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THE UNIVERSITY OF NORTH DAKOTA SCHOOL OF MEDICINE & HEALTH SCIENCES



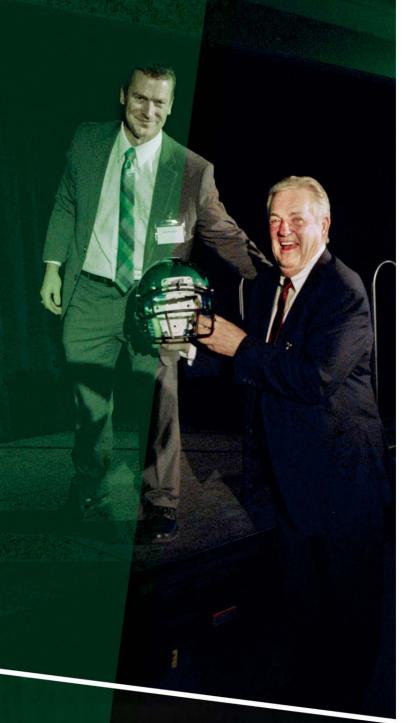


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MARK KENNEDY, President, University of North Dakota

JOSHUA WYNNE, Vice President for Health Affairs and Dean, School of Medicine and Health Sciences

EDITOR WRITERS	Denis MacLeod Stacy Kusler, Denis MacLeod, Nikki Massmann, Dave Miedema, Debra Sorvig Pedraza, Juan Pedraza, Jessica Sobolik
CONTRIBUTORS GRAPHIC DESIGN PHOTOGRAPHY	Kristen Peterson Laura Cory, John Lee, Victoria Swift Shawna Noel Schill, Wanda Weber
COVER ART	Detail of painting by Marcus Geffre

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WEBMASTER Eric Walter

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UND School of Medicine and Health Sciences Office of Alumni and Community Relations, Attn: Kristen Peterson 1301 North Columbia Rd. Stop 9037, Grand Forks, ND 58202-9037 e-mail: kristen.peterson@med.und.edu

phone: 701-777-4305

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DEAN'S LETTER

The Power of Community



October 14, 2016, marked one of the more noteworthy events in the history of the University of North Dakota, the School of Medicine and Health Sciences, and North Dakota with the official opening of the new building, a nearly \$124 million educational and research facility that was completed on time and on budget. The ribbon-cutting ceremony to officially open the new building occurred on that afternoon, and it was a truly memorable event. There was a standing-room only crowd of around 350 people present for the ribbon-cutting ceremony, and almost 400 signed up for the gala celebration later that evening. The special guest speaker at the evening celebration was Dr. Darrell Kirch, president and CEO of the Association of American Medical Colleges that represents all 147 medical schools in the United States. He presented a thoughtful address about the "Power of Community" that was especially appropriate in this time of national political discord. Dr. Kirch posited the notion that local communities-of learners, donors, and people who care-have the power to advance projects (like healthcare workforce development for North Dakota) that are too big and complicated for individuals to accomplish, and are not the focus or province of national agencies.

The School has long promoted the concept of small-group learning experiences, but we've advanced that idea considerably with the construction of eight physical learning communities in the new building that foster interprofessional and team-based learning-in essence, a community of learners. These learning communities are self-governing groups of about 100 students each composed of trainees in all of the health disciplines sponsored by the SMHS. So we have physical and occupational therapy, medical laboratory science, sports medicine, physician assistant, and medical students all housed together for an integrated

learning experience. We believe that the active and interprofessional education that is occurring in these learning communities will better prepare our graduates for the rapidly changing world of clinical healthcare delivery that stresses team approaches to healthcare; obvious examples include accountable care organizations and medical homes that are becoming increasingly commonplace in the healthcare delivery enterprise.

A second critically important community for the School is composed of graduates and other concerned practitioners who through their dedication and altruism give back to the School and the healthcare enterprise by being voluntary clinical faculty members who teach our students for little or no remuneration—a community of people who care. North Dakota leads the nation in the fraction of physicians who are on the voluntary clinical faculty roster of a local medical school-in our state, two out of three of all physicians in the state are faculty members. It would be impossible to train our students without their help and support-that's for sure!

And the last vitally important community in support of the SMHS is that composed of donors. Why are private donations so important? They are needed to improve the student experience, largely through scholarship support to lower student debt. Even though our educational costs are among the lowest in the region and nation, our medical students in particular used to have above-normal educational debt, reflecting the often lower financial resources our students have that require more borrowing. But through the generosity of our donors, we have been able to reduce their cumulative debt from well above to well below the national average. This is a wonderful example of a highly effective public-private partnership; the Legislature has provided a marvelous and functional new building and strong

appropriated support for out programs, and private donors have joined that effort by endeavoring to reduce student debt. To honor our especially generous donors, we have designated some three dozen named spaces in the building to recognize and acknowledge these gifts. Four donors in particular should be recognized for their extraordinary gifts to our students. The first is Dr. Marlys Schuh, who is a surgical oncologist and whose generous donation supports medical student scholarships. The lobby on the first floor of the building is named for her. The second is in honor of the late Dr. Charles H. Fee, a revered family medicine physician. The auditorium is named for him, and the supporting donation came from Dr. Fee's daughter Carlen Goehring and her husband Charles. The next gift to highlight is from a long-standing member of the UND family and former Associate Dean for Student Affairs and Admissions Judy DeMers. That office is now named for her in honor of her generous donation in support of medical student scholarships. And the last donation is from Dr. David and Lola Monson, who endowed a chair currently held by Dr. Rick Van Eck. The Monsons' extraordinarily generous gift supports student education, and their contribution will be remembered by the naming of one of our learning communities in their honor.

The SMHS is one of 27 communitybased medical schools in the United States, meaning that we don't own or operate our own hospital or hospital system. Instead, we partner with all of the larger hospitals and many of the smaller hospitals and clinics in the communities throughout the state to educate our students. I like to say that we are a community-based medical and health sciences—school, and our community is all of North Dakota. And it is the active participation of the three communities outlined above—learning, caring practitioners, and donors—that have helped propel the School forward. Thanks to all the caring, dedicated, and forward-thinking people who have brought us to where we are. The future looks even brighter thanks to your efforts!

Don't miss learning about the inspiration for the art that is on the cover of this issue, and please read the articles that medical students submitted on pages 16 and 17. The new section is the result of the work by second-year medical student Houda Abdelrahman. She led the effort to promote medical students' writing and creative work in the new section dedicated to publishing students' contributions to the magazine.

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

NIH funds Basson's study of treatment to alleviate effects from starvation or intestinal surgery



When children or adults either undergo prolonged fasting or have much of their small intestine removed because of disease, they are often initially unable to eat enough to survive. Without sufficient intestinal adaptation, they may be condemned to permanent intravenous feedings, with a substantial effect on quality and length of life, or require

small bowel transplantation, which has its own complications.

"Current medical treatment for this condition has limited efficacy," said Marc D. Basson, MD, PhD, MBA, FACS, the associate dean for medicine and professor of surgery and of biomedical sciences at the University of North Dakota School of Medicine and Health Sciences. "We have identified a novel protein that turns on the function of the cells that line the small intestine and may offer a new approach to the management of this condition."

The National Institutes of Health granted over \$860,000 to Basson to continue research he initiated at Michigan State University in 2012. Basson's unique approach is called Schlafen mediation of intestinal epithelial differentiation.

Please read more at http://goo.gl/wBApBo.

Medical students receive scholarships

A total of \$419,905 in scholarships has been awarded to 82 medical students at the University of North Dakota School of Medicine and Health Sciences for the 2016–2017 academic year. Funds for the scholarships come from various private sources, endowments, and scholarship funds.

For a complete list of scholarship recipients, please read more at https://goo.gl/6YmRGu.

UND scientists lead \$3.6 million NIH study of weight regain and depression after weight-loss surgery



Scott Engel



Researchers from the University of North Dakota are leading a study to identify problems experienced by patients who have undergone bariatric surgery and regained weight.

Research Assistant Professor Scott Engel, PhD; and Chester Fritz Distinguished Professor and Associate Chair Stephen Wonderlich, PhD, in the Department of Psychiatry and Behavioral Science at the UND School of Medicine and Health Sciences are the principal investigators for the study that has received a \$3.6 million, five-year grant from the National Institute of Diabetes and Digestive and Kidney Diseases, an institute within the National Institutes of Health.

Engel and Wonderlich are also research scientists for the Neuropsychiatric Research Institute in Fargo, where Wonderlich is the

Stephen Wonderlich

president and scientific director. He also is chair of the Sanford Eating Disorders and Weight Management Center in Fargo. Engel and Wonderlich have assembled a team of researchers from the SMHS and NRI as well as from coast to coast to collaborate in the study titled "Post-Surgical Predictors of Weight Regain and Depression after Bariatric Surgery."

Please read more at https://goo.gl/eaIcSC.

UND Physician Assistant Program earns reaccreditation



Jeanie McHugo

The Accreditation Review Commission on Education for the Physician Assistant (ARC-PA) has granted Accreditation-Continued status to the University of North Dakota Physician Assistant Program sponsored by the University of North Dakota School of Medicine and Health Sciences for 10 years, the maximum length of time allowable before another on-site review. Accreditation-Continued is an

accreditation status granted when a currently accredited program is in compliance with the ARC-PA Standards. Accreditation remains in effect until the program closes or withdraws from the accreditation process or until accreditation is withdrawn for failure to comply with the Standards. The approximate date for the next validation review of the program by the ARC-PA will be September 2026. The review date is contingent upon continued compliance with the Accreditation Standards and ARC-PA policy.

"The intensive external peer review process ensures the value of high-quality education for all PA students. The process and preparation is truly a team effort, and I applaud all faculty, staff, preceptors, and students who contributed to this success," said Associate Professor Jeanie McHugo, PhD, PA-C, chair of the Department of Physician Assistant Studies at the UND SMHS. Please read more at https://goo.gl/l3Qvxb.

NIH funds \$1.5 million UND study of transgenerational threat from amphetamines



Lucia Carvelli

If your mother or father were addicted to amphetamines, does that increase your risk of becoming addicted? An answer to that question is a focus of a \$1.5 million, five-year grant to the University of North Dakota School of Medicine and Health Sciences from the National Institutes of Health's National Institute on Drug Abuse. The study, titled "Amphetamine Causes

Transgenerational Effects," will be led by Associate Professor Lucia Carvelli, PhD, in the Department of Biomedical Sciences.

"The long-term goal of this grant is to investigate the potential role that regulation of gene expression plays in mediating drug-induced behaviors and the inherited predisposition to addiction," Carvelli said. "Thus our data collected on amphetamines might be useful to understand how other drugs of abuse, such as cocaine and alcohol, generate their long-term effects." Please read more at https://goo.gl/XreGx3.

Metzger honored with New Faculty Award for Professional Excellence from PAEA

Assistant Professor Jay Metzger, MPAS, PA-C, in the Department of Physician Assistant Studies at the University of North Dakota School of Medicine and Health Sciences, was honored with the New Faculty Award for Professional Excellence from the Physician Assistant Education Association on October 14 at the PAEA's Education Forum in Minneapolis.

The New Faculty Award for Professional Excellence recognizes a program faculty member with three or fewer years of service who has made noteworthy contributions to PA education. Nominees must demonstrate outstanding contributions in teaching, scholarship, or administration.

"Though he is new to the PA education realm, Metzger has already made his mark on the University of North Dakota PA program," said the PAEA in announcing Metzger's award. "He has served as course director for classes from primary care to general surgery, plans all didactic schedules, and teaches a full week of trauma curriculum affectionately referred to by students and faculty as 'Jay Week.' He is also credited with identifying innovative teaching methods and taking the lead on test question revision and creation, making him indispensable to his colleagues."



PAEA President-Elect Bill Kohlhepp, on left, presents Jay Metzger with his award.

"Thank you to everyone who nominated me for this award," he said. "And thank you for the contributions you make to our students, our university, and our great state." Please read more at https://goo.gl/b0fb1s.

UND forges partnership with Norwegian university on public health education

UND SMHS Assistant Professor Arielle Selya, PhD, and Master of Public Health Founding Director and Professor Raymond Goldsteen DrPH, in collaboration with Associate Professor David Wheat and Professor Pål Davidsen in the Department of Geography at the University of Bergen in Norway (UiB), were awarded a grant titled "Model-based Public Health Education."

Under the project, UiB exchange students receive public health training at UND, and UND exchange students receive system dynamics training at UiB. Up to five students per year combined from both universities could be involved.

Participating students will also work on research projects that apply system dynamics modeling to study public health problems. The students will conduct the projects in conjunction with MPH faculty at the UND SMHS, UiB faculty, and partners in the North Dakota Department of Health and Altru Health System. Please read more at https://goo.gl/xmFAfc.



Arielle Selya and Raymond Goldsteen

Schmitz is new chair of Family and Community Medicine

David F. Schmitz, MD, has been named the chair of the Department of Family and Community Medicine at the University of North Dakota School of Medicine and Health Sciences. He is an internationally known and respected clinician who has extensive research expertise in training and retaining physicians in rural and underserved areas. Since 2013, Schmitz has been the chief rural officer for the Family Medicine Residency of Idaho in Boise, where he served as the chief quality officer, as well as program director of the Rural Training Tracks for the Caldwell and Magic Valley Programs in Idaho. He practices as a family physician and taught for the Family Medicine Residency of Idaho. "It is an honor to join the University of North Dakota," Schmitz said. "My entire career has centered around the mission I personally share with this department and the UND SMHS. I am dedicated to serving the needs of our patients, our communities, and our School. Together we will continue to strive to meet the needs of



the state of North Dakota while setting an example nationally." Please read more at https://goo.gl/yo8QKt.

Champagne and Panteah receive Alan Allery Awards

Trevor Champagne and Mylan Panteah were recently honored with 2016 Alan Allery Awards. The awards honor outstanding American Indian graduate and undergraduate student health researchers. Selection criteria for the awards include quality, impact, and significance of the research conducted by the nominee.

Champagne is a senior premedical student at the University



Left to right, Dr. Jacque Gray, director of the Seven Generations Center of Excellence in Native Behavioral Health at UND; Trevor Champagne; and Leigh Jeanotte, director of American Indian Student Services at UND.

> Left to right, Dr. Jacque Gray, Mylan Panteah, and Leigh Jeanotte.

of North Dakota. He is originally from Lawrence, Kansas, and is an enrolled member of the Turtle Mountain Band of Chippewa.

Panteah is a second-year medical student at the UND School of Medicine and Health Sciences. He is Navajo and Zuni Pueblo, born in the Navajo Nation.

Please read more at https://goo.gl/S4WFAk.



Geiger selected for leadership team for Great Plains IDeA-CTR Network



Jonathan D. Geiger, PhD, Chester Fritz Distinguished Professor in the Department of Biomedical Sciences at the University of North Dakota School of Medicine and Health Sciences, was selected to serve on the leadership team for the Great Plains IDeA-CTR Network, a collaboration involving nine institutions in four states—Nebraska,

North Dakota, South Dakota, and Kansas.

The Great Plains IDeA-CTR Network was created by a \$20 million grant from the National Institutes of Health to the

University of Nebraska Medical Center in Omaha, the largest grant ever in the center's history. Funding is provided through the Institutional Development Award (IDeA) program and the NIH's National Institute of General Medical Studies.

At the University of North Dakota, Geiger will serve as the institutional coordinator, where he will identify researchers who are early in their careers who deserve funding for their projects from the Great Plains IDeA-CTR Network.

"This a great opportunity for researchers at UND and in the region," Geiger said. "They will get mentoring support and funding to conduct critical translational and clinical research."

Please read more at https://goo.gl/dV0RkA.

National Institutes of Health funds multi-university study of new public health threat

A distantly related cousin to the bacterium that causes Lyme disease is the focus of a new multi-university research study funded by the National Institutes of Health Institute of Allergy and Infectious Diseases.

The grant brings together an expert team of microbiologists and tick researchers led by Principal Investigator Brian Stevenson, PhD, a professor at the University of Kentucky, and Coinvestigators Catherine A. Brissette, PhD, an assistant professor at the University of North Dakota School of Medicine and Health Sciences; and Jean Tsao, PhD, an associate professor at Michigan State University.

"We are excited to be part of a dynamic research team on a newly recognized human pathogen," Brissette said. Please read more at https://goo.gl/bDFb8Q.



Catherine Brissette

UND School of Medicine and Health Sciences among top five for family medicine physicians

A study completed by the American Academy of Family Physicians (AAFP) noted that the University of North Dakota School of Medicine and Health Sciences was again among the top five contributors to building the nation's family physician workforce.

"This annual report is one measure of the effectiveness of medical schools to produce a primary care workforce, a key measure of social responsibility, as measured by their production of graduates entering into family medicine," said the authors of the AAFP report. "Primary care has been demonstrated to improve healthcare outcomes and reduce health disparities while reducing per capita costs."

According to the study, the top five schools and their percentage of graduates entering family medicine are the following:

University of Minnesota Medical School—19.0%

- University of Kansas School of Medicine-17.8%
- University of North Dakota School of Medicine and Health Sciences—17.4%
- University of East Carolina—16.7%
- University of Washington—16.6%

Since 1981, the UND SMHS has averaged 22.5% of its graduates who enter a family medicine residency, while the national average is 10.9%. In 2015, the UND SMHS led the nation with 20.8% of its graduates choosing a family medicine residency.

The full AAFP report titled "Entry of US Medical School Graduates Into Family Medicine Residencies: 2015–2016" is available at http://www.stfm.org/FamilyMedicine/Vol48Issue9/ Kozakowski688.

Relling elected vice president of the Federation of State Boards of Physical Therapy

David Relling, PT, PhD, associate professor and chair of the Department of Physical Therapy at the University of North Dakota School of Medicine and Health Sciences, was elected vice president of the Federation of State Boards of Physical Therapy on November 5 at the Annual Delegate Assembly meeting of the FSBPT in Columbus, Ohio.

The FSBPT is an organization of PT licensure boards in the United States, Puerto Rico, District of Columbia, and Virgin Islands with a common mission of protecting the public. The FSBPT has multiple areas of focus, including the development of the National Physical Therapy Examination that is a requirement for licensure of all graduates from PT and PT assistant programs. Please read more at https://goo.gl/J5CGX1.



David Relling

Larson named ND Occupational Therapy Association's Student of the Year



Sydney Larson was named the North Dakota Occupational Therapy Association's 2016 Student of the Year. From Hazen, N.Dak., she is a second-year student pursuing a Master of Occupational Therapy degree through the University of North Dakota School of Medicine and Health Sciences Department of Occupational Therapy.

Larson was nominated for the award by Associate Professor Sarah Nielsen, PhD, OTR/L, and Instructor Bobbi Carrlson, MOT, OTR/L. Please read more at https://goo.gl/uf9E2Q.

Larson, on left, accepting the award from NDOTA President Heather Dibla.

Triple Threat Research

The unique work of three scientists has one goal: healthier North Dakotans.

2

By Debra Sorvig Pedraza and Juan Pedraza

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It's the most vital biomedical research establishment in North Dakota—the leader in the region in focusing efforts on directly addressing the state's major health issues. The University of North Dakota School of Medicine and Health Sciences—one of only 11 federally selected sites in the nation to receive the most advanced technology—is home to some of the country's most forward-looking research into health challenges such as Parkinson's and other neurodegenerative diseases, in issues affecting aging Baby Boomers, and of the many cancers that commonly strike North Dakotans.

Among other large grants, the UND SMHS has been awarded close to \$30 million over the last 10 years to advance investigations into diseases of the brain. Several other federal grants fund research in cancer, diabetes, eating disorders, alcoholism, and many other diseases of both national interest and of special concern in North Dakota.

Several dozen researchers at the SMHS work across this spectrum, tackling solutions, not just the causes, of such diseases. Scientists call it "translational research," and it means more therapies sooner reaching the bedside.

We focus in this article on the work of three key researchers:

- Donald Jurivich, DO and an expert on health challenges among older people.
- Jau-Shin Lou, MD, PhD, MBA, chair of neurology at both the UND SMHS and at Sanford Health in Fargo and an expert in neurodegenerative diseases.
- Gary Schwartz, PhD, MPH, PhD, an epidemiologist and expert in the causes, triggers, history, and distribution of various cancers.

Who is Donald Jurivich, DO?

Donald Jurivich, DO (Doctor of Osteopathy), is the founding Eva L. Gilbertson, MD, Distinguished Chair of Geriatrics at the SMHS. He is a nationally known and respected clinician who has conducted extensive research on aging and age-related diseases and their treatment. All of his research is collaborative—he works with faculty and institutional leaders in the new Department of Geriatrics. This division of the SMHS develops and provides oversight of education, research, clinical care, training, and service programs. As chair, he works with the SMHS's clinical partners to innovatively meet the need for education and training of current and future health professionals to effectively serve an aging population. A graduate of Harvard University, Jurivich focuses on chronic ailments of the aged, including Alzheimer's disease.

This is important to the state of North Dakota, which has an above-average life expectancy, resulting in a greater proportion of senior citizens and elders among the state's population, according to Joshua Wynne, MD, MBA, MPH, UND vice president for health affairs and dean of the UND School of Medicine and Health Sciences.

A clue to the mystery of Alzheimer's—that is what Jurivich believes he and his research associates have found.

Jurivich's most recent discovery involves a stress protein that is important in the regulation of amyloid. This starch-like protein is naturally found in the body, but sometimes gets processed the wrong way and accumulates. This aggregated form is thought to be toxic.

The body then struggles to remove the aggregated (bad) amyloid while producing the good, but sometimes producing the bad. These stress proteins resemble antibodies in the way they work—they recognize other proteins but can fight amyloid.

Jurivich studies the "master switch" of these stress proteins called HSF1 and notes that this factor is also thought to be a longevity factor that declines with age and even more so with Alzheimer's disease.

Thus, he says, this new observation may be the first opportunity to explore a test to screen an individual's risk for developing Alzheimer's, as well as determining the effectiveness of treatments by monitoring HSF1 levels in white blood cells.

Because stress proteins resemble antibodies, vaccination against amyloid is considered another possible therapy for Alzheimer's. Initial vaccination studies were unsuccessful because of adverse side effects such as brain swelling. There was too much amyloid and too much damage to have the immune system clear the amyloid "junk."

However, new research that targets people destined to get Alzheimer's because of their genetic predisposition indicates this treatment may prevent the onset of familial and genetically inherited Alzheimer's before symptoms appear. Once diagnosed, Alzheimer's patients have an 8- to 12-year life expectancy.

Dementia in general is a collection of different etiologies as to what causes memory loss. Alzheimer's has a specific pathology, identified by plaques and tangles, found in brain biopsies. The parts of the brain selectively destroyed by disease varies with each patient. Progression or rate of deterioration with the different types of dementia varies depending on the type of dementia the patient has. Short-term memory loss, spatial awareness, and the ability to use numbers are some of the challenges that patients and their families will need to deal with—when to pull a driver's license, take control of banking, make alternative living arrangements, and related life-altering decisions.

Jurivich and his UND colleagues are interested in identifying longevity factors that protect individuals from aging and chronic conditions.

The good news, says Jurivich, is that simple things like adequate exercise and proper nutrition such as the Mediterranean diet may promote these longevity factors and strengthen our resiliency.

Who is Jau-Shin Lou, MD, PhD, MBA?

A prominent neurologist, he's founding chair of the Dr. Roger Gilbertson Endowed Chair of Neurology at the University of North Dakota School of Medicine and Health Sciences and chair of neurology at Sanford Health, Fargo. He's both a clinician with a growing practice at his Fargo-based neurology practice and an active researcher, delving into new and much more advanced therapies to treat Parkinson's disease. He was voted one of *U.S. News & World Report's* Best Doctors 2011–12. In addition to his clinical practice and research work, Lou



Gary Schwartz, Donald Jurivich, and Jau-Shin Lou.



teaches medical students and post-MD residents in addition to his administrative responsibilities in neurology.

In its declaration of Parkinson's Awareness Day last spring, the North Dakota Office of the Governor noted that Parkinson's is the second-most common neurodegenerative disease in the United States, affecting upwards of 500,000 and as many as 1.5 million people annually. The prevalence of Parkinson's is expected to double in the next 25 years.

Parkinson's disease is the 14th-leading cause of death in the United States, according to the Centers for Disease Control and Prevention, with an economic cost of at least \$14 billion.

North Dakota is third in the nation for per capita incidence of Parkinson's making Jau-Shin Lou's research program into the disease and effective treatments for it all the more compelling. "We're studying the use of transcranial direct current stimulation in patients with mild cognitive impairment underway to see if such treatment will improve cognitive function," said Lou. He notes that the big promise of this technology is that it can be used by patients themselves at home, and it's minimally invasive.

"It only takes a very small current to stimulate the brain; the patient barely feels it," Lou said. "Another important factor is that it's not expensive—and it can easily be used at home."

"It's not a magic bullet, but it's promising," Lou said. "Right now there's only one device, and we're using it in our research program."

Once it is proved effective and safe, Lou said, the technology is designed to be a single push-button machine the patient can use at home, but it needs to be programmed by a physician.



"For Parkinson's and other neurodegenerative diseases, this research is leading us to a noninvasive, nonpharmacological way to manage and improve the function of our patients," Lou said. "Not all treatments need medicine. Basically, this technology is about improving a patient's quality of life."

Who is Gary Schwartz, PhD, MPH, PhD? Gary Schwartz is professor and chair of the SMHS Department of Population Health. Schwartz's research interest involves epidemiologic and translational studies of screening and therapeutic trials—about the roles of Vitamin D and calcium in the natural history of prostate and other cancers. His other interests include the investigation of cancers of unknown etiology, for example, prostate and ovarian cancer and chronic lymphocytic leukemia.

Schwartz, an epidemiologist who

holds two PhD degrees, studies how the biology and natural history of cancers can be used to design better screening or triage tests that can help in personalized medicine. At a recent presentation at Altru Health System, he explained that, "Men with higher calcium levels in their blood are three times more likely to die of prostate cancer, and women with higher calcium levels have a higher risk of diagnosis of and dying from ovarian cancer." For example, during their lifetime, about 1 woman in 10 seeks surgical evaluation for a mass in her abdomen, which may be ovarian cancer. Most of these masses are not cancer, but the ones that are should be treated by a surgical specialist, since women with cancer who are treated by a surgical specialist have improved survival. Recently, Schwartz has found that calcium levels that are high predict which women with a mass have a mass that is malignant, enabling referral to specialist surgery. This is a case of "new lamps from old"-where data already in a patient's medical chart can be used to inform key medical decisions.

Schwartz is especially interested in cancers of unknown cause that differentially affect North Dakotans. For example, for reasons that are not understood, chronic lymphocytic leukemia rates in North Dakota are among the highest in the nation. Discovering the reason behind this problem is important, not only for North Dakotans but also many others, because chronic lymphocytic leukemia is the most common leukemia in the Western world. One possible reason for the high rates in North Dakota is that levels of residential radon, a natural gas that is the product of uranium in rocks and soils and is a known cause of lung cancer, is particularly high in North Dakota. Working to educate individuals about the potential health risks of radon and how to reduce them is one of Schwartz's goals for the Department of Population Health. This is just one example in which population health research at the UND School of Medicine and Health Sciences not only serves North Dakotans, Schwartz notes, but can improve health for individuals globally.

6 New lamps from old.

Cradle of Knowledge

Researcher seeks evidence-based interventions to save babies.

By Debra Sorvig Pedraza



Larry Burd

This story is all about the children—in particular, two especially worrisome and tough-to-fight medical challenges that hit children hard: sudden infant death syndrome (SIDS) and fetal alcohol spectrum disorder (FASD).

SIDS and FASD are familiar diagnoses to Larry Burd, professor of pediatrics, and director of the Fetal Alcohol Syndrome Center at the University of North Dakota School of Medicine and Health Sciences.

Burd has worked with children for much of his 36-year career. As his clients' needs have changed, so has his research, leading to new ways of identifying, diagnosing, and treating those problems. He's driven by the certain knowledge that recommending interventions that are not backed by good research can have serious consequences.

As an epidemiologist, he looks at diseases at a community level, tracking possible causes and finding effective treatments on a large scale.

According to Burd, today's families face a wider range of problems than those he saw early in his career. Drug abuse was rare until the 1980s. Since then, prenatal drug and alcohol abuse are much more common; there's been a rise in behavioral problems associated with physical, sexual, and substance abuse; and family disintegration has become a big problem.

What is SIDS?

A parental nightmare.

Sudden infant death syndrome is the unexplained death of an infant younger than one year.

Often referred to as crib death, cribs do not cause SIDS. But even though the cause of SIDS remains unknown, scientific efforts have eliminated various misleading theories, according to the North Dakota Department of Health.

Burd and his associates have determined that certain interventions can reduce the risk of SIDS. Informing new parents of the risk factors in a reliable and consistent manner is crucial.

"One needs to be very thoughtful about implementing interventions, especially when dealing with babies," Burd said.

One proven recommendation is infant sleeping position—babies need to sleep on their backs.

An early and successful intervention was the development of a baby blanket with the risk factors for SIDS printed on it. This was sent home from the hospital with the baby, so every time the baby was put to bed, wrapped in the blanket, there was a visual reminder of the risk factors. By the time the blanket wore out, the baby was past four months of age—the peak risk period of SIDS incidence.

SIDS rates declined considerably from 130.3 deaths per 100,000 live births in 1990 to 38.7 deaths per 100,000 live births in 2014, according to the U.S. Centers for Disease Control and Prevention.

As Burd says, when supported by good data, "a little intervention goes a long way."

His research looks at many variables, including drug or alcohol use, co-sleeping, and even the mother's sleeping position, as well as looking more carefully at unexplained deaths. Also, there are some ethnic groups that are still at higher risk. As happens with much research, some questions get answered; however, new questions arise.

Fetal Alcohol Spectrum Disorder—as goes the mother so goes the baby

According to the CDC, FASDs are a group of conditions that can occur in a person whose mother drank alcohol during pregnancy. These conditions can affect each person in different ways, and can range from mild to severe. They can include physical problems and problems with behavior and learning—FASDs last a lifetime. There is no cure for FASDs, but research shows that early intervention treatment services can improve a child's development.

Part of Burd's initial research led to the development of the Fetal Alcohol Syndrome Center for the state of North Dakota, which is noted in the North Dakota Century Code (15-11-35).

This led to further funding by the state to develop a program for women at risk during pregnancy, a one-question standardized screening to be given to all prenatal patients: *When was your last drink?*

The answer opens the door for the practitioner to begin a conversation related to alcohol or drug abuse during pregnancy. Almost 100 percent of N.Dak. women get this screening. Providers are now requesting more training for office-based interventions.

Being able to show the cost and benefit of early intervention is critical, Burd notes.

A study done in Canada—Burd was directly involved with it—estimated that the cost of care for a child with FASD averages \$500,000, including costs of speech therapy, residential care, lost productivity, cost of corrections system, early mortality, and substance abuse treatment for FASD.

The actual costs are probably much higher, as this condition is likely underreported. Few estimates for the prevalence of FASDs are available. Based on community studies using physical examinations, experts estimate that the full range of FASDs in the United States and some Western European countries might number as high as 2 to 5 per 100 school children (or 2 percent to 5 percent of the population).

"We are looking at FASD across the world and have had a site in the Congo for over eight years to examine prenatal alcohol exposure, which is very common in this society," Burd said.

Moreover, prenatal exposure to alcohol may be far-reaching, affecting not only the specific fetus but that fetus's future offspring.

"Many people thinking about this issue would recognize the link between maternal drug use and developmental problems, which is a major public health issue in the United States and across the world," Burd said.

PASS Network—Prenatal Alcohol Stillbirth and SIDS

Burd's current research project involves the Prenatal Alcohol and SIDS and Stillbirth (PASS) Network.

The PASS Network was established in 2003 as a partnership between the National Institute of Child Health and Human Development's Pregnancy and Perinatology Branch and the National Institute on Alcohol Abuse and Alcoholism.

The National Institute on Deafness and Other Communication Disorders joined the partnership in 2009.

The network conducts communitylinked studies to investigate the role of prenatal exposure to alcohol in SIDS and adverse pregnancy outcomes, such as stillbirth and FASDs, and how SIDS and these other outcomes may be interrelated.

Teaching and learning

As an active researcher and professor, Burd not only teaches students but continues to learn from them. He said he enjoys and appreciates their unique way of looking at specific problems and considers their possible solutions.

Burd is from Vona, Colorado, and received his PhD in Epidemiology from the University of Manitoba. One needs to be very **thoughtful about** implementing interventions, especially when **dealing with babies**.

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New section features student contributions.

Champions Summer Floor Hockey League

By Andrew Milbridge, MS II, and Jace Kusler MS II

Playing basketball to unwind at the Student Wellness Center after an afternoon of anatomy lab, a stray ball rolled onto our court. Running after it to return it to the owners in the nearby court, I walked toward a group of athletes, including one in a wheelchair. Returning the ball to them, we introduced ourselves; I asked them what other sports they like to play, having seen the group before. Being a hockey enthusiast, I was surprised to hear that they have never played hockey. One individual replied, sadly, "No, we have nowhere to play, but we enjoy watching the UND games." Knowing the happiness that the sport has brought to me in my upbringing and during my studies at UND, this lit a spark inside of me to bring the sport to this population of Grand Forks that may be overlooked in ways we had not known.

Growing up in Minnesota, my grandfather taught me how to skate when I was three years old, inspiring a lifelong love for hockey. The Grand Forks community's hockey culture is just as strong, despite not having the support for all interested players. With these strong roots, Jace Kusler, a fellow North Dakotan medical student friend, and I started the Champions Summer Floor Hockey League for Disabled Children and Young Adults.

For months, our focus was finding a venue, gathering equipment, designing T-shirts, recruiting athletes, and securing donations. Trying to balance schoolwork and organizing an event of this magnitude was extremely challenging. We wanted to foster teamwork and personal growth in each of the athletes who participated. Many days were spent planning and collecting donations, while nights were spent studying. Since moving to Grand Forks five years ago, I have learned various equations, memorized physiology facts, and studied to make it to medical school, where we cram more facts—some remembered, some forgotten. But one lesson learned throughout this experience that will never be forgotten is how resourcefulness and dedication to bringing happiness to others is a win for the entire team.

In June 2016, the hard work paid off. The summer camp held at the UND Wellness Center allowed 15 athletes with varying ranges of disability, including Down Syndrome, autism, cerebral palsy, and fragile X syndrome, to learn to play hockey, free of charge.

Athletes learned basic hockey skills in the first session, such as holding a stick, passing a ball, and shooting. We noticed the range of comfort levels among the athletes with performing the activities. One child with autism exemplifies how this summer camp was life-changing for the participants. From the beginning, he was very shy and preferred to watch the other athletes from the sidelines, holding his mother's hand and often leaving early. But, the last day was the best day. As Jace and I were setting up, I thought I saw the same shy, autistic child sprint through the doors of the gym, something different about him than before. He ran down the hallway, 20 feet in front of his mother, shouted "Hello" to me, grabbed a hockey stick, and jumped onto the court to play with a grin. From day one, he had held his mother's hand and watched from the sidelines. Now, his mother followed, walked up to Jace and me with tears rolling down her face, hugged us, and whispered "Thank you."

It all made sense to me.

We created the floor hockey league not to simply introduce the game of hockey but to change the lives of those in the community who are so often overlooked or underestimated. Seeing this child's progression since day one was an incredibly humbling experience. For this reason, Dr. William Haug of Altru Family Medicine, a physician supporter of the league, said, "This league really was an incredible experience for all those who participated, and we hope it will continue to be for years to come."

Medical school has been described as challenging, but watching these athletes progress has taught me the true definition of overcoming a challenge. During my time at UND, facts have been crammed into this brain—some remembered, some forgotten. But I will never forget the happiness I saw on the child's face this summer.

We would like to thank the following for their donations and support with the Summer Champions Hockey League. Recruiting the help of undergraduate volunteers and the Altru Family Medicine practice, local community organizations made note of our efforts and extended much-needed support. They included groups such as the UND School of Medicine and Health Sciences, Scheels, American Crystal Sugar, Northern Plains Railroad, Hornbacher's, the Matt Cullen Children's Foundation, Bank of Hazelton, Grand Forks Youth Hockey, and the UND Biochemistry Club.



On the cover: *Epistemology*, 2011 Oil and acrylic on canvas **By Marcus Geffre MS III**

As an undergraduate philosophy student, the study of knowledge and how one comes to know was a cornerstone of my studies. The works of Plato and Aristotle were especially meaningful in their discourse about the nature of knowledge, truth, and reason. This painting seeks to visually represent their thoughts on the nature of objects in the world and the ways in which one comes to truth. It also seeks to represent the joys and struggles of obtaining knowledge.

The five predicables of *essence, genus, differentia, property,* and *accident,* Aristotle's basic categories for the classification of objects, are represented across the top. The trial of Socrates from Plato's *Republic* is displayed on the right. On the left is a representation of Plato's *Meno,* which reminds us that inquiry into what we do not know is not only good but also fruitful. Through the creation of this work, I was able to reflect upon truth, the ascertainment of knowledge, and one's relationship between one's mind and the physical objects in this world. It is my hope that others are able to experience this painting in a similar way.

Physicians for Human Rights

By third-year medical school students Seth Zygarlicke, Thomas Seaver, and Nabeel Hyder

In seeking to help others, in retrospect we realize that we also help ourselves. The word *doctor* is derived from the Latin word, *docere*, "to teach," and all good teachers are said to learn from their students. In the preclinical years, there is a certain itchiness, a starved anticipation with an open appetite, to touch patients, physically and emotionally, and to learn from them.

The UND SMHS's chapter of Physicians for Human Rights (PHR) attends to medical students' anticipation for the clinical years by actively hosting health screening clinics at the Northlands Rescue Mission, leading first- and secondyear medical students into the community. Because current preclinical exposure to patients is largely homogenous, we yearned for a challenge to truly help us learn the interaction skills to work with groups that present their own unique health and communication challenges.

We challenged our medical student peers to create booth presentations using illustrative pictures and few words to relay key messages about health and wellbeing for non-English speakers in order to set up a health fair for New Americans. Switching roles, medical students became the teachers in the inaugural April 2016 event. Students brainstormed key areas that may help improve immigrant and refugee health, such as winter wear, nutrition, dental care, emergency care, children's health, appointments counseling, and blood sugar control. Students also solicited donations for their booths, giving attendees warm winter clothing; a plethora of materials and health goodie bags were also donated by Global Friends Coalition and Valley Community Health Center.

Learning about patient-centered care and cultural competency from lecture provided us with the background to drive our efforts. Through creating a health fair, this experiment directly allowed us to experience the challenges that underserved patients face, varying from addressing linguistic barriers in designing fair flyers, to solving transportation issues upon learning that most of our audience did not have driver's licenses. In aiming to be patient-centered, our understanding needed to pierce the core about refugees' and immigrants' difficulties. We interacted with the Grand Forks community in new ways, recruiting local volunteer translators.

Our fair was simple; it was far from an airtight, polished event. And yet this modest endeavor, crafted with thoughtfulness and outreach, made the attendees feel welcome, wanted, and supported. In return, we felt the glowing warmth of appreciation, of knowing that our neighbors would be warmer, healthier, and safer in coming winters. Amid the book-busy studying of the preclinical years, it may not seem conceivable to actually "save someone's life." But perhaps the New Americans actually saved ours, adding a certain richness to our studies, building our immunity against burn-out and allowing us to continue to anticipate serving others for the betterment of their lives in the long path of medicine.

WORKFORCE

A Recipe for Success

By Stacy Kusler



Rural Health Interest Group Board Members

Front, left to right, Janet Julson, MS II, Galchutt, N.Dak.; Heidi Johnson MS I, San Diego, Calif.; and Ashlyn Kamrath MS I, Lakota, N.Dak. Back, left to right, President Dylan Torgerson, MS II, Kindred, N.Dak.; Hannah Schradick, MS II, Wahpeton, N.Dak.; John (Jack) Stacy, MS I, Cheyenne, Wyo.; and Mylan Panteah, MS II, Santa Fe, N.Mex.

A recipe for success: Mix together one heaping cup of a medical school's mission to serve its state's rural communities, a tablespoon of driven medical students with an interest and loyalty to rural areas, and a pinch of hearing about the right opportunity at the right time. Knead and shape as needed for a student-led group focused on a healthy future for rural North Dakotans. Well, at least that's how it came together for the Rural Health Interest Group (RHIG) here at the University of North Dakota School of Medicine and Health Sciences.

Since the University of North Dakota School of Medicine and Health Sciences (UND SMHS) has been in existence, the goal has been to improve the quality of life for North Dakotans through well-trained physicians and other health professionals. One way to do that is by attracting ruralfocused students to the medical school. One of those students was Samantha (Dusek) Kiedrowski, a native of Grafton, North Dakota.

In the spring of 2015, Kiedrowski, a then third-year medical student at the UND SMHS, heard about an opportunity through the Center for Rural Health for a medical student to attend the National Rural Health Association (NRHA) annual conference in Philadelphia. The NRHA had established a Student Constituency Group made up of student members who come together to dialogue about rural-healthrelated issues, including workforce and policy. The North Dakota Rural Health Association (NDRHA), an advocacy organization focused on improving the health status of rural North Dakotans, was looking to support a student to attend and represent our state in this capacity. They put a call out for volunteers through the Center for Rural Health and Kiedrowski responded.

"I honestly had never heard of the NRHA before, so when the conference came up and they needed a representative, I jumped on it," Kiedrowski said. "I had been essentially oblivious to what was going on nationally in healthcare policy as it pertained to rural health. The conference definitely opened my eyes to changes occurring on a national and state level that will most definitely affect my job in a few short years."

What Kiedrowski learned at the conference made her wonder if any of her fellow classmates at UND would be interested in any of the same information. That's how she formed the UND chapter of the NRHA Student Constituency Group called the Rural Health Interest Group (RHIG). The next fall, as Kiedrowski began her fourth and final year at the SMHS, she wanted to get the first-year medical students interested so as to not lose momentum because of her busy schedule, and for the group to have a chance at continuing after she graduated. She held an informational meeting where she talked about her experience at the conference and what there is to gain from being connected to the NRHA Student Constituency Group. Over 60 medical students attended and, that same day, RHIG officers were elected and the group had officially formed.

"My major interest in rural medicine stems from my overall goal of practicing as a physician on my reservation in New Mexico, which is the Navajo Nation," says RHIG board member and second-year medical student Mylan Panteah. "I decided on the UND SMHS because of their strong commitment to rural medicine, and when I met with Sam [Kiedrowski], I was excited she was starting the RHIG. There is a strong need for physicians within [rural] areas, so our group hopes to draw attention to this and come up with ways to address it." RHIG President Dylan Torgerson agrees. "My main goal for members of this group is to recognize and respect the importance of rural medicine, in North Dakota as well as throughout the country. I know rural is not exactly for everyone, and it's rare that someone 100 percent wants to pursue a career in a rural field from the start. However, by informing them and educating them on the subject, perhaps a few more will consider, or at least think about, a career in rural medicine."

Torgerson and Panteah, along with their fellow RHIG leaders, have a similar vision for the current group of around 30 students. They want to expose members of the group to rural practice settings through shadowing opportunities (something that first- and second-year students normally don't have exposure to). They also hope to introduce a yearly skills lab with other student interest groups in various healthcare disciplines on campus, which is an idea that stemmed from this year's Student Constituency Group meeting at the NRHA annual conference in May of 2016, which both Torgerson and Panteah were able to attend with support from the NDRHA. Other topics that members expressed interest in learning more about are employment contracts, which the Center for Rural Health has presented information on already, telemedicine, and the Indian Health Service. The group would also like to expand RHIG to include students from other health professions on campus.

"My hope for the Rural Health Interest Group, in short, would be to inform my classmates of the importance and opportunities in rural medicine. I can only hope that it continues from class to class, grows in size, and begins to have a large presence in the school," Torgerson said. And while a few more ingredients may be added to this "recipe," it will indeed continue. In September, another informational meeting was held to introduce the new first-year medical students to the RHIG. Three first-year medical students were elected to join the existing board of directors to continue the work that has been started. We look forward to seeing more great rural-focused things from the RHIG in the future.

I decided on the UND SMHS because of their strong commitment to rural medicine.

From Volume To Value

By Nikki Massmann

Shift in focus enables rural healthcare organizations to provide high-quality care.



Dan Kelly, CEO of McKenzie County Healthcare Systems in Watford City, North Dakota

There are many abbreviations and buzz words in the media when it comes to healthcare. One such initialism getting some attention in North Dakota is ACO, which stands for Accountable Care Organization.

Defining an ACO is complex, but essentially it is a specific model for healthcare organizations (generally a network of physicians or hospitals) that helps them focus on prevention of disease, in addition to care coordination to better manage the patient. The ACO is "accountable" for providing care to its patients with an emphasis on population health to lower healthcare costs. The U.S. healthcare system is changing how hospitals are paid by insurance companies, Medicare, and Medicaid for treating their patients. There is a shift occurring across the nation, led by the Centers for Medicare and Medicaid (CMS), to reduce healthcare costs. Two of the ways this can happen are by providing care that prevents chronic disease (which can be costly to treat) and by making sure chronic conditions that do

develop receive appropriate follow-up care. ACOs promote quality over quantity when it comes to healthcare.

"We're moving, as we say as part of the nomenclature, from volume to value," said Brad Gibbens, deputy director of the Center for Rural Health at the University of North Dakota School of Medicine and Health Sciences. "The U.S. healthcare system has traditionally paid providers per encounter, test, or procedure. Every time something is done to us or for us as a patient, that provider is paid based on volume. The more tests you order, the more retests, etc., the more there is cost and therefore reimbursement [from insurance] to the healthcare organization for that treatment."

Several rural hospitals in North Dakota are participating in an ACO model that is providing technical assistance in adopting this new type of payment structure. For the next three years, participating rural hospitals can learn how to function as an ACO with this support in place, before fully making the change. One of the benefits to participating is access to data that they have never had access to previously. The data provide a way to identify patients who have not had their appropriate health screenings, such as mammograms, colonoscopies, and blood tests. Another tool is that the ACO participants meet regularly to discuss what they are having success with as part of the move toward value-based reimbursement. McKenzie County Healthcare Systems in Watford City is one of the facilities participating.

"I am thoroughly convinced that the way hospitals do business today will have to change," said Daniel Kelly, CEO. "The benefit in participating in the ACO now is that we're learning to better provide care that is cost-effective and timely. The greater benefit is to our patient population. Our country has a history of not following

G If their healthcare is **managed better**, then that's what it's all about. good preventive medical practices, and our medical providers and hospitals have been focused on caring for people once they are sick. This is not prevention."

Many factors contribute to healthcare costs. Americans spend more on healthcare than other countries but do not necessarily have the best health outcomes. According to the Centers for Disease Control and Prevention (CDC), about 86 percent of all healthcare spending was for people with one or more chronic medical conditions. Nationally, about half of all adults have one or more chronic disease conditions and about one quarter have two or more. The changes in how healthcare is delivered and how providers are reimbursed are built around a public policy goal to improve health, improve care, and to control or lower costs.

North Dakota's rural hospitals face unique challenges in adapting to changes in healthcare policy and treating their patients in a cost-effective but high-quality manner. They regularly deal with shortages in their healthcare workforce, which can be exacerbated by their rurality—recruiting and retaining healthcare workers to small communities can be difficult.

"Right now, we are faced with three overwhelming issues in the healthcare arena: costly care, physician shortages, and staff shortages," said Kelly. "Changing our reimbursement system is the one thing that, if it proves successful, can address all three of those issues. It's less expensive to prevent illness than it is to treat. It takes fewer physicians and staff if fewer patients are being admitted to the hospital. The model has allowed our facility the financial resources to hire a case manager that contacts patients for good preventive care, and proper follow-up care."

Sakakawea Medical Center (SMC) in Hazen, North Dakota, also participates in the same ACO model as McKenzie County Healthcare Systems. SMC has a partnership with Coal Country Community Health Center in nearby Beulah that contributes to the ability to implement the requirements of an ACO. It takes an entire team to make the transition to value-based reimbursement work, and these two facilities already operate together successfully. Care coordinators from both organizations are plugged into the community and work together to help patients find support services to better manage their diseases or prevent them, such as wellness centers, services offered through public health, and health-screening events.

"The partnership allows us to better close the loop on how we provide care between our clinics and hospitals," said Darrold Bertsch, CEO of Sakakawea Medical Center and Coal Country Community Health Center. "When the day is done, the most significant thing is that we are making a difference in the lives of the population we serve. If their healthcare is managed better, then that's what it's all about."

Kelly echoes this sentiment. He said, "As an administrator, we don't talk a lot about this, but it's not that great of a feeling to be focused on people when they're seriously ill. Participating in the ACO and shifting to a focus on wellness as opposed to a focus on illness makes it exciting to come to work. We are finally doing what we should have been doing all along."

North Dakota's rural healthcare organizations are poised to successfully implement changes to their reimbursement and payment structure. They have a history of collaboration and networking that allows them to share best practices and support each other in improving the health of all of the state's residents.



Darrold Bertsch, CEO of Sakakawea Medical Center in Hazen, North Dakota, and Coal Country Community Health Center in Beulah, North Dakota

We are finally doing what we should have been doing all along.

Janet Julson

Medical student helps to mentor students from her high school.

By Denis MacLeod

There's just nothing like a **small town**, especially a small town in **North Dakota**. For second-year medical student Janet Julson, a native of the community of Galchutt, North Dakota, and a graduate from Richland High School, the road to medical school at the University of North Dakota took her north along Interstate 29, first to North Dakota State University, where she earned her undergraduate degree by majoring in exercise science.

Julson would ask her mother, Nadine, "What did I tell you I wanted to be when I grew up?" Her mother said, "You never talked about it." Her dad Ron was the superintendent at Richland. He's retired now. Her mom owns an accounting firm in Wahpeton that her twin brother, Daniel, works for as a CPA.

Although while she was growing up, her mother's sister, also an NDSU grad, attended medical school at the University of Minnesota. "I think that influenced me a little bit," she said.

Her senior class had 19 students. "Almost all of my classes had six kids in them, and one of them was my brother Daniel. It's pretty tight-knit."

Initially at NDSU, she was a premed major. But her desire to go to medical school cooled when she realized that it was a long haul to reach her goal. "I knew it was going be a lot of work and a lifelong commitment. I wasn't sure that I was up to that. I sort of shied away because I knew how intense it was going to be. I talked with my aunt and other physicians, and they all said, 'You know you have to be all in. It's not something you can do halfway."

In her junior year of college, her dad had heart surgery and her grandfather was diagnosed with lung cancer. "So I spent a lot of time at the hospital." She was thinking of health fields other than being a doctor. But her time in the hospital helped her rethink her career path and convinced her that "This is where you're supposed to be. It's supposed to be in medicine. It was really kind of cool to go through that journey."

For a year in Fargo, Julson volunteered in the emergency room at Essentia Health and one night a week in the Friendly Visitors Program at Sanford Health in Fargo. As a friendly visitor, she would go in and visit with hospitalized patients who didn't have family or were lonely. "I loved it. I met a ton of cool people. I learned how to carry a conversation after starting up from nothing other than introducing myself. I learned about different people. There were a lot of interesting stories about how they got there and where they were from."

Julson also coached volleyball in Kindred while she was an undergraduate. "Some of the kids I coached are playing at NDSU, which is exciting."

"I've always just loved learning. I really enjoyed school. I liked medicine because it was humanistic and it involved science. You get the mix of both. I love people and the opportunity to interact with them and still incorporate science into that. I joke sometimes, and it sounds wrong, but it's like I love people too much to be in medicine sometimes. I love the people part of it so much more than the science sometimes. It's an individual, it's a patient, not a disease that I am focusing on."

Her high school science teachers were surprised that she chose medical school. "They knew I could do it. But they said, 'You realize all the science involved, right?" Honestly, at the time, I probably would have told you my favorite classes were English and history."

What does she think of medical school so far? "I love it. The best people I've ever gotten to work with. I love my classmates. It's intense; it took a while to love it. I can't say I love it every single day."

This past spring when she and her family were receiving high school graduation invitations in the mail, she noticed that a lot of kids said that they were going into or expressing an interest in physical therapy, nursing, other health fields. Julson was lying awake one night at 4 a.m. thinking "I really love medical school." And the thought occurred to her that "Gosh, I wish I had had someone to help me through the process, figure out how to apply, which area to choose. Because I really, kind of, winged it [she laughed] when I was trying to get in. I started thinking, 'Almost all of my best friends from high school were in nursing, PT, all these different health fields.' "

"So I thought about bringing them back together to speak with kids at our high school in Richland so kids could ask questions. They would have a contact to reach out to in the future for shadowing, for applying, that sort of thing, and to also know that a health career is an option for them."

Julson partnered with Kendra Dockter, the high school secretary who is in charge of Dollars for Scholars and who also was Julson's piano teacher, to hold a Healthcare Professional Interest evening for high school students and their parents. "I said, 'Kendra is this something people will be interested in? Am I crazy?' And she said, 'No, I think it sounds awesome. Let's see what we can do to make it happen.'"

So one Wednesday evening in June, Julson and fellow Richland High School graduates James Workin, a pharmacy major, Kathleen Bachman, a physical therapist who attended UND, third-year PT student Jacob Erbes, and Lauren Tengsdal, a nurse, gathered at the high school and spoke with 20 students and their parents.

"My goal was to have people from our school and from our area that the kids and their parents knew go through their stories," Julson said. "We explained how we got to where we are and decided on the career that we wanted to be in. Then we discussed how we applied to school, because most of us had gone to grad school in some form. We spoke about how the application processes work and what undergraduate school was like for each of us, in addition to the coursework and any volunteering we did. We wanted kids from Richland to see that they could go on to these careers and do this."

"The high school students asked us, 'What do we take?' And we said, 'Take all the hardest classes that you can. Make yourself work. You'll thank yourself later.' James's dad is the science teacher, so we said, 'Take all of Mr. Lowell Workin's classes, because nobody liked his classes in high school because he made us work.' He taught the biology classes, and Jason Triplett taught chemistry. But when we got to college, we were bored because we knew most of the material from high school."

Julson said the feedback from the students and parents was very positive.

Everyone who presented left their contact information. "I've had some kids text me since then and say, 'How did you get in to shadow this physician?' or 'What should I say to thank them when I'm writing this e-mail?' They also contacted the other presenters. One of the high school students was interested in pharmacy too. So she was excited to have somebody to reach out to. We would like to do a presentation again."

"I was talking with my mom this morning. And she said that since 1975 I'm the first person from Richland to go to medical school. After talking to some of the students at the presentation, I know there are three kids in undergrad at UND, right now, from Richland, that are premed. So that's exciting for me to see."

Julson said she wasn't sure about what specialty she would pursue after medical school. "I really like family med. I got to spend two weeks in Wahpeton this summer, close to home, doing the Don Breen Program. And I just haven't found a specialty yet where I can get the kind of patient relationships and connection like family med, across the whole spectrum."

"My favorite day of the summer was when we were visiting a 100-year-old in the nursing home. Talking about how she was ready to go. And we had to leave her because we had to go deliver a baby. There's nothing else like that."

Julson is a member of the Rural Health Interest Group at the SMHS. Stacy Kusler, the group's adviser, is the workforce specialist for the Center for Rural Health. Julson reached out to Kusler for help with the high school presentation. Julson also just received the Janice Granum Medical and the Dr. and Mrs. W. J. Orchard Scholarships.

Julson sees herself practicing in a rural area someday. "There's just nothing like a small town," she said, "especially a small town in North Dakota. You just know everybody. And I love going home; everybody waves and knows I'm home. I go to church on Sunday, and it's like a reunion."



Coming Home

By Jessica Sobolik

Two recent SMHS graduates—one physician and one physician assistant—are



Rural healthcare administrators fully understand how influential the recruitment of new healthcare professionals are to their communities. As an example, Alan O'Neil, CEO of Unity Medical Center in Grafton, N.Dak., received confirmation that Jared Marquardt, MD, would be practicing at his facility on the same day that Bismarck, N.Dak., native Carson Wentz was drafted by the Philadelphia Eagles. "Personally, I was more excited about Jared coming to Grafton than I was about Carson going to Philadelphia," O'Neil joked.

O'Neil has recruited not only one provider to the community but actually four, three of whom are recent graduates. The fourth provider, who has practiced in another location, will be publicly announced soon. So, in short, big changes are coming to the community 40 miles northwest of Grand Forks.

Whitney Thompson, MPAS '16

Thompson is originally from Park River, N.Dak., 20 miles west of Grafton. She previously worked as a respiratory therapist at Sanford Health in Fargo and Altru Health System in Grand Forks before she decided to enroll in the UND School of Medicine and Health Sciences Physician Assistant Studies Program. She completed her clinical year of training at the Midgarden Family Clinic in Park River, N.Dak., under the guidance of fellow UND alumna Kristi Midgarden, MD '97. "I love the sense of community in a rural area," Thompson said. "Growing up here, I knew that's what I wanted."

She also likes the variety of family practice. "Whether primary care, urgent care or walk-in, you see a lot of things," she said. "And all ages. I am able to see newborn babies (starting at two weeks old) to end of life."

She said she looks forward to not only practicing in Grafton but also becoming part of the community. "I like knowing more about my patients than just what ails them at that moment," she said. "I like seeing my patients in the clinic but also playing basketball. My patients might not necessarily know me, but they may know my parents. They know where I come from."

Thompson will join Sarah Schuster, another physician assistant who recently started practicing at Unity. Coincidentally, Thompson previously worked with Schuster at Altru. Schuster earned her undergraduate degree from UND and her Master of Physician Assistant Studies degree from the University of South Dakota in Vermillion. She is originally from Minto, N.Dak., 10 miles south of Grafton. She went to the same high school as one of her future colleagues, Jared Marquardt.

returning to their roots to practice in the rural community of Grafton, N.Dak.

Jared Marquardt, MD '14

Marquardt claims two North Dakota small towns as his hometown: Bowbells, 70 miles northeast of Minot, and Minto during his high school years. He will complete his family medicine residency at the UND Center for Family Medicine in Bismarck, N.Dak., on June 30 before coming to Grafton to practice. "It's like coming back home," he said.

In his first year of medical school, Marquardt was one of the first students presented with the RuralMed Program opportunity. Funded by the state Legislature, it absorbs the tuition costs for all four years of medical school for graduates who commit to practicing family medicine or general surgery in a rural North Dakota town for five years. Some students hesitate to commit to this program in their first year, but Marquardt did not. "Going into medical school, I was interested in rural family medicine," he said. "As a certified nursing assistant, I had worked in pediatrics, NICU, dermatology, and other areas, and I seemed to like a bit of everything."

Throughout medical school, he took advantage of rural opportunities. Between his first and second years, he spent time in Devils Lake, where he delivered his first baby with a physician's assistance at 2 a.m. "That was quite the experience," he said. "I didn't sleep much that night even after the delivery." He also spent six months in Hettinger, where he was "immersed" in a little bit of everything, including assisting with surgeries, seeing patients in the clinic and emergency room, and admitting patients to the hospital. "I initially had an interest in obstetrics," he said. "But in family medicine, you get to see a little bit of everything and all ages-babies, teens, adults, geriatrics. You get to know the family members in the community. And there are a variety of settings in the clinic, the hospital, the emergency room."

Marquardt admitted that he once considered residency training outside of

North Dakota with the intent to return someday, but he and his wife Annie realized that they wanted to stay closer to home (Annie is originally from Gilby, 20 miles south of Minto). "Whenever there was a holiday, we were traveling back to the [Red River] Valley," Marquardt said. "Near the end of residency, we realized that we wanted to be even closer to family and friends." That's when Grafton came up on the radar.

O'Neil was looking for provider candidates at the request of Unity's Governing Board of Trustees, which was filling the vacancy created by longtime physician Anthony Kotnik's retirement. O'Neil said he sought candidates who would be a good fit for rural healthcare delivery. "They have to be passionate about their profession, technically competent, great communicators, team members, and flexible because they wear a lot of hats in a rural facility," he said. "They have to be adaptable because how we're delivering healthcare is ever-changing. It's about maximum utilization of technology, and the care models are moving toward population health, with reimbursement not driven by volume but data-driven indicators. They have to understand these perspectives."

O'Neil's recent hires are part of the plan to expand Unity Medical Center. "We are in a growth phase right now, so we're taking measures to increase our capacity through renovation, so that we have five more treatment rooms. We've expanded the parking lot, and there is possibly more construction on the horizon."

O'Neil is confident in his new recruits. "These are outstanding recent graduates who are well-trained and ready to jump in and build an active practice," he said. "They'll make contributions sooner rather than later in the organization and the community. They understand the culture here. They're not afraid of winter. It's really about taking care of family and friends. We welcome them to our organization."



Whitney Thompson, MPAS '16



Jared Marquardt, MD '14

ALUMNI NOTES

'10s



Adria Ridl, MPAS '16, is now at the Sanford Southpointe Clinic in Fargo, N.Dak. She is board-certified by the National Commission on Certification of Physician Assistants.



Ashley Sebelius, DPT '16, has joined the medical team at CHI St. Alexius Health in Devils Lake, N.Dak. A native of Devils Lake, specializing in pediatrics, Sebelius will help children maximize their physical abilities and minimize the physical limitations.

Virginia Keaveny, MD '13, has joined Trinity Health's Emergency /Trauma team in Minot, N.Dak. A native of Minot, Keaveny completed her residency training in emergency medicine at the Mayo School of Graduate Medical Education in Rochester, Minn. She is a member of the American College of Emergency Physicians and Alpha Omega Alpha, the national medical honor society.

Stephanie Antony, MD '13, has joined Essentia Health-South University Clinic in Fargo, N.Dak., as a pediatrician.



Lindsey Henderson, MD '13, recently joined Sanford South Clinic in Bismarck, N.Dak. Henderson completed her residency training in family medicine from Western Michigan University Homer Stryker MD School of Medicine in Kalamazoo.



Jessie Lindemann, MD '13, is now at the Sanford North Fargo Clinic in Fargo, N.Dak. Lindemann completed a residency in family medicine at the University of Wisconsin/Eau Claire Family Medicine Clinic.

— '10s ——

Elizabeth Blixt, MD '12, is practicing dermatology at CentraCare Clinic in St. Cloud, Minn. Blixt has a special interest in dermatologic surgery and cosmetic dermatology.

Tiffany Doyle, MD '12, is now at the Sanford Moorhead 8th Street Clinic in Moorhead, Minn.



Thomas Miskavige, MD '12, has joined Altru Health System's internal medicine team in Grand Forks. Miskavige, a Grand Forks native, is board-certified by the American Board of Internal Medicine and an expert in beside pointof-care ultrasound.



Michael Greenwood, MD '11, is now the associate medical director of Dakota Sight. Greenwood currently practices at Vance Thompson Vision in Fargo, N.Dak. He will continue to focus his work on advanced vision correction procedures to correct nearsightedness, farsightedness, astigmatism, and presbyopia.



Christopher Mees, MD '11, recently joined Sanford North Walk-In Clinic in Bismarck, N.Dak. Mees is boardcertified in family medicine by the American Board of Family Medicine.

Ashley Lemere, MD '10, has joined CHI St. Alexius Williston Medical Center in Williston, N.Dak. Lemere recently completed a fellowship in surgical critical care medicine at the University of Iowa.

Kathryn Mell, MD '10, is now part of the family medicine team at Sanford Health Walker Clinic in Walker, Minn. Mell interned and completed her residency in family medicine at the Providence Alaska Medical Center in Anchorage, Alaska, and is board-certified by the American Board of Family Medicine.

ALUMNI NOTES

— '00s



Kayla Burchill, MD '09, has joined the Essentia Health–32nd Ave. Clinic in Fargo, N.Dak., as a general surgeon. Burchill completed a fellowship in bariatric and minimally invasive surgery at the University of Minnesota Medical Center Fairview in Minneapolis, Minn. She is board-certified by the American Board of Surgery.

The International Association of HealthCare Professionals is pleased to welcome **Nicole M. Poppinga, MD '07,** to their prestigious organization with her upcoming publication in the *Leading Physicians of the World*. Poppinga has been in practice for over four years and is currently serving patients at Avera Medical Group Pierre in Pierre, S.Dak.

Ann Hoff, MD '06, recently completed a hospice and palliative medicine fellowship at the University of Minnesota in Minneapolis. She is now employed at the Mayo Clinic Health System in Mankato, Minn., as a palliative medicine consultant. She is a fellow of the American College of Emergency Physicians.

Samuel Milanovich, MD '06, is among the researchers at the Cancer Biology Research Center at Sanford Research in Sioux Falls, S.Dak., who were awarded a \$11 million, five-year grant from the National Institutes of Health to translate laboratory research into clinical trials for head and neck and pediatric cancers. Milanovich will study the genetic mutations that might be associated with leukemia.



Dr. Steven Lantz, MD '98, is now at Sanford Orthopedics and Sports Medicine in Fargo, N.Dak. Lantz is certified in orthopedic surgery and sports medicine by the American Board of Orthopedic Surgery.

'90s ·



Mike McGregor, PA '96, has joined the Orthopedics Department at the Essentia Health–32nd Ave. Clinic in Fargo, N.Dak. McGregor previously worked in orthopedics at Essentia Health St. Mary's–Detroit Lakes Clinic.

John Osland, MD '91, is now at Jefferson Healthcare Orthopedic Clinic, Port Townsend, Wash. Osland specializes in knee and shoulder arthroscopy, knee replacements, and sports medicine.

We want to hear it!

Got news?

Please send your news items for the next issue of **North Dakota Medicine** to Kristen Peterson: kristen.peterson@med.und.edu or call 701.777.4305.

Johnson honored with American Music Therapy Association's Advocate of Music Therapy Award

By Denis MacLeod

Associate Professor Eric L. Johnson, MD, in the Department of Family and Community Medicine at the University of North Dakota School of Medicine and Health Sciences, was honored with the American Music Therapy Association's Advocate of Music Therapy Award at the association's annual conference in Sandusky, Ohio.

The award recognizes a person who is not a music therapist but who has contributed significantly to the MT profession. The AMTA works for the progressive development of the therapeutic use of music in rehabilitation, special education, and community settings.

At the conference, Johnson also presented "Teaching and Learning: Interprofessional Education and Music Therapy" with Dr. Andrew Knight of Colorado State University and Dr. Meganne Masko of Indiana University– Purdue University at Indianapolis.

Johnson is the director of the SMHS's Interprofessional Education Program through which he also teaches in the School's course on Interprofessional Healthcare, which includes students from nine health professions from across the University of North Dakota: medicine, nursing, occupational therapy, physical therapy, music therapy, communication sciences and disorders, social work, counseling psychology, and nutrition and dietetics. The course is run on a collaborative model that doesn't assign a "higher" value to any one profession or specialty over any other in learning team concepts.

The goal of interprofessional education is collaborative practice. Students learn every person on a healthcare team is a patient advocate, which significantly reduces errors in the healthcare system and leads to high-quality care and improved cost efficiency.

Johnson is the medical director for the SMHS's Physician Assistant Program and assistant medical director for the Altru



Diabetes Center. He also is the president of the American Diabetes Association North Dakota Affiliate and the president of Tobacco Free North Dakota. He completed his Family Practice Residency through the University of North Dakota School of Medicine and Health Sciences program in Fargo, North Dakota.

IN MEMORIAM

Bradley Lee Euren, BS PT '74, died August 4, 2016, at his home in Longview, Wash. Brad was born August 17, 1951, to Willis and Olivia (Meyer) Euren in Hillsboro, N.Dak. He graduated from Hillsboro High School and then the University of North Dakota with a degree in physical therapy. He married Deborah Draxton on August 5, 1972, at Wittenberg Chapel on the UND campus. Upon graduation, they moved to Seaside, Ore., where Brad began working as a PT. In 1978, they relocated to Hillsboro, Ore., where their children still reside. Brad and Debbie were later divorced. Brad's joy and enthusiasm were his children, grandchildren, traveling, and his work. For the past several years, he was a physical therapist for Kaiser in Portland, Ore. In the last decade, Brad fulfilled his dream of becoming a certified diver and began to make his way through a list of places in the world that he wanted to travel to, including Australia, New Zealand, Germany, Austria, and England. His next goal was Ireland. Most recently, he enjoyed a family vacation to Disney World with his daughters, sons-in-law, and grandchildren.

Brad is survived by his daughters Jennifer (Joel) Rives and Larissa (Ian) Amanna; grandchildren Brennan and Makailyn Rives, and Hailey and Hayden Amanna; sister Cheryl Stricker; brother Gary (Marcia) Euren; and two nephews, great nephews and niece, cousins, aunts, and uncles. He was preceded in death by his parents and ex-wife.

Mark Flanders Gourley, BS Med '83, died at his home in Bethesda, Md., on September 17, 2016, after a valiant 4¹/₂-year fight with kidney cancer. Mark's kindness was matched with a sense of humor. His greatest joy was spending time with family. For much of his career, he was the program director for rheumatology at the National Institute of Arthritis and Musculoskeletal and Skin Diseases, where he combined his desire to help people and further science through clinical research, teaching, and caring for patients. Mark also worked at the Washington Hospital Center, where he established Washington, D.C.'s first lupus clinic. He was beloved and respected by family, friends, colleagues, fellows, and patients. Mark is survived by his wife, Wendy Kisch; children and sonsin-law, Charlie Gourley, Justin Gourley, Lindsey and Tim Miller, and Jamie and Justin Dean; granddaughter, Elise Dean; mother, Phyllis Gourley and sister and brothers, Carol Stadler, Paul Gourley, and Glenn Gourley.

PHILANTHROPY

Gregory to lead development efforts at the UND School of Medicine and Health Sciences



David Gregory has taken over as the director of development for the UND School of Medicine and Health Sciences with the UND Alumni Association and Foundation (AA&F).

Gregory previously served the AA&F as the director of corporate and foundation relations.

Gregory is taking the place of Dave Miedema, who has worked successfully with the SMHS for many years. Miedema recently moved to Arizona, where he will focus on the southwest region of the United States representing all UND colleges and schools in their fundraising efforts.

"We are excited to have David Gregory working for the School of Medicine and Health Sciences," said Dan Muus, chief development officer for the AA&F. "David has big shoes to fill as Dave Miedema did an exceptional job raising funds for student scholarships and program support. I'm confident he is the right person for the job."

"I'm thrilled to take on this new challenge with the organization," Gregory said. "Dave Miedema has done a tremendous job building up support for the School of Medicine and Health Sciences. I look forward to continuing his work with our loyal alumni."

Donations from alumni and friends of the School of Medicine and Health Sciences have had a great effect on UND students through scholarship support. "Even though our costs are among the lowest in the region and nation, our medical students in particular used to have above-normal educational debt," said Joshua Wynne, MD, MBA, MPH, dean of the SMHS. "But through the generosity of our donors, we have been able to reduce their cumulative debt from well above to well below the national average. I look forward to having David Gregory work to continue to improve the student experience."

Gregory has a bachelor's degree from Bemidji State University and earned his Master of Public Administration degree from UND. Miedema has a bachelor's degree in business from UND and has been with the AA&F for 30 years.

For information on how to best structure your gift to benefit the UND School of Medicine and Health Sciences, please contact:

Dave Gregory, '89 Development Director daveg@UNDfoundation.org 701.777.6679

Jessica Sobolik Director of Alumni and Community Relations jessica.sobolik@med.UND.edu 701.777.6048



Thank you to our thoughtful donors

who recently gave gifts or made pledges.

Betty Wold Johnson of Hopewell, N.J., continues to support the Karl Christian Wold MD Medical Library Endowment, which supports Library Resources, and the Katherine Maryann Rasmussen Memorial Scholarship Endowment, which provides scholarships to physician assistant students.

Members of the MD Class of 2003 established the SMHS Class of 2003 Scholarship Endowment, which provides scholarships for medical students. Participants include Tanya Harlow, Desirae Muirhead, Chris and Sarah Paschall, and Rhonda Schafer McLean.

Bill Harwood of South Burlington, Vt., established the Dean Ted Harwood Memorial Scholarship Endowment in memory of his father, who served as dean of the School of Medicine and Health Sciences from 1953 to 1973. The endowment provides scholarships for medical students.

Christina Tello-Skjerseth, MD '07, and Brent Skjerseth of Bismarck, N.Dak., established the Dr. Christina Tello-Skjerseth and Brent Skjerseth Scholarship Endowment, which provides scholarships for medical students. Dr. Tello-Skjerseth is a radiologist at Sanford Health in Bismarck. Kathy Bangsund, BS OT '72, of Lincoln, Neb., established the Katherine Bangsund Occupational Therapy Scholarship Endowment, which provides scholarships for occupational therapy students. She is an occupational therapist at Regional Medical Center in Lincoln.

Duane Glasner, BS Med '59, of Rolla, N.Dak., established the Dr. Duane D. and Roberta Glasner Medical Scholarship Endowment, which provides scholarships to medical students. Dr. Glasner has practiced as a family medicine physician at Rolla Clinic in Rolla for 25 years.

Michael Reinarts of Eagan, Minn., continues to support the SMHS Faculty Excellence Endowment, which provides awards to faculty demonstrating excellence in teaching, research, or service.

The Robert C. Heen Scholarship Endowment has been established in memory of **Robert Heen, BS Med '44**, of Portola Valley, Calif., through a generous gift from his estate. The endowment provides scholarships for medical students.

Adopt-a-Med-Student

For the second consecutive year in the program's six-year history, there were more Adopt-a-Med-Student donations than students. Thank you, donors! Fifty-nine donors provided funding for 78 stethoscopes, which were presented to first-year medical students during a luncheon on October 18. The students were excited to receive their stethoscopes and appreciated the personal connections with the donors. As one student said, "Your donation will allow me to become a better doctor, and I can't thank you enough for that."

The full list of donors can be found at www.med.und.edu/ alumni-community-relations/adopt-a-med-student.cfm. The website also notes donors who have participated in the program all six years: Heidi Bittner, Devils Lake, N.Dak.; Thomas Hutchens, Bismarck, N.Dak.; Mark Koponen, Grand Forks, N.Dak.; Rick Paulson, Bismarck, N.Dak.; Donald Person, San Antonio, Texas; and Dean Joshua Wynne and Susan Farkas, Fargo, N.Dak. As another student said, "I will do my best to pay this gift forward in the future to my patients, future medical students, and the people of North Dakota."



Scott and Sharon Roche, Grand Forks, N.Dak., and Dean Wynne present a stethoscope to first-year student Nicole Gourneau of Grand Forks.

GRAND OPENING & GALA



On Friday, October 14, 2016, before an overflow crowd of more than 350, the Grand Opening Ceremony was held to formally dedicate the University of North Dakota School of Medicine and Health Sciences building. A ribbon cutting was held after the ceremony in front of the grand staircase.

Front row, left to right: UND Vice President for Finance and Operations Alice Brekke, SMHS Advisory Council Chair Dave Molmen, North Dakota State Board of Higher Education member Dr. Kevin Melicher, North Dakota University System Chancellor Mark Hagerott, Governor Jack Dalrymple, UND President Mark Kennedy, and UND Vice President for Health Affairs and Dean Joshua Wynne.

Second row: Associate Dean for Student Affairs and Admissions Joycelyn Dorscher, North Dakota Senator Robert Erbele, North Dakota Senator Ray Holmberg, and North Dakota Representative Gary Paur.

Third row: Associate Dean for Administration and Finance Randy Eken and Chester Fritz Distinguished Professor Jonathan Geiger. Fourth row: North Dakota Senator Judy Lee, North Dakota Senator Tim Mathern, North Dakota Senator Joan Heckaman, North Dakota Representative Kylie Oversen, and North Dakota Senator Phil Murphy.

Back row: UND Associate Vice President for Academic Affairs Steven Light, JLG Architects Principal Jim Galloway, Senior Associate Dean for Education Gwen Halaas, Associate Dean for Health Sciences Tom Mohr, President and CEO JLG Architects Lonnie Laffen, and Director of Simulation Center Jon Allen.



Class of 1956. Left to right: Director of Alumni and Community Relations Jessica Sobolik, John Lambie, and Dean Joshua Wynne.



Class of 1966. Left to right: Jessica Sobolik, Terry Torgenrud, Frank Vasey, Joshua Wynne, and David Mersy.



Class of 1986. Left to right: Tom Mohr, Karen Aarestad, Steven Berndt, Dean Joshua Wynne, Vicki Braund, Stephen Lynn, Janine Carson, Lori DeFrance, Paul Carson, Gwen Martin, and Mark Koponen.



Athletic training alumni in attendance at the Gala Celebration for the new building were, front row, left to right, Gary Schindler, Matt Carlson, Steve Westereng, Makoto Tsuchiya, and Robin Tracy. Back row: Mayumi Ogino, Steph Nunez, Alicia Champagne, Beth Marschner, Audrey Rambough, and Sara Bjerke.



Participating from a distance in Ortonville, Minn., in Joggin' with Josh on September 29, were Dr. Bryan Delage, assistant professor of Family and Community Medicine, and codirector of the Rural **Opportunities in Medical Education** (ROME) Program and Family Medicine Clerkship, and Dr. Stacy Longnecker, who practices obstetrics at Ortonville Area Health Services. They were joined by UND MS III Lisa Poole of Wheaton, Minn.; and University of Minnesota Duluth MS II Terrell Messerly. Poole is participating in the ROME Program in Ortonville, which is a ROME and third-year clerkship site as well as a fourth-year elective site for rural family medicine.

In the photo provided by Dr. Delage are Poole, Dr. Delage's dog, Bailey, and Messerly. Dr. Delage said Bailey probably enjoyed the run the most. Dr. Longnecker had to run home to get supper for her kids, so she missed the picture.

At Homecoming, occupational therapy students pose in front of the Simulation Center's "simbulance," which was driven by Tim Shea, simulation coordinator at the center. Front row, left to right: Karissa Kempel, Sadie Larson, and Ashley Ystaas. Middle row: MaKenzie Funke, Ashlyn Grindberg, Jade Clement, Karen Jaspers, and Bethany Easthouse. Back row: Norris Chin, Julie McBrien, John LeClerc, Kelsey Hemberger, Olivia Mayasich, Miranda Hosking, and Rachel Lindemann.





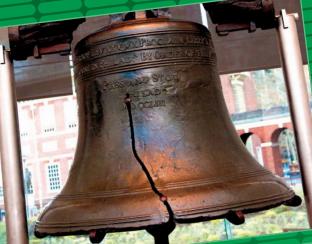
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Upcoming Alumni Receptions Held in conjunction with national conferences



Physical Therapy February 16, 2017 – San Antonio undalumni.org/pt2017



Occupational Therapy March 31, 2017 — Philadelphia More information pending

Honor Roll of Donors 2015–2016





2015–16 Honor Roll of Donors

The UND School of Medicine and Health Sciences and UND Foundation would like to thank the following generous donors for their gifts and pledges made between July 1, 2015, and June 30, 2016. Please note that every effort was made to include all donors who made gifts, new cash pledges, or payments on existing pledges before June 30, 2016. The Honor Roll of Donors represents the good-faith effort of the UND School of Medicine and Health Sciences to provide current and accurate information about donors. If you discover an error or omission, please accept our sincerest apologies. Please contact us so we can update our records.

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"It's heartening that physicians like you still feel connected to the School and are willing to help out those of us who follow in your footsteps."

-Andrew Lesser, first-year medical student

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What a year! 2016 will go into the record books as a truly exceptional year for the School of Medicine and Health Sciences for a number of reasons, among them of course, the dedication and grand opening of our spectacular new building. This transformational structure is already setting a new standard for how to optimally configure

physical space for interprofessional teaching, learning, and research. UND is truly at the cutting edge of medical education delivery. We thank our many partners, which certainly includes the fine people of North Dakota for their generous investment in this influential project for the state's future.

2016 will also be remembered for a truly outstanding year for philanthropy! Alumni and friends from across the nation answered Dean Wynne's challenge to help us mitigate the debt load of our graduating students by providing more, and larger, scholarships. I am thrilled to report that your FY 16 investment in medical education at UND exceeded \$9 million! Nearly 80 percent of the dollars given by our alumni and friends were specifically earmarked for scholarships, with almost all of such gifts used to establish new, or to add to existing, named endowments within the UND Foundation. We, and particularly our students, thank you!

On a personal note, my relationship with Dean Wynne and the School of Medicine and Health Sciences is changing. As of October 1, my wife, Patti, and I have permanently relocated to Surprise, Arizona, where I'll continue in my work as a senior development officer for the UND Alumni Association and Foundation. My good friend and colleague, Dave Gregory, will succeed me in leading the development efforts of the School, working closely with Dean Wynne and our very capable Director of Alumni and Community Relations Jessica Sobolik. My affection for the SMHS's students, faculty, administrators, and of course alumni and friends, has not, and will not change. I fully intend to help continue building a greater School of Medicine and Health Sciences through my future contacts in the Southwest, where I now live. I especially thank Dean Wynne for his leadership and friendship, and I look forward to an exciting future in the Southwest.

Happy Holidays and thank you for all you do for the benefit of the School of Medicine and Health Sciences!

Dave Miedema Senior Director of Development

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-Michael Osterholt, first-year medical student

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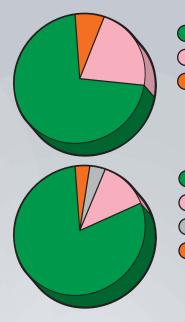
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Dr. William and Helene Powers Scholarship Endowment

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The Foundation shall distribute allocations from the fund each year for one or more scholarships to medical students at the School of Medicine and Health Sciences.

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The Foundation shall distribute allocations from the fund each year for one or more scholarships to full-time, senior students earning a degree in medical laboratory science at the University of North Dakota. Preference shall be given to students from Nelson County in North Dakota. Second preference shall be given to North Dakota residents, and third preference shall be given to Minnesota residents.

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Dr. Stephen and Mae Tinguely Scholarship Endowment

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Linda Well Nagel Scholarship Endowment

The Foundation shall distribute allocations from the fund each year for scholarships to medical students who wish to do rotations in a developing country or in an underserved population of any country, including the United States. Financial need and academic record shall not be considerations for selecting students. If for any reason the School of Medicine and Health Sciences should be eliminated at the University of North Dakota, this endowment shall provide scholarships for students within the Psychology Department at UND.