence. Remember, it is their ability, not their disability that counts.” Where did we first hear that???



Ann Cody wheeling independently across the “Quad.”



Text and references in Braille and tape are available at the Rehabilitation-Education Center.

The Legacy





The Legacy



I, Book, divine the trove, the cache, the circumstantial set that embodies the traces of 50 years and more of concocting The Rehabilitation-Education Program, maneuvering humans and mechanisms to provide effects beyond make-do-ism. These effects collectively form The Program's "Legacy," a sort of gift, the residue of The Program's benefits in the push and gush of time.

Well . . . maybe yes, maybe no.

A legacy seems so dormant somehow, settled, encapsulated in a limiting wrap of history, a pot of once-pitted triumphs now given slight regard by today's hasteners as it sits, stolid and quasi-ostensible, on the expressway of possibility. Wed to history, Legacy is the "already done" temporal coupling, whose worth and virtue becomes appraised, if not proved, only by dint of meeting present and future needs. For example, the public's regard for education, whether classical or nonstructured, by all evidence is putative at best. Who would *not* claim that today's educa-

tional climate is characterized by general indifference and desolation?

Why *you* would not, because you know well that the Rehab Program's first principle was *education*. You see The Program's legacy as a touchstone, a bridge that spanned the chasm of doubt and misdirection, a monument to creative and innovative and sometimes suspect/peripheral/neodevius/beyond-the-pale-of-approved-policy/stubborn single-mindedness, and a collection of solved problems resting in its own time-file.

Yet *that* legacy, a secure road marker of the present, can serve as a directional indicator for everyone participating in the Rehab Program, whether as a student, staff, administrator, parent, sponsor, supporter, or guest.

Thus, legacy conveys the leitmotif, the recurring theme of achieving independence through education-primed opportunities, instilled self-confidence, and gutsy presentation of individual competence.

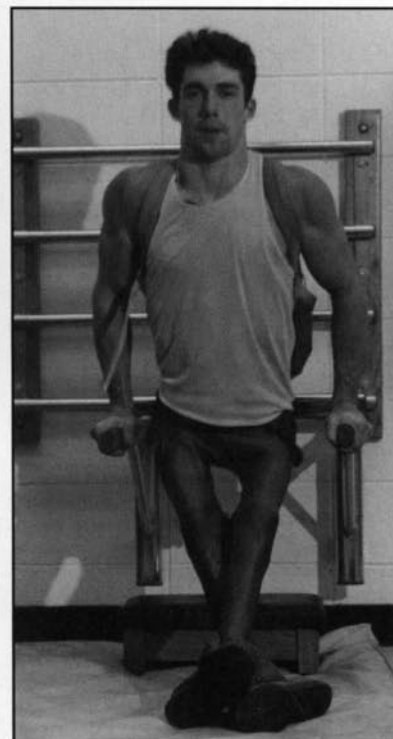
The Overall Impact of the U of I Program Is . . .

Contrary to how those who graduated from the U of I in the early days remember it, not every benefit for people with disabilities originated at the U of I. There undoubtedly were some things other than confinement to an institution or the back room available to people with disabilities prior to 1948. On the other hand, the activities and attitudes practiced in the Program inspired many milestones later claimed by other people and programs. Some of the myths of creation claimed by others that needed to be told with more fidelity are:

➤ Ability, *Not* Disability, Counts

- Proving it's more than a slogan!

"Ability, not disability, counts" has been used by many a charitable organization to combat the formerly acceptable attitude of feeling pity toward those who are physically different, physically challenged, differently able or a host of well-intentioned, candy-coated expressions used to drive away that awful word "cripple." At the U of I, students (and staff many times) more or less phrased the concept as "get your butt in gear because nobody cares about how disabled you are—all that matters is what you can do—NOW." What U of I students and alums could do now has proved to be a lot.



We . . . raise families, (top left) Richard and Anita Feltes pose for a portrait with their first born; (top center). Daughter Brienne finds comfort in having mom Sharon Miller near by; (top right) Scot Hollonbeck building strong muscles; (left) students learn sign language in the Rehabilitation-Education Center.



(Top) one of the favorite activities of Bob Drew, who became a high school teacher, was playing guitar and singing; (middle) the Wheel-A-Thon raises thousands of dollars for spinal cord injury and other causes; (left) Mary Jane Neer helped dozens of students realize their goal of an education through her scholarship funds.

There has also been 50 Years of Awards . . .

HAROLD SCHARPER SERVICE AWARD

1950 Harold Scharper
 1951 Ronald L. Smoot
 1952 L.D. Blankenship
 1953 Leah Mae Truxell
 1954 John T. Whitman
 1955 Charles F. Chapman
 1956 Robert T. Kaloupek
 1957 Katherine Niemeyer
 1958 Thomas F. Linde
 1958 Phyllis Voy
 1959 Glen L. Bellows, Jr.
 1959 Sylvia D. Bellows
 1960 Janet E. Little
 1961 Lynda Koopman
 1961 Michael Sachs
 1962 Thomas Jones
 1963 Robert C. Hawkes
 1964 Cheryl D. Summers
 1965 Fredrick A. Fay
 1965 William K. Johnson
 1966 William B. DeLoach
 1966 Vincent Falardeau
 1967 Joanna Cornett Dunn
 1968 Jonathon Wilkin
 1969 Kim Pollock
 1970 Thomas R. Brown
 1970 Richard J. Feltes
 1971 Nancy R. Frederick
 1972 Susan LoTempio
 1973 Rodney Vlieger
 1974 Edward Scherer
 1975 Sue Aldag
 1976 Richard C. Thorpe
 1977 Deborah A. Dillon
 1977 Robert E. Trotter
 1978 Kathy Oosterbaan
 1979 Ronald W. Malik
 1980 Kenneth E. List
 1981 Barbara A. Baum
 1982 Jeffrey Hatley
 1983 Susan Johnson Smith
 1984 Peter Garceau
 1985 James A. Tasic
 1986 Charles Graham
 1987 Dale Prochaska
 1988 Vivian Vahling
 1989 Todd Schmiedi
 1989 Michael Pallis
 1990 Benjamin N. Davidson
 1991 Scot Hollonbeck
 1992 Carol Hetherington
 1994 Margaret Stran
 1995 Kaitlin Sherwood
 1996 Ron Phelps

HAROLD SCHARPER ACHIEVEMENT AWARD (1950)

1950 Harold Scharper

1951 John C. Prince
 1952 Donald W. Swift
 1953 Alice Mae Smith
 1954 C. Ben Graham
 1955 L.D. Blankenship
 1956 G.R. Perkins
 1957 E. Whitehead, III
 1958 Marjorie A. Nelson
 1958 Marilyn A. Dunn
 1959 James Boen
 1960 Sylvia Bellows
 1961 Thomas F. Linde, Ph.D.
 1962 Margaret Ann McMullen
 1963 Kenneth M. Viste
 1964 Judith Ann Pachiarz
 1965 Mary Louise Bramer
 1966 Jack K. Genskow
 1967 Thomas F. Hancock
 1968 Sherrill Peterson
 1969 Joanna Cornett
 1969 Thomas L. Jones
 1970 Frederick F. Fay
 1970 Judith Webb Harris
 1971 Vincent Falardeau
 1971 Robert Arhelger
 1972 Saul J. Morse
 1973 James Taylor
 1974 Robert Cleary
 1974 Rebecca Matheny
 1975 Rose Ann Marois Farina
 1976 Cheston Mottershead, Jr.
 1977 Janet E. Little
 1977 William K. Johnson
 1978 Miles O'Loughlin
 1979 Robert J. Rice
 1980 Steven H. Gerdes
 1981 Elizabeth Ann Fetter
 1981 Sharon Rahn Hedrick
 1982 Michael P. Makeever
 1983 Joseph F. Arcese
 1983 Richard F. Feltes
 1984 John H. Holliman
 1984 William R. Shanahan
 1985 Susan Sowles Suter
 1986 Gerald G. Weichbrodt
 1987 Charles F. Chapman
 1987 Victoria L. Covington
 1988 Nancy Frederick
 1988 Charles Sheridan
 1989 Jerry D. Range
 1990 Fred W. Springe
 1990 Glen L. Bellows
 1991 Anne G. Edwards
 1992 Paul Scher
 1993 Dean Nosker
 1994 Holly Mirell
 1995 Lynda L. Koopman
 1996 Laura Oftedahl
 1996 Kim Pollock

DSO, INC. HONORARY LIFE MEMBERSHIPS

Frank Allison

R. Warwick Armstrong
 Curt Beamer
 Carmont Blitz
 Robert Bone
 Harry L. Bradley
 Charles A. Bruggeman
 Beatrice Burns
 John A. Burns
 Judy Cain
 William Cain
 E.C. Cline
 Jeanette Corkran
 Cliff Crase
 Victor Cullin
 Whitson Daily
 Russel O. Derby
 Dorothy Devereux
 Emmerson V. Dexter
 Eunice M. Dowse
 Raymond F. Dvorak
 Charles Elmer
 William Ingalls
 Chester O. Jackson
 William Johnson
 Seely Johnston
 Louise Jones
 Durward Judy
 Joseph Konitzki
 Joseph Larsen
 Shauna Larsen
 Homer L. Lawder
 Roger E. Martin
 Howard Miyake
 Lloyd Morey
 Grace Sims Moyer
 Mary Jane Neer
 Jeanette Sato Nugent
 T.J. Nugent
 Cecil H. Patterson
 E. Bruce Linde
 Chauncey M. Louttit
 Paul F. Luedtke
 King J. McCristal
 James L. McManus
 Dr. Walter R. Petersen
 Guy Renzaglia
 Virginia Saupe
 R. Frederick Shepard
 Mikki Smith
 Wayland Smith
 Paul L. Smoot
 Milton Sprunger
 Seward C. Staley
 Hazel Stromm
 Mary Wales
 Frances B. Watkins
 Ann White
 Harold C. Whitman
 Jack Whitman
 Arthur R. Wildhagen

TIMOTHY J. NUGENT AWARD 1970 — Personal Integrity. Human Dignity. Intellectual Endeavor. Pride in Self. Concern for Others.

1971 Ernest Hodge
 1971 Mary Pat Hodge
 1972 Rodney Vlieger
 1973 Mary Jane Wolfe
 1974 Joan Costello
 1974 Nan O'Connor
 1975 Susan Hagel
 1976 Sue Aldag
 1977 Glenn Hebert
 1978 Donnal Schmidt
 1979 Ronald W. Malik
 1979 Jill M. Smith
 1980 Sharon A. Spellman
 1981 Barbara A. Baum
 1982 Susan Johnson
 1983 Peter Garceau
 1983 James A. Tasic
 1984 Dawn St. A. Bragg
 1984 Diana M. Humphrey
 1985 Joseph Gerardi
 1985 Annette Henson
 1986 Dale A. Prochaska
 1987 Matt Darlow
 1988 Virginia Leeds
 1988 Todd Schmiedi
 1989 Kevin Orr
 1990 Jean L. Driscoll
 1991 Ann C. Walters
 1992 Shawn Meredith
 1993 Norm Lyduch
 1994 Michelle Houlihan
 1995 Michael Rembis
 1996 Michael Cafferty

BILL STEWART MEMORIAL AWARD for Courage and Concern for Others
 "Pass the Baton"

1994 Norman E. Lyduch
 1995 Kevin N. Jarboe
 1996 Shelli Ross

THE PAMELA BORELLI AND FAMILY LEADERSHIP ACHIEVEMENT AWARD presented by the U of I at U-C DRES to the Outstanding Students Demonstrating Leadership in Campus Activities.

1994 Joan A. Ellison
 1994 Carrie N. Pinter
 1995 James A. Sharples
 1995 Jana A. Stump
 1996 Robert G. Hill
 1996 Keith W. Wessel



(Above left) Celebrities have long been willing to help the Division raise funds. Lou Boudreau, baseball Hall of Famer, posed with Vince Caputo of the Gizz Kids during a fund-raising exhibition basketball game. (Above right) Famed violinist, Itzak Perlman, visits with students Tyler McHaley, left, and Todd Schmiedl at Krannert Center Concert. (Right) Jim Brady, former Press Secretary to President Reagan and injured in Reagan's assassination attempt, visited with Gail Krasnow and Jann Floyd in the Division's technology laboratory.

► PAVING THE ROAD FOR OTHERS . . .

There are many charities in the nation which use people with disabilities as examples of who the funds they raise will be used to support. The U of I students have turned this around. They have raised thousands of dollars annually to help others, many of whom have disabilities.

The contributions include scholarships established by friends of the Program—Mary Jane Neer is a wonderful example—and graduates of the program, e.g., Tom and Louise Jones. Funds for spinal cord injury research are raised by Wheel-A-Thons, which also give folks who usually walk a chance to learn what it's like to push a chair a couple of miles. Other contributions have been the time and commitment of students who served as much needed role models for children with disabilities.

► LEGISLATION

Many legislative actions that affect employment, housing, and public building access and equal rights for people with disabilities grew from seeds planted by activities launched at the U of I. Tim Nugent and Company marched on the Illinois Capitol in Springfield in 1949—and, in the years that followed—maintained a high profile that attracted the attention of many politicians.

Illinois Governors came to know people with disabilities as individuals when they hosted groups of students and alumni from the U of I at many events in the 1950s and 60s.

And many of the consumer groups who chained themselves to buses, did sit-ins in political venues and fought for civil rights for people with disabilities, had among their leaders PWDs who had cut their teeth on civil disobedience by burning their underwear and marching at the good old U of I. Still others who had attended the U of I went on to become state and national senators and representatives, and to fill other important administrative positions.

► SPORTS

Wheelchair sports have certainly benefitted from the groundwork laid at the U of I. Who can forget the days when the President of the U of I got at least one letter requesting that he make Tim Nugent stop exploiting crippled boys and girls in wheelchair sports? Many now marvel at the scope and status of wheelchair sports. Today those sports include everything from quad rugby to inclusion in mainstream intercollegiate, Olympic, and professional sports. Recently, *Sports 'N Spokes* reported sanctioned regional track and field meets on the high school level that combined events for athletes.



Illinois Governor Otto Kerner (second from left) served food for U of I students with disabilities at the annual picnic at the Disabled American Veterans facility on Lake Springfield.



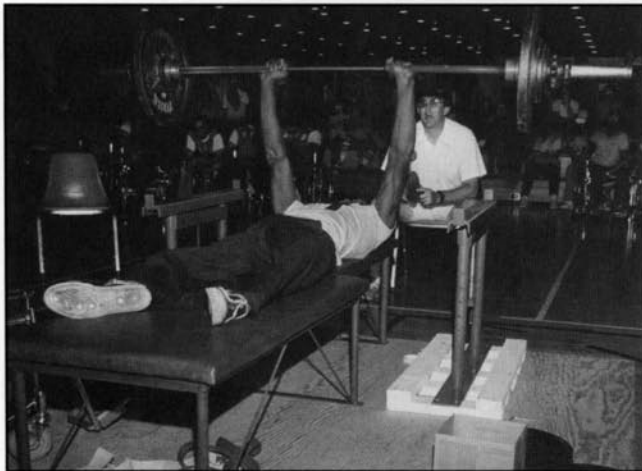
Competition was keen between the Gizz Kids and the Champaign-Urbana Black Knights. Gizz Kid, Ron Stein tries to block a shot by the Knights' Gig Broeren, while Illinois' Harry Stewart, number 33, and Vince Caputo wait for the rebound.



The growth of women's basketball was stimulated by the U of I. Sharon Hedrick drove the level of competition to new heights with her skills.



Ann Cody is one of the U of I women track stars who dominated national and international track and field.



Weightlifters can bench-press weights comparable to able-bodied competitors.

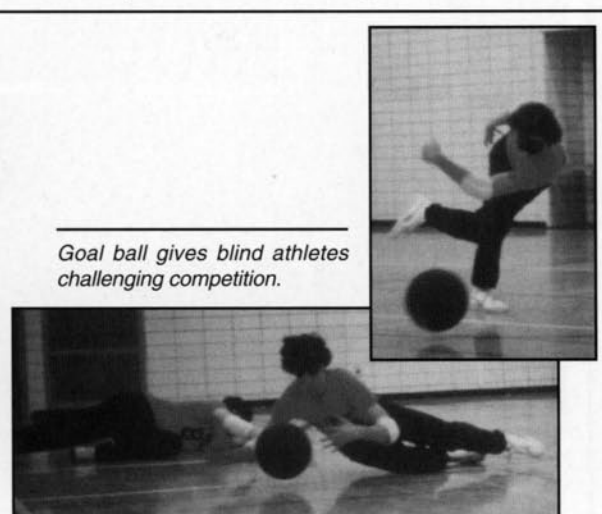
having disabilities with all other events. Folks in wheelchairs find recreation in scuba diving, climbing mountains, sailing boats, playing tennis, sky diving, hang gliding, horseback riding, and trap shooting.

When a member of the *Gizz Kids* basketball, track, field or other team leaves the U of I campus, he or she behaves like Johnny Appleseed. Wherever the U of I alum goes, a wheelchair sports program will sprout. At last count, over 20 NWBA teams were started by a graduate of the *Gizz Kids* (or Illini as they are now called) and few NWBA teams can say they haven't had a player who learned his or her skill at Illinois.

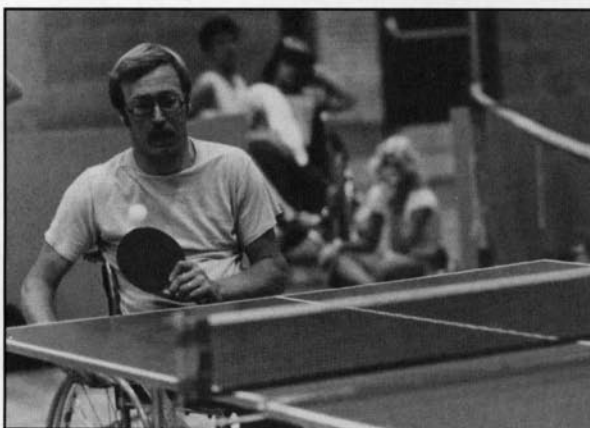
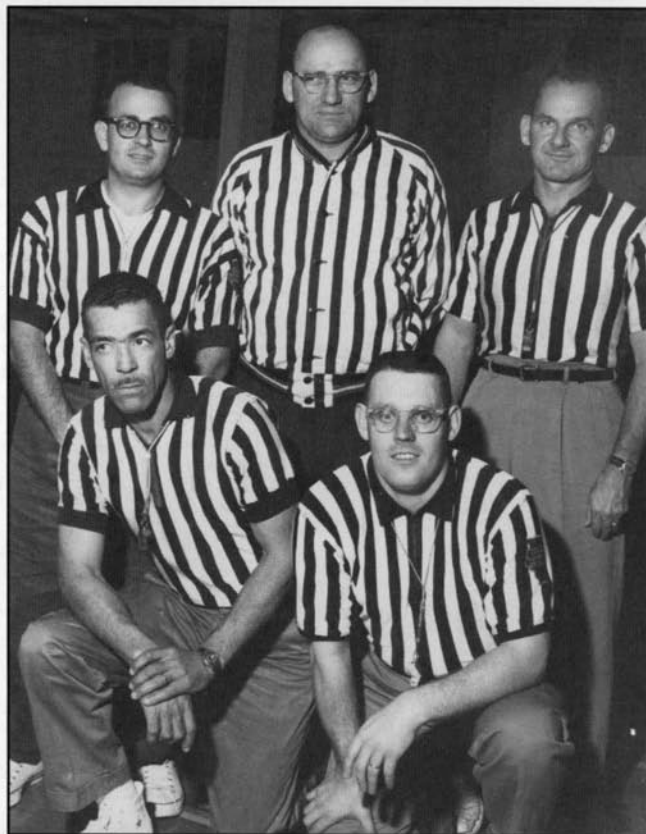
The number of wheelchair athletes the U of I put forth—along with the records, positions and vociferous nature of these folks—pretty much keeps the role of the U of I up front—where it belongs.



Sue Hagel (left) and Hope Chafee made their mark in archery competition.



Goal ball gives blind athletes challenging competition.



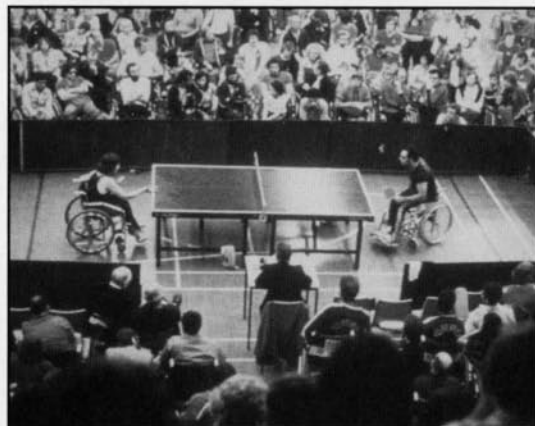
(Above left) Jean Driscoll is best known for her success in the Boston Marathon, but she also is a talented musician and song writer who was invited to sing the National Anthem at a Milwaukee Brewers baseball game. (Above right) Marty Morse coaches U of I athlete, Tony Iniguez. Center, The Division trained many top wheelchair basketball officials, including (top row, left to right) Sam Burrillo, Bob Wright, Fred Davis (bottom row left to right) Henry Bowman and Jim Miller. Bob Wright and Henry Bowman went on to officiate in the NCCA, and Henry Bowman was the first black official in the Big Ten Conference. (Lower left) Rod Vlieger plays table tennis at the 24th National Wheelchair Games.

Accessibility Standards

The ANSI (originally ASA) Standards developed at U of I in 1961 are unique in several aspects. They supplement other standards so that facilities are for everyone. These standards are reviewed every five years and, when technological or other changes warrant, they are upgraded. In areas for which ANSI provides standards—such as building construction—the standards are revised every five years. The grades for ramps, turning radii and other standards developed in this project are still valid today—37 years later. When ANSI A117-A (1961) was reviewed by architects, PWDs, engineers—and anybody else who wanted to play—for the Americans with Disabilities Act Architectural Guidelines (ADAAG), no one could see any need for making improvements. But the most amazing fact about this project is that, while the average time to develop ANSI Standards is 5 to 7 years, U of I did A117.1-A in a little over a year because of previous research and experience.

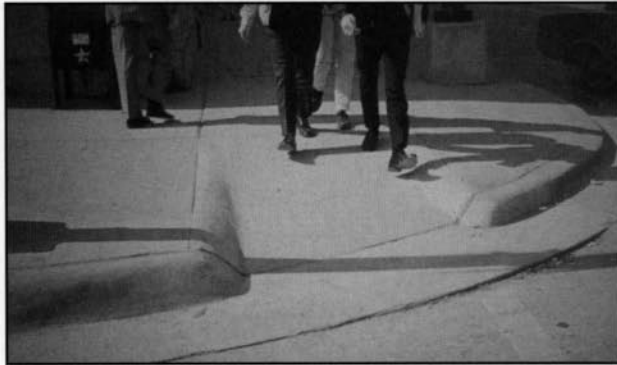
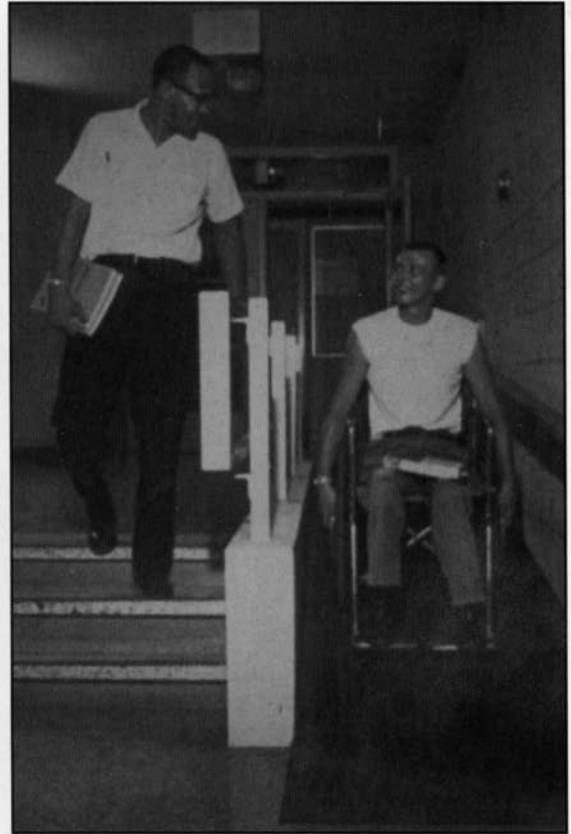
ANSI A117-A (1961) also may set a record for spawning the most industry standards. They include:

- Uniform Federal Accessibility Standards (UFAS), mandating accessibility of all public buildings under Section 504 of the Rehabilitation Act of 1973;
- Fair Housing Amendments Act of 1988 (FHAA) mandating accessibility of all dwelling units in private or public buildings of four or more dwelling units;
- Title III of the Americans with Disabilities Act (ADAAG)



ANSI Standards developed by the U of I proved public places of entertainment can accommodate people using wheelchairs as spectators and participants.

Accessibility . . . around town and in buildings



Through the years things have certainly changed. . . (Top left) whether it be one step, or a thousand, they are problematic for persons with disabilities, particularly wheelchair users. (Top right) A ramp cut through the steps allows equal access for ambulatory and wheelchair students alike. (Left, below) Curb cuts do not hamper an able-bodied person, but certainly give persons in wheelchairs accessibility and, in this case, serves as a directional guide to the blind. (Center, below) Coffee shops and restaurants, have become accessible for persons in wheelchairs; many also now include Braille menus.

U of I Had Impact on Many Other Areas . . .

- **Independent living** in the U.S. has gone from the group home model of the 1970s in Berkeley, CA, to community-based supported living with not more than two or three PWDs residing in any unit. The U of I experiment in transition to independent living moved from Greenbrier Nursing Home to Tanbrier to Beckwith and out into the world, beginning in 1961.
- **Activities of Daily Living (ADL)**—Who says you have to stand up and put your pants on one leg at a time? U of I taught a strict curriculum of “if it works, it’s the right way.” Famous physiatrists (doctors specializing in physical medicine and rehabilitation) still moan about having to put up with Tim pointing out that the lovely lady driving down the street in a convertible was once a patient whom the doctor sent home with a status of “will always need 24-hour attendants.” The lady was trained in one week to do whatever it took to get in and out of bed, dress, and get on with it. Unfortunately, some of the major rehab centers still “don’t get it.”
- **Role modeling**—Isn’t it great that Nordstrom’s ultrachic department store uses models who use wheelchairs? Isn’t it great that one salesman in a wheelchair spent more time acting in TV adventure films than selling wheelchairs? Children, having had teachers who use wheelchairs or Braille, having seen people using sign language in TV commercials, or having learned from Boy Scout leaders who once severed their spinal cords at cervical level, grow up without prejudices or fears.



Sharon Hedrick, apart from being an athlete and gold medalist, is a registered dietitian. Here, Sharon gives a speech on sports nutrition.



(Above) Alumnus Chuck Linster is MC at the DSO Banquet in 1982; (right) In the company of his proud parents, Mike Pence is congratulated by Mayor Goode of Philadelphia (1988).



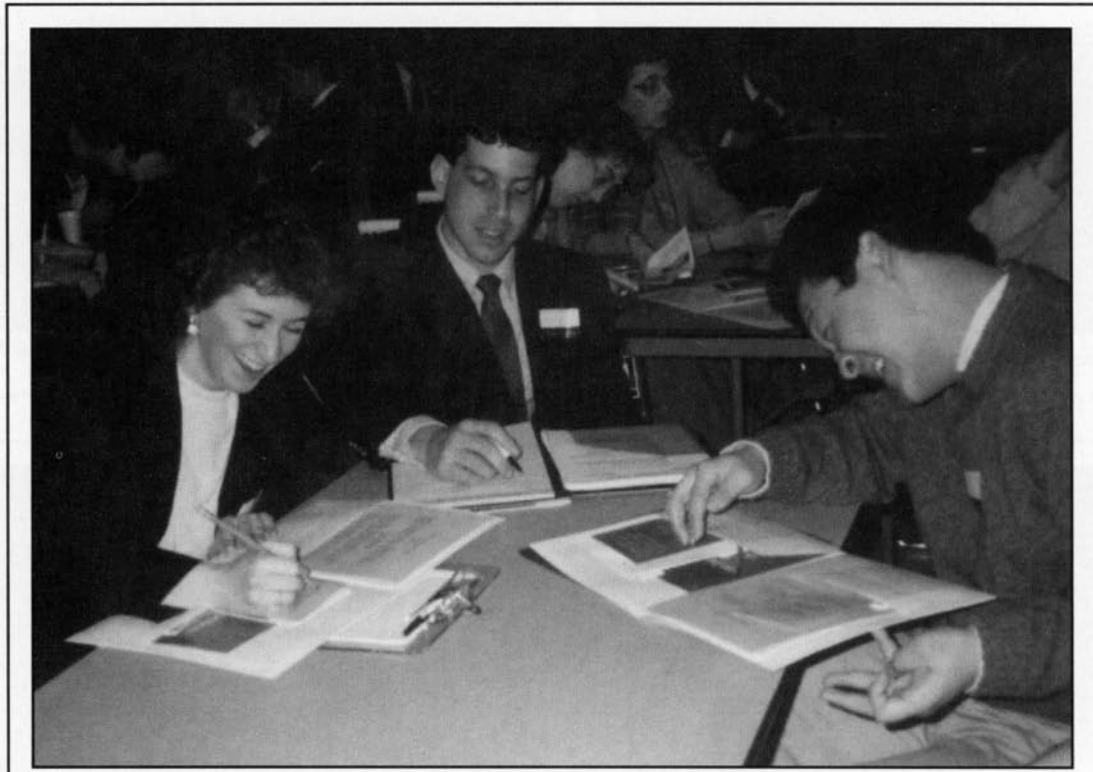
► **HIRING**

“United Air Lines, IBM, CBS, AMA hire people with disabilities” isn’t a recent news flash. It was happening in the 1950s. Long before ADA, U of I grads were getting jobs. It sometimes seems today that we have regressed when we hear that an astronomical percentage of people with disabilities can’t find employment. Some of us suspect that—if you look closely at the picture—the situation is that people with disabilities and with good educations have found jobs and disappeared into the general category called “tax payer” and, of course, don’t show up in the employment/unemployment statistics. Is this amazing when the federally-funded center for statistics on disability lists as a major definition of disability, “the inability to perform meaningful work”?

► **DRIVING, HOUSING, LIFE IN GENERAL**

It is difficult to identify any aspect of everyday life that wasn’t somewhat influenced by the U of I program. Sure, the folks up at a famous hospital in Michigan have done marvelous work in designing controls that let a person with no hand movement, in a power wheelchair, on a respirator, drive a van. But when it comes down to it, a lot of the acceptance of folks with disabilities, driving, came from the U of I, which did studies in concert with insurance companies.

The National Institute on Disability and Rehabilitation Research (NIDRR) funds a marvelous center in North Carolina to issue information about how to make your home accessible. Photos of housing features in one of the recent brochures are dead ringers for the features a number of U of I alumni included when they built their homes in the 1950s.



Job Fairs sponsored by the U of I highlighted the skills and knowledge of people with disabilities.

But the greatest impact the U of I has had, is the effect on individual lives of people with disabilities—as told in “The Exhibition Game”

The Exhibition Game

You go into the high school and change into your uniform . . . in a history room because the lockers are deep down the stairs.

After all, it's the mid-1950s. Accessibility is emerging in concept, but seldom in practice. Finding an accessible locker room is still a matter of chance . . . as serendipitous as finding an accessible motel room, or an accessible public rest room on long trips . . . or an accessible college classroom.

You stack your street clothes on a chair, a desk, the floor . . . whatever is available, pull on the orange and blue, break out the practice balls, and wait. The adrenaline builds and your pulse quickens a bit . . . even though it's only an exhibition game.

Then the team lines up single file . . . bursts through the gymnasium door and moves immediately into the lay-up drill. You like to be one of the first to sink a basket in the warm-up, because those first baskets cause a smattering of polite applause.

You back off a few feet for general shooting. Bruce Karr pops one in from 15 feet. Jones hits from 20 feet. Stein throws up a net stretcher from 30 feet.

The timid applause in the stands fades out. Is it a signal of newfound respect?

Then the local players walk onto the court . . . and for the first time in their lives, sit down in chairs to play basketball. They try a few halting pushes . . . then get more confident. At that point, one of them invariably hits the hand rims too hard and flips over onto his back.

The crowd lets out a collective chuckle and his old high school buddies, who are safe in the stands, give out with cat calls as he stands up, rights the chair, and sits down again.

Tim introduces the *Gizz Kids* players and tells what their majors are at the U of I. Those details are also listed in the program, along with job positions of alumni . . . alumni who are now raising families, holding down jobs . . . taking leadership roles in their communities.

The game starts. And those once graceful hometown star athletes find that their pre-game doubts were fully warranted.

The chairs on wheels that glide so smoothly and effortlessly for the *Gizz Kids* are shackled in the hands of their opponents. They stall and languish like grounded B-29s, while we dart and dash around them . . . jet fighters diving in for the kill.

The genteel applause that greeted our first few lay-ups in warm-up is forgotten. Now those fans are rooting for the hometown boys to make a basket.



Tim Nugent was the first coach of the highly successful *Gizz Kids*. Many exhibition games played an important fund-raising role for the team and many organizations.

So we let one of them inside our defensive perimeter. And they get the ball to him. He shoots. The crowd cheers, then gasps as the ball rolls teasingly around the rim and then falls . . . into Stein's waiting reach.

Stein pitches it to Karr who already is at mid-court on the fast break. Karr hits Nosker at the free throw line. Nosker glides in for another two for the Kids. It happens in the blink of an eye.

Next time down, we let in another one. And he shoots. Again the ball teases around the rim . . . and then falls in. The hometown crowd explodes. The guy springs out of the chair, throws both arms toward the ceiling, and jumps across the floor.

As the pandemonium rages, you reflect on what's going on. These people who came in here tonight intent on giving us encouragement against overwhelming adversity **ARE NOW ROOTING AGAINST US!**

All of the sudden you realize you no longer are the underdogs. Your opponents are. A remarkable transition has occurred here . . . a marvelous transition.

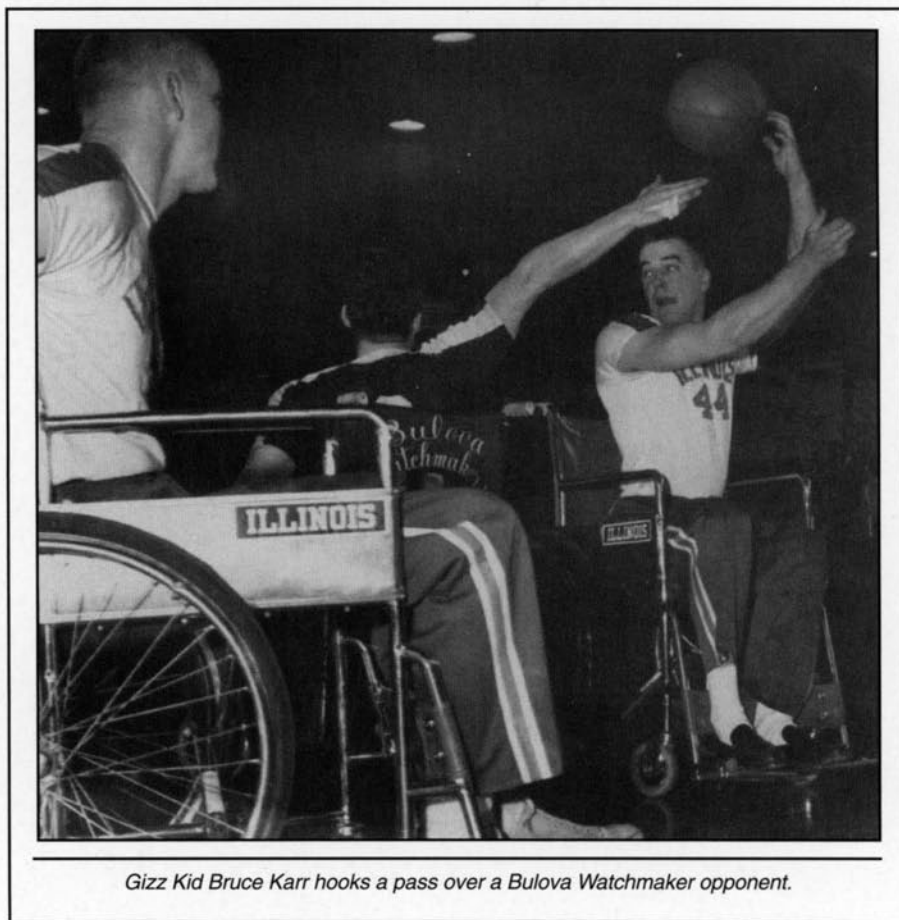
Then you look back over to the sideline . . . at the local high school paraplegic . . . the one who rolled a tractor over on himself a year ago. He was slumped down a bit in his chair before the game. You see he's sitting up a little taller now.

And his usually timid girl friend is gushing and laughing next to him.

And you look at his parents and you know that some part of that massive burden has been lifted.

To the young college boys, it's been a good time . . . an opportunity to work off some of the pressures of the classroom.

But deep down, they all know it too. Because of tonight, there is another small rip in that 1950s curtain of apathy . . . another tear in that tangle of prejudice and ignorance . . . another step toward a future when what counts most is ability. . . .



Gizz Kid Bruce Karr hooks a pass over a Bulova Watchmaker opponent.

Wheelchairs: From Barrymore to Quickie

Just as revolutionary as the shift in attitudes toward people with disabilities since the mid-1940s has been the evolution in wheelchair design and engineering, and the U of I Rehab Program and its graduates were major players from the beginning.

The common mode of hospital transportation for World War II vets was a wood-framed monstrosity with wicker back, large wheels in the front and one or two small wheels in the rear. They weighed about six zillion pounds. To some they resembled a family room recliner without the padding . . . comfortable to rest in, but a bear to put into straight-line motion. And that was the

idea. As long as a guy had to use one, make it comfortable. He wasn't going far anyway.

Of course the chair soon fell to the wayside once the users were out of the hospital and had places to go. By the time the Rehab Program started in 1947, wheelchairs had evolved considerably. Harry Everest, a California mining engineer who became a paraplegic, designed a folding wheelchair that he got his neighbor, Gerald Jennings, to weld together out of steel. To make the chair easier to steer and gain the best mechanical advantage, Everest put the large wheels in the rear, the small ones in the front, and added sling upholstery made from cloth. As Harry



Wheelchairs have gone from the wooden (above, left) "lounge chair" to (above, right) folding steel to (below, right) aircraft metals as used in the customized racing wheelchair seen here.

Everest tooled down the street, people asked where they could get a chair like his, so he gave them his chair and had Jennings make a new one. Finally, they started Everest & Jennings, Inc. to produce wheelchairs.

But in possibly the greatest stroke of all, for freedom, Everest and Jennings engineered the X-brace, which allowed the chairs to fold so you could put them in the back seat of your car. Hand controls, automatic transmissions and fold-up wheelchairs—that combination was a godsend to the paraplegic. Once again, the world was his oyster.

We'll give General Motors credit for their automatic transmission. But, you can credit the hand controls and the portable wheelchairs to the persons with paraplegia. Wheelchair athletes, in their relentless quest for greater speed and more maneuverability, played a major role in innovative designs for both sports and personal chairs.

It wasn't long until Tim Nugent and a local Champaign bicycle dealer used bicycle wheels with rims that accommodated pneumatic tires, to replace the solid rubber tires used at the time. It was a boon to a faster, smoother riding, more maneuverable, vehicle. Later, there was a switch to gray tires to avoid black skid marks on basketball floors and at exhibition games . . . or the kitchen floor.

Of course, the high backs on those old wooden hospital wheelchairs were there to give an attendant a place to push an attendee. This was not necessary among the new breed of wheelchair users. Credit the Long Beach Flying Wheels basketball team with showing the world in the 50s that even persons with high-level paraplegia could handle a minimal chair back with safety.

And the Flying Wheels went a radical step further when they took off the chair arms. Some competing teams were slow to follow that lead. They equated the cut-down, armless chairs with milk stools on wheels. But, when it became obvious that the chairs gave the Flying Wheels an edge, the modifications took hold with other teams. After all, bounce passes can ricochet off chair arms. High backs limit shoulder turning range.

Those were major modifications the early wheelchair companies were slow to adopt. They kept making chairs

with 16-inch backs, and basketball players kept on sawing them down to 6 inches or less.

A major annoyance in the early days was the front casters that invariably came loose after a little use and began chattering. That chatter that slowed the chair and was extremely annoying, whether you were a basketball player racing in for a lay-up, a track star pounding between the lanes in a 100-yard dash, or a civilian just pushing down the sidewalk. You can probably find some old timers who will tell you those front casters were the most annoying aspect of early wheelchairs. But, it didn't take the sports innovators long to engineer caster fork assemblies that didn't shake—to the benefit of every chair user since.

In fact, basketball players and road racers began to make their own chairs. One of the early innovators was Bud Rumble, an All American basketball player for the Detroit Sparks and the Indianapolis Olympians. He built a cut-down, lightweight chair with a rigid frame for himself and later for his teammates.

Those chairs, homemade by Rumble, would run circles around standard chairs other teams were using. That didn't last long. Soon a number of individuals were building basketball chairs made with everything from aluminum to titanium. Chair weights shrank from 50 pounds to less than 20 pounds.

A veteran of 30 years in wheelchair ball said he was ready to give it up after 15 years, but a new, lighter chair design came along. Same thing happened at his 20th and 25th year before he retired after three decades in the game. He credits the last 10 to 15 years to wheelchair innovations.

Today the attitude among wheelchair manufacturers is that, since no two individuals or disabilities are alike, no two chairs should be alike. Modern wheelchairs adjust for height, width, camber, back height, seat length and angle, caster size and position, rear wheel position and more. You can virtually mold them to fit your individual needs.

No question about it. Today's chairs are a far cry from the special "Lionel Barrymore" models of yesteryear.

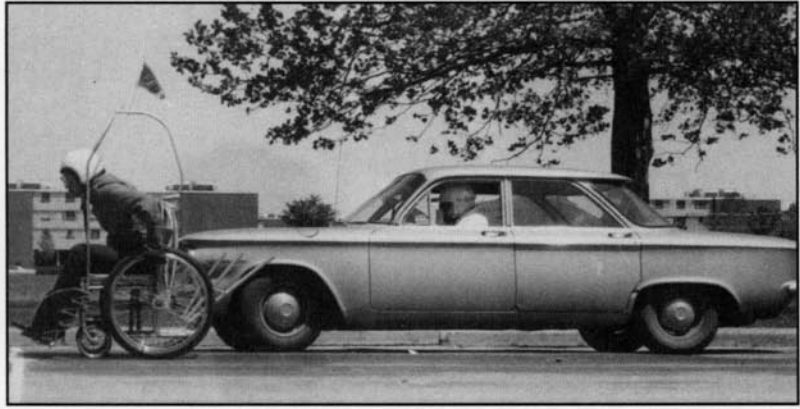
And then there were those innovations whose time never came. . .



This chair solves the problem of finding an accessible rest-room.



This chair is for people who have difficulty transferring into high beds. It comes complete with parachute (not shown). Several students have also gotten summer employment, picking peaches in this chair.



The propulsion unit of this high-powered experimental model can be fueled by a combination of gin and vermouth. Super Chair is customized with roll-bar, flame-outs, and tuck & roll upholstery.



The window shade is for privacy and the bicycle seat is to accommodate a chaperone (if necessary).



Modern dances with their wild side-to-side gyrations are difficult for people with disabilities to perform. This chair provides this motion automatically by having wheels with the axles off-center.



Several of our students are involved in Civil Rights and other political-activist groups.

The Future

PURSUE YOUR DREAMS.



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The Future



Whatever a person's "affliction," "impairment," or "physical difference" (semantic refinements of "handicapped" and "disabled" notwithstanding) may be, society now seemingly has a greater regard for individual "personhood" and has accepted a more open definition of "capability." Legislation and litigation have helped, but a considerable impetus arose from The Program and its aforementioned legacy. Could post-polio Franklin Delano Roosevelt campaign in his wheelchair today? One would believe he not only could, but should . . . and would, perhaps even learning to pop a "wheely" or entering a marathon in a snappy sports model wheelchair.



I, Book, revel in the thought.

Technology has put the shot of possibility down the field of can-do-ism for Auntie Maim and her squire, Turnin Wheeler. Computers, cell phones, electrical by powered systems (Fred Fay's mobile bed—an apotheosis), devices to improve vision and hearing, e-mail, voice-activated circuits—all enabling and facilitating the work and lives of persons having severe physical impairments. Now, down the road of what's to be, here's artificial skin and synthetic blood acomin', helping the burned and seriously injured to survive and thrive. Researchers report spinal nerve regeneration; we already know some cells in the mammalian brain can regenerate—at least in cats! Many organ transplants are now considered routine: heart, kidney. Progress continues with other organs: lung, liver, and spleen.

More advances in technology are needed; more calls for its applications will surely be heeded.

Legislation recapitulates frustration, say



I, Book. The Americans with Disabilities Act set in stone much that is worthy . . . although some

buildings remain inaccessible to persons in wheelchairs and other obstacles persist as well. Perhaps amendments to given legislation will obviate such frustrations. Perhaps, too, such legislation ultimately will prove to be moot as attitudes change and more "wheelchair-confined" architects and contractors themselves have opportunity to prove their mettle and professionalism.

Hurdles remain. Squire Wheeler and Lady Maim still face attitudes of indifference and outright rejection. Furthermore, their therapy programs must be individualized. If their education ambitions are to be fulfilled, any residual academic insouciant must be converted to a Rehab Program enthusiast through aware and effective leadership.

Here's more of what the University, you, and the elusive but powerful decision-makers should also strive for:

- Establish a research professorship in rehabilitation science.
- Create a Program for Integrated Rehabilitation Science Research.
- Enhance and enlarge professional training programs in appropriate and needed fields of total rehabilitation.
- Further enhance research in various areas of emerging technologies as they apply to rehabilitation needs and services.



But, as Squire Wheeler and Lady Maim (and **I, Book**) know, the future forms from the potency of the legacy as impelled by the input and output of the gimpersons of the past and present . . . and beyond.

Squire and Lady await your report.

Future

PROLOGUE

Through the prose and the images of this book, we can relive the panoply of experiences and accomplishments which comprise the storied history of Timothy J. Nugent's legendary social experiment in higher education. Certainly, since the Rehab Program's meager beginning in 1948, it has distinguished itself as a pioneer in the field of rehabilitation education and, as a result of its uniqueness, has enriched the lives of many hundreds of graduates and positively altered the life circumstances of millions with disabilities worldwide.

In a recently published study (cited under "The Research," page 53), a University of Illinois, Urbana-Champaign (UIUC) education was shown to afford graduates lifetime earnings more than 25 percent greater than the national college norm, and 50 percent greater than that of their peers who do not attend college. Similarly, research on graduates with disabilities from 1952-1992, sponsored by the Division of Rehabilitation-Education Services (DRES), demonstrated that a UIUC education has a comparable effect on the annual income of graduates with disabilities.

As noted above (page 53), some authorities estimate that for persons working full-time, incomes for those without disabilities are 15 percent or more than for those with disabilities. Nonetheless, when matched for age, gender,

and college major—and with controls for health status—the salary difference for U of I graduates with disabilities and their nondisabled cohorts was found to be statistically insignificant.

Because many persons with disabilities encounter considerable challenges with employment and income, the reported comparative findings confirm the original principle of the Division, i.e., that education opens options, facilitates opportunities, and improves both competence and confidence through personal performance.

The Division's principal challenge for the future is to determine how best to build upon this distinguished legacy of accomplishment in furthering opportunities for individuals with disabilities to be included within the rapidly changing social, political, economic, and technological context of the 21st century.

Although the concept of a rapidly shrinking world is unarguably cliché, it is also unarguably an irreversible reality. The "virtual" proximity achieved through advancements in telecommunications, computer and information technology, and travel will render moot the previous constraints of time and distance that are two of the most significant limitations imposed by severe disability. Indeed, opportunities for self-employment by entrepreneurs with

severe disabilities and high technology savvy will be greatly expanded by advancements in mass telecommunications. On the down side, however, careers will become increasingly ephemeral, and graduates with disabilities will have to be prepared, both personally and professionally, to progress successfully through several career changes during their lifetimes. To that end, the Division must endeavor to promote the development of graduates with disabilities who have the skills to adapt to an





Beckman Institute, one of the many new campus buildings that students will use in the 21st century.

ever-changing social, economic context, and who are competent in the use of new technologies. The Division must also endeavor to ensure students with disabilities access to the “virtual” campus equal to that, which has been accomplished during the past 50 years in the realm of architectural accessibility. The Division must also serve in the vanguard of the information technology accessibility movement, and work to ensure that while making such concepts as distance learning and the virtual campus accessible, we do not create mechanisms whereby students with disabilities can be passively denied the benefits and experiences of residential college life.

Another significant 21st century trend that will necessarily affect higher education and the role of the Division relates to the nation’s changing demography with regard to age, ethnicity, and disability. First, by 2050, growth in the numbers of minority citizens will cause the U.S. population to be nearly evenly divided between whites and persons of color. With the substantially higher prevalence of disability among the nonwhite segments of the population, this trend could result in a substantial increase in the prevalence of persons with disabilities. Second, the population is aging and the incidence of disability is increasing as a result. Third, the nature of the disabilities represented by incoming students in post-secondary education is changing. Of the students served by the Division currently, 65 percent have traditional mobility and sensory disabilities. The number of students with such disabilities has remained relatively constant over the last 30 years.

Recently, the Division has witnessed a precipitous increase in the number of students with learning disabilities, attention deficit and psychological disorders. At present, the Division serves nearly 400 students with disabilities, slightly more than a third of whom have such disabilities. In contrast, the Division had only one stu-

dent with a specific learning disability registered for services in 1979. As a consequence of these demographic trends, the expertise and services of the Division will likely be in even greater demand during the first half of the 21st century. Furthermore, clearly, one of the Division’s most significant challenges during the next decade will be to maintain its excellence in accommodating the traditional student clientele having severe locomotor and/or sensory disabilities, while working to develop services of comparable breadth and quality for this evolving population having disabilities that affect cognitive processing.

Individuals with disabilities have been empowered by the enactment of a wide array of local, state, and federal laws. Most notable of these laws are the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. Yet, 49 million Americans with disabilities continue to be relatively ineffective in exploiting their collective social, economic, and political potential for public policy gains. Campus units like the Division that serve persons with disabilities, bear considerable responsibility for fostering cooperative alliances among the mosaic of disability subgroups.

A technological revolution is also underway that will undoubtedly have considerable influence upon the lives of persons with disabilities. In 1965, Gordon Moore, Chairman of the Intel Corporation, observed that each new microprocessor contained roughly twice as much capacity as its predecessor, and each chip was released within 18-24 months of the previous chip. He reasoned that if this trend continued, computing power would rise exponentially for an unspecified length of time. If these exponential trends continue as predicted, the first 20 years of the 21st century will likely see more technological progress than was seen in all of the 20th century.

In assessing how this will affect persons with disabilities, Ray Kurzweil suggested, at the 1997 International

Conference of the Association of Higher Education and Disability, that we consider the example of reading machine technology. The UIUC currently owns two Omni 3000 reading machines (the brainchild of Kurzweil's company) that transcribe print to electronic format and produce output through synthesized speech. The Omni 3000 has over 500 times more memory and speed than the inaugural reading machine introduced by Ray Kurzweil in 1976. In the not-too-distant future, chip advancements may make it possible for reading machines the size of pocket cameras to scan printed pages, or "real world" environments and immediately produce auditory descriptive output. Such devices will inevitably be capable of scanning and providing descriptions of graphical data and pictures in real time, thus providing persons who are blind with a mechanism for personal navigation. Such devices will also be capable of real-time translation from spoken language to text, or to another language, including American Sign Language (ASL) output on a hand-held high-resolution screen.

Individuals with disabilities must be proficient in the use of such assistive technologies if they are to benefit maximally from their development. One of the most significant problems faced today by persons with disabilities is the time lag between the introduction of new technologies, and the point at which individuals with disabilities gain access to them and become functionally proficient in their use. Typically, by the time people with disabilities get the technology, it is antiquated, and new knowledge and skills are required. As a result, persons with disabilities will have to continue to learn new technology throughout their lives if they are to remain independent and economically productive.

Along with the revolutionary advancement in computer technology, advancements in such areas as genetics, bioengineering, biochemistry, neuroscience, and nanotechnology are likely to substantially diminish the prevalence of and/or the functionally debilitating manifestations of disability. Recently a Pittsburgh neurosurgeon implanted an electrode into the brain of a 17-year-old adolescent with cerebral palsy, to diminish the associated tremors. As a result, the young man was, for the first time, capable of feeding himself. Although their exact impact cannot be predicted, such advancements will, without question, dramatically and irreversibly change the nature of and the need for rehabilitation services.

Although the social, economic, technological, and political context, both now and in the immediate future, will be characterized by change, the Division's focus on service, educational outreach, and applied disability research will remain constant. This should come as no surprise since the basic needs of persons with disabilities have not substantially changed. The Division of Rehabilitation-Education Services continues to serve as the designated office of the University

of Illinois at Urbana-Champaign that obtains and files disability-related documents, certifies eligibility for disability services, determines reasonable accommodations, and develops plans for the provision of accommodations for students and guests with disabilities.

In the foreseeable future, the Division will continue to coordinate classroom accommodation planning and implementation, and provide auxiliary aids (e.g., note takers, interpreters, lab and library assistants), text conversion to alternative accessible formats (Braille, tape, enlarged print, electronic), assistive listening systems, modified testing services, assistive communication and information technology support, priority registration assistance, course/curricular time extensions, study skills training and disability-related counseling. The non-academic services which the Division will continue to provide include physical therapy and functional training, residential and transitional services for students requiring assistance in the performance of activities of daily living (via Beckwith Hall), accessible campus transportation, wheelchair and equipment repair, scholarship assistance, adapted sports and recreation, and driver education. To facilitate communication with the Office of Rehabilitation Services (ORS), the ORS counselor serving UIUC students with disabilities



Beckman Institute.



The Kinkead Building, home of the Krannert Art Museum.

continues to maintain an office in the Rehabilitation-Education Center.

This does not mean that changes have not occurred or will not continue to occur. Because the Rehabilitation Act and the ADA mandate that the University meet the needs of individuals with disabilities, the Division has both the great opportunity and the responsibility to create a University of Illinois environment where the experiences of students with disabilities are truly indistinguishable from those of their peers without disabilities. New approaches will require that responsibility for the process of assimilation and support be shared on an institution-wide basis, and that all campus personnel be knowledgeable and competent in accommodating all clientele of the University, with and without disabilities.

To date, the University's effort to initiate this process has resulted in having the individual in charge of ADA facility accessibility for the campus be an employee of Project Planning and Facility Management, rather than the Division. Further, a rehabilitation nurse and a physiatrist continue to be employed by the University of Illinois, to serve the medical needs of students with severe physical disabilities (a service that continues to make the UIUC unique among all other institutions); however, these services are coordinated through McKinley Health Services rather than the Division.

Throughout most of its 50 years, the Division distinguished itself while serving, by necessity, as a campus monolith of disability expertise with centralized responsibility for all services. However, the new era will see the creation

of an effective decentralized approach wherein all units of campus become partners in this enterprise of facilitating access.

As previously noted, the Division is currently facing substantial challenges in meeting the needs of the growing number of students with disabilities affecting cognitive processing in particular (e.g., learning disabilities, attention deficit disorder, traumatic brain injury and psychiatric disorders). To address this need, the Division added new professional and graduate staff with expertise in learning disabilities. Further, considerable effort has been invested in the development of more-refined diagnostic and service criteria for the latter conditions. The process by which the staff of the Division communicates with the faculty to identify and implement academic accommodations has been substantially revised during recent years, specifically as a result of the growth of this population. To afford adequate advance notification to the faculty without compromising the confidentiality of the student, the Division has developed, and is in the process of implementing, an electronic faculty notification letter.

By implementing this process, the Division hopes to increase dialog with instructors related to the individual accommodation plans for our growing population of students with disabilities, and increase the amount of time for instructors to prepare adequately. Another significant step was recently taken by the Division to improve continuity and spontaneity of interpreter services for students, guests, and staff of the UI who are deaf, by hiring the first professional staff interpreter.

Scholarship support constitutes another service of the Division that will grow in importance in the decades ahead. The rising price of a college education and increasingly restrictive funding practices by state vocational rehabilitation offices are making it increasingly difficult for students to attend the University of Illinois. Fortunately, due to the benevolence of UI alumni with disabilities and friends of the Program, the Division has accrued considerable gift accounts to provide scholarship support for students with disabilities.

With regard to technology-related investments by the Division, UI President James Stukel recently remarked that "the Internet, and the technology which supports it, may well constitute the third modern revolution in higher education." The land-grant movement and the community college movement were the first two. Clearly, the next decade will be highlighted by a significant investment by the UIUC in the development of educational technology. Although such technologies hold great promise for persons with disabilities, they could also render all of the advancements in architectural accessibility moot if they are not designed to be universally functional for all who need to use them. To address the campus-wide concern for the accessibility of the "virtual" campus, as well as to manage the myriad of increasingly complex individual student problems related to the use of educational and/or assistive technology, the Division recently created the position of Coordinator of Assistive Communication and Information Technology.

One of the first tasks of the new technology specialist was to pursue the implementation of a distributed assistive educational technology model. The technology specialist has spent considerable time working with personnel in the University's Computer and Communication Services Office, the Library, the Housing Division and with the administrators of departmental computer laboratories to promote awareness of this issue, and to implement solutions for decentralized access. To date, sufficient assistive computer technology has been introduced to other campus computer laboratory facilities to allow the Division's assistive technology laboratory, which has been in existence for about 15 years, to begin to be used almost exclusively for the critical functions of technology training, testing and research.

New technology training materials are being developed for students and staff in the use of assistive communication and information technology. While students with-

out disabilities can utilize peers for software support, peer support for students with severe vision, learning and/or motor disabilities is typically more difficult to find. Able-bodied peers do not understand the assistive technology requirements of students with disabilities and, therefore, often demonstrate techniques that are difficult to use with assistive technology. Most often this involves the use of mouse-based commands for activating application program actions. The perceptual/motor demands of mouse interaction are often very difficult for students with visual impairments and students with severe upper extremity locomotor disabilities. In most cases, there are keyboard equivalents to the mouse-based



The International Studies Building was built in 1992.

commands, although most users are familiar only with point-and-click means of computer operation, dominant among nondisabled computer users. The development of the new technology training materials is intended to offset these increased cognitive demands, and to support users in learning keyboard equivalents related to specific application programs.

Another significant technology challenge is to create and deploy information systems that will enable students, staff, and guests with disabilities to immediately and independently convert text-based material to an accessible, alternative format. Increasing numbers of students with verbal learning disabilities and vision impairments have exacerbated the need for text conversion services. Presently, the Division uses readers and Braille transcribers to annually transcribe more than 80,000 pages of print material to alternative accessible formats (e.g., Braille, audio-tape, enlarged print, electronic), and the need is growing. The Division hopes that utilizing information technology will eliminate what is now a cumbersome process.

CONCLUSION

Using its rich tradition of excellence as its rudder, the Division has already begun to navigate a course into the 21st century that perpetuates the programmatic vision and principles that were and are the cornerstones of its legacy of leadership. At the same time, we must continue openly to challenge conventional wisdom related to disability, rehabilitation, and independent living, building upon those concepts and operations that are of high quality, while affording those ideas and practices that can be improved the opportunity to evolve. Indeed, the UIUC could not have achieved its current level of architectural and programmatic accessibility had the Division not been willing, constantly and aggressively to challenge the validity of the status quo. Since its creation, the Division has sought to resolve applied "real world" disability problems, and that legacy which must be perpetuated in the emerging information age via the embodiment of the simple, yet profound, tenet that served the Division well for a half century of accomplishment—it's ABILITY, not disability, that counts!

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University of Illinois Willard Airport—this is where it all starts. . . people from all over the world fly into this small, but extremely busy airport. Professionals from many countries arrive here to visit and to study at the University of Illinois Division of Rehabilitation-Education Center.

Messages from Friends:

The Next Fifty Years . . .



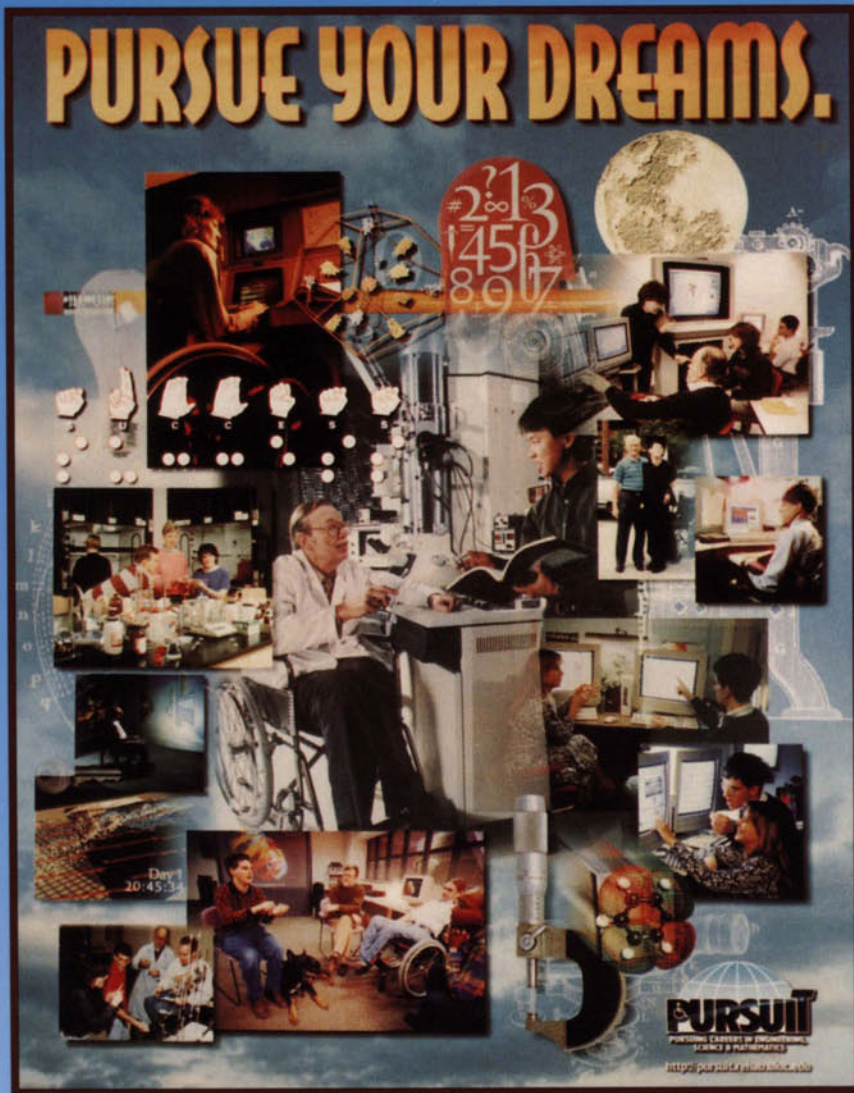
The first fifty years presented myriad opportunities to define the nation's attitudes to and services for people with disabilities. Now, on the cusp of a new millennium, we can foresee that the next fifty will present equally important opportunities to the Division. The issues brought by legislation and our changing society will challenge the Division and the U of I to pioneer the future, both on campus and across the nation. This will test the leadership of the Division and the U of I.

The U of I prides itself on its ability to spot talented people early and to help them achieve; we call this "growing our own." Through good fortune and good management, one of our own has emerged as a strong new leader. He is uniquely qualified to identify and address the new challenges and once again blaze the trail; that leader is Brad Hedrick.

Brad joined the Division as a grad assistant 20 years ago. Brad's exposure to "voc rehab" convinced him to view all aspects of life as important, not just work. He studied the processes of leisure and the quality of life while earning his PhD. Meanwhile, his career as a coach for a large array of athletes developed fast. That career brought achievements for many, many individuals and teams. It earned Brad universal recognition as the preeminent coach in the nation. It also brought much joy when he and Sharon Rahn Hedrick, one of the world's greatest wheelchair athletes, were married.

In 1996 Brad entered the national competition for the directorship for the Division. He was the unanimous choice, for his visions for the future are keen and his grasp of the realities is strong. Your Director has already earned strong support all across campus, and will shortly reestablish the Division as the nation's benchmark program. We can look forward to the future.

PURSUE YOUR DREAMS.



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