The disease known as diabetes has fascinated and puzzled physicians and scientists for thousands of years. Its symptoms were first described by the early Greeks, and a Hindu physician, Susruta, gave it a name in 1000 B.C. It wasn’t until 1922 that two Canadian researchers, Charles Best and Frederick Banting, perfected insulin therapy and successfully used it in humans.

Today, the advances—and the questions—continue, with SHRP’s researchers adding new pieces to the puzzle. Barbara Gower, Ph.D., assistant professor of nutrition sciences, is seeking explanations for two of the most troubling questions in diabetes research: Why are more and more young people developing diabetes, and why are black children more susceptible to the disease than white children?

Targeting Type II

Gower is studying the onset of what’s known as "Type II" diabetes among children. This form of the disease is generally associated with middle-aged adults; in fact, until recently, it was referred to as "adult onset" diabetes. "But now we’re seeing Type II in kids as young as 13,” says Gower. "It’s like an epidemic, and we don’t yet know why it’s happening.” The children with the highest incidence of Type II diabetes are African-American children—especially black females.

To try to understand this disturbing upswing, Gower is studying the relationship between insulin regulation and the development of diabetes. Unlike Type I diabetes, which is apparently triggered by an autoimmune attack, Type II is caused by failure of the pancreatic system.
ELECTRONIC action

New CD-ROM Tackles TB

Fighting TB with a CD-ROM?

Some two years in planning and development, this new electronic weapon is now a reality, thanks to SHRP’s Department of Critical and Diagnostic Care. The multimedia production, titled “Tuberculosis: What Health Care Workers Need to Know,” combines text, voice, photos, diagrams, and video clips to teach health-care staff members how to recognize and prevent the spread of TB. The CD’s release is especially timely because this dreaded infectious disease—once thought to be virtually conquered—is again spreading at alarming speed worldwide, with new strains that are resistant to existing drugs.

The project is designed for health-care professionals and allied health students who will work on the front lines of clinical care. “Our audience is in a strategic position to help stop TB from spreading,” says Ann M. Steves, M.S., associate professor of medical imaging and therapy. “The CD uses a flexible learning format to help them understand important concepts about TB’s symptoms and containment.” Co-authors of the CD-ROM are Linda Jeff, M.A., associate professor of clinical laboratory sciences, and Virginia Randolph, M.A., associate professor and director of the Clinical Laboratory Sciences Division.

In addition to factual information, the CD-ROM offers an on-screen testing tool: two real-life case studies that give students the chance to apply what they’ve learned. The program also provides several versions of a competency exam that instructors or employers can use to document the students’ scores.

The CD-ROM, priced at $250, is available directly from the Department of Critical and Diagnostic Care at (205) 934-4185.

Allied health professionals have a new tool for targeting tuberculosis.
What does the future hold for the field of health informatics? In a word, researchers say: integration. Informatics experts are creating new ways for information systems to work together in a symphony of practical information exchange.

"Integration is already occurring in a number of layers," says Helmuth Orthner, Ph.D., director of SHRP’s Health Informatics Program, "from improved networking of computers and clinics to streamlined data systems. For example, standardized patient identifiers can prevent the need for a patient who’s receiving treatment from five different specialists to have his demographic information entered into the computer system five times."

Michael Hardin, Ph.D., professor of health informatics, says integrating tools such as "data warehouses" will be increasingly valuable in providing decision-making support to administrators.

"Information on treatment, insurance coverage, and cost can be stored on several different database systems within one hospital," says Hardin. "Data warehouses consolidate that information, allowing administrators to devise strategies that will control cost and provide more effective treatment protocols for future patients."

The biggest challenge for this integration initiative, according to Orthner, is not mastering technology, but integrating it into existing organizational structures and human behaviors. "There are still years of work ahead," he notes.

Eta S. Berner, Ed.D, professor of health informatics, says that a number of forces will facilitate this change. "Physicians leaving medical school today are far more comfortable with computers than their predecessors were," she says. "Also, the increased scrutiny for medical errors and cost pressures are pushing us toward more automated systems."

Berner was recently elected to the American College of Medical Informatics (ACMI), a peer-elected group of 135 informatics fellows who have made significant and sustained contributions to the field of medical informatics. "Dr. Berner’s election says a lot about the quality of SHRP’s informatics program," says Orthner, who is also a member. "ACMI allows us to collaborate with the country’s best informatics researchers. The research through that organization is 10 years ahead of most current information management applications."

**HALL of FAME**

Rush Jordan Takes Top Honors

After more than 45 years in health-care management, L. R. "Rush" Jordan, a professor of health services administration, thought he’d heard it all. Then, on March 26, he received a phone call that left him "stunned, shocked, and very humbled"—but in a good way.

The call was from Modern Healthcare magazine, informing Jordan that he would be inducted into the national Health Care Hall of Fame—the 58th person, and the first Alabamian, to achieve that honor. "This award is truly a capstone to my career," says Jordan.

A North Carolina native, Jordan has served as an educator and administrator in such well-respected health-care centers as Duke University Medical Center and Shands Hospital at the University of Florida. He joined SHRP’s faculty 1988, after retiring as president and CEO of MedAmerica Health Systems in Dayton, Ohio.

"I’ve been extremely fortunate," Jordan says. "Everywhere I’ve gone, people have opened doors for me."

And the doors open with good reason. Among the qualities listed for Jordan’s meriting the Hall of Fame were "commitment, passion, a willingness to learn, clear vision, and a foundation of uncompromised ethics."

Jordan was a pioneer in introducing business management practices to traditional health care; his colleagues’ esteem is evidenced by the L.R. Jordan Management Society, which meets each spring for discussions of his contributions to the field. Jordan was also a leader in breaking down racial barriers in health care by integrating hospitals and promoting the advancement of African Americans to leadership positions in health-care administration.

In semiretirement, Jordan enjoys visiting his three daughters and five grandchildren, as well as taking educational tours. Continuing education, he says, helps people "break down our natural resistance to change." He ponders the turbulent times ahead for the field he’s served for almost five decades, but says, "I can’t help being optimistic about the future."
STUDENT SPOTLIGHT: NINA german moore
Navigating Nutrition Research Frontiers

From Nina German Moore’s earliest days as a biological sciences student at UAB, she knew she wanted a career in research. This summer she got her wish—working as a postdoctoral fellow at Ohio’s Cleveland Clinic Foundation, in the Division of Ophthalmic Research.

Moore, a native of Tuskegee, enrolled at UAB in 1995 and completed her Ph.D. in nutrition sciences this June. She conducted laboratory research in the Division of Biochemistry and Molecular Biology in the Department of Nutrition Sciences, trying to determine how diet affects the metastasis of breast cancer.

“It’s a very dynamic field and, in some cases, a controversial one,” says Moore. “There are many theories about whether or not there’s a connection. Right now, I strongly believe there is—I think it’s a question not of whether diet affects breast cancer, but how. Maybe someday I can help clear up that question.”

At the Cleveland Clinic she’s taking her research skills in a new direction, working with Bela Anand-Apte, Ph.D., on a project aimed at identifying proteins that may inhibit enzymes that are responsible for membrane destruction in the eye—the primary cause of age-related macular degeneration.

“Starting a new job in a new city has been a challenge,” says Moore, “but UAB prepared me very well for it.” She notes that her UAB advisor, Gary Johanning, Ph.D., assistant professor of nutrition sciences, was particularly helpful in training her for the wide-ranging research possibilities in nutrition sciences. “He was wonderful to work with—not only very knowledgeable, but also very patient.

“It’s an exciting time for me,” says Moore, “and I’m looking forward to the opportunities I’ll have in the years to come.”

STUDENT SPOTLIGHT: JERRY king
Respiratory Research Assesses AutoPEEP

In 1996, Jerry King, a native of Tarrant City, went to work as a respiratory therapy aide at Anniston Regional Medical Center. Two of the respiratory therapists he worked with there were UAB graduates and told him good things about the SHRP Respiratory Therapy Program. “Returning to school had always been a priority for me,” says King, “so I decided to go for it.”

In December, King will graduate from UAB’s RT Program. He worked full-time throughout his training—an experience that is common for his program, says Jonathan Waugh, Ph.D., an associate professor of respiratory therapy and one of King’s instructors. More than half of SHRP’s RT students work part- or full-time while pursuing their degrees.

“What was different about Jerry’s situation,” Waugh says, “was that he came to UAB with some courses taken at a junior-college RT program and a good bit of working experience. We were able to give him credit for his experience and to qualify him for ‘advanced standing.’ That status allowed him to progress through the program quickly and qualified him to try areas that were more challenging than the standard curriculum.”

King is now conducting research at UAB Hospital—teaching respiratory therapists how to identify the potentially dangerous condition known as “autoPEEP” by reading a computer display of ventilator waveforms. AutoPEEP is caused by trapped air that results from insufficient time for exhalation, and it is often not detectable without special measurements. King will compare the ventilator records of patients before and after staff training, to see if autoPEEP occurrences are less frequent and less severe after staff therapists have been taught to recognize the condition on a graphic monitor.

“The instructors at UAB Hospital gave him a great degree of responsibility,” says Waugh, “and he’s handled it in an excellent way.”

After graduation, King plans to pursue a master’s degree. “The educational side of the profession appeals to me,” he says. “I’d really like to teach.”
Although Claudia Peyton, Ph.D.(c), came to UAB as the new chair of the Department of Occupational Therapy just last fall, her interest in disabilities has been lifelong.

“My father was blind and was never able to see any of my family,” Peyton says. “But I was continually amazed by his ability to overcome his loss. That led me to work with other physically challenged people.”

After completing her undergraduate work, Peyton joined the Army and trained as a psychiatric technician. She came to realize that the medical specialty that best embodied her interests—psychology, healing, and the arts—was occupational therapy.

“It was a wonderful fit for me,” Peyton recalls. “When I started studying OT, I felt as if I had come home.”

She earned her OT degree at Loma Linda University and Medical Center and became an instructor there in 1978. She also served as chair of the Creighton University OT Department in Omaha, Nebraska, before coming to UAB.

In her new post at SHRP, Peyton hopes to enhance the department with a doctoral program in occupational therapy. At Creighton, she helped develop one of the first two OT clinical doctorates in the United States.

“I think the most positive change in our field since I began,” Peyton says, “is the increase in awareness of the value of occupational function to health. Being able to perform daily tasks, either at work or at home, is as vital to a person’s health as eating or drinking. Occupational therapy is therefore a mechanism to both address an individual’s disability and maintain that person’s overall health.”

Most people wouldn’t consider dogs, rabbits, and horses to be part of an occupational therapist’s toolbox. But a pair of SHRP alumni have already incorporated two of these pets into their practices and are ready to add the third.

Beth Wood, M.S., OTR/L, and Ellen Conner, M.S., OTR/L, both 1999 graduates of SHRP’s Occupational Therapy Program, first used “pet therapy” during their clinical rotations. The idea is that people with physical or behavioral disabilities often respond better to animals than to traditional therapist-to-patient techniques. And a growing body of research is lending credence to this concept. One study found that merely petting an animal can significantly reduce a patient’s blood pressure.

“The difference can be very impressive,” Wood says. She recalls working with a group of adolescent boys at Hillcrest Behavioral Hospital when pet dogs were introduced into the program. “One of the boys was extremely withdrawn, surly to everybody, and considered himself a real tough guy.

“But then he really started bonding with one of the dogs, and after six weeks, he was walking ‘his’ dog around the clinic and introducing the dog—and himself—to staff members. They couldn’t believe it was the same boy.”

Animals are also helpful to a wide variety of other patients, according to Conner. “Animals can facilitate verbal interaction between a therapist and patient, making the situation more relaxed,” she says. “And when therapy involves working on particular motor movements repetitively, a patient who quickly gets bored with rote exercise will happily spend hours playing with a pet.”

Animals participating in therapy programs must pass rigorous certification for temperament and obedience, and their owners are required to have liability insurance coverage. Most therapy pets come from volunteer groups such as the national Delta Society or Birmingham’s Critter Companions.

In addition to adding animals to their own practices, Wood and Conner have formed a new business, Therapy Connections, LLC, to help other therapists utilize “pet power” in their work.
The university is in the midst of the $250-million Campaign for UAB—the largest fund-raising campaign ever undertaken by a university in Alabama—and SHRP’s faculty, staff, and alumni are playing a crucial role in that ambitious initiative.

Today, members of the allied health professions—therapists, technicians, and administrators—are involved in virtually every aspect of medical care and comprise some 60 percent of the nation’s health-care workforce. SHRP has trained more than 10,000 of these professionals, who work throughout the state, the nation, and in a number of foreign countries. More than 120 SHRP graduates are working as CEOS, CFOs, or COOs, leading hospitals through one of the most intense and challenging times in the industry’s history.

Alabama is one of only a few states in the nation with no established system for meeting the capital needs of its universities, and the Campaign for UAB is raising funds from private sources to bridge that funding gap. To ensure that students continue to receive the very best training for their future responsibilities, SHRP has set these three priorities for its Campaign needs:

**Endowed chairs and professorships.** Endowed chairs will allow SHRP to attract distinguished clinicians, scientists, and teachers in order to enhance the School’s prestige in the international arena while building on its already stellar accomplishments. Endowed professorships will help attract and retain the best and brightest junior faculty.

**Endowed scholarships.** These scholarships will help attract students of exceptional merit and retain promising scholars, who will become future health professionals. About 70 percent of SHRP’s students must rely on some form of financial aid.

**Capital needs.** Though SHRP has been in existence since 1969, it still does not have a central building—so classes must be conducted in buildings all over campus, and there is a shortage of office and laboratory space for faculty. To remedy this deficit, SHRP is seeking funds to complete Phase II of the Richard M. Scrushy Building and to further renovate the Webb Building.

For information on how you can help SHRP in this Campaign, contact: The Campaign for UAB/SHRP, WEBB 634, 1675 University Boulevard, Birmingham, AL 35294–3361; or call Andrea Martin, director of development for the School of Health Related Professions, at (205) 934–4159.

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The UAB Torchlighters Society has been established to recognize donors who include UAB in their estate plans. Deferred commitments make up almost one fourth of all funds raised for UAB in the current Campaign—and the actual cost of some gifts may be reduced by tax benefits to the donor. These gifts will allow SHRP to continue its tradition of excellence in education, research, health care, and community service for years to come.

Alumni who have expressed interest in sharing their legacy with SHRP will be honored by their inclusion in this newly created society. Those who have already included a gift to the school in their will, trust, life insurance policy, or other estate arrangements are encouraged to contact SHRP to be included as a charter member of the Torchlighters Society. For membership information, please contact Andrea Martin, director of development for the School of Health Related Professions, at (205) 934–4159.
• Barbara Daily Marion, Certificate (Burnett '73), graduated with the first SHRP class of physical therapist assistants. She worked as a LPTA in several areas of Alabama until 1985 and worked in home health for St. Peter’s Hospital in Shelton, Washington, until 1993. She and her husband Phillip have four children: Sara, 17, George, 16, Frances, 15, and Phillip, 14.

• Herman Brehmer, M.S.H.H.A. ’74, is retired and lives in Birmingham.

• Michael C. Tarwater, M.S.H.H.A. ’78, is executive vice president at Carolinas Health Care System in Charlotte, North Carolina. He is a 2000 ACHE Regents Award Recipient for western North Carolina and this year’s chairman elect for the North Carolina Hospital Association.

• Tammy Young Lyles, Certificate ’83, B.S. (Jean Young’86), recently passed her licensure exam to become a registered health information manager. She is the director of quality improvement at Gateway, a non-profit mental health agency in Birmingham.

• Susan Williams Thren, Certificate (Williams ’90), works in UAB’s Department of Physical Medicine and Rehabilitation. She’s been affiliated with Carraway Hospital for almost 10 years and recently became a new grandmother to Madison Ahlia Williams.

• Cleve Crews, B.S. ’93, has worked at UAB for 18 years and has been chief MRI technologist in the Department of Radiology for the last 15 years. He is married to Dolores Montabana Crews; they have one daughter, Amanda, and two grandsons, Nathan and Landon.

• Roxanne Rossiter, M.S. (Kronk ’93), works as a clinical dietitian in Hollywood, Florida, focusing on trauma and critical care and physical rehabilitation. She is president of the Broward County Dietetic Association for 2000-2001. She married James Rossiter in 1999; their son, Justin Michael, was born this January.

• Traci Swartz, B.S. (Taylor ’93), is director of occupational therapy at the South Carolina Department of Disabilities & Special Needs at Midlands Regional Center in Columbia. She teaches a continuing education course on environmental modification through Therapy Network Seminars, which is owned by UAB occupational therapy graduate Andrew Schrodt, B.S. ’94.

• Alan Boyarchick, B.S. ’79, M.S.H.I.M. ’94, is Chief Information Officer at Good Samaritan Health System in Kearney, Nebraska. He’s also the proud father of twin boys, born this May.

• Lisa C. Robinson, B.S. ’94, worked at Shelby Baptist Medical Center in Radiology until 1998, when she was promoted to clinical technical specialist in Baptist’s Corporate Information Services. She supports and maintains the radiology management system for 10 Baptist facilities statewide.

• Lisa B. Riviera, B.S. (Guest ’95), is a research assistant in UAB’s Department of Pediatrics, Infectious Diseases Division. The division’s research focuses on cytomegalovirus. She was recently inducted into the Delta Omega Public Health honors society and the Beta Gamma Sigma School of Business academic honors society. She serves as a volunteer at Children’s Hospital in Birmingham.

• John G. Brooks Jr., M.N.A. ’97, works as a CRNA at LeBonheur Children’s Medical Center in Memphis, Tennessee. He is also a commander with the U.S. Army Reserve’s 330th Combat Support Hospital in Millington, Tennessee.

• Kevin M. Outzs, M.S. ’97, is an occupational therapist for Therapy Management Services at St. Joseph/Candler Health System in Savannah, Georgia.

• Haden Moon Ridlehoover, M.S. ’97, works at Children’s Hospital in Birmingham as a pediatric occupational therapist. Her first child, William McCarty, was born this January.

• Joseph D. Ayers, B.S. ’99, practices emergency medicine and works in the Fast Track emergency room at St. Vincent’s Hospital in Birmingham.

• Chris Patrick, M.S.H.A. ’00, married Sarah Wade Patrick, M.S. (Wade ’98), in June 1999. He recently accepted a planning and research position with Eastern Health System in Birmingham after completing an administrative residency there.
Charles Joiner, Ph.D., former SHRP dean and professor of health administration, has been named to the Board of Directors of American Behavioral, a behavioral health-care service provider. "We are very pleased to have Dr. Joiner on our board," says Allen S. Blackwell, president and chief executive officer for American Behavioral. "His strategic vision will help us better identify with the marketplace we serve. Dr. Joiner is a man of great integrity who holds the respect of leaders throughout academia and the business community."

Jo Clelland, professor of physical therapy, was selected to be included in the sixth edition of *Who's Who Among America's Teachers*. She was also named to the fifth edition in 1998.

Lucille Odom, office associate in the Department of Critical and Diagnostic Care, was the first recipient of a Housing Plus assistance grant from UAB’s Center for Urban Affairs. A grant from the Fannie Mae Foundation funds the program, which provides housing and financial assistance as part of an effort to revitalize neighborhoods in the Titusville and West End communities.

*Just As I Am: Americans with Disabilities*, was recently named the winner of this year’s IPPY award for spiritual and inspirational books. The award is presented by the Independent Publisher’s Association. *Just As I Am* is a collection of photos of people with disabilities taken by Carolyn Sherer, assistant professor of physical therapy, with essays written by UAB psychologist Ellen Dossett, Ph.D. (see the Winter 2000 issue of *SHaRP Banner*).

In Memoriam: William R. Gould, Ph.D., associate professor of physical therapy at UAB from 1973 to 1978, died in July 1999 in Dallas, Texas, from complications following vascular surgery. He was serving as head of the Department of Physical Therapy at Hardin-Simmons University in Abilene, Texas, at the time of his death.