

A Green Bill of Health

**Binary Care
Wilson's Way
The Riddle of Eating Disorders
Culturing a Long-Distance Relationship**

Fall 2009

VOLUME 34, NUMBER 4

www.ndmedicine.org

 The University of
North Dakota



Dear Friends,

This summer has been a season of welcomes and goodbyes. In June, we bid farewell to former **Dean H. David Wilson, MD** who is now dean of the University of Kansas School of Medicine–Wichita. We thank him for his many contributions over the past 14 years and wish him success in Kansas.

UND President Kelley has announced the formation of a search committee for the permanent Vice President for Health Affairs and Dean of the UND School of Medicine and Health Sciences. The committee is chaired by Provost Paul LeBel and has broad representation from the school, UND and the community.

In the interim, I continue to serve UND as Interim Vice President for Health Affairs and Interim Dean of the SMHS. I welcome your comments and ideas about the school and how we can create the best possible learning and working environment.

In June, we welcomed the school's first inductees into the Gold Humanism Honor Society, which recognizes senior medical students who demonstrate professionalism and a

commitment to patient care. This summer we hosted 40 undergraduate students from colleges, universities and tribal institutions throughout the United States who participated in summer research experiences. We welcomed 38 new residents to our residency programs in family medicine, surgery, internal medicine, psychiatry and transition year. This month, we'll say hello to incoming students in all 13 of our graduate and undergraduate programs.

In the life cycle of organizations such as ours, there are periodic goodbyes and welcomes. These events serve as reminders of where we as a school have been, and where we are going. It continues to be a productive and rewarding journey!

Joshua Wynne, MD, MBA, MPH
Interim Vice President for Health Affairs and Interim Dean



NORTH DAKOTA MEDICINE

UNIVERSITY OF NORTH DAKOTA SCHOOL OF MEDICINE & HEALTH SCIENCES

FEATURES

A Green Bill of Health	4
UND School of Medicine and Health Sciences remains healthy despite nationwide recession	
Culturing a Long-Distance Relationship	8
From one border to the other and nearly 2,000 miles apart, UND and the University of Arizona work together to fill a need	
Binary Care	10
Ensuring a Health-e North Dakota	
The Riddle of Eating Disorders	14
One man's leadership in research yields new answers	
Wilson's Way	16
During 14 years as dean, H. David Wilson put North Dakota on the map in medical education	

DEPARTMENTS

Alumni Profile - Erwin Samuelson	19
Student Profile - Taylor Mertz	22
Guest Columnist - Randy Eken	24
News Briefs	25
Opportunities	28
Alumni Notes	30
In Memoriam	32
Planning Ahead	34
Parting Shots	35

UNIVERSITY OF NORTH DAKOTA SCHOOL OF MEDICINE AND HEALTH SCIENCES

ROBERT O. KELLEY, President, University of North Dakota
 JOSHUA WYNNE, Interim Vice President for Health Affairs and Interim Dean, School of Medicine and Health Sciences

WRITERS	Brenda Haugen, Denis MacLeod, Gary Niemeier, Laura Scholz, Amanda Scurry
CONTRIBUTORS	Wendy Opsahl, Shelley Pohlman
GRAPHIC DESIGN	Laura Cory, John Lee, Victoria Swift
PHOTOGRAPHY	Gary Niemeier, Wanda Weber
COVER ART	Victoria Swift

www.ndmedicine.org

DESIGN Eric Walter

NORTH DAKOTA MEDICINE (ISSN 0888-1456; USPS 077-680) is published five times a year (March, June, August, November, January) by the University of North Dakota School of Medicine and Health Sciences, Room 1914, 501 N. Columbia Road Stop 9037, Grand Forks, ND 58202-9037. Periodical postage paid at Grand Forks, ND.

Printed at Fine Print Inc., Grand Forks, ND.

All articles published in **NORTH DAKOTA MEDICINE**, excluding photographs and copy concerning patients, may be reproduced without prior permission from the editor.

Want **more** **NORTH DAKOTA MEDICINE**?

Look for this symbol, and check out our

WEB EXCLUSIVES site: www.ndmedicine.org



**POSTMASTER: Send address corrections to:
ND Medicine Address Correction**

UND School of Medicine and Health Sciences

Office of Public Affairs, Attn: Shelley Pohlman
 501 North Columbia Rd. Stop 9037, Grand Forks, ND 58202-9037
 e-mail: spohlman@medicine.nodak.edu
 phone: 701-777-4305

NORTH DAKOTA MEDICINE is available online at www.ndmedicine.org

A Green Bill of Health

UND School of Medicine & Health Sciences
Remains Healthy Despite Nationwide Recession



The University of North Dakota School of Medicine and Health Sciences (SMHS) is in a position many across the country envy. Despite the nationwide recession, the school not only remains healthy, it's continuing to grow, thanks in part to the firm financial ground the state of North Dakota stands on as well as benefits from the American Recovery and Reinvestment Act, more commonly known as the federal stimulus package.

"The school is relatively insulated from the country's economic downturn," said Randy Eken, associate dean for administration and finance. "Other medical schools may be

Right now we're pretty fortunate

experiencing budget cutbacks and shortfalls, but we are not. The demand for health care professionals, especially in rural areas, remains high, and we continue to increase enrollment and expand programs."

Research boost

The SMHS hopes to feel even more fortunate in the next couple of months. That's when most faculty members will find out if their research projects will receive any of the funding offered through the federal stimulus package.

One early award notice has been received, though. Donald Sens, PhD, professor of pathology, secured \$43,200 in supplemental stimulus funding from the National Institutes of Environmental Health Sciences of the U.S. Department of Health & Human Services (HHS) to expand the STEER program for undergraduate research in environmental science. The funds will increase the number of North Dakota undergraduate students employed to perform research in the environmental sciences during the next two summers to eight.

According to SMHS Grants and Contracts Officer Corey Graves, about 80 percent of the medical school's

It looks very promising

funding for research comes from the federal government, with 50 percent of total awards from the National Institutes of Health (NIH). The NIH received over \$10 billion to devote to higher education research, construction and instrumentation projects through the stimulus package, Graves said. Many faculty members have applied for NIH grant awards, and several are getting verbal feedback that their projects are great.

"I'm very optimistic," Graves said. "It looks promising."

He said that faculty members have been working hard to secure funding. A great deal of thought and preliminary data go into each application. They want their applications to stand out among all the others expected to be filed.

"It really has to catch their eye," he said.

Right now these grant proposals are being reviewed and scored. If a proposal gets a good enough score, it will be funded in August or September, Graves explained.

"In the world of research, that's really quick," he said.

According to Associate Dean for Research Ed Sauter, MD, PhD, the university submitted three building projects and several research projects in response to the stimulus funding provided to the NIH. One of the goals of the federal stimulus package is to retain the faculty and trainees already on staff. Another is to support the work of students in the labs, Sauter explained.

"We are hopeful," Sauter said. "Nonetheless, you really don't know how you fared until you receive the award notice."

The stimulus package provides funding for two years with no extensions. The goal is to have a specific gain from the research, to report it, and to use the findings from the stimulus-funded research to submit new applications to the NIH or other agencies.

"It just kind of steamrolls," Graves said.

He confirmed that UND has applied for lab research stimulus funding and construction project funding. Eken said one construction project involves a \$14 million building he thinks has a strong chance of being funded.

"They do go hand-in-hand," Graves said of research and building grants, adding that facilities are cramped right now. With the possibility of hiring additional faculty, the need for more space grows, he said.

Student influx

It seems as if UND can expect to have more students in its buildings as well. At a time when Americans are hesitant to spend money, that trend isn't holding when it comes to education. Medical student applications at the SMHS have remained steady the last two years, according to Judy DeMers, associate dean for Student Affairs and Admissions.

"The number and quality of applicants has been about the same: 300-plus, and the same GPA average and MCAT averages," she said. "We don't ask age on the application, but I really am not seeing differences."

But they are seeing a difference at UND's Graduate School, particularly in the health fields.

"We've been noticing growth over the last seven years,

but last year was a record enrollment," said Susan Caraher, marketing and external relations specialist with the graduate school.

Fall 2008 to fall 2009 intake at the graduate school was 2,135, a nine

percent increase from the previous year and a record for enrollment.

including those in the health fields. The federal stimulus package includes many programs that will benefit college students and encourages colleges to expand job training programs in health care. The U.S. Department of Labor's

More students in our buildings

percent increase from the previous year and a record for enrollment.

Applications for this year have been coming in a steady stream, and officials at the graduate school are hoping for a small increase in enrollment again this year.

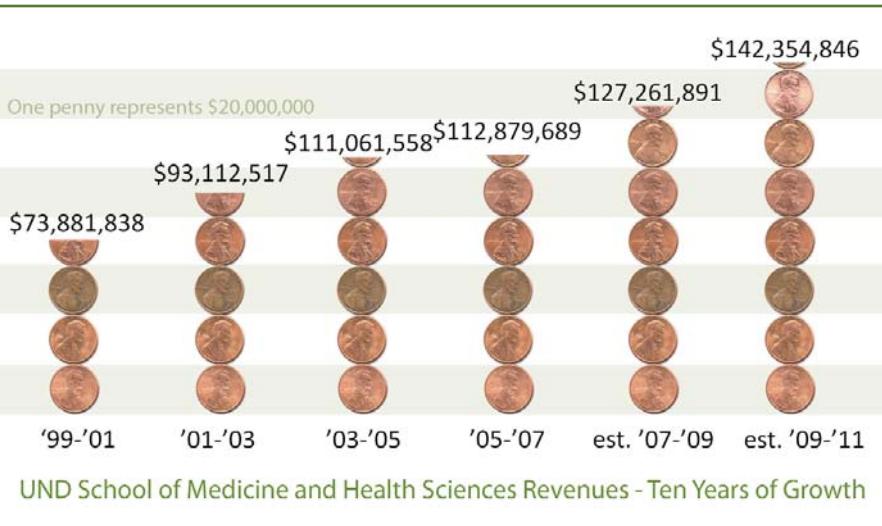
Employment and Training Administration has received about \$3.5 billion for training and other services for dislocated workers, adults and youth. Of that amount, \$250 million has been prioritized for jobs in the health care sector. The UND School of Medicine and Health Sciences offers a wide array of graduate programs in the health professions that will help to meet regional demands.

According to Caraher, UND's growing reputation as a high-quality institution is another reason the graduate school has seen record enrollments. Aggressive recruiting and good word-of-mouth from current and past students has helped get that message out, she said. Evidence of this is seen in the shift of where students are coming from. While UND continues to have a strong presence in North Dakota and Minnesota, the graduate school increasingly includes students from not only across the United States but from other nations as well. Caraher said this is particularly evident in the nursing program.

"Which is a really good sign for North Dakota," she said.

Challenges remain

The picture isn't all rosy. Retaining health care professionals in North Dakota remains an ongoing concern, according to Brad Gibbens, co-interim director for UND's Center for Rural Health (CRH). In testimony to Senator Kent Conrad July 2, Gibbens pointed out that the CRH has determined the need for 44 family medicine physicians in North Dakota. In addition, there are 271 vacancies for doctors, nurses, and clinical lab, mental health, and radiology technicians. While health



"It's looking healthy," Caraher said. "We're cautiously optimistic for this year."

Nursing, physician assistant (PA), physical therapy and clinical laboratory science are nationally recognized programs and among the areas where growth is being seen. The expansion of research in the basic sciences has also served as a catalyst for attracting top-level students.

"The health and human services seem to be enrolling quite well," Caraher said.

Nationwide, thousands of displaced workers are going back to school in an effort to tune-up their skills. Others are switching careers altogether to secure better jobs—particularly positions that will be needed well into the future,

Health workforce is a chronic structural concern

care reform is a hot national topic, improving the ability to pay for services that can't be obtained in rural North Dakota doesn't help the situation here, Gibbens said.

"Health workforce is a chronic structural concern," he said. "Health reform must improve options for training and education, must create new incentives to inform and attract youth into the professions, create opportunity for mid-career changes, and empower rural communities to be more responsible in creating their own unique solutions."

The UND Foundation also is facing

scholarships come to fruition is a top priority of the UND Foundation. Awards are being fulfilled for the 2009–2010 academic year for all endowed scholarships, including high achiever scholarships, which help UND recruit and retain top-performing students."

In addition, the state's billion-dollar surplus is the envy of nearly every other state in the union. With a healthy general fund, the state is using some of these funds to invest in priorities, such as education, infrastructure and jobs training. During last spring's legislative session, the state agreed to take on more responsibility for funding

Another challenge: a drop in endowments

another challenge: a drop in the market value of endowments.

"The UND Foundation's investment portfolio has suffered like most university portfolios have," Eken said. "I think they're managing the funds carefully and doing as well as they can. But it is difficult to raise money right now."

UND Foundation personnel say endowments' values are down, but that student scholarship amounts are on par with previous years. Not only that but they are also experiencing a record number of donors and annual gifts for the fifth straight year.

"While the economy has affected investment returns, the fact that the state Legislature passed the Uniform Prudent Management of Institutional Funds Act, or UPMIFA, during this past session allows us to continue fulfilling scholarship payments," said Laura Block, chief financial officer of the UND Foundation. "This strategy is adopted in many other states and is a prudent way to ensure students receive scholarships to attend UND, and donor wishes are continually met."

"Scholarships are a significant priority for the university's administration, and helping make

education, including increased spending at the college level.

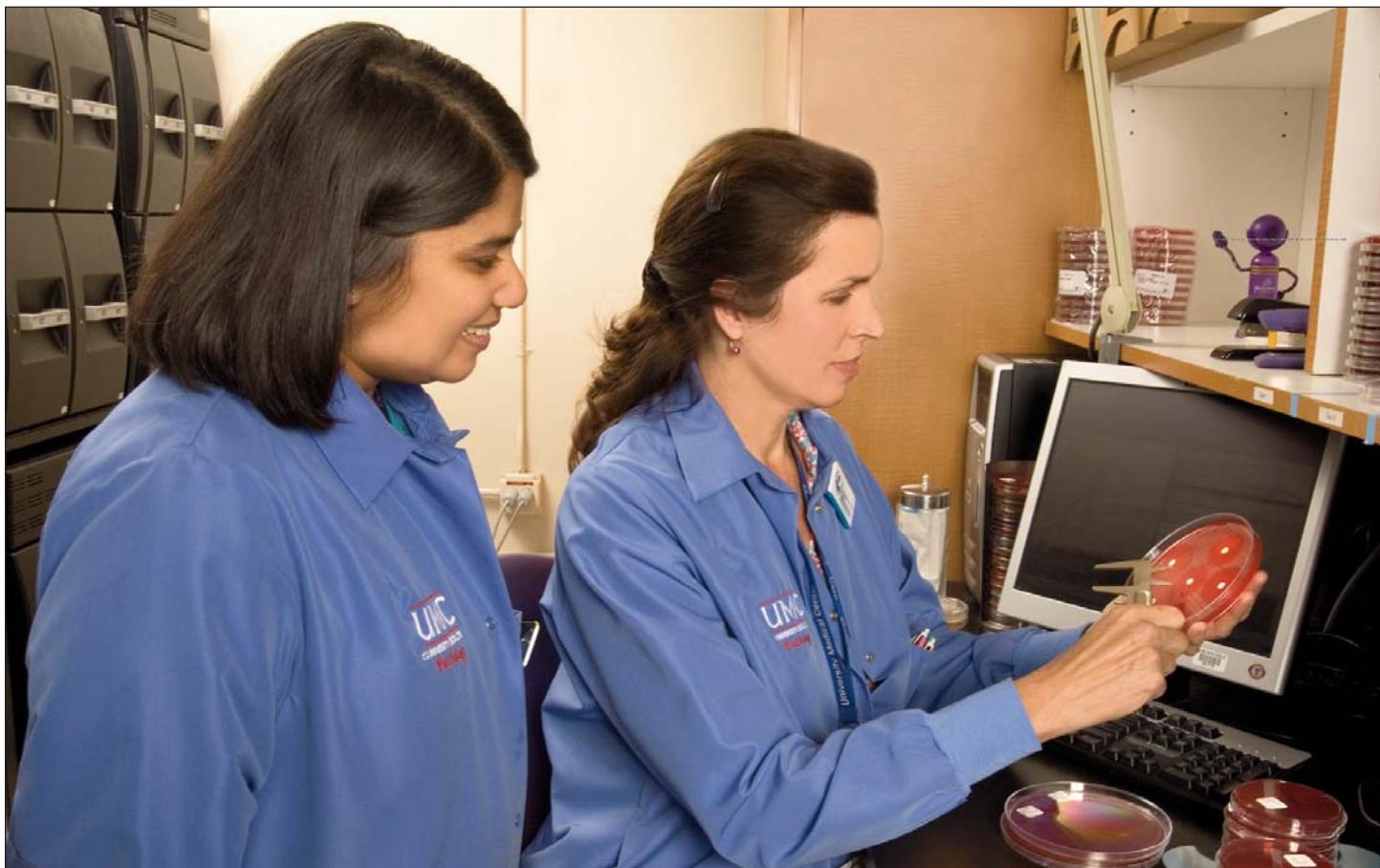
"The state legislature was very kind to us this year and provided about a 20 percent increase in general fund support," Eken said.

- Brenda Haugen



Culturing a Long-Distance Relationship

From one border to the other and nearly 2,000 miles apart, UND and the University of Arizona are working together to fill a need.



Clinical laboratory scientist Ellen Tuttle, MT (ASCP), senior technologist at University of Arizona Medical Center's microbiology laboratory, performs antibiotic testing of bacteria with Dulini Gamage, MLT (ASCP).

DR. MARC TISCHLER'S UNDERGRADUATE DEGREE program in biochemistry at the University of Arizona (UA) was on the chopping block. With not enough students enrolled in the major, the faculty senate was set to cut the program at their next meeting. Meanwhile, two hours northwest in Tempe, Arizona State University had just cut its clinical lab science (CLS) training program. There was nowhere in the state to train to be a CLS. Then **Donna Wolk, PhD, D(ABMM)**, a pathologist at UA, called the CLS distance learning program at UND.

"We sat in our program director's office for an afternoon and just went through all the different options of how we

could make this work," said **Brooke Solberg, MS, MT (ASCP)**, an instructor with the UND CLS program and its certificate program director. "By about 5:30 that day we had come up with something that would work."

Within a week of the initial phone call, the two schools had an agreement put together to save the biochemistry degree program at UA and to allow the students majoring in the program to train in CLS.

"We chose UND as an educational partner for a number of reasons," said Wolk, division chief for clinical and molecular microbiology at Arizona Health Sciences Center and assistant professor, clinical pathology and medicine at

UA. "First and foremost, from my perspective, the UND faculty truly portrays all that is right and good about health care. They are team-oriented, inclusive, open-minded, flexible, and most importantly, dedicated to delivering the best in content and ease of use for their students."

Building on a foundation

Starting this fall, undergraduates at UA majoring in biochemistry can take CLS classes through the existing and very

Neither first nor last

The UND CLS program partners with about 20 institutions throughout the nation to provide CLS certification training through distance education, including the Mayo Clinic and the U.S. Veterans Administration. There are also new agreements in the works with the University of Pittsburgh Medical Center and Boyce and Bynum Pathology Laboratories, Columbia, MO, both of which learned about the UND program through the UA partnership.



Donna Wolk, PhD
D(ABMM)

Every partnership we create makes our program stronger.

successful distance learning program at UND. Not only will the credits from these classes be put toward their biochemistry degree from UA but they will also earn a certificate in CLS from UND and qualify to sit for the CLS national certification exam.

"The UND CLS program has a long tradition of excellence in CLS training," Wolk continued, "with a pass rate of over 95 percent for successful board certification of their students."

The university medical center and the department of pathology at UA will take care of the hands-on lab portion of the classes while UND instructors will teach the lectures online.

"They keep their lectures updated with the latest information in clinical laboratory science," said Wolk, "playing a vital role in medical laboratory education in the West and the Midwest."

In addition, according to UA, students who obtain an associate degree in applied science from Pima Community College in Tucson leading to medical laboratory technician positions can transition into the UA CLS program to achieve a bachelor's level education and become eligible for higher-level positions.

"The CLS profession is facing a workforce shortage that is reaching crisis mode as programs are being closed nationwide," said Solberg.

"Every partnership we create makes our traditional, on-campus program stronger, which means we can continue to graduate more than 60 students annually that will be able to populate regional laboratories."

In the nick of time

Tischler's program was saved.

"Two days before the official axing was going to occur," said Tischler, UA professor of biochemistry and molecular biophysics and UA College of Medicine faculty member, "I called the provost and said 'we need to keep the program for this reason,' so they are keeping the BA program."

"We are proud to be affiliated with UND," said Wolk, "and hope to expand our collaborations to include new teaching modules with special focus topics such as a series in molecular microbiology."

- Amanda Scurry



Marc Tischler, PhD



Brooke Solberg, MS,
MT (ASCP)

Binary Care: Ensuring a Health-*e* North Dakota



“LAWS ARE LIKE SAUSAGES; IT IS better not to see them being made.”

Most people cite Otto von Bismarck, the first chancellor of Germany, for this political bromide. The true source remains in doubt. However, what is certain is the North Dakota Legislature calls the namesake city of Bismarck home. In 2009, an

integral link to the future of North Dakota's health care system was ground out of the state legislative session: funding for health information technology (HIT).

Like the beginning and end of a sausage, health information technology is fundamentally binary: 1s and 0s. Yet, from this simple foundation rises the

powerful information and communication systems necessary to accelerate a change in health care that leads to safer, more efficient and less costly care, enabling health care to free itself from the weight of the paper millstone around its neck and catch up to the digital age.

Health care still operates in a paper world. More than likely your health record exists on paper only, whereas the other vital statistics in your life are

Health IT will improve quality of care by freeing time for your health professionals to focus as a team on early prevention of disease and on wellness. It will cut costs by eliminating duplicate tests and procedures, improving scheduling, and expediting processing and billing of claims. An integrated, interoperable link between departments within a health facility and between health facilities nationwide would replace the paper chase. HIT

It's an investment that will take the long overdue step of computerizing America's medical records to reduce the duplication and waste that costs billions of health care dollars, and medical errors that cost thousands of lives each year.

preserved and backed up in easily accessible electronic files. If you want your health records to follow you if you move, you have to authorize release of your information from your health care provider and wait for your provider to deliver your records, which is not per se a bad thing—except if you are traveling and require emergency medical care. The emergency room physician might not have ready access to your medical chart. Unless you or a companion can provide an accurate vital medical background (or you wear a medical bracelet, necklace, or watch), the well-meaning ER doc may take steps to save you that lead to your demise.

With health IT, your electronic health record (EHR) would be at the fingertips of any health care provider or facility tied to a health information exchange (HIE), an electronic network for sharing health information. An electronic guardian angel would follow you from place to place ready to inform a doctor's diagnosis of your condition. Health IT provides safety and more. It can not only reduce medical errors but also lower health care costs through increased administrative efficiencies, decreased paperwork, and expanded access to affordable care.

will give doctors, nurses, and other health workers precious time to attend to patients rather than locating patients' medical records and trying to pinpoint relevant information, reducing the wait in waiting rooms.

HIT's story in North Dakota

On April 18, 2006, the first North Dakota Health Information Technology Summit took place in Bismarck with 160 participants. The sponsors were Senator Kent Conrad along with representatives from the North Dakota Healthcare Review, Blue Cross Blue Shield, the North Dakota Healthcare Association, the North Dakota Medical Association, Gruby Technologies (now known as IntelligentInSites), and the Center for Rural Health at the University of North Dakota School of Medicine and Health Sciences. To ensure future dialogue on health IT, the health summit sponsors and the North Dakota Department of Health created an all-volunteer ND HIT Steering Committee.

The steering committee members knew that states with the most success in implementing health IT began discussions with key stakeholders early in the process; so, in August 2006, the committee, led by the Center for Rural Health's **Lynette Dickson** as chair, invited 40 representatives from pivotal



Lynette Dickson, Director,
North Dakota State Office of
Rural Health

health care organizations statewide to explore applying health IT in North Dakota. In 2007, the state legislature formally authorized, but did not fund, the steering committee. Committee members continued their work as volunteers.

The 2009 legislative session was the first opportunity the steering committee had to establish state funding for health IT; however, Senate Bill No. 2332 (the HIT bill) was on life support early during the Sixty-first Legislative Assembly. As originally proposed, the HIT bill would have appropriated \$5.9 million to establish a health information technology office, an advisory committee, and provide funds for a grant program to help health facilities plan and implement health IT.

Access to health care is one of our biggest challenges, not because anyone is denied care, but with the sparse population in much of the state, the providers are not easily available everywhere.

However, many legislators saw health IT as the responsibility of private organizations—hospitals and clinics—not the state. The Senate did provide \$500,000, and the House agreed to give \$250,000. The HIT steering committee persevered; their diligent work, along with a big boost from the federal government, revitalized the future of health IT in North Dakota.

Recession to resuscitation

Congress passed the American Recovery and Reinvestment Act of 2009 to combat the recession that began in December 2007. Upon signing the legislation on February 17, 2009, President Obama said, “Because we know that spiraling health care costs are crushing families and businesses alike, we’re taking the most meaningful steps in years towards modernizing our health care system.”

“It’s an investment that will take the long overdue step of computerizing America’s medical records to reduce the duplication and waste that costs

billions of health care dollars, and medical errors that cost thousands of lives each year.”

The federal recovery act provided the ammunition the HIT steering committee needed to fight for the future of health IT. The 2009 act continued funding for the national coordinator of health IT and, most importantly, initiated federal funding for states’ efforts to implement health IT. In 2011, the feds would provide a 5-1 match of state funds dedicated to loan programs for hospitals and clinics to purchase or upgrade their individual electronic health record systems.

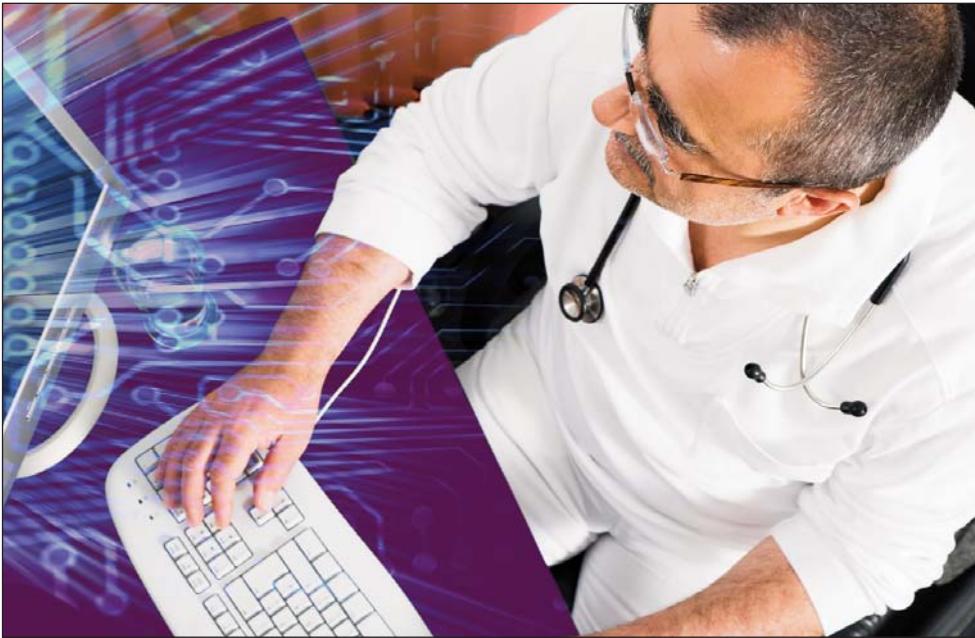
To jump-start a national health information system or health information exchange, Congress agreed to match states’ spending to develop

HIEs. States will have three competitive money-go-rounds to grasp a gold, silver, or bronze federal match of state dollars: a 10-1 federal match in 2011, 7-1 in 2012, and 5-1 in 2013.

Also in 2011, Medicare and Medicaid will pay incentives to non-hospital-based physicians (for example, Medicare will pay up to \$44,000 over five years) and hospitals that can verify they are *meaningful users* of EHRs—*meaningful users* is a term not yet defined by the U.S. Department of Health and Human Services. After 2015, Medicare will penalize, through reduced reimbursements, doctors and facilities that have not met meaningful user criteria.

Hitting the road

Given Congress’s lead with the stimulus package, the North Dakota legislature followed the money. The final version of the health IT bill made \$8 million available to be used as North Dakota competes in the three rounds for federal funding of HIE from



2010 through 2012. In addition, a \$5 million loan fund not tied to the stimulus funds will be available (contingent on general fund revenues exceeding an established limit) for health facilities to purchase and upgrade EHRs.

Furthermore, the health IT bill will create a state HIT office within the ND Information Technology Department and an advisory committee—appointed by the governor and the state health officer—that would hire a health IT director to run the office. The advisory committee will provide oversight and advice to the director through its six stakeholder work groups: communication and education, funding and resources, health information exchange, legislation and policy, privacy and security, and standards.

The HIT director and the advisory committee will determine the criteria and eligibility for all loans. They also will develop North Dakota's HIE plan and decide how much of the \$8 million will be bid in the three competitive rounds for HIE federal match dollars.

"I am pleased that the legislature provided the support needed to begin to implement health information technology throughout North Dakota," said ND State Senator **Judy Lee**, West Fargo, who represents the legislature on

the health IT steering committee.

"Access to health care is one of our biggest challenges, not because anyone is denied care, but with the sparse population in much of the state, the providers are not easily available everywhere. HIT will permit quick exchange of health information so that citizens will have access to expert consultations, even when treated in rural areas."

Constructing a national health IT program to better the lives of Americans is like the grand-scale twentieth-century public works projects championed by presidents from both political parties: Roosevelt's Rural Electric Administration in the 1930s and Eisenhower's Interstate Highway System in the 1950s. Roosevelt's and Eisenhower's ubiquitous networks were designed to provide citizens with the gainful flow of electrons and automobiles. Similarly, health IT would create for all Americans a nationwide, interoperable system to instantly deliver essential medical data. Interestingly, Eisenhower's idea for his interstate system was sparked in part by his appreciation of a similar high-speed system in the homeland of Chancellor Bismarck: the autobahn.

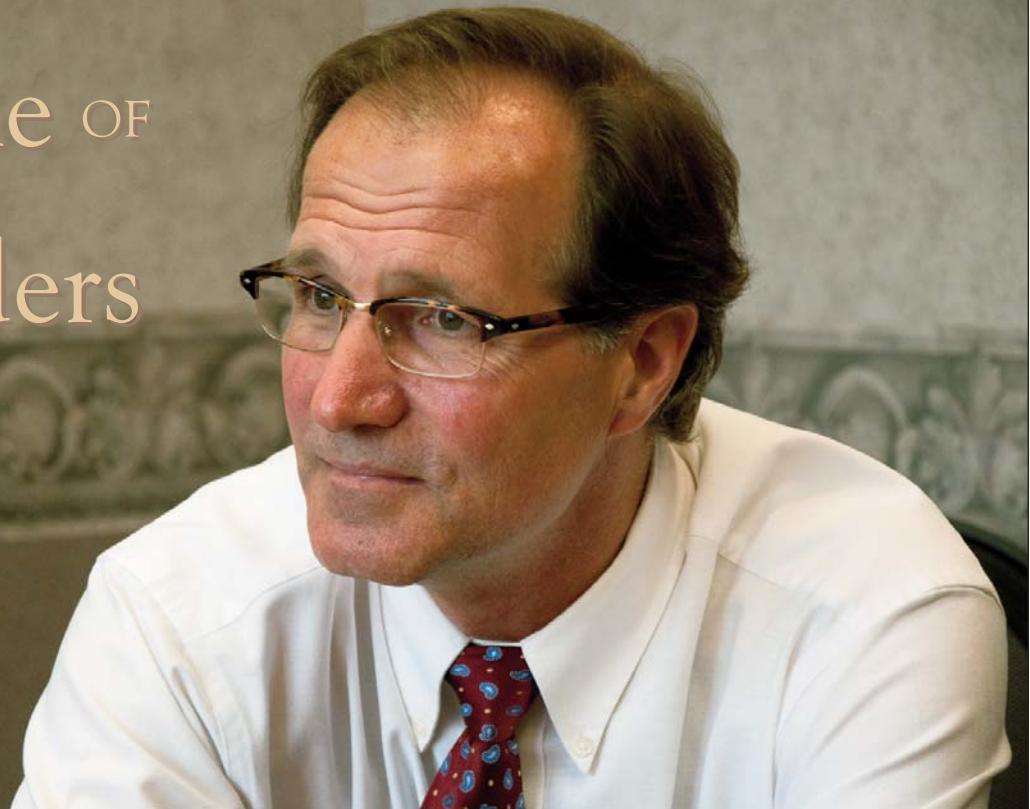
- Denis MacLeod



Senator Judy Lee, West Fargo

THE Riddle OF Eating Disorders

One Man's
Leadership
in Research
Yields New Answers



CALL IT THE CULTURE OF PHOTOSHOP. We're bombarded daily with images carefully manipulated to stimulate a desire to look like the models we see depicted, either by buying things or perhaps even trying to shape our bodies as well. And indeed, according to UND researcher **Dr. Stephen Wonderlich**, fully five percent—overwhelmingly female—of our population does suffer from a clinically significant eating disorder. The question is, why this five percent and not the rest of the population? And what can be done for those who suffer from this debilitating condition?

Stephen Wonderlich, PhD, is an internationally-recognized innovator in the field of eating disorders. He is the Chester Fritz Distinguished University Professor and Associate Chair of the Department of Clinical Neuroscience at the UND School of Medicine and Health Sciences. He's also director of clinical research at the Neuropsychiatric Research Institute in Fargo, where for 22 years he's been doing ground-breaking research into the many conundrums presented by eating disorders.

In 1996, Wonderlich, together with colleague **James Mitchell, MD**, Christoferson Professor, Chair of the UND Department of Clinical Neuroscience and Chester Fritz Distinguished Professor, teamed up with MeritCare Health System and the Neuropsychiatric Research Institute in Fargo to create the Eating Disorders Institute (EDI), the clinical branch of this unique tripartite entity. The EDI employs over 20 staff and maintains space for 18 hospital patients at MeritCare Hospital South in Fargo.

Earlier this year, Wonderlich was recognized by the Academy of Eating Disorders with its Leadership Award for Research. His work was cited as an "internationally-respected body of research" that has yielded new knowledge and measurably advanced the field. The Academy in particular noted his role as a "synthesizer of new information," and commended his scholarship and thoughtfulness.

High praise indeed for this native of Moorhead, MN, who graduated from Concordia College and credits the psychology faculty there for being a

"tremendous influence" on his career. Wonderlich traveled south to receive a doctoral degree in clinical psychology from the University of Missouri, Columbia. He continued his education with an internship and fellowship in the psychiatry department at the University of Wisconsin, and from there he was recruited to UND by Richard Stadler, MD, then chair of the neuroscience department.

Wonderlich's interest in eating disorders dates to his time in Wisconsin.

"Eating disorders were on the rise in the United States. At that time, eating disorders were not well-known. Of the two primary eating disorders (anorexia nervosa and bulimia nervosa), bulimia had only been clinically defined in 1979."

His timing was good.

"Much of this emerged as I started my professional training, and that's how I got interested."

Since coming to North Dakota, Wonderlich has had a particularly close view of the changes in the field.

"In the last two or three decades, we've come a tremendous distance in developing and understanding not only what but how treatments work for eating disorders. We have a more sophisticated understanding of how culture, genetics and biology might operate together."

Presently, he has become quite interested in the idea of *self-discrepancy* as an important concept.

"It's the difference between how people see themselves actually and ideally."

Those with eating disorders have a larger self-discrepancy than those who do not, and it leads them down the road to emotional upset and depression. Wonderlich says a recent federal grant has allowed study of a new treatment in which self-discrepancy is a core idea.

"Our treatment is much more about this discrepancy; the patient's emotional life in the moment, and how they are dealing with their unhappiness. It's very precise and carefully applied."

If the study, which concludes in

less than two years, compares well to an alternative approach developed in Oxford, England, it could lead to another treatment method entirely. Wonderlich concludes, "it's a very important comparison."

In the palm of their hand

The Institute has received two major grants to study the use of Palm Pilots in monitoring the day-to-day life of patients. Wonderlich likes the ability to get data "in the moment." He says the instant feedback circumvents the delays and distortions of after-the-fact surveys.

"There's all kinds of problems with bringing patients into the lab and interviewing them about things that have happened in the past, because we distort so much."

Not surprisingly, younger researchers take to the technology.

"It's actually become a sort of hot ticket for young people coming into the field."

As he reflects on decades of cutting-edge research in eating disorders, Wonderlich has no doubt about his ultimate goal: a meaningful, sustained contribution that will enhance treatment. Given his stature in the field, he's referring to a global contribution, but he recognizes and values his local impact as well.

"I want to help build and sustain a very productive eating disorder and obesity research community in the state of North Dakota."

He pauses, ever mindful of the dual, symbiotic nature of research and treatment.

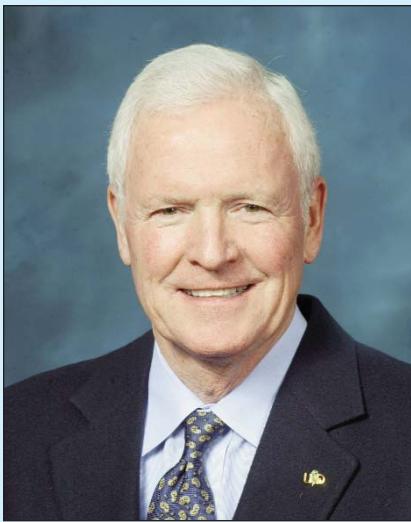
"We must also continue to have a meaningful hospital and clinic program. We serve people all over the region. That needs to endure."

With his carefully built organizations, Wonderlich is in a unique position to do just that.

- Gary Niemeier

**'self-discrepancy'...is
the difference between
how people see themselves
actually and ideally**





Wilson's Way

During 14 years as dean, H. David Wilson put North Dakota on the map in medical education

FOURTEEN YEARS AGO, H. DAVID Wilson, MD, became dean of the medical school at the University of North Dakota and was determined to make changes. The biggest of these changes, the school's innovative patient-centered learning curriculum, put him and North Dakota on the map of medical education and has become his legacy.

"I said soon after I arrived [at UND] that the goals for the school should be an outstanding curriculum, to be the rural health medical school and to recruit terrific [faculty] to North Dakota," said Wilson.

Nation's leader in rural health

"One of the first thoughts I had when I came here was to focus on rural health because we are the most rural state in the nation to have a medical school," said Wilson. "I believe our Center for Rural Health is one of the top one or two in the

country. We have the only Rural Assistance Center sponsored by the United States government, and now the focus of health care workforce

information is at the University of North Dakota."

"[David] brought the very clear perspective of the needs of a state like North Dakota," said **Darrell Kirch, MD**, president and CEO of The Association of American Medical Colleges, who witnessed Wilson's work on several national medical boards and committees.

To encourage students to look at rural medicine, the Rural Opportunities in Medical Education (ROME) program was established, allowing students to better experience life as a rural physician. More recently, it was made mandatory that every medical student do at least one rural rotation during their third and fourth years.

"This past year we were the number one medical school in the entire country in the percentage of our students going into family medicine," said Wilson. "I don't know how you can top that!"

Research expansion

When Wilson arrived at UND in 1995, the medical school had a little over \$8 million in research dollars.

"One of the priorities that David brought to the medical school was a need to emphasize scholarship broadly and in particular to develop the research infrastructure," said **James E. Mitchell, MD**, Christoferson Professor and chair of the clinical neuroscience department at the medical school.

Highlights of Wilson's Tenure

- Changed school's name to School of Medicine and Health Sciences
- Established yearly White Coat Ceremony for first-year medical students
- Instituted new Patient-Centered Learning Curriculum
- Preserved consistently high ranking in rural medicine by *U.S. News and World Report*
- Sustained consistently high ranking (#1 in 2009) in choice of family medicine training by graduating seniors
- Formed several federally funded centers
- Increased research grant funds to \$24 million
- Recruited or promoted 26 associate and assistant deans, chairs and directors
- Held a dozen positions in national organizations
- Secured funding for or dedicated nine facility projects on three medical school campuses
- Garnered \$22 million in philanthropic support

Research dollars under Wilson grew to \$24 million in fiscal year 2003 and has hovered at \$20 million for the past several years. He also recruited some of the best researchers to the school.

But those researchers need somewhere to work. During his tenure, Wilson secured funding for and dedicated the Biomedical Research Facility and – with the instrumental assistance of Dr. Manuchair Ebadi – the Neurosciences Research Facility.

"David fostered a culture at UND which clearly valued research as a priority," said Mitchell, "a characteristic of great importance in environments that train physicians and other health care professionals."

Increasing endowments

Much of the recent years of Wilson's time in North Dakota has been spent outside of North Dakota raising private money for the school from alumni and friends.

"While we are well-funded by the state of North Dakota, one recognizes pretty quickly that the state can't pay all the bills," Wilson explained. "Endowed chairs and professorships

are tools to recruit the best faculty to the school."

His efforts resulted in \$22 million in a four-year span, with more than \$7 million to fund endowments.

Patient-centered learning

When Wilson was interviewed for dean at UND, he told the search committee that he intended to change the school's traditional curriculum. He put together a small team to research medical curricula. What they came back with would drastically change the way medical students were taught and how they would learn at UND.

Richard Vari, PhD, now associate dean for medical education at Virginia Tech Carilion School of Medicine, was on that team.

"Change is never easy – for people or institutions. Dr. Wilson provided constant encouragement and support as we changed the way we taught medical students."

The school's new patient-centered learning curriculum began in 1998.

"David really needs to be commended for promoting that transition," said **Rob Beattie, MD**, clinical professor and

Where in the World is Flat Dean Wilson?

DURING THE MEDICAL SCHOOL CENTENNIAL GALA IN THE FALL OF 2005, A COUPLE OF MEMBERS of the MD class of 2009, with the help of a faculty member who created a diversion, kidnapped a life-size wood cutout of Dean H. David Wilson. The cutout was created by medical school graphic designer Victoria Swift and was used to welcome people to several centennial events the week leading up to the gala.

The kidnappers were roommates Brian Rau and Matthias Christianson, who kept the Flat Dean as a third roommate. Over the next four years the Flat Dean would make appearances at various medical student events and Grand Forks locations. He visited the hospital and clinic and several bars and parties. He also played "Deal or No Deal" at Suite 49.

"It was sort of a game of who could get the funniest picture," said **Dane Breker**, a member of the MD class of 2009.

In April when the MD class of 2009 returned to Grand Forks for graduation festivities, each member of the class autographed the Flat Dean and they presented it to the REAL dean during a graduation reception.

"It was nice to see him again and to be signed by all the seniors," said Wilson. "I just thought the students had left him in a Grand Forks bar someplace. Flat Dean has really been around!"

Online Exclusive:

Wilson Trivia: What does the "H" in H. David Wilson stand for?

- A. Horatio
- B. Harry
- C. Hubert

Visit www.ndmedicine.org to find out the answer.

chair of the family and community medicine department at UND. "We truly do have one of the more innovative curriculums in the country, and you can't really put that anywhere but at his feet."

"All of this is a team effort," Wilson stressed. "It took the entire faculty and the staff to make all of this happen. It's labor intensive, but I think, by and large, everyone believes it's a better way to educate future doctors."

"It made a huge difference," said Vari, who ran the curriculum for ten years. "It was innovative, and it made medical school fun for students and faculty alike, and it's just been a night-and-day difference."

"I'm extremely proud of the educational program," Wilson said. "I have said around the entire country that I think it is the best in the country for the education of first- and second-year medical students, and I really believe that."

On to Wichita

On July 1, Wilson became dean of the University of Kansas School of Medicine—Wichita.

"There is a lot of opportunity here," said Wilson of his new stomping grounds. "One of my goals is to make it into a full four-year medical school, and I'd like to raise some money for some major projects [such as] a new medical education building, research space and clinical space."

"David is always first and foremost focused on the needs of patients and then secondarily on the needs of learners," said AAMC's Kirch. "I've been in many conversations where he functioned as a kind of conscience for the group, reminding us of where our priorities should be."

"Before I came to North Dakota, there was a lot of talk at the legislature about closing the medical school," remembers Wilson. "Well, you don't hear that anymore at all. People recognize how important the medical school is to the health of the people of North Dakota."

- Amanda Scurry

Where in the World is Flat Dean Wilson?



Flat Dean reappeared at the MD graduation brunch with some of the original "dean-nappers" (from left) Carrie Ann Ranum, Janalee Holmes, John Horner, Nicole Duchsherer, Dane Breker, Stefan Johnson, Marisa Upton, Jon Kolberg, Andy Gasparini, Matthias Christianson, and Mark Longmuir.



TAYLOR MERTZ
MAJOR: Medicine
CLASS OF: 2011
HOMETOWN: Fargo
HIGH SCHOOL: Oak Grove Lutheran
UNIVERSITY: Bethel University,
St. Paul, Minn.
PARENTS: Monty and Paula Mertz

Prime Caring

Thankful villagers give as well as they get from two UND medical students

TAYLOR MERTZ, A THIRD-YEAR UND medical student, says that he received more than he was able to give on a medical mission trip to Guatemala last summer. Along with another UND med student, **Alexis Hilfer**, Taylor participated in six days of village- and church-based clinics

that successfully served an astonishing 2,500 people. And, according to Mertz, the patients weren't shy about showing their appreciation. "They would watch us pull up in our vehicles with these smiling faces... we knew they appreciated us being there."



"There were 500 people waiting. We disembarked from our vehicles amid cheering."

Mertz, 26, is a Fargo native who was already contributing to mission works in college. He graduated from Bethel University in St. Paul, Minn., in 2006 and entered UND's medical school in 2007, where he credits **Jon Allen, MD**, associate professor of internal medicine and assistant dean of the UND northeast campus, with laying the groundwork for the Guatemala trip. Allen led Mertz to **John Baird, MD**, health officer of Fargo Cass Public Health and a member of the Episcopal Dioceses of North Dakota. Baird, along with Guatemalan physician **Padre Roberto**, performed the heavy lifting of meeting the logistical challenges of a large-scale excursion: the 24-member team included physicians, nurses, a dentist and dental students, a pharmacy student, translators and assistants.

After landing in Guatemala City, the entourage bused to Quetzaltenango, a nearby city that Mertz describes as very modern by third-world standards. Once based, the band split into groups and built impromptu clinics in surrounding villages, usually in schools, churches, even a town hall. The 900 pounds of supplies and medicine they brought from the United States gave them the luxury of being completely self-contained and allowed them to provide primary care for as many people as time allowed. The need quickly overwhelmed the available resources: "We just didn't have time to see everybody—we handed out all the medication we had. Obviously, we didn't want to come home with any of it."

Big numbers

They soon discovered that even their limited time could address a surprisingly large number of people. "I was blown away when we finally counted all the numbers at the end," admits Mertz. "It was almost never a single person. More likely, it was a mother with her four kids, and you'd just go from one to another to see what they needed." The statistics are startling: Mertz describes 1,368 medical visits, 205 dental visits, as well as 750 fluoride varnishes and 500 vitamin and worm medicine dispensations. The pace of the visits accelerated over time and as word spread: it progressed from 50 per day to several hundred, until finally, "on the last day we saw so many people, one after the other, that it was just incredible."

Not lost in translation

After Mertz and Hilfer had a chance to observe a local physician's procedures for a day, they were ready to see patients. It was time to bring in the translators. Many villagers don't know Spanish, but instead speak in a Mayan dialect. Mertz's Spanish wasn't up to the task, so he leaned heavily



Alexis Hilfer administers a vaccination to an elderly woman, aided by a translator.



on translators, some of whom were recruited en route to the day's clinic. Eventually, a three-way translation was made between English, Spanish and Mayan. This linguistic bridge meant that complaints were heard accurately and proper treatments administered.

Mertz admits he was out of his comfort zone at first. "The translation was of the utmost importance. Sometimes, you'd start off thinking they were saying one thing, and it would develop that they were talking about something else entirely." There was a backup system in case the students were stumped. If a patient presented with something more serious, the physicians would make themselves available. Did that ever happen? "Oh yeah, for sure." As the week went on, Mertz says the "somewhat ordered chaos" eventually came to feel more comfortable to the pair.

Grateful responses

Mertz says it was obvious that the team's presence in the villages was appreciated. "It was really fun to see. In our last

location, there were so many people there that we had to come back the next day. When we pulled up, there were 500 people waiting. We disembarked from our vehicles amid cheering—they would literally cheer for us as we set up our stuff! Afterwards, the town leaders put on a presentation for us that included certificates of appreciation."

Does Mertz think his experience will inform his life as a medical professional? "I know it will. I encourage everybody to grab the opportunity if it presents itself. You realize the world has so much to offer—it's very worth it for those who go and those receiving the help."

In a presentation last November for the Christian Medical Association of UND, Mertz summed up his experience. "We were able to help many people on this trip, and hopefully our presence has been felt longer than that week. I can guarantee that I received much more than I was able to give." 

- Gary Niemeier

Mertz and Hilfer worked with patients at a school for the deaf, relying on a translator who converted Guatemalan sign language to English.

WHAT'S UP, Doc?



UND ALUM'S
PASSION FOR
PEOPLE AND
PLANES IS A
MATCH MADE IN
MEDICAL HEAVEN



WHILE MANY CHILDREN WHO dream of planes go on to fly the friendly skies, **Dr. Erwin Samuelson's** passion for aviation led him down a slightly different path—medicine.

The 1954 University of North Dakota medical school graduate got his first taste of the high life when he was 15 years old and serving as a volunteer with the Civil Air Patrol during World War II. His stint in the Iowa Wing of this civilian Air Force sparked this self-proclaimed "nerd" from Fargo's interest in aerospace.

"I distinctly remember the summer camps, which were part of our training for the Patrol. I fell in love with

airplanes and all things aviation," said Samuelson.

Samuelson's passion for planes brought him to UND, renowned for both its aerospace and medical programs. After graduating with a bachelor's degree in medicine in 1954, he attended Temple University in Philadelphia, where he earned his medical degree. He fell in love with sunny California during an internship at the Naval Hospital in Camp Pendleton, and when he finished medical school, he moved back to the state and eventually set up his practice in Redondo Beach.

Samuelson is just like your average



family physician, but one with a very special roster of patients: pilots. He is a senior Aviation Medical Examiner (AME) for the Federal Aviation Administration (FAA) and ensures that the nation's pilots are fit to fly.

"I see nearly a thousand pilots each year. I love people, and I love flying, so for me, it's the best of both worlds," he said.

Pilots must pass an intensive medical examination every six months in order to maintain their FAA credentials.

Samuelson, like all certified FAA physicians, uses the "IMSAFE" checklist (illness, medication, stress, alcohol, fatigue and eating) to measure a pilot's health. Airline pilots must have at least 20/40 vision in each eye (both distant and near), the ability to distinguish colors (the color-blind need not apply), hearing at a distance of up to six feet, no distinguishable speech or equilibrium issues, blood pressure under 155/95 and no current substance abuse or treatment for psychological disorders in order to pass muster with the FAA.

"The tests are rigorous, but are designed for the safety of both the pilot and passenger," said Samuelson. "And I'm proud to say that so far this year, every single one of my pilot patients has passed certification."

While most FAA-certified examiners see 15 to 20 patients a year, Samuelson happily sees as many as he can. His expertise has earned him kudos from his colleagues, and his work has been published in several national aviation magazines and is used to teach other AMEs. While back in the "old days," FAA certification was a fairly simple process, Samuelson says he now must take classes and seminars each year to maintain his

license—but he finds the constant learning "fun" and "invigorating."

While his first passion is medicine, Samuelson's others are family and travel. He and wife Alberta—also a physician—met while he was a senior at Temple and an intern at the Naval Hospital. Samuelson was instantly attracted to the "smart, pretty" woman, but knew he would only be in town for a short while. The pair dated for two months before he popped the question over an oceanfront

dinner in La Jolla. They have been together ever since. They celebrated 52 years of marriage in July.

The couple has five children—four daughters and a son—though, ironically, none of them followed their parents' footsteps into medicine. Though busy with their careers, in the early years, the Samuelsons cherished time with their family.

"I always tried to take a month off every summer," said Samuelson, who enjoyed taking his family on excursions to exotic locales such as Japan, Italy and Denmark.

It is a tradition they maintain even today, now that their children are grown and have their own families. For their 50th wedding anniversary, Samuelson and his wife flew the whole clan to Alaska, where they cruised and then rented a car to explore the state.

"We all piled into a 757—but I like being the passenger, not the pilot," said Samuelson.

Yet in spite of these adventures and his love of flight, when asked about his favorite destination, he simply said "home."



- Laura Scholz

My, How We've GROWN



THE SCHOOL OF MEDICINE AND HEALTH Sciences has experienced tremendous growth over the last 10 years. At the beginning of that period, total revenues were almost \$74 million. Today that figure is about \$142 million—almost 92 percent growth.

A lot of that has been due to the leadership of former dean **H. David Wilson, MD**. He certainly helped to modernize the school. There are a number of things that went on here—renaming the school; bringing in researchers with lots of new ideas, new programs, and the belief that North Dakota can compete nationally in some selected areas. We can't be in the forefront in 20 different programs, but we can focus on strong areas like rural health and family medicine. And the department of Physiology, Pharmacology, and Therapeutics has really grown, too.

Where did the growth come from? The general fund, which comes from the state, grew 39 percent in the last 10 years. Other funding sources, those that we're responsible for raising, grew 128 percent. We like to say, "You invest a dollar in us, and we'll give back three." We're a good economic engine for the state. And it's not just in Grand Forks; it's in Fargo, Minot, and Bismarck, too. We're a statewide entity. We do work in every county in the state through the Center for Rural Health.

We like to say,
"You invest a
dollar in us,
and we'll give
back three."

Grants and contracts have grown at an even faster rate—212 percent—which is really a credit to the faculty and programs of the school.

This session, the Legislature recognized that tuition income during the last 10 years grew 209 percent, which is really unsustainable. Our legislators took a big step in correcting that. Our tuition this next biennium is limited to 3.5 percent per year.

Ten years ago, the state funded almost 40 percent of our program; now it's 29 percent. We've become less dependent upon the state for our revenues and more dependent upon ourselves. The Legislature appreciates that if it gives us money, we try to do our best with it and try to help the state. The intention of the school is to produce health care professionals for the state, and we've done a remarkable job. Almost half the physicians in the state come from our school; the percentage is even higher for occupational therapists and physical therapists.

That's the past. Now let's look to the future.

We'll be building a new clinic in Bismarck, thanks to \$5.4 million from the state this session. The Legislature also found new funds for the Bismarck and Minot centers for family medicine. They funded \$600,000 for the new RuralMed Program. This funding allows us to give tuition waivers to students who pre-select family medicine residency programs. They're going to fund eight students per class who will then go into primary care and commit to staying in North Dakota for three or four years.

The Legislature also marked \$500,000 for the Center for Rural Health to do a comprehensive health delivery plan for the state, and \$225,000 to purchase electronic medical records systems to modernize the way we look at patients and to train physicians.

I would say this is the best legislative session we've ever had, both financially and in the way the legislators listened and responded to our concerns.

- Randy Eken, MPA '96

Associate Dean, Administration and Finance
UND School of Medicine and Health Sciences

UND med school inducts first members of Gold Humanism Honor Society

Eight senior medical students from the University of North Dakota School of Medicine and Health Sciences were the first members inducted to a new chapter of the Gold Humanism Honor Society on Thursday, June 18. Keynote speaker **Stephen Tinguely, MD '78**, provided an inspiring commentary on humanism in medicine. An associate professor and chair of pediatrics at the UND School of Medicine and Health Sciences, Fargo, he has throughout his career epitomized the qualities of a humanistic physician.

The UND chapter joins 77 other medical school chapters across the country in recognizing senior medical students who demonstrate exemplary humanism and professionalism throughout their medical education. Creation of the chapter was made possible by a grant from the Arnold P. Gold Foundation.

Fifteen percent of the class was selected through a process that includes peer nomination and subsequent confirmation by the school's Gold Humanism Honor oversight committee. Each student's clinical performance



The 2009 inaugural members of the UND Gold Humanism Honor Society pictured with Charles Christianson, MD (far left), and Judy DeMers (far right), include (from left) Luke Van Alstine, Dan Dixon, Miran Blanchard, Stacie Wellman, Katrina Gardner, Jennifer Mullally, Chad Hanson and Erica Martin.

and record of community service was considered. Members include **Miran Blanchard, Dan Dixon, Katrina Gardner, Chad Hanson, Erica Martin, Jennifer Mullally, Luke Van Alstine, and Stacie Wellman**.

"We are very pleased to bring this recognition of the importance of humanism to our school," said **Judy DeMers**, associate dean for student affairs and admissions. "We congratulate these students on their commitment to patient care and dedication to the medical profession."

Neville Alberto, MD, named new director



Neville Alberto, MD, has been named to the newly combined position of program director of the University of North Dakota School of Medicine and Health Sciences transitional residency program, and associate program director of the internal medicine residency program, effective July 1. Alberto has served as the associate program director for

internal medicine since 2006. He continues to serve as a hospitalist at MeritCare Health System in Fargo.

"We are pleased to welcome Dr. Alberto to this new position," says **Joshua Wynne, MD**, UND interim vice president for health affairs and interim dean. "He will provide valuable leadership for the residency programs."

In his new role, he will oversee the transitional year residency program, which provides a well-balanced

program of graduate medical education in multiple clinical disciplines. Conducted almost entirely at MeritCare in Fargo, the program allows residents to explore medical and surgical specialties that they will interact with in the future. As associate program director of the internal medicine residency program, he will assist Dr. David Theige in leading the three-year, community-based program. He will continue to see MeritCare patients.

Dr. Alberto received his medical degree from Goa Medical College, Goa, India. He was the senior registrar in internal medicine at Princess Margaret Hospital, Nassau, Commonwealth of the Bahamas. Prior to joining MeritCare, he completed his residency in internal medicine and was the chief medical resident in the department of internal medicine at Easton Hospital, Hahnemann University, Easton, Pa. He is board-certified in internal medicine and palliative medicine. He was chosen by the current transitional year residents as "Teacher of the Year" in May.

New project enhances patient safety at North Dakota hospitals

The North Dakota Critical Access Hospital (NDCAH) Quality Network announces a new effort to enhance patient safety across the state: the Statewide Information Management Project. Participating hospitals collect information related to patient safety at their facility and use it to make improvements; they also share best practices with each other. The Web-based management system allows for efficient information gathering and analysis.

The project is supported by the Center for Rural Health at the University of North Dakota School of Medicine and Health Sciences, and the management system is a product of Chicago-based consulting firm, Clarity Group, Inc. The Quality Network serves as a common place for Critical Access Hospitals to share education and resources to help advance health care quality and safety in the state. "Last year the Quality Network tested the possibility of working together to collect information that could have a positive impact on patient safety in the rural health care setting," said Jody Ward, NDCAH Quality Network Coordinator. "We're excited to roll out this program in 13 of North Dakota's rural hospitals, with plans to add more participants."

Participants include

- First Care Health Center, Park River;
- Heart of America Medical Center, Rugby;
- Hillsboro Medical Center, Hillsboro;
- McKenzie County Memorial Hospital, Watford City;
- Nelson County Health System, McVille;
- Northwood Deaconess Health Center, Northwood;
- St. Aloisius Medical Center, Harvey;
- Sakakawea Medical Center, Hazen;
- Southwest Health Care, Bowman;
- Tioga Medical Center, Tioga;
- Towner County Medical Center, Cando;
- Union Hospital, Mayville; and
- Unity Medical Center, Grafton.

"We have recognized the benefit," said Coleen Bomber of Northwood Deaconess Health Center. "It's easy to access information, and hospitals can use it to create positive change."

"This has been an important project because it demonstrates the power of data in supporting safety and quality efforts of rural health care, which is the backbone of the U.S. health care system. We are pleased to be working with North Dakota as they continue with their innovative program," said Anna Hajek, President and CEO of Clarity Group.

UND Aging Center receives funds to assist Native Elders

You worry about how to get to the doctor's office and how long you will wait after you arrive. Worst of all, your doctor tells you, based on your health, that he or she considers you ten years older than you really are. This is a discouraging prospect for anyone at any age; for North Dakota Native elders, this is reality. Native elders, those aged 55 years and older, are more susceptible to a number of chronic diseases and incur more barriers to receive health care, according to **Twyla Baker-Demaray**, director of the National Resource Center on Native American Aging and research analyst at the Center for Rural Health at the University of North Dakota School of Medicine and Health Sciences.

"Our mission is to identify and increase awareness of evolving Native elder health and social issues through research, education and advocacy. The success of the center is based on recognition of community expertise in the provision of resources to develop community-based solutions," said Baker-Demaray.

Recently, the Administration on Aging within the U.S. Department of Health and Human Services gave UND's Resource Center over \$422,000 to continue its work for another three years.

The National Resource Center on Native American Aging was established in 1994 at the Center for Rural Health through a cooperative agreement with the Administration on Aging. The Resource Center's purpose is to work closely with local service providers throughout the nation to address the needs of American Indian, Alaska Native and Native Hawaiian elders. The National Resource Center on Native American Aging was the first center established of the three centers that exist. The other centers—University of Alaska—Anchorage and the University of Hawaii—each work with their unique state Native populations.

The National Resource Center focuses on community-based health care solutions to strengthen the foundation of every Native tribe, village and homestead. Center staff created a nationally recognized needs assessment process that has assisted more than 330 of the 562 federally recognized tribes. Baker-Demaray said the NRCNAA will initiate a program to nationally recruit and train Native researchers on aging. In addition, she plans to develop resources to assist both informal caregivers of Native elders and Native elders who, increasingly, are caregivers for children.

"Many tribes also struggle with the problem of elder abuse. We hope to focus on effective ways to intervene and prevent this abuse," said Demaray. "Our Native elders should be treasured."

UND doctors receive humanism in medicine awards



David M. Schall, MD '97, associate professor of surgery at the University of North Dakota (UND) School of Medicine and Health Sciences, recently was honored with the prestigious Leonard Tow Humanism in Medicine Award. **Marisa A. Upton**, a 2009 UND medical school graduate and Minot native, also received a Tow award.

The Leonard Tow Humanism in Medicine Awards are sponsored by the New Jersey-based Arnold P. Gold Foundation. They recognize physicians and medical students who best demonstrate the foundation's ideals of outstanding compassion in the delivery of care, respect for patients, their families and health care colleagues, as well as clinical excellence.

Schall was nominated by students and fellow faculty members for the award because of his widely recognized willingness to help others, his demonstrated compassion and empathy in his treatment of and relationships with patients, and for his excellence in professional behavior toward students, colleagues, and the community. He teaches senior medical students in their required Surgery Acting Internship.

A native of Grand Forks, Dr. Schall graduated from the University of North Dakota School of Medicine with highest honors in 1997. He is certified by the American Board of Orthopedic Surgery. Dr. Schall joined Valley Bone & Joint Clinic in 2002 after completing an orthopedic surgery

residency at the Mayo Clinic in Rochester, Minnesota. At Valley Bone & Joint Clinic, Dr. Schall specializes in adult reconstruction and foot and ankle surgery, as well as providing general orthopedic and fracture care.

Nominated by a peer, Marisa A. Upton was described as, "A true doctor's and friend's friend. Marisa's compassion toward her patients and those she works with is evident daily. She is an inspiration to all she meets, and her compassion for her patients is comparable to none."

Upton, a first-year resident at the Minot Center for Family Medicine, has consistently volunteered for numerous activities including Special Olympics, blood drives, high school gymnastics, a mentorship program for Native American youth, and teaching elementary classes about tobacco use dangers. For four years, she served as class representative on the medical school committee that reviews poor academic performance, issues of professionalism, or academic honesty. She is a highly valued contributor, demonstrating exceptional maturity, judgment, and compassion.

The Gold Foundation sponsors the annual Leonard Tow Humanism in Medicine Awards at over 85 of the nation's medical schools. The awards are made possible through a generous donation from entrepreneur and teacher Leonard Tow.



UND Center for Rural Health provides federal testimony on health reform

GRAND FORKS, N.D. – Senator Kent Conrad heard testimony from the University of North Dakota (UND) Center for Rural Health on July 2 regarding the importance of health reform for rural health in North Dakota. Senator Conrad was joined by North Dakota native and Obama administration official **Dr. Mary Wakefield** and Grand Forks area health care leaders for a roundtable meeting on health care reform. Senator Conrad said he is advocating reform legislation based on three principles: choice, value and coverage.

Center interim co-director **Brad Gibbens** stressed the importance of taking rural health into consideration when restructuring the nation's health care system.

"Many in rural health worry that other issues that are fundamental to building an equitable, stable, and sustainable health system will be lost in the overall debate on coverage and who pays for it," said Gibbens. "And, at the heart of health reform, be it coverage or access to care, the reason we are taking on this huge struggle is a desire to see improved health conditions for all Americans."

Gibbens focused on three fundamental themes critically important to all North Dakotans: a strained health workforce, health facility viability and questionable sustainability, and a continued national focus on understanding care quality and making quality improvements. Gibbens' testimony was informed in part by an environmental scan of North Dakota's health and health care completed earlier this year by the Center for Rural Health.

Senator Conrad serves as Chairman of the Senate Budget Committee and as a veteran member of the Senate Finance Committee, which has already begun work on negotiating the shape and scope of health care reform legislation.



WEB EXCLUSIVE: To read the full testimony, visit www.ndmedicine.org

The following is a listing of communities in North Dakota with current openings for all specialties. Please contact the site directly or Mary Amundson, MA, at the Center for Rural Health, University of North Dakota School of Medicine and Health Sciences for more information about these opportunities at 701.777.4018 or by e-mail at mamundson@medicine.nodak.edu

Ashley Medical Center welcomes George Stenger, MD, a family physician from Wisconsin.

Beulah

Coal Country Community Health Center
Dawn Berg
701.873.7788
dawnberg@westriv.com
Nurse practitioner, ultrasound technician, psychiatrist

Bismarck

Mid-Dakota Clinic
Mark Dordahl, CEO
701.530.6010
mdordahl@primedcare.org
Internal medicine

St. Alexius Medical Center
Carol Lindsey
701.530.7000
clindsey@primedcare.org
Neurologist, interventional cardiologist, rheumatologist, anesthesiologist

Bottineau

St. Andrew's Health Center
Jodi Atkinson, CEO
701.228.9300
jodia@standrewshealth.com
Family medicine, internal medicine

Bowman

Southwest Healthcare Services
Darroll Bertsch, CEO
701.523.3214
Family medicine, registered nurse, X-ray, paramedic

Cando

Towner County Medical Center
Jac McTaggart, CEO
701.968.4411
jacm@tcmedcenter.com
Family medicine, family medicine with obstetrics, internal medicine, X-ray

Devils Lake

Altru Health System
Kerri Hjelmstad
701.780.6596
khjelmstad@altru.org
Family medicine, family medicine with obstetrics, internal medicine, pediatrics

Dickinson

Great Plains
Mark Grove, Administrator
701.483.6017
markgrove@greatplainsclinic.com
Family medicine, family medicine with obstetrics, pediatrics, podiatry

St. Joseph's Hospital

Christina Anthony
701.456.4000
Nurse practitioner, physician assistant, registered nurse, licensed practical nurse

Elgin

Jacobson Memorial Hospital Care Center
Jim Opdahl, Administrator
701.584.2792
fhg@bis.midco.net
Registered nurse, licensed practical nurse

Fargo

Innovis Health
Connie Long
1.800.882.7310
clong@innovishealth.com
Family medicine, family medicine with obstetrics, internal medicine, nurse practitioner, physician assistant

Fargo, continued

MeritCare
Jill Gilleshamer, Recruitment Manager
701.234.2151
jillgilleshamer@meritcare.com

Family medicine, family medicine with obstetrics, internal medicine, nurse practitioner, physician assistant, pediatrics, obstetrics, registered nurse, licensed practical nurse, physical therapy, X-ray, emergency room, perinatal, ortho surgery, neonatology, peds intensivist, allergy, dermatology, endocrinology, gastroenterology, neurology, ophthalmology, psychiatrist, pulmonary

Innovis Health in Fargo

welcomes new doctors Suima Aryal, MD, family medicine; Lisa Jamsa, MD, family medicine; and Fady Nasrallah, MD, general surgery.

Grand Forks

Altru Health System
Kerri Hjelmstad or Jennifer Semling
701.780.6596; 701.780.6607 or
1.800.437.5373
khjelmstad@altru.org;
jsemling@altru.org
Family medicine, internal medicine, pediatrics

Harvey

St. Aloisius Medical Center
Rocky Zastoupil, President/CEO
701.324.4651 rockyz@staloisius.com
Internal medicine

Hazen

Sakakawea Medical Center
Jim Marshall
701.748.7240
jmarshall@sakmedcenter.org
Family medicine, general surgery, nurse practitioner

Hettinger

West River Health Services
Jim Long, CEO
701.567.4561 jiml@wrhs.com
General surgeon, internal medicine, family medicine

Kenmare

Trinity Health
Shawn Smothers
701.385.4296
shawn.smothers@trinityhealth.org
Family medicine, internal medicine,
nurse practitioner, registered nurse,
licensed practical nurse

Linton

Linton Hospital
Roger Unger, Administrator
701.254.4511
administrator@lintonhospital.com
X-ray, medical technologist

Mayville

MeritCare Clinic
Mark Duncan
701.786.4550
markduncan@meritcare.com
Family medicine

McVille

Nelson County Health System
Cathy Swenson, Administrator
701.322.4328 cswenson@gondtc.com
Family medicine, registered nurse

Minot

St. Alexius Clinic
Carol Lindsey, Recruitment
701.530.7172
clindsey@primeicare.org
Family medicine, internal medicine

Oakes

Southeast Medical Center
Theresa (Terri) Kelly, Administrator
701.742.4113 terri@semed.com
Family medicine, internal medicine

Park River

First Care Health Center
Louise Dryburgh, CEO
701.284.7500
louise.dryburgh@1stcarehc.com
Family medicine

Rolla

Rolla Clinic
June Banse, Clinic Manager
701.477.3111 (ext. 9)
rolclin@utma.com
Family medicine, nurse practitioner,
physician assistant

Rugby

Johnson Clinic
Bonnie Mattern
701.776.5235 bonniehr@gondtc.com
Family medicine, internal medicine

Tioga

Tioga Medical Center
Randall Pederson
701.664.3305
randyp@tiogahealth.org
Family medicine, internal medicine

Valley City

MeritCare
Linda Lane, Clinic Manager
701.845.6122
lindalane@meritcare.com
Family medicine

Wishek

Wishek Community Hospital & Clinic
Trina Schilling, CEO
701.452.2326
trinas@wisheskhospital.com
Family medicine, internal medicine,
nurse practitioner, X-ray, laboratory
technician

**SCREAM
GREEN**

**HOME
COMING
2009**

SAVE THE DATE FOR HOMECOMING 2009 | SEPT. 28 – OCT. 3
FOR MORE INFORMATION ABOUT HOMECOMING EVENTS GO TO WWW.UNDALUMNI.ORG

UND ALUMNI
ASSOCIATION

'00s



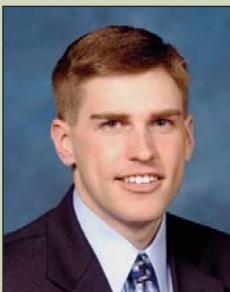
Nichol Jurgens-Dinius, MPT '01, joined Medcenter One Occupational Health Clinic in Dickinson. As a physical therapist, Jurgens-Dinius evaluates and treats work-related injuries and oversees patient rehabilitation. She also performs pre-placement testing, pre-injury screening, functional capacity assessments, work-conditioning programs, job site analysis and ergonomic assessments.



Grant Seeger, MD '04, joined Altru Cancer Center as a radiation oncologist. Seeger is a member of the American Medical Association and is board-certified by the American College of Radiology.



Stefanie Gefroh, MD '00, joined the Southeast Medical Center (SEMC). Gefroh is a specialist in obstetrics and gynecology. Prior to joining SEMC, she was a staff physician at Innovis Health in Fargo.



John Hoyt, MD '07, has been accepted into the cardiovascular training program at the University of Michigan. Hoyt will begin his training in July 2010.

Jodi Henrikson, MD '00, has joined Northern Valley Obstetrics and Gynecology, Grand Forks, in conjunction with Towner County Medical Center, Devils Lake. Henrikson specializes in high risk obstetrics, infertility, laparoscopy, interstitial cystitis and evaluation and treatment of incontinence and prolapse. Henrikson is a native of Perth, ND, and said "he is excited to provide services in the area."



Chad Vandrovec, MD '02, anesthesiology, has joined MeritCare, Fargo. He completed his residency in anesthesiology and his fellowship in pediatric anesthesiology at the Medical College of Wisconsin, Milwaukee. Prior to joining MeritCare, Vandrovec practiced at the Children's Hospital of Wisconsin, Milwaukee. He is board-certified in anesthesiology.



Sara Knutson Vandrovec, MD '03, anesthesiology, recently joined MeritCare, Fargo. Vandrovec is board certified in anesthesiology. Prior to joining MeritCare, Vandrovec completed her residency in anesthesiology and fellowship in pain medicine at the Medical College of Wisconsin, Milwaukee.

'90s

John Tate, MD '91, has joined Lake Region Healthcare in Fergus Falls, Minn. He formerly worked as a hematologist and medical oncologist and was a medical oncology consultant for the Cancer Risk Assessment program at MeritCare Roger Maris Cancer Center in Fargo. Tate also serves as a clinical associate professor for the UND medical school.

Robin Haaland, MD '92, a pediatric psychiatrist at Medcenter One, Bismarck, was recently recertified in general psychiatry by the American Board of Psychiatry and Neurology, Inc. Haaland has been board-certified in general psychiatry and child and adolescent psychiatry since 1999.

Dawn Mattern, MD '97, a sports medicine and orthopedics specialist at Trinity Health in Minot led an "Exercise is Medicine" initiative in Minot, including "Doc Walks" and presentations on the benefits of exercise.



Jon Dangerfield, MD '92, an obstetrician and gynecologist at MeritCare in Fargo, recently performed North Dakota's first robotic hysterectomy using the da Vinci Surgical System.

"The patient benefits of this technique are significant, including a markedly shortened hospital stay, shortened recovery time, less blood loss and reduced rate of infection," said Dangerfield.



Michael Schmit, MD '99, (Surgery Res. '04) a specialist in general and vascular surgery with Mid Dakota Clinic, Bismarck, performed the first "sleeve gastrectomy" in North Dakota last year. This surgery generates weight loss solely through gastric restriction (reduced stomach volume). The stomach is restricted by dividing it vertically and removing

more than 85 percent of it; however, it still functions normally, so most food items can be consumed in small amounts.

—'70s—



Brad Meland, MD '79, recently joined Truyu Aesthetic Center in Grand Forks. Meland has 22 years of experience and is a member of over 18 organizations, including the American Society of Plastic and Reconstructive Surgery.

—'60s—



David Baumgardner, MD (BS Med. '68), an internal medicine specialist, joined the staff at Southeast Medical Center (SEMC) in Oakes, N.D. Prior to joining SEMC he practiced medicine at MeritCare in Fargo for 15 years. Baumgardner received MeritCare's Outstanding Physician and Teacher of the Year award in 1990 and the University of North Dakota's Internal Medicine Outstanding Clinical Instructor of the Year in 1980.

IN MEMORIAM

Robert Brandenburg (BS Med. '43), 90, died June 5, 2009, in Friendship Village, Bloomington, Minn.

Robert Brandenburg was born in Lakota, N.D., Aug. 5, 1918, to Edith and Dr. Tunis Brandenburg. He graduated from North Dakota State University, which gave him its Alumni Achievement Award in 1972, and the University of North Dakota Medical School. He completed his medical education at the University of Pennsylvania Medical School. Dr. Brandenburg met his future wife, Jean, a nurse, while he was interning at Presbyterian Hospital in Philadelphia.

During his Army Air Force service in World War II, he and Jean were married. They settled in Rochester, where Dr. Brandenburg completed a residency in cardiology at the Mayo Clinic and was asked to join the staff. He went on to become chairman of the cardiology department at Mayo Clinic. Later, he served as president of the American College of Cardiology. The ACC gave Dr. Brandenburg its Distinguished Fellowship Award in 1988. A year earlier, Dr. Brandenburg co-authored "Cardiology: Fundamentals and Practice."

Following his retirement from Mayo Clinic in 1984, the Brandenburgs moved to Green Valley, Ariz., where Brandenburg taught at the University of Arizona Medical School and was a consulting physician at the Tucson VA Hospital until he was 81, served as president of the Green Valley chapter of the American Heart Association, wrote a cardiovascular disease column for the *Green Valley News*, and was active in the Rotary Club. They moved back to Minnesota in 2002. Brandenburg is survived by his wife of 64 years, Jean; a daughter, Carol; sons Rick, Scott and Mark; and nine grandchildren.

R. J. Rutten MD (BS Med. '52) died January 6, 2009. Rutten was a leader in the local medical community and served as the Goleta Valley Community Hospital's first chief of staff. Ruben John "Jack" Rutten was born in Devils Lake, N.D., on March 2, 1927 and grew up in Langdon, N.D. Rutten left high school early to serve in the United States Navy at the end of WW II and later went back to serve in the Korean War. He attended the University of California, Los Angeles in 1947. He graduated from the University of North Dakota in 1951 with a physics degree. He married his high school sweetheart, Laura Mae Crockett, on August 20, 1950, and they moved to Oregon so Rutten could begin medical school at the University of Portland. In 1953 they moved to San Diego, Calif., where he fulfilled his internship at Balboa Hospital.

They moved to Goleta, Calif., in 1955, where he became Goleta's first general practitioner. Rutten served as president of the Goleta Lions Club and was their bulletin editor for 30 years. He served on the board of directors for the Goleta Valley Cottage Hospital and the Santa Barbara Cottage Hospital's Board of Trustees and maintained privileges at both of these hospitals as well as Saint Francis hospital in Santa Barbara. In 1971, Jack left his private

practice in Goleta and joined the Santa Barbara Medical Clinic.

In 1976 he took a two-year tour of duty as a regional medical officer based in Tehran, Iran, traveling to Afghanistan, Sri-Lanka, Bangladesh, India, and Pakistan. He and Laura renewed consecutive two-year commitments, and together they served in similar posts in Panama, Alice Springs, Australia, and finally in Kinshasa, Zaire, before returning to Goleta in 1987. Jack semi-retired then and once again became immersed in community service and part-time substitution for practicing physicians in northern Santa Barbara County.

Jack was bestowed the honor of the Goleta Valley Man of the Year in 1992. He served as a docent at the Stow House in Goleta, as president of the Goleta Valley Historical Society and the Goleta Valley Chamber of Commerce, and as a delegate for Santa Barbara County to the California Medical Association. He donated his time to many organizations over the years, including the Recording for the Blind & Dyslexic, Santa Barbara County Vector Control, and was a second baseman for the Goleta Lions All-Thumbs softball team for many years.

Jack is survived by his wife of 58 years, Laura Mae, and their sons, Randy J. Rutten (wife, Kathleen, daughter, Kiana, and son, Aaron, and great-grandson, Landon) and Raul Rutten (wife, Maya, son, Helek and daughter, Ila), and sister, Nora Johnson, as well as many nieces, nephews, cousins and their families.

Nancy Teigland (BS Med. Tech. '63), 67, of rural Oklee, Minn. died October 3, 2008.

Nancy Annette Stucy was born on September 12, 1941 to Malcolm and Opal (Halvorson) Stucy in Thief River Falls, Minn. She grew up on a farm near Oklee and graduated from Goodridge High School in 1959. She attended Bethany Lutheran Junior College and earned her bachelor's degree from the University of North Dakota in 1963.

On February 23, 1963, Nancy married Carl Gene Teigland of Grygla, Minn., and after briefly living in East Grand Forks, Minn., they moved to Minneapolis, where they lived for nearly forty years. To this union were born Daniel Gene (1963) and Debra Nell (1966). Nancy enjoyed a twenty-nine year career as a medical technologist: first at St. Barnabas Hospital, which became MMC-Mt. Sinai Hospital, from 1964 to 1990, then at the University of Minnesota Hospital's Coagulation Lab until 1993. In 2002, Nancy and Gene moved to the Stucy home farm in rural Oklee to enjoy their retirement.

Nancy is survived by her husband Carl Gene, Oklee, Minn., her children, Daniel Teigland of Houston, Texas, daughter Debra (Matt) Haglind, Eagan, Minn., her granddaughters Kristen Haglind and Kathryn Haglind, and sister Faye (Carl) Johnson, Chico, Calif., also by sisters-in-law Marian (Clayton) Ostby, Doris Smeby, Carole Teigland, Mavis (Robert) Smeby, Gloria (Richard) Ness, and Carol

(Andy) Wells, by brothers-in-law Glenn (Donna) Teigland and Sheldon (Lucy) Teigland; and by many nieces and nephews.

Nancy Jones (BSOT '65), 66, of Wenatchee, Wash., died November 20, 2008. An occupational therapist, Jones had lived in Wenatchee for nine years.

Stuart H. Myster MD (BS Med. '65), 68, of Corpus Christi, Texas, died March 20, 2008. A native of Bismarck, N.D., he was a graduate of Bismarck High School. Myster continued his education at San Diego State University, the University of North Dakota, and the University of Pennsylvania medical school. He served in the Navy Medical Corps for twenty years as a physician, retiring as captain. During his military career, he worked in California, Japan, and Washington, retiring from the military in 1987. Myster worked as a civilian pathologist in Washington, Texas, and finally Sterling, Ill.

Bonnie Stjern (BSOT '70), 61, of Anoka, Minn., died May 30, 2008. She was born October 13, 1946, to Edward and Mary Bertha Fischer and married James Stjern. She had worked as an occupational therapist in the Anoka-Hennepin School District since 1989.

Stjern is survived by her husband Jim, son Eric (Heather), grandsons Travis and Adam Stjern, brothers John (Mary) Fischer, Joseph (Joann) Fischer, Thomas (Wendy) Fischer and Daniel (Pam) Fischer along with nieces and nephews.

Save the Date!



April 13-15



2010 Dakota Conference on Rural and Public Health



Health Care in Transition: Creative Strategies

www.ruralhealth.und.edu/dakotaconference



Alerus Center
Grand Forks, ND

Lodging Reservations: **Canad Inns Grand Forks**
1-888-33CANAD (22623)
www.canadinns.com/grandforks/

Please complete the conference planning survey at the conference website: <http://ruralhealth.und.edu/dakotaconference/>



Annual gifts of any amount are increasingly important to help **move UND from great to exceptional**. When you give – and give again every year – you assure the School of Medicine & Health Sciences the ability to respond to immediate needs and opportunities.

With **annual gifts**, the School of Medicine & Health Sciences is able to award more scholarships to students; provide supplemental funds to its faculty to enrich the classroom experiences; enhance academic programs; and make necessary facility improvements.

Give now at www.undfoundation.org
or contact Dave Miedema, Director of Development,
School of Medicine & Health Sciences at
701.777.4933 or davem@undfoundation.org.

UNIVERSITY OF NORTH DAKOTA
FOUNDATION



In July, 90 Native American students from across the United States completed the Indians Into Medicine (INMED) Summer Institute, a six-week program designed to enhance their potential for success in health careers. Seventh- through 12th-grade students can take part in the program, which has been offered for more than 35 years.



Second-year physical therapy student Jeff Middleton, with wife Dee Dee and daughter Abigail, participated in the Physical Therapy Department's "Entrance into Professional Service" ceremony in July. An Air Force veteran, Middleton started clinicals this fall in Grand Forks and plans to reenlist after graduating in May 2011.



UND interdisciplinary studies/pre-dentistry senior Nathan Burbach, Minot, N.D., constructs mutations in the human serotonin transporter, and studies their effects on ion-coupled transport in the UND Pharmacology, Physiology and Therapeutics lab. Burbach took part in Research Experiences for UND Undergraduates (REFUNDU), a summer research experience for UND undergraduates.



Joining former Dean H. David Wilson, MD, at his June farewell reception were (from left) granddaughter Madeline Fish, Lexington, Ky.; daughter Jackie Wilson, Louisville, Ky.; granddaughter Katherine Fish, Lexington, Ky.; fiancée Jan Nyflot, Thief River Falls, Minn.; and daughter Jennifer Fish, Lexington, Ky.



University of North Dakota School of Medicine and Health Sciences
A National Leader in Rural Health—Serving North Dakota since 1905
501 North Columbia Road Stop 9037 • Grand Forks ND • 58202-9037
701-777-4305 www.med.und.edu

Periodical POSTAGE PAID

ADDRESS SERVICE REQUESTED



A young woman with blonde hair tied back, wearing a white lab coat, looks thoughtfully off-camera. She is positioned in front of a row of bookshelves in a library or study area. The background is slightly blurred, showing more bookshelves and a window.

Ashley Davis, a senior in neuroscience at Westminster College in Salt Lake City, Utah, spent her summer in the UND Pharmacology, Physiology and Therapeutics lab studying serotonin transporters. Davis is at UND through the Research Experiences for Undergraduates (REU) program, which supports active research participation by undergraduate students.

UND The University of North Dakota