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# NORTH DAKOTA MEDICINE

THE UNIVERSITY OF NORTH DAKOTA SCHOOL OF MEDICINE & HEALTH SCIENCES

A close-up photograph showing an elderly person's wrinkled hand being gently held and supported by a younger person's smoother hand. The hands are resting on a dark surface, possibly a table. The lighting is soft, highlighting the texture of the skin.

## Bridging the Healthcare Generation Gap

**Parkinson's Disease Research**

**Brushing Up on Dental Care in North Dakota**

**Rural Surgery Support Program**

**UND** SCHOOL OF MEDICINE  
& HEALTH SCIENCES  
UNIVERSITY OF NORTH DAKOTA 



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Dr. and Mrs. Kyle, thank you so much for your donation to the UND Medical Laboratory Science Program. The digital slides and other equipment have revolutionized learning in the lab.

—Stephanie Gellner, third-year student  
Langdon, N.Dak., native

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# NORTH DAKOTA MEDICINE

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### UNIVERSITY OF NORTH DAKOTA SCHOOL OF MEDICINE AND HEALTH SCIENCES

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# Philanthropy and



My “Dean’s Letter” in the last edition of *North Dakota Medicine* (Holiday 2014) stressed the importance of philanthropy in reducing educational debt, which can be substantial for medical, graduate, and health sciences students. Mitigating student debt is the School’s highest philanthropic priority. Other benefits of enhanced giving include supporting named professorships and endowed chairs that are of great help as we compete for faculty recruits on a national stage; additionally, other philanthropic dollars are directed at programmatic support and program development. So how are we doing in growing the School’s philanthropic giving base? Actually, we are making good progress. One of the more gratifying recent manifestations of this is the fall—that is, the improvement—in the School’s percentile ranking of average medical student debt when compared with other medical schools. In one short year, the cumulative debt of our medical students plummeted from the 75th percentile to the 50th; that is, the debt burden of our students was as much or more than the debt level at 75 percent of the medical schools in the United States, and it improved so that it currently is the same or less than that at half the schools. And we aim to do better. This impressive improvement is substantially the result of an increase in scholarships awarded by the School made possible by increased giving by our generous benefactors.

Philanthropy also has helped us recruit several top-notch educators and researchers to the School. Jau-Shin Lou, MD, PhD, MBA, a prominent neurologist, was named the founding chair of the Dr. Roger Gilbertson Endowed Chair of Neurology at the University of North

Dakota School of Medicine and Health Sciences, and joined us about a year ago. Dr. Lou came to us from the Department of Neurology at the Oregon Health and Science University School of Medicine. And joining us this year is Donald Jurivich, DO, who has been named the founding Eva L. Gilbertson, MD, Distinguished Chair of Geriatrics at the University of North Dakota School of Medicine and Health Sciences. He is a nationally known and respected clinician who has conducted extensive research on aging and age-related diseases and their treatment. Since 1997, Don was the Vitoux Endowed Chair and Associate Professor of Geriatric Medicine as well as chief of the Division of Geriatric Medicine at the University of Illinois

College of Medicine at Chicago. He also was chief of Geriatric Medicine at the Jesse Brown Veterans Affairs Medical Center in Chicago. And it is a pleasure to announce the recruitment of Gary Schwartz, PhD, MPH, PhD, to head the School’s new Department of Population Health.

It is with mixed emotions I announce the retirements of Drs. Julie Blehm and William Newman. Why mixed emotions? Because I and the School will miss the many talents and contributions of Julie and Bill, while at the same time I respect their decisions to do what they really want to do in the next phases of their lives. Dr. Blehm has served as the School’s Southeast (Fargo) Campus dean since October 2007. She learned medicine at the SMHS, provided superior care for countless patients through her many years of dedicated practice, and was honored to have the privilege and pleasure of conveying to students and residents the healing art and science of medicine.

Dr. Newman has functioned as assistant dean for Veterans Affairs since July of 1998 as well as professor and chair

“Mitigating student debt is the School’s highest philanthropic priority.”

# Public Support

of the Department of Internal Medicine since November 2003. He has decided to retire from those positions so that he can devote all of his time to patient care, to teach UND SMHS students and residents, as well as to conduct clinical research projects at the Veterans Affairs Medical Center in Fargo.

We realize that you never can replace the talent of these two valued faculty members and leaders, but the School has searches underway to identify individuals who can apply their unique abilities in assuming the positions.

And while philanthropy is critically important as a major component of our recruitment strategy, the bedrock of the School's overall financial underpinnings is the strong support we get from the people of North Dakota (mainly through legislatively directed appropriated dollars and to a limited degree from a one-mill property tax levy). We derive about a third of our annual budget of \$100 million from state support; that is a higher fraction than almost any other medical school in the United States. So we follow the developments in the current 64th Legislative Assembly closely, since we are so critically dependent on state support. And while we won't know the final, official budget numbers until May, thus far we are very pleased with how things are progressing. The Healthcare Workforce Initiative continues to be fully funded at the level that we have requested. Importantly, the amount of funding that we requested for the upcoming biennium is exactly what we said we'd need when we first proposed it during the last legislative session. Assuming that there are no surprises coming down the road, we continue to be gratified by the extraordinary level of support that the Legislature has demonstrated. The School's leadership team works hard each and every day to justify the phenomenal confidence that the Legislature has vested in us.

Perhaps the most dramatic manifestation of that confidence and support is the new SMHS building that rapidly is rising at the corner of North Columbia Road and Gateway Drive in Grand Forks. We now are a mere year away from the opening of the building, and the project continues to be on time—and on budget! PCL Construction, our construction manager at risk, puts a priority on worksite safety, and we've now gone over 100,000 worker-hours without a single lost day from employee injury. That—along with the project being on time and on budget—are remarkable accomplishments. But the real payoff will occur when we start using the building and reaping the benefits of the many state-of-the-art features that have been incorporated into the new facility. It's going to be fantastic!



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

“  
The bedrock of the  
School's overall financial  
underpinnings is the  
**strong support** we get  
from the people  
of **North Dakota**.  
”

## UND scientists prove Lyme disease is in Grand Forks County

University of North Dakota scientists warn that all of the variables for contracting Lyme disease are now present and established in Grand Forks County. Although eastern North Dakota borders Minnesota counties where the risk of contracting the tick-borne Lyme disease is moderate to high based on confirmed human cases, few studies have been done on the migration of the disease farther west.

Lyme disease is the most common tick-borne illness of humans in the United States, causing an estimated 300,000 cases per year. Lyme disease is a debilitating and significant public health problem that can result in arthritis, heart problems, and neurological impairment and disability. While Lyme disease can be treated effectively with antibiotics, some people continue to suffer with pain, fatigue, and memory problems called post-treatment Lyme disease syndrome.

Now, a joint research team, led by Professor Jefferson Vaughan, PhD, from the UND Department of Biology, and Assistant Professor Catherine Brissette, PhD, a biomedical scientist in the Department of Basic Sciences at the University of North Dakota School of Medicine and Health Sciences, reports they have verified that Lyme disease has spread to Grand Forks County.

Brissette's laboratory works on the causative agent of Lyme disease, the bacterium *Borrelia burgdorferi*. The full article is available at <http://tinyurl.com/m6kewgc>.



Catherine Brissette

## Department of Occupational Therapy garners Community Engagement Award

The Annual Civic Engagement Awards were presented at the Stone Soup Awards Program and Reception hosted by the Center for Community Engagement on November 20 at the Gorecki Alumni Center. The awards recognize excellence in community partnerships, service learning, and community-based research.

The Department of Occupational Therapy received the Engaged Department Award. The award recognized the partnership role Occupational Therapy (OT) participated in with Global Friends Coalition, a local nonprofit helping new Americans in the Greater Grand Forks Community. OT students helped with job-readiness skills. In keeping with the goal of OT, students helped new Americans in other valued occupations such as home management, cooking, shopping, participating in the community, accessing the library, and becoming an active part of the Grand Forks community.

The Department of Occupational Therapy started their effort last spring through the Department's OT 451 Multicultural Competency course that was taught by Associate Professor and Chair Janet S. Jedlicka, PhD, OTR/L, FAOTA; and

Associate Professor LaVonne Fox, PhD, OTR/L. The work of students in the course was further expanded by Assistant Professor Sarah Nielsen, PhD, OTR/L; Associate Professor Deb Hanson, PhD, OTR/L; Instructor Cherie Graves, MOT, OTR/L; and Dr. Fox to serve as a level I fieldwork site for the program's curriculum. In August of 2014, Global Friends Coalition and the Occupational Therapy Department entered into a clinical affiliation agreement. Developing the agreement took a team effort on the part of the OT faculty. The experience working with new Americans has helped students develop more confidence and the ability to adapt interventions to more effectively work with clients from various cultures.

Cynthia Shabb, executive director of the Global Friends Coalition wrote the nomination letter. Occupational therapy is about preventing "occupational deprivation." Many new Americans are deprived of the work or career or job that they once knew in their own countries. According to Shabb, "OT students help to ease the transition so that new Americans can gain the skills they need to thrive."

## UND medical students receive scholarships for 2014–2015

A total of \$371,705 in scholarships has been awarded to 135 medical students at the University of North Dakota School of Medicine and Health Sciences for the 2014–2015 academic year. Funds for the scholarships come from various private sources, endowments and scholarship funds.

For a complete list of scholarship recipients and their scholarships, please read more online at <http://tinyurl.com/n3mpmjk>.



## UND scientists garner second top-level NIH grant to study HIV-1/AIDS neurological complications

In a time of reduced research funding, the National Institutes of Health granted \$1.45 million to Chester Fritz Distinguished Professor Jonathan Geiger, PhD, and his colleague and collaborator Assistant Professor Xuesong Chen, MD, PhD, in the Department of Basic Sciences at the University of North Dakota School of Medicine and Health Sciences. This is the second, five-year R01 grant—the NIH’s top-ranking—awarded to Geiger and Chen in the last half of 2014. The grant from the NIH’s National Institute of Mental Health funds research on novel mechanisms that regulate intracellular levels of calcium and how drugs used to treat HIV-1 infection affect these levels of calcium and interact with HIV-1 proteins to affect the mechanisms that control the levels of calcium inside of neurons.

In August 2014, the Geiger and Chen laboratory received a \$1.6 million 5-year NIH R01 grant for similar work that was focused on the effects of HIV-1 proteins on intraneuronal calcium control mechanisms. The novelty of both applications was recognized by the NIH grant review study section members. Geiger and Chen’s unique insights and approaches resulted in their receiving these two R01 grants in one year.

“This is a huge achievement because it is so hard to get even one NIH R01 grant, let alone two,” said Malak Kotb, PhD, the chair of the Department of Basic Sciences at the UND SMHS.

A part of the U.S. Department of Health and Human Services, the NIH is the nation’s medical research agency. The



Jonathan Geiger



Xuesong Chen

NIH is the largest source of funding for medical research in the world. The mission of the NIH is to seek fundamental knowledge about the nature and behavior of living systems and the application of that knowledge to enhance health, lengthen life, and reduce illness and disability.

“This further distinguishes Drs. Geiger and Chen from most other researchers because only the top 10 percent of grants are currently being funded by the NIH,” said Joshua Wynne, MD, MBA, MPH, UND vice president for health affairs and dean of the UND School of Medicine and Health Sciences. “To receive two such grants probably puts them in the top 2 percent nationally.”

Geiger and Chen are currently the only faculty members at UND that hold two NIH R01 grants.

The full article is available online at <http://tinyurl.com/pq5753v>.

## UND Physician Assistant Program presented new class with white coats



Jeanie McHugo

Thirty-three health professionals began the clinical portion of their studies in January to earn the Master of Physician Assistant Studies degree at the University of North Dakota School of Medicine and Health Sciences.

The White Coat Ceremony was held on Friday, Jan. 16, in the Reed T. Keller Auditorium at the UND School of Medicine and Health Sciences. Kate Larson, PA-C, presented the keynote address, focusing on the role of the physician assistant in primary care. Larson, a UND PA alumna of the Class of 1995, is a practicing primary care physician assistant in Garrison, N.Dak. She also serves as treasurer for the North Dakota Board of Medical Examiners. Welcome remarks were given by SMHS Senior Associate Dean for Education Gwen W. Halaas, MD, MBA; and Wayne Swisher, PhD, interim dean of the UND School of Graduate Studies.

“The presentation of the white coat is symbolic of the new profession the students are entering,” said Department Chair Jeanie McHugo, PhD. The coats will be worn by students through the clinical phase of their training and denote their involvement with the Physician Assistant Program at UND.

The individuals in this class come from a wide variety of

professional healthcare disciplines, which through class interaction will strengthen each student’s ability to return to his or her rural clinical site as a well-rounded primary care provider.

The PA Program admits health professionals who have years of experience working as nurses, respiratory therapists, radiology technologists, paramedics, military healthcare providers and related professions. This group averages nine years of previous professional healthcare experience upon matriculation into the program.

Enrolled students come from throughout the United States, from Idaho to Florida, but this particular class is very regional, with almost 50 percent of the students from the tristate area of North Dakota, South Dakota and Minnesota. Students range in age from 26 to 52 years, with an average age of 35; the class includes 18 men and 15 women.

The students have completed their first two semesters of basic sciences and spent their first four weeks in Grand Forks before returning to their home communities, where most of their training will take place under the supervision of physician and physician assistant preceptors. Over the next 18 months, they will return to UND for several weeks at different junctures for education and training.

For a list of students and their hometowns, please read the full article online at <http://tinyurl.com/n9b7tnw>.

## Chelsey Luger named Native Nation Rebuilder



Chelsey Luger

The Bush Foundation's Native Nation Rebuilders Program named its Rebuilders for 2015. Chelsey Luger of Grand Forks was named among these Rebuilders. Luger is a project coordinator for the Seven Generations Center of Excellence within the Center for Rural Health at the University of North Dakota School of Medicine and Health Sciences.

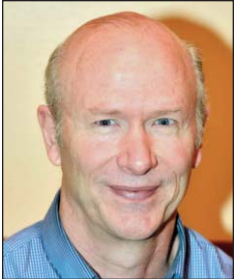
Each year, the Bush Foundation selects a cohort of approximately 30 Rebuilders to participate in a

two-year program. This is the sixth cohort of Rebuilders. In the first year, the Bush Foundation and its partner, the Native

Nations Institute, provide access to ideas and information, expanded networks, leadership training, and other resources for nation building. In the second year, Rebuilders use the tools and skills to implement action plans in which they engage in practical nation-building projects within their communities. Rebuilders are chosen through a selection committee composed of individuals with expertise in nation building. The committee evaluates each Rebuilder candidate according to his or her commitment to Native self-governance, knowledge of the issues facing his or her nation, and potential to help his or her nation.

Luger is an advocate for indigenous health and wellness. She is Ojibwe (Turtle Mountain Band of Chippewa) and Lakota (Standing Rock Sioux Tribe and Cheyenne River Sioux Tribe). Luger grew up in Fort Yates and Grand Forks, North Dakota. She has a BA in Native American studies and history from Dartmouth College, and her master's in journalism from Columbia University. She is currently working on designing an information source and online community for young Native people who are committed to decolonizing foods and indigenizing fitness.

## Garrett new editor of the Americas and Japan for *Toxicology Letters*



Scott Garrett

Associate Professor Scott Garrett, PhD, in the Department of Pathology, was recently chosen to be the editor of the Americas and Japan for the journal *Toxicology Letters*, published by Elsevier. This journal has a total of three co-editors-in-chief, handles over 1,000 submissions, publishes just over 300 papers per year, has an Impact Factor of 3.355, and is the official journal of EUROTOX (Federation of European

Toxicologists & European Societies of Toxicology).

*Toxicology Letters* serves as a multidisciplinary forum for research in toxicology, an aspect of Garrett's research that involves the toxicology of arsenic and cadmium. The journal's audience consists of toxicologists, pharmacologists, cancer researchers, and epidemiologists. The prime aim is the rapid publication of research studies that are novel and advance the understanding of a broad range of topics in toxicology from clinical, occupational, and safety evaluation to legal, risk, and hazard assessment, with an enhanced focus on mechanisms of mammalian toxicology. The journal also publishes mini-reviews, editorials, commentaries, and contemporary issues in toxicology.

## Children in Grades Five and Six invited to participate in Science Day at UND School of Medicine and Health Sciences

All students in Grades Five and Six are invited to "Science Day" on Saturday, May 2, at the University of North Dakota School of Medicine and Health Sciences in Grand Forks.



The free event features hands-on learning experiences organized by medical students. Science Day is designed to stimulate children's interest in science. Children will conduct science projects and learn about human anatomy and various health issues, such as the dangers of tobacco use, among other topics.

Two sessions, morning (9 a.m.–noon) and afternoon (1–4 p.m.) will be offered.

The event is FREE. Parents are welcome, but they are not required to attend since medical students supervise all events. For more information and a registration form, visit <http://med.und.edu/events/science-day.pdf> or call (701) 777-4305.



## UND Master of Public Health students receive training awards



Kalee Werner, Michael Dulitz, and Gaurav Mehta

Three University of North Dakota Master of Public Health students received stipend awards from the Rocky Mountain Public Health Training Center for projects they will be completing this spring. The MPH Program is part of the UND School of Medicine and Health Sciences.

Each of the students received a stipend of \$1,500 that supports field placements and collaborative learning projects. The UND students, among 20 from several other colleges in the region, were selected because they proposed projects in rural areas, work with underserved populations, or work to support tribal health on a reservation or urban Indian health. Students receive an initial \$1,000 and the remaining \$500 in July, following the submission of a brief final report describing their field placement. The UND recipients are the following students:

Michael Dulitz, from Webster, S.Dak., will organize and help with cooperative learning and sharing sessions to assist with the implementation of electronic health records in the eight local public health units that make up the Northeast North Dakota Public Health Collaboration.

Gaurav Mehta, a physician from Mumbai, India, will be performing clinical outcomes research with data from Native Americans regarding vascular surgery and amputation rates.

Kalee Werner, from Bismarck, N.Dak., will be implementing an exercise and diet intervention among pregnant women in Grand Forks.

The full article is available online at <http://tinyurl.com/po2obgx>.

## Johnson appointed to national physical therapy commission



Beverly Johnson

Beverly Johnson, PT, DSc, GCS, CEEAA, was recently appointed to the Commission on Accreditation in Physical Therapy Education (CAPTE) Physical Therapy Panel. Johnson is assistant director of clinical education and an associate professor in the Department of Physical Therapy at the University of North Dakota School of Medicine and Health Sciences.

The Commission on Accreditation in Physical Therapy Education is an accrediting agency that is nationally recognized by the U.S. Department of Education and the Council for Higher Education Accreditation. CAPTE grants specialized accreditation status to qualified entry-level education programs for physical therapists and physical therapist assistants.

Johnson serves on the PT Panel as the academic administrator. The commission is a group of 31 individuals with varied backgrounds who are charged with determining whether a program meets the standards of quality in physical therapy education, developing the evaluative criteria for quality, and setting policy and procedure for the physical therapy accreditation process. Members of the commission must have served as on-site reviewers to be eligible for appointment. Johnson has been an on-site visitor for physical therapist programs since 1997.

As a commissioner, Johnson reviews physical therapy education programs to assure the programs meet quality education standards developed by the commission.

“Dr. Johnson is recognized nationally as a leader in physical therapy clinical education,” said David Relling, PT, PhD, associate professor of physical therapy and chair of the Department of Physical Therapy at the UND School of Medicine and Health Sciences. “As a member of on-site review teams, Bev visited developing and established physical therapy programs. She employed substantial knowledge and skill in evaluating program policies, clinical experiences, and course content. Appointment to the commission is a great honor, recognizing Dr. Johnson’s dedicated and exceptional service to CAPTE and the physical therapy profession.”

# Bridging the Healthcare



# Generation Gap

By Juan Pedraza

The founding chairs of new departments at the SMHS will work to improve and extend care to all people and across all generations in North Dakota.

**D**onald Jurivich, DO, the recently named founding Eva L. Gilbertson, MD, Distinguished Chair of Geriatrics at the University of North Dakota School of Medicine and Health Sciences, is an avid reader—when he finds the time.

Quoting American poet T. S. Eliot and adjusting his tie for the photographer, the nationally known clinician and expert on the elderly chats easily about his vision for his new job in a brand new department at the SMHS.

“The key to an effective geriatric program is wide diversity of expertise,” said Jurivich. “You may even include, perhaps, a pediatrician, because of the aspects of grandparenting. Such partnerships are far-reaching in their contributions to the care of an older adult.”

Jurivich recollects a recent case where two social workers notified him about one of his senior citizen patients who was in crisis.

“They were part of a team that comanaged his case, and they alerted me that time,” he said. “Good teamwork like that is what really makes healthcare click—it’s all evidence-based, but it’s coming from people who really care and who are advocates for older patients. The point is to improve outcomes, and in the elderly, that means improving overall function.”

The challenge Jurivich see as a geriatrician is to encourage healthcare systems to take note of and care for older patients.

“I’ve seen many changes in geriatric care,” Jurivich said. “It’s a mosaic of wins and losses, with creative programs in some hospital systems, but regression in others.”

For example, a big metro health system may focus on patients with commercial insurance rather than Medicare—so they de-emphasize the older adult population, even though the population in their area is aging. Some other institution may focus on organ transplant patients and therefore doesn’t put any of its resources into geriatric care. However, some systems provide excellent geriatric care, supporting a broad range of programs that attend to the needs of older patients.

Jurivich would like to see geriatric medicine fully integrated into the healthcare system. He cites PACE (Program of All Inclusive Care of the Elderly), a federal program of all-inclusive care for geriatric patients under both Medicare and Medicaid (it works on a state-by-state basis, as locally approved), as an excellent example.

“It’s an effective social-support medical model merged together,” Jurivich said. “PACE programs thrive where there is good community support.”

Jurivich plans to teach.

“I’m looking to establish a new geriatric course for medical students,” he said. “One of the draws of the SMHS was its strong primary care footprint; that is where geriatrics needs to be, and I want to encourage the building of geriatric skills and knowledge among primary care practitioners. This also will encourage interdisciplinary team dynamics among physicians and other healthcare professionals.”

Jurivich plans to travel the state, visiting UND family practice centers and other healthcare facilities, to spread the word about UND’s new geriatric program.

Before joining UND, Jurivich held an endowed chair at the University of Illinois College of Medicine at Chicago; he also was chief of geriatric medicine at a VA center in Chicago. He has conducted extensive research on aging and age-related diseases and their treatment for many years

“Because North Dakota has above-average life expectancy, we are fortunate to have proportionately more senior citizens and elders than comparable states,” said Joshua Wynne, MD, MBA, MPH, UND vice president for health affairs and dean of the UND School of Medicine and Health Sciences. “The

recruitment of a national leader like Dr. Jurivich to lead the School’s geriatric program will help ensure that the care delivered in North Dakota will be the most advanced. He will play a critical role in shaping the future of healthcare delivery to the elderly in North Dakota.”

While earning his bachelor’s degree in biology at Harvard University, Jurivich was the founder of the school’s women’s track and field team at a time when opportunities were scarce for women collegiate athletes. He has consistently supported university programs for mentoring women in their academic journey to become senior faculty members. Jurivich earned his osteopathic medicine doctorate from the Midwestern University, Chicago College of Osteopathic Medicine. His residency training was completed in internal medicine at Rush Medical Center in Chicago and the Duke University Medical Center in Durham, N.C., where he also completed a fellowship in geriatric medicine. Jurivich is a Diplomate in Geriatric Medicine, which he earned from the American Board of

“  
One of the draws of the SMHS was its strong primary care footprint; that is where geriatrics needs to be, and I want to encourage the building of geriatric skills and knowledge among primary care practitioners.”  
”



Internal Medicine.

The Eva L. Gilbertson, MD, Distinguished Chair in Geriatrics was established through a generous investment by the Dr. Eva L. Gilbertson Foundation to support education and research in the field of geriatrics. Eva Gilbertson earned her Bachelor of Science in Medicine from the UND School of Medicine in 1939. She obtained her medical degree from Temple University in 1941. Gilbertson grew up on a small farm near Maddock, N.Dak. She was the only woman in her medical class at UND, the first woman to complete the radiology residency program at Mayo Clinic, and upon her graduation, the first female radiologist in the state of Washington. She passed away in 2007.

Donald Jurivich



**Gary Schwartz, PhD, MPH, PhD**

How are African Americans like Norwegians?

That's the kind of question that Gary Schwartz, the newly appointed chair of Population Health at the UND School of Medicine and Health Sciences, aims to ask.

"There are lots of answers floating around out there—what we don't have enough of are useful questions," said Schwartz, who started out his research career with a PhD in neuroscience studying monkeys. "Yes, I was a monkey psychologist."

But his driving curiosity about the right questions led him into the much broader field of inquiry, including a Master of Public Health degree and another PhD—this one in epidemiology.

To answer the first question, let's see what Schwartz, also an expert in prostate cancer, observed about Norwegians and African Americans.

"The highest rate of prostate cancer is among African Americans, then among Norwegians," said Schwartz, who likes to quote cultural figures such as British folk singer Sandy Denny and Spanish poet Antonio Machado.

"As an epidemiologist, I understood that a lot of what I do is a kind of reverse engineering," Schwartz said. "So what's the question in this case? How are African American men similar to Norwegian men? They don't look alike, they don't have the same genetics—but somehow they must be alike. The answer—both have very low levels of vitamin D."

Schwartz explains: African Americans have low vitamin D because black skin sucks up ultraviolet light, and African Americans have half the circulating vitamin D as whites. Norwegians have low levels of vitamin D because of the latitude where they live.

"You might say that African Americans are Norwegians all year long," Schwartz said. "The world is full of answers—what we need are the right questions."

Population health is like that, Schwartz explains. It's not about the pathophysiology of individual diseases, or, stated another way, how errors occur in an individual.

"To use an analogy, it's not about how structural damage in a car leads to an accident, it's about why drivers fall asleep at the wheel," Schwartz said. "Epidemiology—population health—is about asking *why*

Gary G. Schwartz



“  
Ask me in a couple of years  
where we’ve been,  
and I’ll tell you what  
**my vision** was.”

questions across populations instead of *how* questions about individuals.”

The textbook definition of epidemiology runs along these lines: it’s the study of the distribution and determinants of disease frequency in populations.


“Epidemiology often is seen as the basic science of public health,” said Schwartz, who also has researched the occurrence of ovarian cancer. “It’s a huge universe of specialties, from analysts to people who implement effective health interventions in order to improve disease outcomes.”

Schwartz, who has patented a couple of cancer screening tests, said he’ll also be working with medical students.

And when prompted for his vision about his new job, he said, paraphrasing a famous Machado line, “Ask me in a couple of years where we’ve been, and I’ll tell you

what my vision was.”

Schwartz’s research interest involves epidemiologic and translational studies (studies of screening and therapeutic trials) concerning the roles of vitamin D and related calcium-controlling hormones in the natural history of prostate cancer. His other interests include the investigation of cancers of unknown etiology (testicular and pancreatic cancer).

Schwartz will work collaboratively with faculty and institutional leaders to launch the Department of Population Health and to develop and provide oversight of the department’s programs in education, research, training, and service. As chair, he will work with the SMHS’s senior leadership team in helping to shape a population-based approach to healthcare delivery to North Dakotans. 

# Parkinson's Disease Research

An old technology may be the means to a new treatment to help alleviate one of the unseen effects of the disease.

By Juan Pedraza

A small medical device with a sci-fi name to match: transcranial direct current stimulation.

But this relatively simple technology—a hundred years old at least—is the latest proposed therapy to treat the “cognitive fatigue” in patients with Parkinson’s disease. It promises to improve the mental functioning of Parkinson’s sufferers who often must cope with significant impairment of mental functions such as learning and memory.

“We’re ready to undertake translational research with this technology,” said Jau-Shin Lou, MD, PhD, MBA, the founding Dr. Roger Gilbertson Endowed Chair of Neurology at the UND School of Medicine and Health Sciences, director of the School’s clinical neurology program, and a neurologist with Sanford Health in Fargo.

If proved effective—and Lou, who has been studying Parkinson’s for much of his combined clinical and research career, is confident it will—this technique will significantly improve the quality of life of patients with Parkinson’s, a neurodegenerative disease that affects about 1 million people in this country, with 60,000 new cases diagnosed annually.

“This is translational research because I’ve already laid the groundwork in earlier research in Oregon,” said Lou, who came to UND about a year ago. “This technology applies a very low current right into the brain—it’s well-behaved electricity, not shock therapy, which can be very painful.”

Another advantage of this proposed Parkinson’s therapy is that it can be stacked on top of drug therapies used to treat the other major manifestation of the disease: motor control issues such as tremors.

“The beauty of this treatment is that it’s very portable, about the size of a small camera; patients will be able to take this technology home with them,” Lou said.

Lou and his team are undertaking this

research because not much has been done before to address treatment for cognitive impairment in Parkinson’s.

“The cognitive impairment in Parkinson’s patients is at least as much of a problem as motor impairment, so we really need to address this issue,” Lou said.

There’s no question about the safety of the transcranial direct current stimulation: it’s already been approved by the Food and Drug Administration to treat patients with depression as an alternative to expensive drug therapies that all too often carry many unwanted side effects.

“The reason it’s safe is the current is generated by a 12-volt system delivering 1 milliamp of current; the patient feels a little buzz when it’s turned on, then nothing,” Lou said. “It basically nudges the modulation of the brain’s own electrical pattern.”

If it proves effective in the clinical research that Lou is planning, then he’ll make sure that clinicians across the state get training to use the device. He wants to get the community involved, too, by announcing the clinical trial and recruiting volunteers to engage in the research process.

It will be a randomized trial, with half the Parkinson’s patients getting the device with live current, and half getting the device with the current turned off.

Lou notes that, as with any research, there are two fundamental but distinctly different steps: framing the research question appropriately—the aim is to get a useful outcome—and getting the money to carry out the research.

“And what we’re focusing on with this proposed research project is cognitive fatigue in patients with Parkinson’s,” Lou said. “Mostly, we think about motion impairment, such as shaking, tremulous hands, walking slowly—that’s what we can see. But what we can’t see is the cognitive impairment. Many Parkinson’s patients can’t focus. They have very short attention spans. They don’t sleep well. They can’t read a paper

““ The beauty of this treatment is that it’s very portable . . . ””



through. Their minds wander.”

This happens really early on, and often by the time a patient is diagnosed with Parkinson’s, their attention span already is affected by the disease.

“For example, I ask you to pay attention to me, to repeat a five digit number to me, and you won’t have trouble doing that; however, a Parkinson’s patient will have trouble with that because they just cannot concentrate,” Lou said.

So a Parkinson’s patient can listen to you, but after a while, they tune it out because they can no longer concentrate on what you’re saying.

In effect, Lou notes, cognitive fatigue is a mental capacity decline.

“This has not been adequately addressed in the Parkinson’s literature,” he said. “The major challenge today: pharmacological interventions using several commonly prescribed treatments to alleviate tremors have the unfortunate side effect of exacerbating mental slowdown in some Parkinson’s patients.”

However, he adds, “Patients persist in the treatment because they want to control the tremors, which embarrass them.”

It’s a catch-22 that Lou aims to eliminate with his transcranial direct current stimulation therapy.

### **\$1 million boost**

“That’s why I and my team decided to pursue this research—and we have been very fortunate to have an anonymous donor who gave us a \$1 million endowment to pursue this line of research at our Parkinson’s Center at Sanford—Fargo,” Lou said.

“We were very happy to get that gift,” he said. “I started talking with the donor the first month that I got here to North Dakota. The gift was announced right before Christmas 2014. We are very excited because now we have the patient population and the endowment, so we can proceed with this research and collect the pilot data.”

The goal then is to get federal research funding to do more extensive research.

Lou earned his medical doctorate from the National Taiwan University Medical School in Taipei, Taiwan. He completed his residency training in neurology at the Baylor College of Medicine in Houston,



Jau-Shin Lou

and he completed a fellowship in motor control at the National Institute of Neurological Disorders and Stroke in Bethesda, Md.

His PhD in Neurophysiology is from the University of Minnesota. His research and scholarly interests are fatigue associated with Parkinson’s disease.

He also holds a Master of Business Administration in Healthcare Management from the joint MBA program of Portland State University and Oregon Health Science University.

# Nearing the Second Year

Construction progresses as planned as year two approaches.

**By Lonnie Laffen**  
**President and CEO, JLG Architects**

As we near the second year of planning, design, and construction work on the new School of Medicine and Health Sciences building, I am pleased to report the following:



Ty Pritchard (left) and Craig Martin with JLG Architects review construction progress on an iPad.

- The project is and will remain on budget.
- Work is two weeks ahead of schedule, and slated to open July 2016.
- Over 200,000 sq. ft. of construction has been completed, which is roughly the size of 18 hockey

rinks (an appropriate comparison now that Grand Forks has been named America's Best Hockey Town by SmartAsset.com).

- Over 100,000 worker hours of construction time have been logged without a lost-time incident.
- Over 200 North Dakotans have been passionately involved with the project.

Since I last wrote, the three main towers have been poured, allowing interior framing, mechanical, electrical, and plumbing work to occur. On the East Tower, exterior masonry on the first level has been completed and roofing has begun, and stairs are now erected for mobility between floors. Over 70,000 sq. ft. of exterior masonry is set—the equivalent of three-and-a-half football fields.

The construction process has been running very smoothly, in part thanks to the utilization of some of the most advanced technology in data tracking. Using an iPad, any one of the trades is able to home in on the smallest of details to ensure a system is being installed correctly and has met the architects' design intent. Bar-coded doors

allow the construction manager and contractors to study each room individually to streamline the punch-listing, which is the process of checking off a list of contract items in order to be deemed "complete."

An entire room has been dedicated on the job site to house the hub for all of this information, so that anyone in the field can attend a meeting and access all of the data from a single source.

Lest you think construction timing is due to luck or a surprisingly mild winter, the schedule has actually been closely maintained by PCL, Community Contractors, JLG, and UND, and has included the addition of summer and Saturday work. The team will closely monitor the schedule as work begins on the West Tower.

If you are interested in North Dakota politics, you will know that I proudly wear two hats: one as the president of JLG Architects, and another as a state senator for District 43 in Grand Forks. The 64th Legislative Assembly reconvened in January, and we are in the process of drafting, debating, and voting on bills that will shape the future of North Dakota for years—and often decades—to come.

I have the same goal at JLG as I do in the Legislature: to make every day better for North Dakota. All of us at JLG share the burning passion to elevate communities through thoughtful architecture, and there is no better opportunity to make us all healthier, happier, and set a new standard for higher education in our entire region than at the new University of North Dakota School of Medicine and Health Sciences building.

Healthcare delivery systems now rely on teamwork and the knowledge bases from many disciplines. The new building will provide the academic and social areas to assist in developing the culture of collaborative and integrated healthcare education, which is exactly what students will find when they enter the real world. I look forward to seeing how the professors, students, and medical community at-large will thrive in their new home.



# “HOSA” Spells the Future of North Dakota’s Healthcare Workforce

Middle school and high school students explore becoming healthcare professionals.

By Stacy Kusler



HOSA members at the 2014 State Leadership Conference.

For years, the State of North Dakota and the University of North Dakota School of Medicine and Health Sciences have been working diligently to battle the state’s current healthcare workforce shortage. Many of the efforts are focused on retaining our locally trained medical students by providing them with financial incentives during and after medical school. For instance, the RuralMed Scholar Program, implemented by the School in 2010, awards full tuition payment for four years of medical school to students interested in practicing family medicine or general surgery in a rural North Dakota community for five years after the completion of residency training.

The State of North Dakota has also focused on retaining medical professionals by providing and participating in various loan repayment options. Medical students enter the workforce with well over \$100,000 in student loans. The State’s loan repayment options were recently reevaluated and a proposal was made to expand loan repayment options to include more healthcare professions, as well as increase loan repayment

amounts in order to provide incentives for graduates of a medical profession to work in North Dakota.

These efforts in retaining medical students and professionals have proved to be successful. But why stop there? A quickly growing program in North Dakota is targeting the future North Dakota healthcare workforce from a much earlier

“  
A big part of HOSA’s focus is on developing professional and leadership skills.  
”

point—as early as seventh grade. HOSA-Future Health Professionals (HOSA) is a national student-led organization that focuses on providing high school students from seventh to twelfth grade with leadership development, self-confidence,



social skills, teamwork, and technical healthcare skills.

HOSA formerly stood for Health Occupation Students of America, but was changed to HOSA-Future Health Professionals in 2011 to expand the program outside of the United States, thus making the acronym obsolete but still used to identify the program. HOSA currently exists in 49 states plus the District of Columbia and Puerto Rico. North Dakota's program was established in 2011 as a result of the "grow our own" initiative of the North Dakota Area Health Education Center (ND AHEC). The implementation of HOSA is filling a large gap in healthcare career education. Currently, there are 168 public schools in North Dakota, and just 31 of those schools offer some kind of health career occupation course. Through HOSA, ND AHEC is expanding the reach of healthcare occupation education and training to produce the next generation of healthcare workers. ND AHEC supports and administers the program across the state and has been instrumental in the rapid growth of chapters and members, going from just three chapters and 33 members in 2013 to nine chapters and 206 members in 2015.

Members of a HOSA chapter are mainly students who are interested in a future career in healthcare, although it is not a requirement. Each chapter operates a little differently depending on what works for their school and community. The Grand Forks chapters at both Red River and Central High Schools incorporate their HOSA activities into the Medical Careers classes held at both schools. Dani Rowenkamp, RN, of Red River High School, and Kim Adams, RN, of Central High School, are the chapter leaders in Grand Forks. "We treat HOSA as a cocurricular activity so we hold meetings during class time," Adams said. "A big part of HOSA's focus is on developing professional and leadership skills. We consider most of what we do in class as part of HOSA."

The opportunity for learning about healthcare careers through HOSA happens on two levels: training for HOSA-sponsored competency-based competition events, and exposure to healthcare careers through clinical experiences. HOSA competitions take place at state and national levels. There are 56 competency-based competition events in six different categories, including health sciences, health professions, emergency preparedness, leadership, teamwork, and recognition. Through the chapters' regular meetings, members are able to learn about each of these categories and then focus on training for their preferred competition area. Twice annually, all of the state's chapters gather for the spring and fall leadership conferences. The spring leadership conference is when the students have the opportunity to compete in their categories. Top performers from this state competition will have a chance to compete nationally, which may provide students with

additional opportunities for scholarships and internships. Grafton's North Valley Career and Technology Center hosts a HOSA chapter and prepared 13 students for the state competition at the spring leadership conference at the University of Jamestown. Valerie Heuchert, BSN, is the health sciences instructor and North Valley's HOSA chapter leader. She said her members are motivated by the opportunity to compete. "Some students actually study and try very hard to place first because they want to make it to nationals," Heuchert said.

The other level of HOSA training is through clinical experiences, which are offered slightly differently depending on the chapter. These experiences give students a chance to connect what they learn from competition training in the classroom to the actual job setting. Both Grand Forks chapters offer a nine-week clinical experience for their advanced students in a variety of healthcare job settings. Adams said the support from the Grand Forks healthcare community is key to

being able to let students "try the career on" and experience the reality of it with trained professionals at their side.

No matter how each chapter chooses to function, the overall goal of fueling students' interest in a healthcare career remains the same. "[Through HOSA,] the students gain a sense of what it means to be a professional and work together as members of a healthcare team. Students also get a chance to hone those valuable leadership skills such as public speaking, problem solving, and developing organizational and critical thinking skills," Adams said.

“The more exposure students have to medical professionals, medical careers, and medical experiences, the more likely they are to choose a healthcare career.”

### Future Impact

HOSA student members enjoy benefits such as résumé building, opportunities for scholarships, collaboration with health professionals and future employers, and leadership opportunities at the local, regional, state, and national levels. And just as the student members benefit, Adams agrees that the future of North Dakota's healthcare workforce will benefit from HOSA as well. "Any exposure to the different career opportunities in the healthcare field will only encourage students to follow that career path," Adams said. "As HOSA continues to grow at the secondary and postsecondary level, we hope to see continued opportunities for students including scholarships, internships, and creating more awareness of HOSA within the healthcare community [about] how this student organization can benefit them in the long run."

Because North Dakota's program is so new, it's hard to place a number on how it has affected the workforce so far. Heuchert believes that the impact of HOSA on the state's workforce will likely be realized farther down the road. "I do believe HOSA is a great organization because it offers so many educational opportunities. Even though [some] students may not be focusing on that aspect right now, most will look back and



At the state Capitol, Representative Richard G. Holman, Mayville, meets with HOSA State Secretary Abby Kaseman (left) and HOSA State President Jessica Stair. They are both from Bismarck.

remember what they learned to make their future career decision. I have found that most of my [HOSA] students will choose to work in the healthcare field,” Heuchert said.

The work of HOSA in North Dakota is important in keeping the pipeline of future medical professionals filled. Christi Miller of ND AHEC is the state adviser for North Dakota. She encourages current medical professionals to take an interest in the up-and-coming healthcare workforce by engaging in HOSA-related activities. “Support can be offered on many different levels,” Miller said. “If you are willing to donate time, funds, or contribute resources for competitions and meetings, any support from the medical community will go a long way in training North Dakota’s future healthcare workforce. The more exposure students have to medical professionals, medical careers, and medical experiences, the more likely they are to choose a healthcare career.” To find out more about how you can contribute to HOSA events or activities, or to learn more about starting a HOSA chapter in your community, visit [www.ndhosa.org](http://www.ndhosa.org). 🌱

# Brushing Up on Dental

The Center for Rural Health makes recommendations based on a study of ways to improve North Dakotans' oral health.

By Nikki Massmann

A trip to the dentist is a childhood rite of passage. Children go in for a routine cleaning and hopefully become members of the “No Cavity Club.” For adults, it’s a common experience that we like to commiserate about. No one really enjoys it, yet we all know it’s necessary. But for many populations, especially those in rural areas, routine visits to the dentist can be few and far between.

In order to assess oral health in North Dakota, the state’s Legislative Health Services Interim Committee was charged with conducting a study. The Pew Charitable Trusts approached and subsequently funded the Center for Rural Health (CRH) to conduct a neutral study and to provide recommendations based on the findings. Pew is an organization working to improve oral health access across the United States. They chose to fund North Dakota’s study because the state had been discussing access and workforce around oral health for some time. The Trust works to move the discussion along and assist a state in making recommendations, whatever they may be, to the legislature.

“Everyone involved worked to ensure recommendations to the Legislature come from within the state and those that have firsthand knowledge of the needs,” said Shawnda Schroeder, PhD, research specialist at the CRH. “We chose our research methods and stakeholders based on what we know about North Dakota.”

Beginning in May of 2014, Schroeder began assembling two groups of individuals to provide input and to help assess oral health data for North Dakota. The Stakeholder Working Group was made up of people that worked with populations with oral health needs, such as teachers, nonprofit health centers, long-term care organizations, and emergency room personnel. This group met frequently throughout the summer of 2014 to identify oral health needs in North Dakota and to

hear state and national presenters address possible models to improve the oral health status of North Dakotans.

“Oral health status means the level at which North Dakotans are getting the oral health they need,” said Schroeder. “Are people getting the care they need when they need it? The assessment process was developed around answering that question.”

In addition to the Stakeholder Working Group, a separate Input Group also worked on the assessment. The Input Group comprised organizations that have experience engaging in oral health work, such as provider organizations. This group was asked to share their knowledge regarding oral health access, workforce, and models, as well as review and provide recommendations for the full assessment report.

These two groups worked together to assess the existing oral health workforce and service capacity, evaluate the unmet need for oral healthcare, perform analyses on oral health workforce data, and develop a report of outcomes, findings, and recommendations. Among those findings were the following:

- American Indian third-graders reported higher rates of tooth decay, untreated decay, rampant decay, and need for treatment than their white and other minority peers.
- More third-graders presented with history of decay, untreated, treated, and rampant decay among schools where 50 percent or more of students qualified for free or reduced lunch.
- Medicaid reimbursement rates increased in 2011, 2012, and 2013; yet the percentage of Medicaid-enrolled children who had had a dental visit in the last year declined over that same period.
- In 2014, 12 counties had no dentist, nine had one, nine counties had two dentists, and five counties had not reported.

“Are people getting the care they need when they need it?”



# Care in North Dakota

- In 2013, 67 percent of all the licensed North Dakota dentists worked in the four largest counties: Burleigh, Cass, Grand Forks, and Ward

The top needs that were identified in the state were related to prevention, care for the under- or uninsured and Medicaid populations, and workforce and access issues for special populations. Oral health disparities were prevalent among children, American Indians, those with low-incomes, those with disabilities, homeless, aging, rural residents, and those covered by Medicaid.

“Oral health is an important part of primary care,” said Schroeder. “It has taken awhile to come to the forefront, and has long been seen as such a separate piece of healthcare. But it really is a part of overall health. If patients aren’t getting in to see a dentist for preventive care, these patients may end up in the emergency department with oral health problems. Left untreated, they can lead to other health issues, and infection can spread to other parts of the body. Improved access to dental care could lead to better outcomes in the oral health status of these populations.”

As a result of the assessment process, work will continue to improve access to oral healthcare in North Dakota. Partnerships have been created among entities in the state that are working on oral health. They now have a platform with which to work together and be aware of each other’s successes. The goal of everyone involved in oral health is to get it to be viewed as just as important as any other part of healthcare.

“We now have a single location and a full list of all the organizations in the state working to improve oral health status in this assessment report,” said Schroeder. “Work will continue to develop solutions to these health disparities and improve access across all populations in North Dakota. The common goal of everyone involved is that all those needing oral



Shawnda Schroeder

healthcare will receive it when they need it. A trip to the dentist for routine care should be a common experience that’s accessible to everyone.”

The full oral health assessment report can be accessed by visiting the Center for Rural Health’s website at <http://ruralhealth.und.edu/projects/nd-oral-health-assessment>.

“ “ **Oral health is an important part of primary care. . . .**  
It really is a part of overall health. ” ”

# Marc Granrud

Experience in service and research prepared first-year student for medical school.

By Claire Lenard



Granrud and his Grade 10 students at graduation.

Everyone may have a different idea of what constitutes a good doctor, but most people would probably agree that the ingredients include intelligence, compassion, and drive. It is safe to say that first-year medical student and Minneapolis, Minn.,

native Marc Granrud possesses all three qualities. He is an incredibly driven individual, obviously very intelligent, being a medical student and having worked with a biotechnology company, and he is also a compassionate person, having spent time



in the Peace Corps.

He was introduced to the idea of pursuing medicine because it has always been a part of his life; both of his parents work in the medical field. Though the idea of pursuing medicine has always been an option, it has not always been the definite choice. After graduating from Gonzaga University in Spokane, Wash., even though he had completed the premedical requirements, he did not have any set plans to apply to medical school yet. "I ended up joining the Peace Corps because I thought it would be interesting and a different kind of experience," Granrud said. And that it most definitely was. He was placed in Namibia, and he went into this really not knowing what to expect. "The thought that first came to mind when thinking of traveling to Africa was something similar to *The Lion King* set, but what I found there was completely different. My experience profoundly changed my view of what life is, especially in that part of the world." He spent two years in Namibia teaching biology, chemistry, and physics to the ninth- and tenth-graders at a local high school. With his free time, he was able to become involved in helping the community. This experience was the deciding factor in his decision to pursue medicine when he returned. "Working with the kids, and seeing how hard the people worked really inspired me."

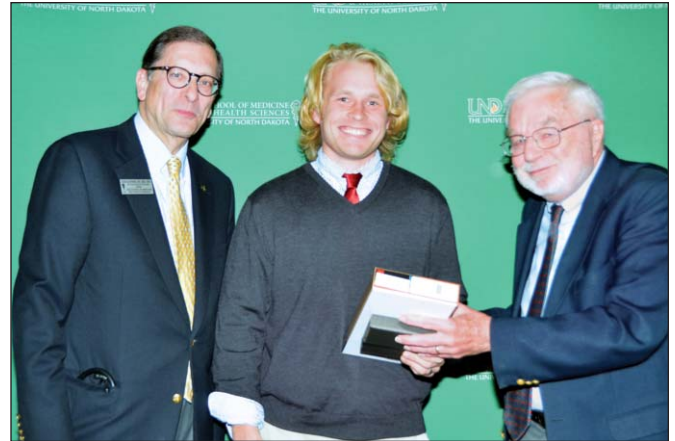
By his second year working there, the specific high school he was working with had been voted the most improved because of such a high increase in the passing rate. This was his most memorable moment of the Peace Corps; it was when he was really able to see the effect his time and work were making. "I firmly believe that without this experience, I would not have gone to medical school. This was truly one of my most amazing experiences, and I would do it again if only Africa were a little bit closer."

After returning from Africa, Granrud worked for St. Jude Medical, a biotechnology company in St. Paul, Minn., testing pacemakers and ablations for heart arrhythmias. "The pacemakers were tested using intraoperative testing, which involves testing during the operation." The ablations for cardiac arrhythmias were tested using EP mapping. EP mapping is

the term for mapping the electrical activity of the heart in an electrophysiology (EP) lab, and it is used to diagnose heart disease and other heart issues. St. Jude Medical has made important developments in the cardiology field, and Granrud had the opportunity to be a part of these advances.

Granrud has had a lot of incredible experiences, and he hopes to continue making an impact. He is known as a person who goes out of his way to help, dedicated to the important things in his life, loyal, and really just fun to be around. As for the rest of his medical career, "I am not sure of what area I want to specialize in, though emergency medicine could potentially be in the cards." Whatever he decides, he has the drive to be successful.

Everything has led him toward doing something in the medical field, and when he sets his mind to something, he does not stop until he succeeds. His determination will have a lasting effect, whether in helping to develop an innovative technology or in making a patient's day. He is an inspiration to future medical students, fellow classmates, and anyone who has a goal to strive for.



Marc Granrud receives his stethoscope from Dean Joshua Wynne and Dr. James Moller (right) at the Adopt-a-Med-Student program in October 2014. Dr. Moller donated Granrud's stethoscope.



Granrud and his host parents Johanna Nangombe and Veiyo Nangombe.



# The Quack with a Duck

Glenn Thoreson—Physician, Flight Surgeon, Fighter Pilot

By Morgan Goulding and Denis MacLeod



Captain Glenn Thoreson and the *Rosie Dee*.

In Mayville, N.Dak., you can see a car with the custom license plate designated “F4FANTM.” In the driver’s seat of this car is a man who not only provided medical care for the people of Mayville but also served our country during the Vietnam War.

Glenn Thoreson grew up in Mayville, where his dad was a veterinarian. When asked what got him into medicine, Thoreson said, “My heritage is medicine; I didn’t have a ‘gee-whiz’ or a ‘wow’ moment.”

Thoreson attended Luther College in Decorah, Iowa, for his first year of school. His older brother went there, so it was only

natural he said that he followed in his footsteps. But he missed his girlfriend whom he grew up with, Rose. This led him to transfer after the first year to Concordia College in Moorhead, Minn., to be closer to her. At Concordia, he finished his premedical training in three years instead of four. “I applied to both medical school and veterinary school, when I was getting ready to be done with Concordia. I got letters back from both schools that said, ‘You complete your studies and you will be enrolled.’”

When Glenn was deciding if he should go into human or animal medicine, his

father asked him, “Do you want to deliver a calf in a barn at 10 degrees below zero, with a farmer helping you, maybe? Or do you want to do human medicine in an air-conditioned or heated delivery or emergency room?”

Glenn started at the University of North Dakota Medical School in 1962. At that time, the medical school was only a two-year school. Glenn married Rose, and they moved into UND housing—the “tin huts” on campus. Rent was only \$36 a month, and they lived among other medical students and their spouses. After finishing up his two years at UND, Glenn then attended the University of Kansas for his final two years of medical school; he graduated on June 6, 1966 (6/6/66). Rose and Glenn knew they wanted to get back to North Dakota, so he applied for an internship in Fargo at St. Luke’s Hospital. There he completed a rotating internship in all the different specialties of the hospital, working six days (80 hours) a week.

He was among a generation of young physicians that all knew they were bound to be called for duty in the Vietnam War. Glenn applied to be in the Air Force. He wanted to be a flight surgeon because he wanted to fly and his best friend in high school was a jet pilot.

In the spring of 1967, he applied to the Air Force. He was accepted for flight surgeon training at Brooks Air Force Base in San Antonio, Texas, starting on July 1, 1967. “I was interested in flying. I did get exposed to flying. They understood that I enjoyed being in airplanes and on the flight line taking care of pilots and the health of their ground crews.” As a flight surgeon, part of my duty was training in T-37 and T-38 jet planes.

“During the Christmas of 1967, I got a Christmas card from President Johnson, with orders to report for duty in Vietnam, June 1, 1968,” Glenn said, “I was to report to McChord Air Force Base, which was in Seattle, luckily assigned as a flight surgeon in a jet fighter squadron.” At 10 p.m. on June 1, 1968, Glenn was on a flight to Vietnam. “You could hear a pin drop,” he said. “You could hear sniffles and crying—and dead silence. How many of these 300 young men are coming back?”

After crossing the international date line, they arrived in Cam Ranh Bay, South

Vietnam, on June 3, to start the in-processing for his squadron of F4C Phantom fighter jets—the 559th Tactical Fighter Squadron (known as the Billy Goats) of the 12th Tactical Fighter Wing. When Glenn arrived, Zach, the flight surgeon he was replacing, took him to meet some of the pilots. When Glenn walked in, one of the pilots said, “Oh, the new quack is here.”

“I said, ‘Hold it!’ ”

Zach said, “Quack is good. If they like you, you’re the squadron quack. Quack is OK.”

“It was a nickname of affection,” Glenn said. “I got along with them very well.”

Rose stayed home in Mayville with their two children; she got a job as a nurse at the local clinic. She worried about her husband, the father of Mark and Mary Ann. She would listen to the casualties reported on radio and TV every week. Glenn and Rose were able to send each other letters every week and voice recordings on reel-to-reel-cassette tapes. “I would put them in the mail,” Rose said. “And they would always go to Grand Forks, to the base, and he sometimes got them the next day, or two days later. It was our version of modern day Skype.”

In Vietnam, Glenn’s duties consisted of overseeing the health of the squadron’s pilots and crew members. “You’re not only looking after their health and well-being; you’re also allowed to train in the F-4 fighter as a copilot. On the ground I was a doctor; in the air I was a fighter pilot, with full stick-and-rudder flying control.” He also went 15 miles outside the base, where he volunteered to help the Montagnard villagers. “They were our allies; they liked us.”

Glenn and his pilot were selected to name an F-4 in honor of their wives. To be stenciled on the nose of their Phantom, Glenn chose “Rosie” to be painted in white.

Glenn’s closest brush with death came on the evening of January 28, 1969. During takeoff the canopy of a Phantom fogged over from the high humidity of the night air, and the pilot lost control and veered off the runway and struck a cement barrier. The pilot was killed instantly, and the copilot died when he ejected from the plane at ground level. Glenn, in an ambulance, arrived at the scene and waited with the fire crew for the fuel to burn off. “All of a sudden, one of the







Rose and Glenn with Glenn holding the display of his Airman's Medal, certificate, and citation letter.

rockets that had come off the airplane happened to be facing the airplane and launched into it and exploded," Glenn said. "The explosion blew off the right arm of the fireman standing next to me. I didn't get hurt. I just got thrown in the air and knocked into the sand; I got up and went to where the fireman was crying and moaning. I got in there and pulled him out and got him away from the fire. The ambulance was there. We clamped the bleeder and got him in the ambulance, then got him to the hospital. He was then flown directly to Clark AFB in the Philippines. He lost his arm, but he survived."

For his exemplary courage and heroism on that evening, the U.S. Air Force awarded Glenn the Airman's Medal. The citation reads, "Captain Glenn M. Thoreson distinguished himself by heroism involving voluntary risk of life on the Flight Line, Cam Ranh Bay Air Base, Republic of Vietnam on 28 January 1969. On that date, Captain Thoreson rushed to the area where an aircraft crashed upon takeoff. With complete disregard for his own safety, Captain Thoreson, despite the hazard of exploding fuel cells and high explosives, unhesitatingly entered the area near the flaming aircraft and persevered in his humanitarian efforts until he succeeded in removing the injured fireman to a place of safety. The exemplary courage and heroism displayed by Captain Thoreson reflect credit upon himself and the United States Air Force."

Glenn flew his 30th and last combat

mission with Hoople, N.Dak., native Jim McMullen. Glenn had met McMullen upon arrival at Cam Ranh Bay. They had a connection; Jim's brother Harvey was Glenn's high school coach. Tradition dictates a champagne celebration upon landing after the last combat mission. The fire crews would spray them with water, and Glenn and Jim would drink a celebratory glass of champagne. Glenn had a surprise for everyone. White ducks were present everywhere, so Glenn asked the sergeant of their maintenance crew to get a duck and meet the plane as they taxied in and deliver the duck to Glenn. Glenn and Jim taxied back to the squadron and shut down the engines. Glenn had the duck in the backseat cockpit. He tossed the duck into the air and thus became known as "The Quack with a Duck."

In 1969, Glenn returned home after his one year of duty. It took him only two hours to be discharged. He returned to Mayville, where he went into family medicine with three other partners at the Mayville Clinic. He practiced there for 36 years. He delivered about 700 babies. Son Matthew Lynn joined the Thoreson family in July of 1971. He is named after Glenn's Vietnam roommate Lynn Adams.



Glenn retired on a Friday in 2006 after practicing 36 years in Mayville. After two weeks of retirement, he missed practicing medicine so much that he decided to work part-time in Valley City for three years. He also worked part-time for a year at the VA in Fargo. After retiring for good the second time in 2009, Dr. Thoreson's retirement meant more time with kids and grandkids. Rose and Glenn's lake house has become a gathering place for family and friends. The North Dakota Medical Association presented Dr. Thoreson with the Community Physician of the Year award in 2006.

“**Quack is good.**  
If they like you, you're  
the squadron quack.  
**Quack is OK.**”



'10s

**Eric Mjelde, MPAS '14**, has joined the internal medicine department at Essentia Health–Park Rapids Clinic in Park Rapids, Minn.

**Toni Rheault, MPAS '14**, has joined the Essentia Health Heart and Vascular Center in Fargo, N.Dak. Rheault previously worked for Essentia Health as a respiratory therapist.



**Melinda Picard, MD '11**, is now at Trinity Health in Minot, N.Dak., specializing in hospital medicine. Picard, a native of Williston, N.Dak., is board-certified in internal medicine.

'00s



**Jill Klemin, MD '07**, a family medicine physician at Sanford North Clinic in Bismarck, N.Dak., has recently been appointed to the Burleigh County Board of Health. She will serve a five-year term with four other board members. The board is responsible for enforcing all laws, rules, and regulations relating to the preservation of the life and health of the people of the county

outside the corporate limits of cities.

**Jessica Skjolden, MD '07**, is a recipient of the National Health Service Corps scholarship award. Skjolden, a Bottineau, N.Dak., native, is a family medicine physician with St. Andrew's Health Center in Bottineau.



**Michael LeBeau, MD '02**, was elected to Sanford Health's Board of Trustees. He is an internal medicine physician and nephrologist at the Sanford Bismarck Clinic. LeBeau is certified by the American Board of Internal Medicine. In addition to his work in Bismarck, LeBeau practices at outreach locations in New Town and Fort Yates, N.Dak.

**Chad Vandrovec, MD '02**, has joined the surgical and specialty care service line at the Fargo VA Health Care System. Vandrovec completed his residency in anesthesiology at the Medical College of Wisconsin and his fellowship in pediatric anesthesiology at the Children's Hospital of Wisconsin in Milwaukee.

'90s



**Paul Olson, FM Res '90**, was recently named the 2014 Physician of the Year by Trinity Health in Minot, N.Dak. A longtime physician in Trinity's Emergency/Trauma Center, Olson was cited for his kindness, intelligence, and being the ultimate team player.

'80s

**James Volk, MD '84**, has received the Golden Stethoscope Award from Sanford Health, which recognizes outstanding physicians who demonstrate excellence in patient care, customer service, communication, and teamwork. Volk is the chief medical officer for Sanford Health in Fargo, N.Dak.

'60s

**Thomas Jacobsen, BS MD '63**, was recently honored with the Pioneer Award given by the South Dakota Perinatal Association. Jacobsen received the award at the 39th annual meeting in Deadwood, S.Dak. Jacobsen recently retired from being a physician in Hettinger, N.Dak..

**Got news?**

**We want to hear it!**

Please send your news items for the next issue of

**North Dakota Medicine**

to Kristen Peterson:

[kristen.peterson@med.und.edu](mailto:kristen.peterson@med.und.edu)

or call 701.777.4305.

**William Edward Anderson, BS Med '47**, passed away on October 23, 2014. He was born July 29, 1921, and raised in Missoula, Mont. He attended the University of Montana for two years, majored in forestry, and fought forest fires as a smoke jumper in the summers. He was raised by a single mother during the Depression and was a self-made man. He enlisted in the U.S. Navy in 1942, serving in the South Pacific on the battleship *New Mexico* in World War II. He received his undergraduate medical training through the Navy, at the University of Notre Dame, and the University of North Dakota. He completed his postgraduate medical training at Temple University School of Medicine in Philadelphia, where he received his Doctorate in Medicine in Family Medicine in 1949. It was there that he met his future wife Doris Eloise Treiber, who graduated in 1949 from Temple University's School of Nursing. They married in 1950 and recently celebrated 64 years of marriage. After serving a one-year internship at the U.S. Naval Hospital in Bethesda, Md., he and Doris moved to Spokane, Wash., where he did his residency at Sacred Heart Medical Center followed by a three-year practice at the Rockwood Clinic. He was called back to serve in the U.S. Navy during the Korean War and was stationed at Whidbey Island, Wash. Upon discharge, he returned to Spokane and opened a solo family practice clinic in the Spokane Valley in 1954 and worked there until he retired in 1983.

**Rodney Clark, BS Med '46**, 90, Grand Forks, died peacefully at his home, Wednesday, December 3, 2014. Rodney George Clark was born to Basil and Louise (Johnson) Clark on July 1, 1924, at Grey Eagle, Minn. Rodney grew up and attended school at Redwood Falls, Minn., and graduated from Redwood Falls High School. In 1942, Rodney began his college education at Carleton College for one year, where he joined the U.S. Navy Reserve. He went into the Navy college program and continued his education at St. Mary's College, Winona, Minn., where he signed up for premed. Rodney then attended the two-year University of North Dakota Medical School. It was in Grand Forks that Rodney met the true love of his life, Carol Kopperud of Grafton, N.Dak. Rodney went on to complete his medical degree at the University of Illinois College of Medicine in Chicago, Ill. Rodney and Carol were united in marriage on June 30, 1947, at Berwyn, Ill. Rodney served an internship in Denver, Colo., and his OB-GYN residency at Louisville General Hospital. Upon completing his medical education, Rodney and a fellow graduate established a private practice in obstetrics and gynecology in Nampa and Caldwell, Idaho. Rodney and Carol returned to Grand Forks in 1957, and Dr. Clark practiced medicine at the Grand Forks Clinic until his retirement in 1987.

**Dr. Manuchair "Mike" Ebadi**, retired Chester Fritz Distinguished Professor, associate vice president for health affairs at UND, associate dean for research and program development, and director of the Center for Excellence in Neurosciences at the UND School of Medicine and Health Sciences, passed away Jan. 19, 2015, at his residence in Laguna Niguel, Calif., at age 79. He was born September 6, 1935, in

Iran. Dr. Ebadi joined the University of North Dakota School of Medicine and Health Sciences in 1999; he retired June 30, 2007. Under his leadership, the research enterprise at the UND medical school increased sixfold in large measure related to his recruitment and support of talented researchers. He and his colleagues investigated the nature and underlying causes of Parkinson's and other neurodegenerative diseases as well as drug addiction. Dr. Ebadi pursued and won support for the Positron Imaging Research Facility, one of only 12 such centers in the country at the time, which houses the microPET (positron emission tomography) scanner—a first for North Dakota. He was instrumental in obtaining funds for the Neuroscience Research Facility. He was an award-winning teacher, having received 11 Golden Apple Awards, and an internationally recognized researcher in the area of Parkinson's disease. He wrote several books on topics concerning pharmacology and Parkinson's disease; two of these texts have been translated into Chinese and Japanese. In December 2004, the University of North Dakota awarded him its highest honor for faculty, the Chester Fritz Distinguished Professorship.

**Robert E. Hankins, BS Med '48**, MD, 87, Minot, N.Dak., passed away Sunday, December 28, 2014, in his home. Robert E. "Doc" Hankins was born in Parshall, N.Dak., to Fredrick Hugh and Emma (Eckes) Hankins on January 22, 1927. He attended school in Lidgerwood, N.Dak., until his sophomore year, and then graduated from Parshall High School in 1944 as co-valedictorian. Following his high school graduation, he was accepted into the V-12 Navy program and completed his premed program in two years in Milwaukee, Wisc. He then attended the University of North Dakota Medical School in Grand Forks, receiving a Bachelor of Science in Medicine in 1948. He completed his medical degree at Loyola Stritch School of Medicine in Chicago, Ill., in 1950, followed by an internship at Milwaukee County Hospital in 1950–51. He was a Navy recruit medical exam physician for a short time in Chicago. While attending Loyola, he met the love of his life, Florita Thielen, who was a nurse at St. Elizabeth's Hospital Emergency Room. They were married on September 16, 1950. He, Florita, and eldest daughter, Kathy, moved to Mott, N.Dak., in 1953, where he set up his first independent medical practice. He was the primary physician in Mott until the family moved to Minot in 1975, where he was the first director of the UND Family Practice Center (currently Minot Center for Family Medicine). He opened a private practice in Minot in 1980. He retired from his practice in 1996, but continued as the medical director for St. Joseph's Hospital chemical dependency unit, Trinity Nursing Home, and the Dakota Boys and Girls Ranch in Minot until 1999.

**Ryan B. Harrington, BS Med '58**, died in the palliative care unit of Sanford hospital on December 16, 2014. He had been ill for more than 13 years with myeloproliferative disease. On November 26, he sustained a hip fracture and was not able to recover from the additional health problems associated with the injury. He was born in Hancock, Mich., on the shores of

beautiful Lake Superior, on October 2, 1932, to Ryan C. and Constance (Freidrichs) Harrington. He attended North Dakota Agricultural College (now NDSU). When the Korean conflict broke out, he was activated by his Naval Reserve unit. He served for two years as a Navy corpsman, assigned to a Marine unit. Upon discharge, he enrolled at the NDAC as a premed student. He was accepted by the UND Medical School, where he received a BS in Medicine. In 1958, he transferred to the University of Kansas. He received his Doctor of Medicine there in 1960. After graduation, he interned and completed a residency in internal medicine at St. Luke's in Kansas City. He was then accepted for a fellowship at the Mayo Clinic in neurology and neurodiagnostic medicine. In 1966, he began practice with the Neurologic Associates at the Neuropsychiatric Institute in Fargo and served as clinical professor for the University of North Dakota School of Medicine and Health Sciences.

**Aivars Imants Kalnins, BS Med '57, 80** of Kettering, Ohio, passed away October 21, 2014. He was born March 20, 1934, in Allaži, Latvia, to the late Dr. Arnold and Milda Kalnins. An emigrant from Latvia in 1950, he and his family settled in North Dakota, where his father Arnold established a general medicine practice in Washburn. Aivars attended Bismarck High School, the University of North Dakota, and finally earned his medical doctorate from Tufts University School of Medicine in 1959. After completing his training in Minneapolis, he settled in Dayton, Ohio, where he practiced general surgery for over 30 years.

**Dr. Don Martindale, BS Med '82, FM Res '85, 58**, of Fargo, N.Dak., died Saturday, December 20, 2014, at Sanford Health in Fargo. Donald Jay Martindale was born May 31, 1956, in Grand Forks to Thomas and Loraine (Gierke) Martindale. He attended Fargo Public Schools, graduating from North High School in 1974, where he was recently inducted into the Hall of Fame. His undergraduate studies were completed at North Dakota State University, after which he attended the University of North Dakota School of Medicine and Health Sciences. He then completed his family practice residency in Fargo. He met his wife, Lori (Nolting), at St. Luke's Hospital in Fargo, where she was a nurse and he was a resident. They married on June 5, 1982. He began his career in family practice at the South Moorhead MeritCare Clinic, where he worked until early December 2014. In addition to his practice, he served as team physician for the Moorhead State Dragons football team as well as a team physician for the North Dakota State Bison.

**Robert C. Nordlie, MS '57, PhD '60**, was born June 11, 1930, in Willmar, Minn., to Peter and Myrtle (Spindler) Nordlie, and grew up in New London, Minn. He earned a BS in Education from St. Cloud (Minn.) Teachers College in 1952, served two years in the U.S. Army Combat Engineers, and then earned his MS and PhD in Biochemistry from the University of North Dakota in 1957 and 1960. There he met his future wife Sally Ann Christianson. They were married in Pembina, N.Dak., on August 23, 1959, and have three children: Margaret, Melissa,

and John. After his graduate work, Dr. Nordlie studied for two years as a postdoctoral fellow at the University of Wisconsin's Institute for Enzyme Research. He returned to UND in 1962 as the Medical School's first James J. Hill Research Professor. His 38-year career in the Department of Biochemistry and Molecular Biology included serving as its chair from 1983 to 2000. Dr. Nordlie's internationally renowned research on glucose-6-phosphatase and its role in blood glucose homeostasis resulted in 135 research papers and reviews, and numerous invitations to speak in the United States and abroad. He mentored 12 MS, 20 PhD, and 15 postdoctoral students. Dr. Nordlie was a highly respected teacher, and received numerous awards for teaching and research throughout his career, the most recent of which was the Sioux Award from UND in 2011.

**Jean Colville Oberpriller, PhD, 72**, Jean Colville Oberpriller, retired professor of anatomy at the School of Medicine and Health Sciences, passed away Dec. 23, 2014 in Eagan, Minn., with her family at her side. She was born in Pittsburgh, Penn., and was the first in her family to attend college. She received her undergraduate degree from Mount Mercy College and earned her graduate degree at Tulane University, where she met her future husband John, who also taught at UND. "Dr. Jean" was an integral part of the UND Medical School for 30 years as a professor of anatomy.

**John Oscar Oberpriller, PhD, 79**, retired professor of anatomy, died January 4, 2015, in Eagan, Minn., with his family by his side. He was born in St. Croix Falls, Wisc., and raised in Newport, Minn. He received his BA in Biology from St. John's University, his master's degree in zoology from the University of Illinois, and earned his PhD degree at Tulane University, where he met his future wife Jean. John was genuinely interested in everyone and everything around him, a natural inquisitor. He brought people together with masterful social skills. "Dr. John" was an integral part of the UND Medical School for 30 years as a professor of anatomy.

**Richard John (Dick) Schindler, BS Med '66, 72**, of Austin, Minn., died Saturday, October 18, 2014, from injuries received in a bicycle accident. Dick was born on February 23, 1942, in Fargo, N.Dak., to Edward and Angeline (Havel) Schindler. His mother took the train from Barnesville, Minn., in a snowstorm, and he was born in the hallway at the hospital. He married Belita Softing in Fargo in July 1964. The family recently had a wonderful celebration of their 50 years of marriage. Dick completed his first two years of medical school at the University of North Dakota and graduated from the University of Iowa Medical School. He did his internship in Biloxi, Miss., and completed his medical studies in the United States Air Force Academy Hospital in Colorado. He joined the Austin Medical Clinic in 1972 and recently retired.





# Rural Surgery Support Program

This novel SMHS program serves as a national model in providing surgical care to rural patients.

By Juan Pedraza



Mary Aaland

A recent North Dakota job posting tells a compelling story about what “rural” means:

The University of North Dakota invites applications and nominations for the position of Director of Rural Surgery Program. . . . We seek an outstanding educator to fill this position . . . a candidate with a background in clinical research and rural general surgery practice. Candidate will be expected to maintain a clinical practice in general surgery or a surgical subspecialty.

The posting was signed by Professor Robert Sticca, MD, chair and program director of the UND School of Medicine and Health Sciences Department of Surgery and head of surgery at Sanford-Fargo. This was the first step in launching the University of North Dakota School of Medicine and Health Sciences Rural Surgery Support Program—the first, and so far the only, such program in the country.

“When I got here in 2003 from the East Coast, I started working with people around the state, and it became clear to me that the surgeons who practice in rural hospitals have a different type of practice, and different issues related to that kind of practice,” said Sticca.

It’s all about who’s available to do what.

“First, rural surgeons do a wider spectrum of procedures compared with surgeons in urban and metropolitan locations, where general surgeons have a more limited practice because there are plenty of surgeons who can focus on specialties,” Sticca said.

Rural surgeons perform a lot of different things across specialties, such as obstetrical surgeries, delivering babies, urology procedures, and ear-nose-throat operations. They don’t do the really complicated stuff in the subspecialty areas of surgery, Sticca noted, but they often handle the basic care and procedures in these surgical disciplines,

including cesarian sections, hysterectomies, nose bleeds, and setting broken bones.

In 2006, Sticca and his colleagues began taking a closer look at surgery practice in rural North Dakota and South Dakota, personally interviewing the 58 surgeons in the two states who were actively practicing at that time.

“It’s interesting that as we began to do that, there was also an interest developing across the country in the unique challenges for surgeons in smaller communities, which in many cases were having trouble recruiting and retaining surgeons,” Sticca said. “That was a change because when I first started talking about this at national meetings like the American College of Surgeons, it wasn’t received very well. I was told ‘all surgeons are the same.’ Then things started to change—many prominent national surgical societies began to acknowledge the unique practice and role of the rural surgeon. For example, in 2012, the American College of Surgeons, of which I’m a member, organized the Advisory Council for Rural Surgery, which was created to address the difficulties of practice in a rural community.”

“One of the biggest issues we found was that if a small-town surgeon left, it was a big problem; conversely, surgeons who practiced in small hospitals found it tough to get away,” Sticca said. And hiring a locum tenens—a surgeon from out-of-town who would visit the community for a certain time period—was often a very unsatisfactory option.

“So your small-town surgeon has trouble taking vacation, taking time off for continuing medical education, and because they’re working in a smaller facility, they have a hard time keeping up to date, so they get burned out,” Sticca said. “Thus communities have ongoing troubles recruiting and retaining competent surgeons.”

After completing the 2006 study of rural surgery practice, Sticca mulled both problems and solutions.

“I started to think about the many

“  
She’s the **mainstay**  
of our program,  
a real **godsend**.  
”

problems faced by rural surgeons, many of which had been discussed in national forums, but no one had any answers,” he said. “I then thought about different ways we could try to fix some of the problems, and decided based on our study that coverage for surgeons while they were away was the biggest challenge.”

Sticca considered the best solution would be to provide support to the rural hospital surgery practice.

“I thought that providing them someone to come from the medical school, already licensed and credentialed in the state, to provide coverage would be a major advance,” Sticca said. “And we could do it a lot cheaper than a locum agency. The small rural hospitals appreciate having an affiliation with the state’s only medical school. I thought it sounded like a win-win for everybody.”

Enter UND’s Rural Surgery Support Program, officially launched last July.

Mary Aaland, MD, a native of Northwood, N.Dak., and a 1982 grad of the UND School of Medicine and Health Sciences, has been on the job since then. She had already been recruited back to the state after many years away and got the call from Dr. Sticca.

“She’s the mainstay of our program, a real godsend,” said Sticca. “It’s wonderful to have someone local do this too. Every time I mention someone to her, she seems to know them or someone who knows them.”

The program, over the skeptical asides from some, has taken off.

For example, Aaland was able to step in to help the hospital in Hettinger, whose longtime surgeon retired a couple of years ago.

Moreover, she met the surgeon whom Hettinger was trying to recruit. Of course, as he mulled the job offer, he wondered how he would get time off. That doubt was allayed by Aaland, who noted that the Rural Surgery Support Program would provide coverage on the weeks he was off—so he signed up. Aaland has committed to several weeks of coverage at Hettinger each year.

Aaland covers for surgeons in rural practice around the state as a general surgeon, but she also is board-certified in trauma and critical care.

There’s an important economic

component to this program besides costing less than a locum tenens service: rural hospitals depend on a general surgeon’s revenue. In-patient stays of surgical patients can account for up to 50 percent of revenues in many rural hospitals.

“When they lose a surgeon, they can go under because they can’t make up that lost revenue,” Sticca said. “Our program helps to alleviate that concern. After six months, we’re seeing a lot of interest, and not just from rural hospitals. I told my colleagues on the American College of Surgeons Rural Surgery Advisory Council about this, and they said it was unbelievable. This is the first time this has been done, and they’re asking me to submit an article in the College’s bulletin. This is, in fact, a model for the rest of the country.”

Aaland said she traveled the state, knocking on doors to talk about the new program.

“No e-mails—I did it the old-fashioned way, meeting people at rural hospitals directly,” said Aaland, whose great grandmother Eli Thingelstad started the first hospital in Northwood before World War I.

Now, she tailors the coverage to meet the individual needs of each locality that she can serve.

“Just like we tailor a plan for each patient, I do it to meet the needs for each rural community,” said Aaland, who recently completed a surgical mission trip to Ecuador. “And another benefit: unlike a locum, or what I call a ‘doc-in-a-box,’ if I operate and there’s a problem, they know how to get a hold of me, so there’s continuity of care.”

Aaland said one of her goals is to take surgery residents along on her temporary assignments.

She performs many of the procedures on an out-patient basis—operations such as gall bladder removal, hernia repair, colonoscopies, thyroidectomies, and breast biopsies can be done that way.

Being a female surgeon out there doing this is no problem for Aaland.

“The first appendectomy in the Dakota Territory was performed by a woman, a physician from the state of Michigan, on a kitchen table,” Aaland said. “Basically, I feel pretty good about being able to give back to my state that provided me with a foundation.”



Robert Sticca

“  
I feel pretty good  
about being able  
to give back to my state  
that provided me  
with a foundation.  
”

# Pembina County farmers invest in future of rural medicine

North Dakota woman fulfills parents' intentions of investing in SMHS scholarships.

By Alyssa Konickson



Karen Robinson

Since she was seven years old, Karen Robinson had aspirations of serving in the medical field—a goal backed by her parents, Pembina County farmers Clarine and Howard Robinson, who understood the importance of quality healthcare access, especially in rural communities.

“My mom passed away in 2013, and she had the same physician since the mid-1980s,” said Karen, who pursued her childhood dream, working as a Veterans Affairs nurse for more than 30 years. “I

know from talking to other people that they're not always so fortunate to keep the same primary care provider for so long.”

The Robinsons' primary physicians were graduates of the UND SMHS: David Glatt, BS Med '73; John Wahl, BS Med '66; and Peggy Sheldon, MD '79. Karen says her family always realized how fortunate they were to have a medical school so close by. So her parents showed their appreciation for the good healthcare they received throughout their lives by including the UND SMHS in their estate plans.

Karen, honoring her parents' wishes, recently established the Howard, Clarine, and Karen Robinson Scholarship Endowment in support of scholarships for North Dakota's future healthcare providers.

“Early on, my parents recognized the importance of the medical school, so it was their idea that we establish an endowment,” Karen said. “They felt it was very important to support endowed scholarships. They understood student debt, and carried out their intentions in their will.”

Karen made a pledge toward the endowment that will allow the fund to begin awarding scholarships immediately; additionally, she established a living trust that will eventually award a percentage

of her inherited assets to fund a bequest to the UND Foundation, growing her family's endowment and furthering their gift to SMHS students.

“My parents realized that, no matter your educational background, you can give back,” she said.

Through the years, Karen not only has worked to fulfill her parents' wishes of giving to UND but also has given back herself. Though she's not a



Clarine and Howard Robinson

UND graduate (she has a diploma from St. Luke's School of Nursing in Fargo, a baccalaureate from the University of Kentucky, a Master of Nursing from Texas Woman's University, and a PhD in Nursing from the University of Texas in Austin), she served as the VA representative for the SMHS Advisory Council from the mid-1990s to 2010. The School will continue to feel the effect of her family's gifts of time and treasure for years to come.

## Bequests to benefit UND

Over the years, SMHS students have benefited immensely thanks to thoughtful estate planning done by alumni and friends of UND like Howard and Clarine Robinson.

Please contact us for additional general bequest information, for other recommended bequest language, or to discuss how you would want your gift to specifically benefit the SMHS.



## Contact Us

For additional information on how to best structure your bequest gift to benefit the University of North Dakota, please contact:

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Senior Director of Development  
UND Foundation  
[davem@undfoundation.org](mailto:davem@undfoundation.org)  
701.777.4933  
[und.giftlegacy.com](http://und.giftlegacy.com)  
800.543.8764





# *Thank you* to our thoughtful donors who recently gave gifts or made pledges to support the UND School of Medicine and Health Sciences.

## **Janell and Mark**

**Anderson** of Bismarck, N.Dak., have established the James Rudd Memorial Scholarship Endowment, which will provide scholarships for athletic training (AT) students and the first scholarship in the AT program's 25-year history. Janell earned her Kinesiology and Public Health Education degree from UND in 1991 with a minor in Athletic Training. She is a radiologic technologist at Mercy Hospital in Valley City, N.Dak. James Rudd was the inaugural chair of the Athletic Training Program 1990–2003. He was an assistant professor when he passed away in 2014. This fund includes gifts given by others in his memory after he passed away.



James Rudd

**Rev. Gerald Bass** of Grand Forks, N.Dak., has established the Gail Shimer Bass OT Scholarship in honor of his wife **Gail Bass, PhD '04**. The fund will provide scholarships for occupational therapy (OT) students with preference given to students interested in pediatric OT. Gail retired as an assistant professor of the UND OT Department in December 2014.



Gail Bass

**Dr. Cecil, BS Med '63, and Penny Chally** of St. Paul, Minn., continue to support the Dr. Cecil and Penny Chally Medical Scholarship Endowment, which provides scholarships to medical students with preference given to students from Walsh County, North Dakota. Dr. Chally is a gastroenterologist at Gastrointestinal Diagnostics Center in St. Paul, Minn.



On Feb. 10, Mark Hall and Claire Herland of Alerus Financial visited the UND School of Medicine and Health Sciences to present three generous gifts from the estate of Linda Redmann that will benefit public health, rural health and cancer research. Left to right: Dave Miedema, UND Foundation; Herland; Hall; SMHS Dean Joshua Wynne; DeAnna Carlson Zink, UND Foundation.

**The Dr. Eva Gilbertson Foundation** in Seattle, Wash., continues to support the Eva L. Gilbertson, MD Distinguished Chair of Geriatrics, which provides support to the new Department of Geriatrics and its Chair Dr. Donald Jurivich. Dr. Eva Gilbertson, BS Med '39, was a radiologist at Pacific Medical Center in Seattle. She passed away in 2007.

**M. Brian Hartz, MD '99**, of St. Paul, Minn., has established the M. Brian Hartz, MD Scholarship Endowment, which will provide medical student scholarships. Dr. Hartz is a pulmonologist at the St. Paul Lung Clinic.

**Dr. Donald, BS Med '61**, and Blanche Person of San Antonio, Texas, have established the Dr. Donald and Blanche Person Scholarship Endowment, which will provide medical student scholarships. Dr. Person, a native of Fargo, N.Dak., also supports the School's Adopt-a-Med-Student Program annually.

**Betty (Wold) Johnson** of Hopewell, N.J., continues to support the Karl Christian Wold MD Medical Library Endowment, which provides funding for the Harley E. French Library of the Health Sciences; and the Katherine Maryann Rasmussen Memorial Scholarship Endowment, which provides scholarships for physician assistant students.



# Simlympics 2015

Gunshot wound to the femoral artery. Emergency childbirth. Resuscitation of a child who fell through thin ice and drowned.

These are a few scenarios the SMHS first- and second-year medical students bravely took on in the Simlympics competitions on January 29 and 30. Simlympics is a tournament-style simulation competition made possible by cooperation between the SMHS Emergency Medicine Interest Group (EMIG) and the North Dakota Simulation, Teaching, and Research (STAR) simulation training facility in Grand Forks.

Simlympics teams are presented with a case that could realistically present to any local emergency department. The teams must collect information about the patient's history and condition, and use leadership, teamwork, communication, and clinical reasoning to establish appropriate differential diagnoses and to administer effective treatments. The simulations provide a high-pressure, low-stakes environment in which medical students can apply their classroom knowledge and learn from their successes and mistakes in a forgiving atmosphere.

In the final round of the competition, first-year medical student finalists treated a patient who sustained a gunshot wound to the right femoral artery while on a hunting trip. The winning team was composed of first-year students Syed (Nabeel) Hyder, Kathryn Johnson, Cameron MacInnis, Dhilhan Marasinghe, and Vanessa Stumpf.

On Friday, January 30, three teams of second-year medical students and one team of first-year medical students faced challenging scenarios, including pediatric cold-water drowning, pediatric Tylenol overdose, and emergency childbirth. The winning team was composed of second-year students David Collins, Wes Halseth, Steven McKnight, and Megan Meyer.



First-year student winners: Syed (Nabeel) Hyder, Dhilhan Marasinghe, Vanessa Stumpf, Kathryn Johnson, and Cameron MacInnis.



Second-year student winners: Steven McKnight, Megan Meyer, Wes Halseth, and David Collins.





In December 2014, Dean Joshua Wynne thanked the School's volunteer faculty as well as School faculty and staff at holiday receptions held in Bismarck, Fargo, Grand Forks, and Minot.



The Physician Assistant Class of 2016 is shown on the steps of the Vennes Atrium of the School after the White Coat Ceremony on January 16. For more information and a list of students and their hometowns, please visit <http://tinyurl.com/n9b7tnw>.





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# Upcoming Alumni Receptions

## Held in conjunction with national conferences



**Occupational Therapy**  
**April 17, 2015 — Nashville**  
[www.med.UND.edu/events/ot-2015.cfm](http://www.med.UND.edu/events/ot-2015.cfm)



**Physician Assistants**  
**May 23, 2015 — San Francisco**  
[www.med.UND.edu/events/pa-2015.cfm](http://www.med.UND.edu/events/pa-2015.cfm)



**Athletic Training**  
**June 24, 2015 — St. Louis**  
[www.med.UND.edu/events/at-2015.cfm](http://www.med.UND.edu/events/at-2015.cfm)