



NORTH DAKOTA MEDICINE

University of North Dakota School of Medicine & Health Sciences



Spring 2020
VOLUME 45
NUMBER 1



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NORTH DAKOTA MEDICINE

University of North Dakota School of Medicine & Health Sciences

UNIVERSITY OF NORTH DAKOTA SCHOOL OF MEDICINE & HEALTH SCIENCES

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ON THE COVER: Gabe Kavadas (left) and Brooke Pasanen at the Physical Therapy/Kinesiology Bi-Ped lab open house on the UND campus in Sept. 2019.



North Dakota Medicine (ISSN 0888-1456; USPS 077-680) is published four times a year (March, June, September, December) by the University of North Dakota School of Medicine & Health Sciences, Room W103, 1301 N. Columbia Road Stop 9037, Grand Forks, ND 58202-9037. Periodical postage paid at Grand Forks, ND.

Printed at Forum Communications Printing, Fargo, ND.

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NORTH DAKOTA MEDICINE is available online at
www.med.UND.edu/nd-medicine

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UND SCHOOL OF MEDICINE & HEALTH SCIENCES
UNIVERSITY OF NORTH DAKOTA



SERVING NORTH DAKOTA AND THE WORLD

As you may be aware, UND is now in the midst of a presidential transition. I have been Interim President since June 16, 2019 (while continuing as Vice President for Health Affairs and Dean of *your* School of Medicine and Health Sciences), but I'll be turning over the reins of the university to incoming President Andrew Armacost on June 1, 2020. Since he was selected as the next UND president by the State Board of Higher Education in December 2019, Andy and I have jointly fashioned a five-month transition plan during which I continue to function as president while allowing Andy to spend a good deal of his time meeting the various stakeholders in the University, from students, faculty, and staff to legislators, donors, and the citizens of North Dakota. This transition plan has been deliberate, thoughtful, and planned. It will help get Andy "up to speed" in short order, since he comes to this post with a wealth of higher education experience and accomplishments, much of it in the military. Most recently, he functioned as the Dean of Faculty at the Air Force Academy in Colorado Springs, Colo. This position is equivalent to the provost role at civilian universities, and thus is a common segue into a presidency role.

I have met and talked with Andy on numerous occasions over the past few months, and feel that he will make a truly outstanding president for UND. We are lucky to have recruited him and his wonderful wife Kathy. My wife Susan and Kathy really have hit it off, and have spent some time together comparing notes and insights. Perhaps more important than my high opinion of the Armacosts is that of Susan—and she is mightily impressed! While I will miss some of the fun of being interim president—including learning more about UND and higher education through a wider lens than "just" that of the School of Medicine & Health Sciences—I'm really looking forward to getting back to the School more regularly so that I can devote my full time and energy to it. We have so many wonderful things going on that I can't wait to get back to it full-time. And while it has been a pleasure and an honor to do all three UND jobs (president, vice president, and dean—not to mention my practice as a cardiologist), it has been stressful from a time commitment standpoint. So while it has been a

thrill to be interim president, I look forward to returning full-time to my first love—the UND SMHS. I am quite confident that UND will be in superb hands starting on June 1.

There are many exciting things going on at the SMHS after all, including the roll-out of a new and revised curriculum for medical students; the upcoming medical program re-accreditation survey team visit to the School in April 2022; the awarding of a very large federally-funded grant to Dr. Marc Basson, Professor of Surgery and Senior Associate Dean for Medicine and Research, to develop a network of institutions involved in cancer research and care delivery, with the goal being to accelerate the application of new research findings to the clinical care of patients; and so much more!

On that note, a shout-out is in order to Assistant Professor of Family & Community Medicine Dr. Bryan Delage and his cardiac-ready team from across UND. This group recently learned that their efforts at improving cardiac event outcomes on campus—holding more CPR training, developing a map of automated external defibrillators (AEDs) on campus, and raising awareness of hypertension—convinced the North Dakota Department of Health to designate UND the state's first and only "Cardiac Ready Campus." As a cardiologist, I can appreciate the significance of these efforts, which can literally save lives of our students, faculty, staff, and guests, should they experience a heart attack or similar health emergency while on campus.

I'd like to end with another shout-out, this time to Dr. Donald Warne, our associate dean for Diversity, Equity, and Inclusion and director of our Master of Public Health and Indians into Medicine (INMED) programs, and his colleagues for instituting the first ever Ph.D. program in Indigenous health—not just in the U.S., but anywhere! Dr. Warne tells me that more than 300 potential students expressed interest in the program the first week that it was announced! So best wishes to the program and its students, all of which help UND and the UND School of Medicine & Health Sciences continue to better serve the people of our state, region, and, literally, the world.



Finally, I should add that Dr. Joy Dorscher, the School's associate dean of Student Affairs & Admissions, decided to retire as of February 19, 2020. Dr. Dorscher served the School with energy and commitment since May 2012. During her tenure, she devoted great time and energy to our students to help ensure their success. She also did a phenomenal job as interim director of our esteemed Indians Into Medicine (INMED) program after long-time director Gene DeLorme retired several years ago, and helped ensure the very successful transition that occurred for the current director, Dr. Don Warne.

I am pleased to share that Associate Professor in the Department of Biomedical Sciences Jim Porter, Ph.D., has accepted my offer to succeed Dr. Dorscher as the new

associate dean of Student Affairs & Admissions. I am sure that you join me in thanking Dr. Dorscher for her service and wishing her all the best in the future.

Joshua Wynne, MD, MBA, MPH
Interim President, UND
Vice President for Health Affairs, UND
Dean, School of Medicine & Health Sciences





LANDING ON TWO FEET



UND's Bi-Ped Lab brings physical therapy and kinesiology students together to explore collaborative research opportunities.

Being housed within a so-called “hockey school,” the new College of Education & Human Development’s Bi-Ped Lab was christened in true University of North Dakota fashion—with a slap shot.

“Ready ... go!” barks Gabe Kavadas, a kinesiology graduate student manning the lab’s new motion-capturing system, to the hockey-stick-wielding student volunteer. Then as administrators, faculty, and students watched, the lab’s Vicon software outlined the hockey stick’s movement in a series of dots, cast against a grid pattern on a black background representing the floor of the collection room. The puck showed up as a separate pair of dots on the large TV used as a computer monitor.

With a sharp, unmistakable slap, the puck rocketed into the net, which—fortunately for the system’s multiple thousand-dollar cameras—the lab had set up only three feet away.

Kavadas replayed the action on the monitor moments later, showing the path of the stick as it swung and demonstrating the lab’s instantaneous ability to analyze movements, velocities, and impacts.

At the Bi-Ped Lab’s open house, Kavadas and Associate Professor of Kinesiology Jesse Rhoades were able to show off the 18-camera array that had been installed over the summer. The setup had been moved from the third floor of UND’s Hyslop Sports Center, where it had been since its inception in 2017.

The new location, in the basement of the former School of Medicine & Health Sciences (SMHS) Clinical Education Center (CEC), provides a range of advantages in comparison to the Hyslop and accelerates a partnership between kinesiology and the SMHS Department of Physical Therapy.

Hollywood tech, scientific applications

Assigning as many as 35 markers along the anatomical landmarks of a two-legged

human body (thus the Bi-Ped reference), the lab is capable of measuring the velocities and mechanics of bodies in motion. For instance, how fast does the lead hand travel during a slap shot? What force is applied—and in which direction—by your hips in that same action?

Rhoades also pointed out that it’s possible to track not only the speed of marked objects but also their movement. On the puck, for example, two markers let observers determine the puck’s directional rotation as it flew into the net.

And to hear Associate Professor of physical therapy Gary Schindler tell it, both the partnership with kinesiology and the new gear in a new location make his job much easier.

“We used to have to set up the camera system and tear it down in the same day in our space at the old school of medicine [now Columbia Hall],” laughs Schindler from his office in the new SMHS building.

“It was a nightmare. So, it’s nice to have a home for [the gear], to share their resources and ours.”

It’s this ease of data collection, never mind the ability to more accurately track objects in motion, that has Schindler so excited.

“Whether you have so-called flat feet or high arches, when you’re running or walking the bones in your foot will move. The bone we are researching is the navicular bone, and for some people it moves a lot, causing problems,” explains Schindler, who is a runner.

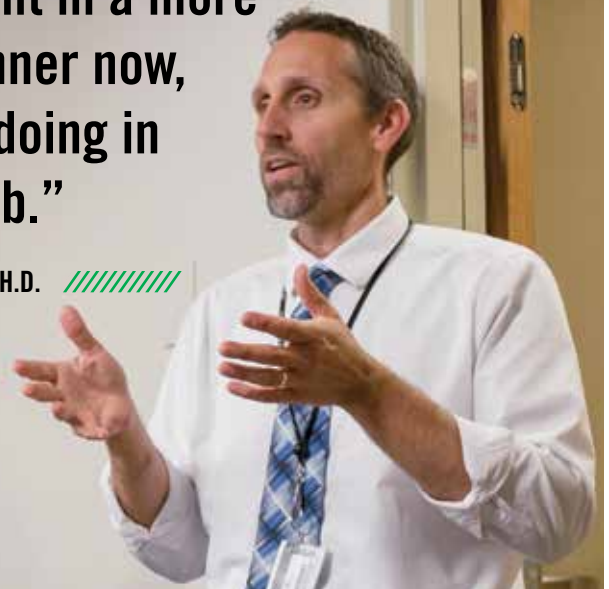
Before the new Bi-Ped Lab came online, Schindler and his students had been trying to measure navicular movement using an electronic pad on the floor that measured the pressure the foot registered when it hit the pad.

“We decided that just wasn’t going to work, so we talked to Dr. Rhoades and asked him about this study and that’s how we got connected. It’s nice to be able to measure that movement in a more dynamic manner now, which we’re doing in the Bi-Ped lab.”

Today, says Schindler, he and his PT student-researchers can apply sensors on

“It’s nice to be able to measure that movement in a more dynamic manner now, which we’re doing in the Bi-Ped lab.”

GARY SCHINDLER, D.P.T., PH.D. // // // // //



their subject's feet and record movement in a digitized, three-dimensional way. This video is then transferred to a computer that can then help the therapist assess what the offending bone or tendon is doing in real time during the patient's gait, jump, or swing.

"We are currently preparing to complete a validation study, which we hope will be the gold standard for studying navicular movement," Schindler smiles. "If we know which activities create more bone movement we can prevent injury better and do more with gait and shoe modification. The lab gives us a new way to assess how the navicular is moving, which hasn't really been studied at all."

Joining forces

Rhoades adds that although the square footage hasn't changed much, relative to the Hyslop, he's been able to transform what was once a storage space for the CEC and SMHS Simulation Center into precisely what he and the Physical Therapy Department wanted for data collection and processing.

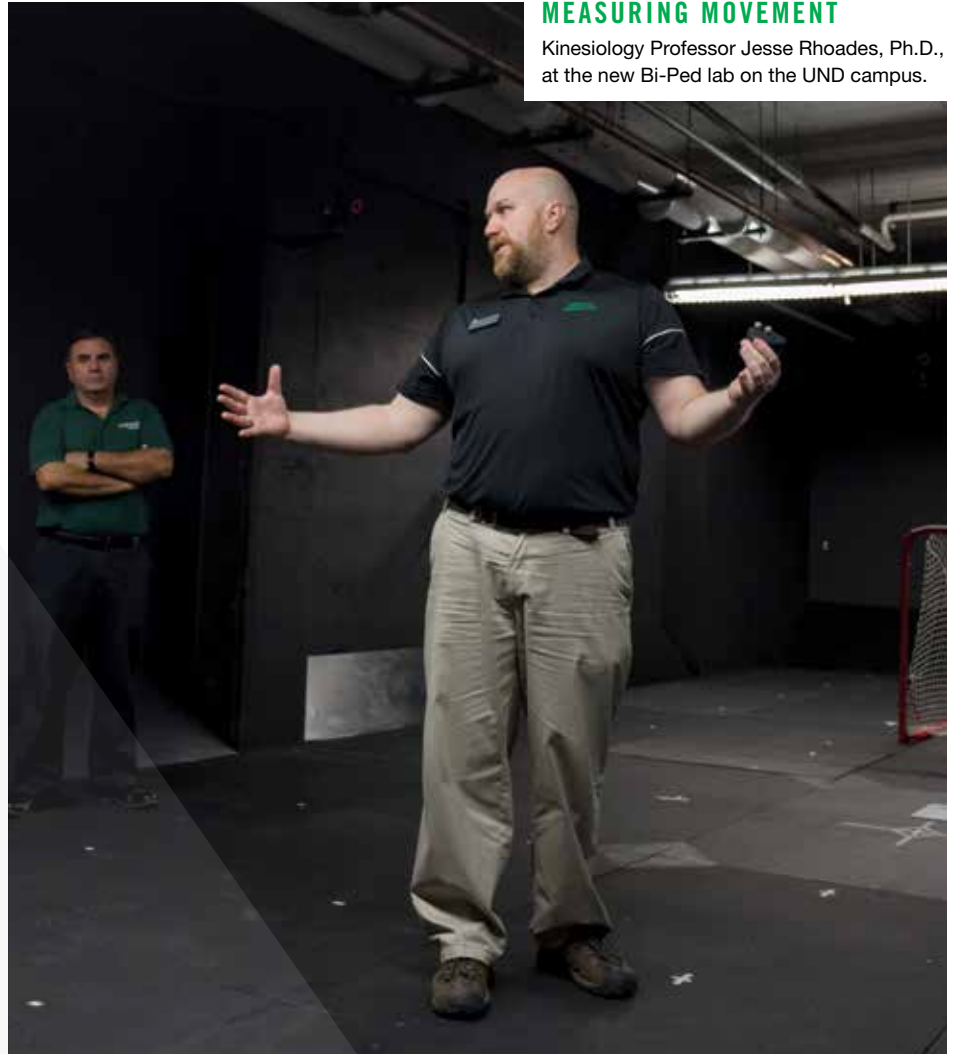
"We realized it would be mutually beneficial to combine labs," Rhoades says. "We'd be able to lend each other's expertise, and PT students could be there any time they need."

Physical Therapy is also able to integrate their electromyography system into the motion-capture setup. Electromyography, better known as EMG, can track the actions of muscles. Rhoades was previously trying to accomplish this with a system that was incompatible with Vicon.

"That's going to be a major change for us," Rhoades says. "And it's going to allow for our students to see how EMG integrates—on this very different form of analysis—into motion capture."

MEASURING MOVEMENT

Kinesiology Professor Jesse Rhoades, Ph.D., at the new Bi-Ped lab on the UND campus.



System-wide benefits

David Relling, professor and chair of the Physical Therapy Department, says the lab is an excellent example of the collaborations, innovations, and forward thinking that benefit UND and North Dakota.

"It's a real-life example of Leaders in Action," Relling quips. From his perspective, opportunities for the Lab include collaborative research for faculty and graduate students, high-impact learning experiences for undergraduates through real-time analysis of complex human movements, and real-life applications to train future physical therapists.

"All of these opportunities wouldn't exist without the collaborative mindset of faculty, deans, and administrators at UND," Relling says.

Schindler agrees, adding that collaboration is almost always the way to go. He's hoping that future research projects in the Bi-Ped Lab will include faculty or students from departments like psychology or mechanical engineering.

"I want it to be that way," he concludes. "It's always better if you get more people working together. You get more publications out of that arrangement, and students certainly learn more."

By Connor Murphy and Brian Schill

THE BIG FOUR OH!

From its humble beginning, UND's Center for Rural Health has worked to improve health in rural and tribal communities.



THROUGH THE YEARS

From Top to Bottom: Drs. Clayton Jensen (left) and Kevin Fickenscher ca. 1980, Jack Geller ca. 1990, and Fickenscher at a rural health conference ca. 1980.

The following is the first of a two-part series by Brenda Haugen detailing the history of UND's historic and influential Center for Rural Health, which was founded 40 years ago this year. This story focuses on the center's early years.

If you ask any of the former directors what has made the Center for Rural Health (CRH) successful for the past 40 years, you'll likely get several answers. But one thing they'll all agree on is that at the heart of the CRH is a committed group of people all working toward the same goal—connecting resources and knowledge to strengthen the health of people in rural and tribal communities.

"We have a great staff and faculty here," said Gary Hart, who has served as the CRH director since 2010. "I think one of the great things is that very few people have left, and we've kept a real strong core of programs. All of these national centers that we have, those people who were here when I got here are still here, and their centers are doing really well. The folks here work really hard. They're dedicated, there's a mission that people feel, and they work toward that."

Because the CRH is mainly a grant-funded operation within the University of North Dakota School of Medicine & Health Sciences, it has a little more latitude than other programs to be creative in finding solutions for the communities it serves.

"I've always said that the Center for Rural Health is basically a form of public entrepreneurship," said CRH Deputy Director Brad Gibbens, who has been with the CRH for 34 years. "We find problems, we come up with solutions, and we try to find money to address those problems. We are not locked into a box where we can do only the things that our State Office of Rural Health grant can support. So again, it's part of that environment that's very supportive and conducive to innovation. You have an idea. It's a good idea. Let's try to find some funding."

In the beginning

That entrepreneurial spirit has been with the CRH from the start. In the late 1970s, Dr. Robert C. Eelkema, chair of the then-Department of Community Medicine at the University of North Dakota School of Medicine, envisioned a new way to address the lack of providers in rural and underserved areas. Eelkema pitched the idea to Tom Johnson, who was dean of the medical school. Agreeing it was a good idea, Johnson and Eelkema presented the concept to the North Dakota Legislature. With a \$73,000 allocation, the CRH was established in 1980. It was one of just five such centers in the country. Today, all 50 states have an office of rural health.

Johnson approached Kevin Fickenscher, BS Med '68, to be the CRH's founding director. At the time, Fickenscher was working in New York, but the idea of coming back to North Dakota and

shaping this new program intrigued him. “To me, it seemed like the ultimate social medicine project because I was going to be coming back home, and I was given this very broad charge of ‘solve rural health problems,’” Fickenscher said.

Fickenscher accepted the challenge and became the CRH’s first and only employee at that time. From the very start, Fickenscher didn’t want the CRH to be a traditional academic research program. “I wanted us to help the people of North Dakota,” he said. “So we were going to help make health care better. That was my overriding philosophy.”

Fickenscher didn’t know exactly what that meant, so he visited physicians in rural North Dakota. He also reached out to legislators across the state. He asked all of them what they wanted his office to do. “The clear message was if you sit in Grand Forks, you’re not going to help us. So don’t sit in Grand Forks,” he said.

So Fickenscher travelled the state, working with rural hospitals to help them find ways to continue developing and sustaining health care services for area residents.

Among the first events held by the CRH was the Dakota Conference on Rural and Public Health. The first Dakota Conference was held in 1984. Since its inception, the conference has provided an opportunity for health care professionals, educators, and students to share strategies for building and sustaining healthy communities in North Dakota.

Because of the work going on in North Dakota, several of the surrounding states reached out to the CRH, giving it a more regional focus. By the time Fickenscher moved on from the CRH after nine years with the program, it included 15 staff members, a \$1.8 million budget and a number of projects.

A time of growth

Originally from New York City, Jack Geller first came to UND to fill in for a

Sociology Department faculty member who was on a one-year sabbatical. With an academic interest in rural issues, it seemed natural that Geller would gravitate toward the CRH despite his urban roots. In time, and at the invitation of Fickenscher, Geller came to the CRH as its research director.

“The Center for Rural Health was doing a modest amount of research, but most of this focus was service to rural communities, rural health care facilities,” Geller said. “So there was a very large service staff, people who were going all across rural North Dakota, but research capacity and research expertise was modest.”



OVER THE HILL

Staffers at the UND Center for Rural Health celebrate 40 years of improving health care in less populated regions.

After Fickenscher left, Geller became the CRH's director in 1990, serving until 1996. Though he had a background in research, the main goals of the CRH stayed true.

"I don't think by that time my focus was really changed. I think it would be more appropriate to say the mission of the center actually grew and expanded," Geller said. "So in addition to its continuing commitment to actual service, physician recruitment, and, to an extent, trying to engage with medical students in the value and the virtue of rural practice, we also then had a component which was pretty fixed by the time Kevin left. We had become, shortly after I arrived, one of seven

national health research centers in the country funded by the federal government. That kind of gave us entrée into a broader network of researchers that the center didn't have before, but I don't think it lessened in any way the service commitment to rural North Dakota communities, hospitals, physicians, and the recruitment of physicians to rural North Dakota practice."

Along with branching out the research and service agenda, the CRH delved into gerontology and Native American aging pursuits, Geller said. With that program growth came the need to bring more staff onboard. The growth that happened at the CRH occurred with the support of the University. People at

UND understood the value of the CRH and allowed it to take risks and to grow, Geller said.

"People like Tom Clifford, when he was president, understood the value of a place like the Center for Rural Health," he said. "The deans of Medicine, Tom Johnson at that time, Clayton Jensen, and a number of really strong deans who followed, all [supported us] as well. There was a commitment University-wide to this center that I don't think really existed in many other universities, which may have been getting an equal amount of grant dollars. But if those grant dollars went away or lessened, the University didn't have that overall commitment. That [commitment] was at UND, and I think that really made the difference. That allowed [the CRH] to flourish. That allowed it to take risks [and] to expand services."

By Brenda Haugen

Look for the second article in this series in the Summer 2020 issue of North Dakota Medicine!



CELEBRATING SILVER



NRCNAA 25TH ANNIVERSARY – DECEMBER 18, 2019

From left: Cynthia LaCounte; Shawn Egeland, representing Leigh Jeanotte; Kathy and Gina Allery, representing Allan Allery; Richard Ludtke; Brad Hawk, representing Russ McDonald; Twyla Baker; Paula Morin-Carter; and Collette Adamsen, current director of the NRCNAA.

NRCNAA looks to the future while honoring the past.

The National Resource Center on Native American Aging (NRCNAA) celebrated its 25th anniversary recently not only by honoring those who helped get it this far, but also by focusing on the future and its continued mission to help Native elders.

Among the highlights of the celebration was a banquet held December 18 at Alerus Center in Grand Forks, N.D. Emceed by Chance Lee Rush of Three Affiliated Tribes, the banquet honored former directors and advocates of the program, including Leigh Jeanotte, Alan Allery, Leander “Russ” McDonald, Twyla Baker, Paula Morin-Carter, Richard Ludtke, and Cynthia LaCounte.

The gala event also included members of American Legion Post 262 and the Lake Region Singers. The NRCNAA’s current Director, Dr. Collette Adamsen, and Dr. Joshua Wynne, interim president of the University of North Dakota (UND) and dean of the UND School of Medicine & Health Sciences (SMHS), offered welcoming remarks at the event. Dr. Donald Warne, associate dean of Diversity, Equity, & Inclusion at the UND SMHS and director of the School’s Indians Into Medicine (INMED) program, provided the keynote address. In addition, Adamsen read a proclamation from North Dakota Governor Doug Burgum declaring December 18, 2019, Native American Elder Recognition Day.

A look back

Through a cooperative agreement with the Administration on Aging (AoA), an agency within Administration for Community Living (ACL) and United States Department of Health and Human Services, the NRCNAA was founded within the UND Center for Rural Health in 1994. Dr. Leigh Jeanotte served as the NRCNAA’s inaugural director for about one year while the grant program objectives solidified. Jeanotte realized the enormous task of overseeing two programs and leaned on Dr. Alan Allery for leadership. Jeanotte spoke fondly of Allery’s leadership and background in health and credits Allery for “getting the program off the ground and moving forward.”

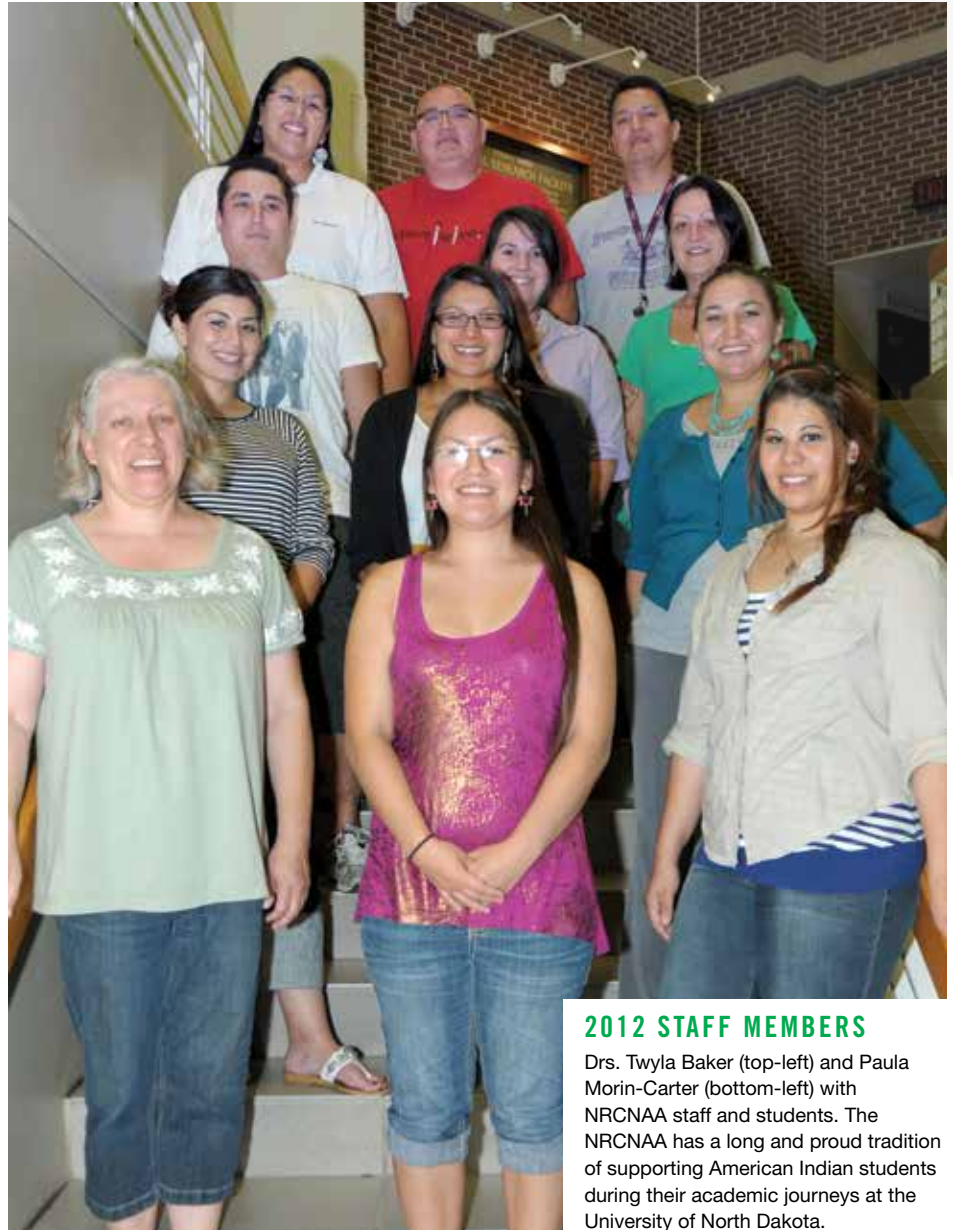
Allery and Dr. Richard Ludtke worked tirelessly to improve health outcomes for Native elders. Both were committed to identifying the health and social issues Native elders faced in order to help tribes develop community-based solutions to improve elders' quality of life. One of the components needed to understand the issues affecting Native elders was a needs assessment survey. To effectively tackle this task, the team needed to grow.

First shot at leadership

Enter Dr. Leander “Russ” McDonald, current president of United Tribes Technical College, who came to UND through the Ronald E. McNair Post-baccalaureate Achievement Program. McDonald wanted an opportunity to conduct research within tribal communities in preparation for graduate school. He connected with his advisor, Dr. Ludtke, and became a graduate research assistant conducting primary data analysis. The Spirit Lake Nation, McDonald’s home community, became the initial test site for the survey.

The AoA/ACL endorsed the “Identifying Our Needs: A Survey of Elders” needs assessment, which became an invaluable tool for tribal Title VI organizations. The Older Americans Act established the Title VI grant program in 1978. Through the program, tribal organizations are able to provide nutrition and delivery of home and community-based supportive services for Native American elders.

The NRCNAA also became a training ground for numerous American Indian undergraduate and graduate students. Like McDonald, Dr. Twyla Baker, Dr. Paula Morin-Carter, and Dr. Collette Adamsen climbed the ranks in a similar fashion. They started as NRCNAA graduate research assistants and worked their way up the ladder, eventually becoming directors as they completed their doctoral degrees at UND.



2012 STAFF MEMBERS
 Drs. Twyla Baker (top-left) and Paula Morin-Carter (bottom-left) with NRCNAA staff and students. The NRCNAA has a long and proud tradition of supporting American Indian students during their academic journeys at the University of North Dakota.

Just like Allery, all the former directors continue to give back to tribal communities in substantial ways. Morin-Carter, now the Billings Area Indian Health Services Health Promotion Disease Prevention Coordinator, proudly recalls her time as a student researcher and supporting other American Indian student researchers.

“It’s about contributing through something that will positively impact their communities,” she said. “When we had our students working, cleaning data, analyzing data, every drop of sweat was to give back to those communities,” she said.

During the past two decades, NRCNAA’s mission of empowering Native people to develop community-based solutions didn’t really change, according to McDonald. “People who were doing the work had good hearts, and they had to buy into what was happening out there in tribal communities,” he said.

A trusted partner

Baker, who now serves as president of Nueta Hidatsa Sahnish College, reminisced about NRCNAA staff spending time “explaining things so that elders could understand, advisory committees could



2019 NRCNAA STAFF

Left to right: Halle Short, Dr. Robin Besse, Jordan Dionne, Dr. Collette Adamsen (director), Heather Lawrence, Michelle Meyer, and Courtney Davis Souvannasacd

understand, and tribal councils could understand what our purpose was and that we weren't necessarily someone there to come and harvest data and then just disappear. We were trying to establish trust relationships with each of these communities and the people who were within them."

A stipulation of the AoA/ACL funding is that the NRCNAA director is an enrolled citizen of a federally recognized tribe. This requirement was meant to affirm the expertise of cultural knowledge through lived experience and professional achievements.

"The 25th anniversary of the resource center is an accomplishment in and of itself," Baker said. "It's kind of a testament to the validity of the work, the quality of the work, the need for it, and the fact that we're still telling their stories. We're still helping them to tell their stories through data, through research, and really empowering these communities to be their own advocates."

Honoring the past & building towards the future

LaCounte has a long history with the NRCNAA and attests to the value of

strong relationships with tribal nations. She was a former Title VI director and tribal chair for the Trenton Service Area before moving to Washington, D.C., to contract with Kaufmann & Associates with Title VI programs, eventually leading to her position at the ACL. With the support of the UND SMHS and Center for Rural Health, LaCounte has watched every director build on their predecessor's foundation.

Optimistic for the next 25 years, the NRCNAA plans to expand long-term services and support through on-site trainings, webinars, and data boot camps. With partners such as the American Association of Retired Persons (AARP), National Council on Aging, and the National Council on Urban Indian Health, the ability to assist tribes and tribal elders by advocacy through data analysis can be maximized.

Adamsen proudly emphasized that tribal organizations have participated in the NRCNAA needs assessment for the past 21 years—seven three-year cycles. During each cycle, more elders participate, identifying health

and social issues. In December 2019, nearly 23,000 Native elders participated in Cycle VII of the NRCNAA survey. The NRCNAA has often been called to participate in congressional hearings to advocate for additional funding for long-term services for tribal elders, so the data from the surveys has been incredibly valuable.

Adamsen is mindful of her predecessors. "I also think working with tribal communities and partners the past 25 years is a major accomplishment," she said. "To be able to work with so many tribal communities throughout the nation and maintain our partnerships is amazing. The NRCNAA is truly a great center, and to continue to be at the forefront, helping to address Native elder issues is something to be proud of."

By Courtney Davis Souvannasacd

FILLING THE GAP

Rural North Dakota facilities persevere with non-physician workforce.

Nurse practitioners (NPs) and physician assistants (PAs), or non-physician health care workforce, have played an integral role in American health care for decades (since 1965 and 1971, respectively). And because primary care physicians can be hard to recruit and retain in rural areas, some North Dakota hospitals rely on these providers more than ever.

The challenge with physician recruitment

Just ask Beverly Vilhauer, CEO of South Central Health in Wishek, N.D.

Her rural community has been without a physician since Dec. 2018. As a result, daily patient care in the hospital, emergency room, two nursing homes, and four rural health clinics in neighboring rural towns is the responsibility of a patient care team made up of four NPs and two PAs, with a contracted physician to serve as a medical director from 90 miles away.

It's a daunting task, to be sure. Though South Central Health's search for a physician has not ended, patient needs are being met with a small, mighty team.

"We are grateful for NPs and PAs," Vilhauer said. "They are somewhat easier to recruit to rural areas, and we try to keep them engaged by encouraging and supporting them to pursue their passions in the patient care setting."

Wishek had two physicians on staff at one point, but retention proved difficult because physicians and their families were drawn to larger communities. Physicians' satisfaction and the ability for spouses to find work are often noted as factors in the ability, or inability, to retain a physician workforce. Despite its best efforts to accommodate the needs of the physicians and their families, Wishek, like many rural communities, struggles to compete with larger

communities. It has adjusted accordingly, and the community is supportive, even if a physician is not on staff full time.

"I have had patients stop by my office and provide positive feedback after having been seen by our providers," Vilhauer said. "I even had a patient ask what we are doing to keep an NP, as he really liked the care that he received."

Flexibility is key

In another part of the state, similar adjustments to patient care teams have occurred. Jody Nelson is CEO of St. Luke's Medical Center in Crosby, N.D. Since 2016, her facility has operated on a mostly NP/PA model, with two physicians on-site a few days a month. Crosby employs six providers, only one of whom lives in Crosby. The other providers either fly or drive in on a rotating basis.

While there are challenges with this model (namely finding housing for the traveling providers or navigating weather events that cause travel delays), Nelson says this is a model that works for them, and they plan to continue it while they can.

But now, with a model that allows providers and their families to continue living where they are, St. Luke's has more providers for patients to choose from, which is a big advantage for a small town.

"Since we are a small rural hospital, having six different providers to pick from is very unique. We feel we have a provider for everyone at St. Luke's," Nelson said.

But the community had to adjust to this new model. "At first our patients did not like the idea of some providers not making Crosby their home, but that has quickly been replaced with acceptance," Nelson said. "The key has been consistency of

our traveling providers and educating our patients that our providers are part of our team at St. Luke's, even though they don't live in our community full-time."

New law removes barriers for PAs

NPs in North Dakota have independent practice authority, which means they do not need physician oversight or a collaborative agreement to provide care to patients. North Dakota House Bill 1175, which passed unanimously in April 2019, now allows PAs the same authority, making North Dakota one of the first states to remove this barrier.

Jay Metzger, PA-C, is board president for the North Dakota Academy of Physician Assistants. He is also assistant professor of physician assistant studies at UND's School of Medicine & Health Sciences. Metzger helped draft the bill that was eventually passed into law.

"Even though the enactment of this legislation doesn't require PAs to have a state-mandated supervisory agreement with a physician, we still must practice within the scope of our education and training," Metzger said.

This change is certainly an advantage to rural communities, such as Wishek and Crosby, which may not have a supervising physician on-site all the time.

"Physicians are becoming more reluctant to take responsibility for PAs. Therefore, many institutions did not even consider qualified PAs to fill their open practice positions [before HB 1175]," Metzger said.

He hopes the new law helps underserved communities hire qualified PAs, closing gaps in patient care due to physician workforce shortages.

By Stacy Kusler



Next Steps

- Indian Health Teaching Hospitals?
 - Endowed Clinical Professors
- North Dakota—UND/MGH
 - Belcourt (Turtle Mountain)
 - Ft. Yates (Standing Rock)
- South Dakota—USD/MGH
 - Cheyenne River
 - Pine Ridge
 - Rosebud
 - Sioux San
- Collaborate with clinical

FIRST IN THE WORLD

Already home to world’s most successful Indigenous medical training program, UND adds world’s first doctoral program in Indigenous health.

The North Dakota State Board of Higher Education made history by recently allowing the University of North Dakota to offer the world’s first doctoral program in Indigenous health.

The Ph.D. degree will launch in May, and prospective students are already inquiring about the program, said Dr. Donald Warne, director of the Indians Into Medicine (INMED) and Master of Public Health (MPH) programs at UND, who led the push for the new program.

“There is a need for well-trained administrators with a deep understanding of Indigenous health issues,” Warne said.

“There is nothing like that in the world.”

Warne, who also serves as professor of family and community medicine as well as associate dean of diversity, equity and inclusion at the UND School of Medicine & Health Sciences, has a history of “firsts.”

With a holistic vision that starts with educating middle school students and taking them through high school, college, and beyond, Warne said that UND will offer the world’s only Indigenous health doctoral program, the only online bachelor’s/ master’s degree combination in public health, and one of very few MPH degrees with a focus on Indigenous health.

As of May 2019, INMED has graduated 244 American Indian/ Alaska Native physicians, making it the most successful



A HISTORY OF “FIRSTS”

Dr. Don Warne, director of the School of Medicine & Health Sciences Indians Into Medicine Program and associate dean for Diversity, Equity & Inclusion, lectures at the SMHS in 2019.

Indigenous medical training program internationally and in history. The new program will be linked to the INMED and MPH programs.

High-value degree

“This will be a high value degree that’s unique in the nation,” Warne said. “We have eight Indigenous health scholars at the School, which is an unprecedented number. Through national and international collaborations, we will offer distance education opportunities for students across North Dakota, the region, and around the world.”

“I am so proud of the University of North Dakota for taking leadership on this important endeavor,” said Dr. Nicole Redvers, assistant professor of family & community medicine and a First Nations person from Canada. “This program will

lead the globe, integrating both Indigenous and Western knowledge to prepare a new generation of health scholars to tackle the health issues facing Indigenous people everywhere. I am very proud to be a part of this program, and look forward to working toward better health for our people.”

UND’s Interim President and Dean of the SMHS Dr. Joshua Wynne agreed.

“Over his career, Dr. Warne has been a tireless advocate to ensure that our health care delivery team — both at the state and national level — reflects the rich diversity of our populations,” Wynne said. “This new program offering at the UND School of Medicine & Health Sciences is another big step in developing a truly inclusive and equitable makeup of those involved in the health care delivery enterprise.”



FIRST NATIONS, FIRST DOCTORATE

Faculty of UND's Indigenous Health Ph.D. program with students in UND's Master of Public Health program at the UND School of Medicine & Health Sciences.

A global need

There is a global need for advanced training in Indigenous health, and Warne expects robust demand for graduates of the program.

Career opportunities include health researchers, health program evaluators, policy analysts, faculty, program administrators and consultants, and public health officers. Graduates will be uniquely positioned to join faculty in public health, Indigenous studies, and other disciplines at universities and tribal colleges.

“At the international level, the coordination of health needs across Indigenous populations is greater now than at any point in history,” Warne said, adding that the Indian Health Service, Centers for Disease Control and Prevention, and National Institutes of Health all need well-trained administrators with a deep understanding of Indigenous health issues.

“I am so proud of the University of North Dakota for taking leadership on this important endeavor.”



NICOLE REDVERS, N.D. // // // // //

Before developing the program, Warne consulted with organizations that include the National Indian Health Board, Indian Health Service, National Indian Education Association, American Indian Science & Engineering Society, Association of American Indian Physicians, and others, all of whom agreed on the need.

Meeting a demand

More than 300 potential students have expressed interest in the initial eight to 12 spots in the program, which is a 60-credit, post-master's degree that includes research and evaluation methods, policy, and leadership. It will be delivered nationally and internationally through distance delivery, with students coming to campus twice per year for in-person instruction.

Courses will be taught by faculty in population health and family & community medicine, along with 10 Indigenous health scholars at the School of Medicine & Health Sciences.

The program addresses multiple goals of the One UND Strategic Plan, including those to increase graduate and online enrollment and enhance discovery through research. It also addresses UND's Grand Challenges in human and rural health.

Warne believes that opportunities to expand research, grant funding, scholarship, and discovery are virtually limitless.

"We anticipate substantial increases in external funding, publications, and student research opportunities led by faculty in Indigenous health," Warne said. He has already secured more than \$2 million in external funding for Indigenous health research and public health programming.

"I want to prepare the next generation of health professionals," Warne said. "I love engaging all students, Native American or not. Our Ph.D. program will be the national and international leader in Indigenous health education, innovation, and scholarship. We will expand outreach and engagement across North Dakota, the region, and around the world."

By Jan Orvik

■ '10s

Leigh Moyer, MD '19, recently volunteered with fellow physicians of Kaiser Permanente Hawaii, cleaning out and preparing taro patches for planting at wetlands sites across the state of Hawaii. She was joined by her husband Luke and two-year-old son Andre.

Annah Preszler, MD '15, has joined Sanford Health in Bismarck, specializing in psychiatric services.

Haris Ali, PhD Anatomy '14 and Geriatrics Fellow, '18, has joined the staff at the Cooperstown Medical Center.

Misty Anderson, IMR '11, has been elected President of the North Dakota Medical Association. Anderson is a physician at Sanford Clinic in Valley City, N.D.

Gillian Lavik, MD '10, has received an Eagle Award from the Minot Area Chamber of Commerce. Receiving the Eagle Award is validation of the pursuit of the mission of Trinity Health, which values exceeding professional quality standards.

■ '00s

Theresa Hegge, MD '08, recently joined Sanford Clinic in Bismarck, N.D., as part of the plastic surgery team. Hegge completed her residency in plastic, reconstructive, and hand surgery from Southern Illinois University School of Medicine in Springfield, Ill.

Ryan Hegge, MD '08, has joined Sanford Health in the radiology area. Hegge specializes in diagnosing and treating injuries and diseases using medical imaging exams.

■ '90s

Greg Glasner, MD '90, has joined Blue Cross Blue Shield of North Dakota as Chief Medical Officer. As CMO, Dr. Glasner has overall responsibility and accountability for leading the strategic direction of clinical integration, medical policy, and health cost management.



Luke, Andre, and Leigh Moyer, MD



Annah Preszler, MD



Theresa Hegge, MD



Ryan Hegge, MD

CIVILIZATION AND ITS DISCONTENTS

SMHS faculty explore the causes of—and antidotes to—anxiety, which is on the rise nationally.

From Sigmund Freud (*Civilization and its Discontents*) and Michel Foucault (*Madness and Civilization*) to Gilles Deleuze and Félix Guattari (*Capitalism and Schizophrenia*), scores of philosophers and physicians have for more than a century explored the degree to which mental illness is not necessarily internal to the sufferer, but “caused” by the increasingly complex society in which she or he lives.

The question is especially poignant in the United States, which today is in the midst of what some observers have characterized as an unprecedented eruption of mental illness— anxiety in particular—unique to the Western world.

One recent study in the *New England Journal of Medicine*, for example, found that the number of American youth receiving any outpatient mental health service shot up 30 percent between 1996 and 2012. And as *JAMA Psychiatry* put it in 2017, generalized anxiety disorder “is more prevalent and impairing in higher-income countries,” like the United States, “than in low- or middle-income countries.”

Sleepless in North Dakota

Although the comparative data suggest that North Dakotans are typically less anxious than others in the U.S., the creeping rise in anxiety nationally has reached the northern plains as well.

According to the *Fifth Biennial Report on Health Issues for the State of North Dakota*, a 2019 survey by the UND Center for Rural Health found that access to behavioral and mental health services was the top concern of hospital CEOs—and their workforce—in the state.

Such figures have providers, politicians and parents from Williston to Wahpeton asking: What’s going on? Why is anxiety, in particular, so prevalent now, and what role does environment play in the cause of such conditions?

Such questions have been buzzing in Dr. Andrew McLean’s ear for years.

“[The rise in anxiety] is accurate, particularly with youth,” said McLean, chair of the Department of Psychiatry & Behavioral Science at the UND School of Medicine & Health Sciences (SMHS). “It’s interesting because a few years ago I’d ask my

child and adolescent [psychiatry] colleagues about this and they’d say, ‘Yes, it has definitely increased, but we don’t know why.’ But today we have some ideas.”

Those ideas include both biological factors such as genetics, lack of exercise, and poor nutrition, as well as environmental factors like social media, social isolation, and worry over issues like climate change (especially among youth) and income inequality.

“Some have called this increase in angst, resulting in higher rates of suicide and overdose, ‘diseases of despair,’” noted McLean from his office on the SMHS Southeast Campus in Fargo. “There have been a number of papers recently alluding to the fact that the increase in anxiety and depression at least seems to correlate with the emergence of smartphones and the rise of social media. Plus there has been a gradual decrease in the amount of sleep Americans and even people in other Western countries are getting.”

As McLean explained, devices like smartphones and tablets not only disrupt more conventional ways of interacting with friends and family but can also disrupt sleep in a variety of ways. And both of these scenarios have an impact on physical activity, inflammatory processes in human tissue, and hormone changes generally.

More than this, McLean added that such devices contribute to the idea that each of us now must be “on-call” for our jobs or friends and families all the time, which can be stressful.

“So we’re seeing more clinicians and teachers saying ‘give it a break,’” he added. “Put it down for 15 minutes—or much longer—in order to combat this idea of being on-call all the time. There are some businesses that are trying to help staff minimize their on-call time, not expecting them to answer email after hours.”

Still, said McLean, it’s perhaps too easy to blame the environment alone for any so-called anxiety pandemic.

“There are systemic issues involved, but there are also individual solutions,” he said. “There are things individuals can do to avoid falling into these traps like putting the phone down,

working on our sleep hygiene, and interacting with people face-to-face.”

Pressing vasopressin

A better understanding of human physiology also helps, of course.

To that end, a host of researchers at the SMHS are studying the pharmacology of mental illness, hoping both to learn better the chemistry of anxiety and explore new treatments for this and other complex conditions.

“Unfortunately, the current drugs for anxiety are less than satisfactory,” noted Department of Biomedical Sciences Professor Saobo Lei, Ph.D., from his office in the UND Neuroscience Research Facility. He is part of a research team at the School studying the basic science of human neurotransmitters (e.g., glutamate, serotonin, and dopamine) and how they impact mental health. “Many [drugs] have serious side effects, and the effect of treatment is unsatisfying. We need to try a different approach to anxiety.”

This is why Lei and crew are hoping to discover new ways of treating or preventing anxiety by focusing more on the physiological mechanisms at the core of the body’s anxiety response.

Having already explored the connection between neurotransmitters and anxiety, Lei was awarded a five-year, \$1.5 million R01 grant late last year from the National Institutes of Health to explore the connection between anxiety and vasopressin, an anti-diuretic hormone that plays a role in regulating blood pressure.

According to Lei, vasopressin can interact with many receptors in the brain, including the V1a, V1b and V2 receptors. If too much vasopressin lingers in the nervous system, blood vessels will tighten up and the kidneys will produce less urine, which can increase blood pressure generally and heighten anxiety.

“But if you knock out the V1a receptor in mice, they showed a decrease in anxiety,” Lei explained. “Our hypothesis is that in the brain vasopressin is involved in the mechanism that leads to increased anxiety. How? We don’t know—maybe through the activation of glutamate—that’s what we’re trying to figure out.”

The hope, said Lei, is to find a novel target for pharmaceuticals that will better control patients’ anxiety with fewer side effects.

“If we figure out these mechanisms, we can perhaps develop treatments for anxiety and have a clinical trial and increase drug options for people.”

Madness and civilization

All of that said, Lei, who earned a medical degree in China and a doctoral degree in pharmacology from the University of Alberta in Canada, also recognized that cultural differences—even from one city to another—have an impact on our society’s collective level of anxiety.

Admitting that he has yet to read any peer-reviewed studies on the subject, Lei nonetheless feels that the speed and rhythm of work-life in the U.S. is faster, often in problematic ways.

“In Canada it’s slower—we would get to work at 9 a.m.,” he said. “Here it’s eight. Things are busier, and there can be more pressure [in the United States].”

The research suggests that Lei is correct, and that an increase in anxiety among Americans, relative to a generation ago, might be the consequence.

But research is also helping us understand why—and what we can do to reduce our experience of anxiety and, hopefully learn how to keep calm and carry on.

By Brian James Schill



NEW TECH, NEW TRICKS



UND's Department of Geriatrics uses \$3.75 million grant to help create "age friendly" communities in North and South Dakota.

It sounds ironic: improving health care for the oldest of patients using the newest technologies that those same patients probably once considered science fiction.

But as Dr. Donald Jurivich and his colleagues have already shown, it's the latest digital platforms—video games, social media, virtual training modules—that are the future of education in geriatrics care in the United States.

"Too often, medicine for the elderly means multiple prescriptions to treat symptoms rather than the person or condition," explains Jurivich, chair of the UND School of Medicine & Health Sciences (SMHS) Department of Geriatrics. "Prescriptions accumulate, and if someone has more than six medications, they're considered to have 'polypharmacy' and are also at risk for falls, cognitive impairment,

hospitalization, and maybe death."

Combatting this business-as-usual approach for elderly patients has been Jurivich's mission for several years now. And he says at least part of the solution to problems emerging in eldercare is not only better provider education, but also new technology.

Posts, tweets and games

In 2018, for example, Jurivich and his team published a report in the *Journal of the American Geriatrics Society* that described "quizzing" medical students via Twitter. Students who were quizzed on geriatrics care, it turned out, nearly doubled their geriatrics knowledge relative to their un-quizzed counterparts.

On the strength of that interdisciplinary research, Jurivich applied for and was

awarded in 2019 a \$3.75 million grant from the Health Resources & Services Administration (HRSA) to advance geriatrics education and health care transformation in North and South Dakota, through the strategic use of digital platforms in particular.

Assembling a group of institutions—including the North Dakota State Division on Aging Services and Health Promotion, Center for Rural Health, Alzheimer's Association of North Dakota, North Dakota State University, and South Dakota State University—into what he calls the Dakota Geriatrics Workforce Enhancement Program (GWEP), Jurivich hopes the grant will help providers in the two states improve knowledge about older adult health care generally, and therefore make local communities and health systems more "age-friendly."

“Our first aim is to create online training modules in older adult care for providers,” says Jurivich from his office at the School in Grand Forks, describing platforms that can address overmedication, geriatric syndromes such as falls, bladder incontinence, and memory loss, and communications with older adults and cognitively impaired people. “The second goal is trying to harness social media for geriatric knowledge and education. Much of this is driven by student usage. Students tend to use Instagram more than Twitter, so we need to tailor the platform to the learner to optimize their exposure to geriatrics.”

In addition to harnessing social media for geriatric knowledge and education, GWEP is looking to facilitate group webinars and call-in sessions on eldercare through a platform called Project Echo that can enhance the School’s “telementoring” capacity and develop a virtual video game for trainees to intervene in the health care of patients with different geriatric syndromes.

“We’re creating a game where clinicians prescribe treatment for a panel of patients whose age and health status reflect the general population,” adds Rick Van Eck, associate dean for Teaching and Learning at the SMHS and the School’s Dr. David & Lola Rognlie Monson Professor in Medical Education. “Physicians can see the impact of their decisions every five years or so as patients ‘age’ over time in an accelerated way, allowing them to see patterns in patient populations within minutes that would otherwise take 40 years to emerge.”

Age-friendly communities

Although boasting a population with a relatively low median age (35.4 in 2018), North Dakota also has the fourth-oldest elderly population in the U.S. among those age 85 and up.

This is why it is imperative, continues Jurivich, not only that North Dakota addresses its shortage of geriatricians statewide, but makes its health systems and communities more age friendly.

“Age-friendly health systems consistently adhere to the geriatric ‘4Ms’ with each patient encounter,” Jurivich says, referring to the four principles that guide geriatric medicine: (what) matters, mobility, mentation (attention to dementia and cognition), and medication. “With each encounter, the provider should examine the status of these 4Ms for the patient in question and adjust the care plan as needed.”

Likewise, Jurivich says that age-friendly communities are those that emphasize programs and services that help older adults age “in place” and remain as functionally independent as possible for as long as possible. Such programs include Meals on Wheels, physical activity and fall prevention programs, and Alzheimer’s awareness/education efforts.

“We know, for example, you need to control your blood pressure and engage in cognitive thinking, games, and physical activity to reduce your Alzheimer’s risk,” says Jurivich. “Given that one-third of the population is obese, though, they’re at extraordinary risk for Alzheimer’s. Addressing those kinds of problems early at the community level jump starts the whole prevention process. Because once the cat is out of the bag for Alzheimer’s, we have no treatment—only palliative care.”

Making aging a thing of the past

Jody Ward agrees.

“We did a series of six palliative care sessions recently for providers across the state via Project Echo,” says Ward, a nurse by training who is now a Minot, N.D.-based senior project coordinator for the UND Center for Rural Health (CRH).

“Those topics crossed over into geriatrics and the age-friendly health system. That

was a big success, and we’re all ready to go on multiple topics on this.”

Ward works on patient safety and quality improvement with the Center for Rural Health and the state’s 36 critical access hospitals. She and her team are already working on the age-friendly-community side of Dr. Jurivich’s HRSA grant in Hazen, Beulah, and Killdeer, N.D., with Sakakawea Medical Center and Coal Country Community Health Center.

“We have a very Midwestern mentality in North Dakota where we like to have a shared voice across the state,” says Ward, referencing the state’s hub-and-spoke health system model where the six tertiary care centers in the four major cities provide assistance to the state’s rural communities in a networked way. “That’s the framework we’re thinking about for doing more across the state with the 4Ms, which is a national movement. A lot of these pieces are already being done here, but we can still identify gaps of care and get team members thinking with the same mindset to meet elderly needs.”

In the end, it’s not entirely clear who the old dog is here in the cliché about teaching new tricks—North Dakota’s elderly population or its medical establishment?

Dr. Jurivich says maybe it’s both.

“There’s a line among geriatric health providers that puts all of this into perspective,” he laughs, thinking too of the NIH’s Dog Aging Project, which is studying aging in man’s best friend. “‘Aging: If it’s not your issue, it will be.’ Our mission, as a department is literally to make aging a thing of the past. Ultimately, we want to have healthy longevity, which is the longest lifespan possible, for everyone. This requires the education of everybody from the public to caregivers, students and trainees.”

By Brian James Schill

Targeted Rural Health Education
(TRHE)
University of North Dakota School of Medicine and Health Sciences

UND UNIVERSITY OF
NORTH DAKOTA
LEADERS IN ACTION

LOGAN SCHMALTZ, MEDICINE WOMAN

Third-year medical student Logan Schmaltz talks with North Dakota Medicine about whole foods, rural practice for women, and diabetes management.

ON THE ROAD AGAIN

Logan Schmaltz (right) and Dr. Bryan Delage present at WONCA 2019 in Albuquerque, N.M.

“If you’re at Thanksgiving dinner and you’re not eating turkey, grandma is not happy.”

Laughing at the thought is Logan Schmaltz, a third-year medical student at UND on the phone from her clinical site in Fargo. The Rugby, N.D., native was explaining the social challenges of eating a whole-foods, plant-based diet in the upper Midwest.

She’s heard all the quips of course: How do you get enough protein? Don’t you crave meat? Isn’t avoiding meat unnatural?

Although she has responses for such questions—including reminding skeptics that newborns thrive on a diet of only

breastmilk, one of the most nutritious products on the planet—she explains that her decision to adjust her diet several years ago was less about ethics or politics than necessity.

“I was 12 years old when I was diagnosed with Type 1 diabetes,” Schmaltz, now 30, continued. “I am at greater risk for other chronic diseases, especially high blood pressure and cholesterol, heart attack, and stroke. Heart attacks are the top killer of patients with diabetes of all types. So I choose to eat this way to decrease my insulin resistance, keep my blood pressure down, and hopefully prevent heart attack or stroke.”

“Health tax”

Her gastronomy notwithstanding, Schmaltz has diabetes to thank, in part, for its influence on her interest in both medicine and socioeconomics. A former preveterinary medicine major, Schmaltz said she turned to medicine following an especially moving visit with a diabetes specialist.

“He treated me with amazing empathy, and I decided I really wanted to be able to treat patients the same way,” said Schmaltz, who spent time in Belcourt, N.D., last summer for a site visit with UND’s Indians Into Medicine MCAT Prep Program and learned about chronic disease in rural “food deserts.” “I know that getting whole foods to families can be expensive. If you’re in a place like Belcourt, you pay a tax of sorts for fresh fruits and vegetables because transporting that food to a rural place takes extra fuel. It’s perishable, so you pay something like \$8 for a pound of apples—it’s insane.”

This is why Schmaltz envisions building a community greenhouse as part of her medical mission so the region she ends up serving can grow its own produce year-round.

“You need to address these [socioeconomic] issues with the community, not just in the clinic,” she added, referencing an article she drafted for the Center for Rural Health’s Targeted Rural Health Education (TRHE, pronounced “tree”) program that discusses epigenetics and chronic disease in the American Indian population. “We learn so much about acute care [in medical school], but more than 75 percent of the stuff many of us treat is chronic. And that’s where most of the issues emerge.”

One-doc town

Given these overlapping interests, it makes sense that Schmaltz would have her mind set not only on primary care, with endocrinology creeping in, but practicing in North Dakota after her medical residency.

“But either way, I will be doing diabetes management in my practice,” she confirmed.

To that end, in October 2019 Schmaltz joined SMHS faculty at a conference of the World Organization of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians (WONCA) in Albuquerque, N.M.

After presenting on the TRHE program with SMHS faculty Drs. Bryan Delage, Kamille Sherman, and David Schmitz, Schmaltz coordinated an international, all-female panel of providers and students at the conference, “Women in Rural Health: Strategies for Success in Rural Practice,” to talk about the perks and challenges women face when practicing in a rural area.

“Studies have shown that a lack of rural female physicians limits access to care for female patients, especially in obstetric care and screening tests,” wrote Schmaltz in her panel abstract. “Therefore, the importance of female physicians practicing in rural locations cannot be understated.”

Calling the panel both well-received and well-attended, Schmaltz noted that she rounded up physicians from Sweden, Australia, and the U.S., and a resident from Wales—plus herself and another medical student—to talk everything from work-life balance and finding a spouse in a rural setting to workplace safety, childcare, and having confidence in being a community’s lone physician.

“The one thing that came up repeatedly on the panel was that [the women] never felt they were not supported by their community,” she said. “The community wanted them to stay, so for example some of these women’s neighbors would take care of their kids if they got called in to the hospital in the middle of the night.”

Gender parity

Such support matters because it’s likely that female health providers will play a large role in helping alleviate the physician shortage in rural and urban areas in the future. Women have been matriculating into and graduating from medical schools with greater much frequency since at least the 1990s, now making up at least half of the medical student body in most colleges.

This fact sits well with Schmaltz, who is a member of the first majority-female medical student class in SMHS history (Class of 2021).

Closing the conversation the way she began it—with a laugh—Schmaltz commented on the excellent training she received at the SMHS in Grand Forks.

“I feel prepared,” she said, admitting that “trying to learn how to get information that you need out of patients to treat them better has been my biggest challenge. But that comes with time and practice. I love sitting with patients and learning about them and their lives. That has been the best thing for me about getting into the clinic.”

By Brian James Schill

CRACKING THE CODE ON SIDS

In the 1990s, when the Back-to-Sleep campaign was introduced to remind parents to lay baby down on his or her back for sleeping, the number of deaths from sudden infant death syndrome (SIDS) began to fall dramatically.

Two decades into the campaign, though, forensic pathologists and medical examiners across the country were still seeing too many tiny bodies in their laboratories.

Mark Super, M.D., was determined to find out why.

According to the 1980 graduate of the UND School of Medicine & Health Sciences, much of the reason for the persistence of SIDS is wrapped up in semantics.

Super forensic pathology

“In the late 90s, [Back-to-Sleep] did reduce the number of SIDS cases,” explained Super over the phone from his office in Merced, Calif., where he is also a forensic pathologist in the Merced Co. Sheriff-Coroner’s Office. “But then American pathologists quit using the term ‘SIDS.’ So, cases statistically dropped off, but these deaths were in many cases occurring—they were just called something else.”

In other words, as Back-to-Sleep emerged, American pathologists started thinking of SIDS not as a natural, passive event, but one wherein kids may have been actively placed in a dangerous situation unintentionally. So they started using different terms such as “undetermined” or “asphyxia”—terms that ended up on death certificates at the state level even when SIDS was what the pathologist had in mind.

“When we looked at the situation, some of these were ‘layover cases’ [of parents rolling onto co-sleeping babies],” Super explained. “They could be accidents. And yet the autopsies all looked the same.”

To address this definitional question, Super joined UND Department of Pathology Chair Mary Ann Sens, M.D., Ph.D., who is also the Grand Forks County Medical Examiner, at the Third International Congress on Sudden Infant and Child Death, held at Harvard University’s Radcliffe Institute for Advanced Study.

Tasked with better defining SIDS and clarifying the coding for SIDS and its subcategories for the 11th edition of the

SMHS faculty and alumni team up to reduce SIDS deaths in the U.S. and change the way physicians and medical examiners talk about the event.

International Statistical Classification of Diseases and Related Health Problems (ICD-11) Sens, Super, and 22 of their colleagues were invited to the Congress. Forensic pathologists, epidemiologists, researchers, WHO and CDC administrators, family physicians, pediatricians, pediatric pathologist, and parent representatives from the U.S., New Zealand, England, Norway, and Germany spent three days parsing out words, acronyms, and phrases surrounding SIDS as an event and medical diagnosis—and the effect those revisions would have on medical examiners and forensic pathologists in the lab.

“We weren’t discovering anything new, but creating more organization in a field that has ‘gone off the rails’ a bit in terms of coding death certificates,” Super added. “But there’s still a lot of work to do because in some places they don’t even autopsy these kids.”

Super said he was flattered when he was selected to be on the Harvard panel and delighted when he realized that Sens was also on the panel. In July 2019, the panel produced a paper for the journal *Forensic Science, Medicine and Pathology*. Summarizing days of work into about 2,000 words, the paper, “Inconsistent classification of unexplained sudden deaths in infants and children hinders surveillance, prevention and research,” makes clear that the biggest obstacle to getting a better handle on SIDS has been its definition and coding—or lack thereof.

So did their team clarify that definition, said Sens, recommending that the World Health Organization change the ICD-11 codes to align with the recommendations of this international panel.

“This is under consideration now and when implemented will advance the codification and classification of these tragic deaths so that we can work to eliminate them,” she added. “As forensic pathologists, we still see these cases often. We have to talk to the parents, which is heartbreaking, so it’s vital that we get this right not only for [parents] but for us as professionals. It helps us do a better job of finding causes of these tragedies.”

Looking for answers

After all, said Sens, the issue involves more than mere semantics.

She would know.

Sens had a hand in a landmark new paper that she and her colleague Larry Burd, Ph.D., a professor of pediatrics at the SMHS, contributed to that might have just found one major factor in SIDS deaths.

The two are included in the author list of a paper (“Concurrent prenatal drinking and smoking increases risk for SIDS: Safe Passage Study report”) published in *The Lancet’s EClinicalMedicine* journal describing the almost 12-fold increase in SIDS incidence among children exposed to alcohol and cigarette smoke after the first trimester, relative to unexposed fetuses.



DYNAMIC DUO

Drs. Mark Super and Mary Ann Sens at the Third International Congress on Sudden Infant and Child Death, held at Harvard University’s Radcliffe Institute for Advanced Study.

Results that stark don’t come along very often.

“This is the first multinational, longitudinal study showing that infants exposed to alcohol and cigarettes beyond the first trimester have considerably higher risk for SIDS,” said Burd, who worked on the alcohol exposure portions of the report.

“We enrolled almost 11,900 women in North and South Dakota and South Africa, and followed babies up to one year of age looking at stillbirth rates, development problems, and birth defects.”

According to the paper, although the incidence of SIDS, the leading cause of infant mortality in the United States, has been in decline since the 1990s, it remains a stubbornly frequent occurrence in the U.S., relative to most other advanced free-market economies. And the data suggest that alcohol and tobacco exposure late in pregnancy is part of the reason for the event’s persistence.

Enter Burd, Sens, and their colleagues, who said that while a correlation between SIDS and smoking was established years ago, the literature on SIDS and alcohol has been mixed.

But this new paper puts any ambiguity to rest.

“What we found is that exposure to alcohol and smoke combined had what we call a ‘synergistic effect’ on SIDS risk

that was substantially higher than exposure to just alcohol or cigarettes individually,” Burd added. “This increased risk was unique to SIDS and did not correlate to other non-SIDS infant deaths.”

From North Dakota to the world

With the World Health Organization’s adoption of the ICD-11 in 2019, then, not only defining and coding for SIDS, but determining its cause should get easier for medical examiners, pathologists, and states.

Such an outcome demonstrates the degree to which North Dakota continues to have an impact on world health.

“We’d previously estimated sudden infant death syndrome rates from prenatal alcohol exposure in North Dakota to be very similar [to this report],” concluded Burd. “And I’d consider this [new paper] to be a pretty good worldwide estimate.”

Super agreed and credits the success he’s seen at least in part to his Midwestern roots.

“It’s too bad my mother died because she’d be proud to know that her son finally got into Harvard,” laughed Super, a Bismarck native. “It took a while, but I made it.”

By Brian James Schill

GIVING ROUND-UP

A summary of the many notable philanthropic efforts ongoing at the UND School of Medicine & Health Sciences.

Edson and Margaret Larson Foundation ROME Scholarship Endowment

Seven UND School of Medicine & Health Sciences medical students learned recently that they are recipients of scholarships provided by the Edson and Margaret Larson Foundation ROME Scholarship Endowment. The endowment was established by UND alumni Edson and Margaret Larson and is today managed by the Edson & Margaret Larson Foundation.

The scholarships were given to third-year students who have demonstrated an interest in rural medicine and are coming off placements in the School's Rural Opportunities in Medical Education (ROME) program, which sends third-year students off to live and train in non-metropolitan communities in North Dakota under the supervision of physician preceptors. The students are:

Scholarship recipients	Hometown	ROME location
Hallie Anderson	Edgeley, N.D.	Jamestown
Connor Baker	Webster, N.D.	Dickinson
Megan Kolb	Milaca, Minn.	Ortonville
Audrey Lane	Elko-New Market, Minn.	Jamestown
Quinci Paine	Bigfork, Mont.	Dickinson
Allie Trudel	Granite Falls, Minn.	Hettinger
Taylor Volberding	Fargo, N.D.	Hettinger

A 1951 graduate of UND and veteran of World War II, Edson Larson, who was born in 1923 and died in Mayville, N.D., in 2008, farmed with his family near Mayville for more than 40 years. He married Margaret Brunsdale in October 1955 at the Governor's Residence in Bismarck when Margaret's father, Norman Brunsdale, was governor of the State. Margaret passed away in 2019 at age 93.

ADOPT-A-PA-STUDENT PROGRAM

Similar to the Adopt-a-Med-Student Program, the inaugural Adopt-a-PA-Student Program was a success, thanks to generous donors who included both physician assistant and physician alumni from across the U.S. Fifteen donors provided funding for 30 white coats presented in January to the PA Class of 2021 (see page 30). The full list of donors can be found at med.UND.edu/alumni-community-relations/adopt-a-pa-student.



HOST PROGRAM

This year, the UND SMHS HOST Program (Housing Our Students as they Travel) connected fourth-year medical students on the residency interview trail with alumni who were willing to provide complimentary lodging, transportation, meals, or general information. Thank you to the following alumni who graciously hosted our students:

Jeff Dodson

Director of Development
701.777.5512
jeffd@UNDfoundation.org



Jessica Sobolik, '02, '17

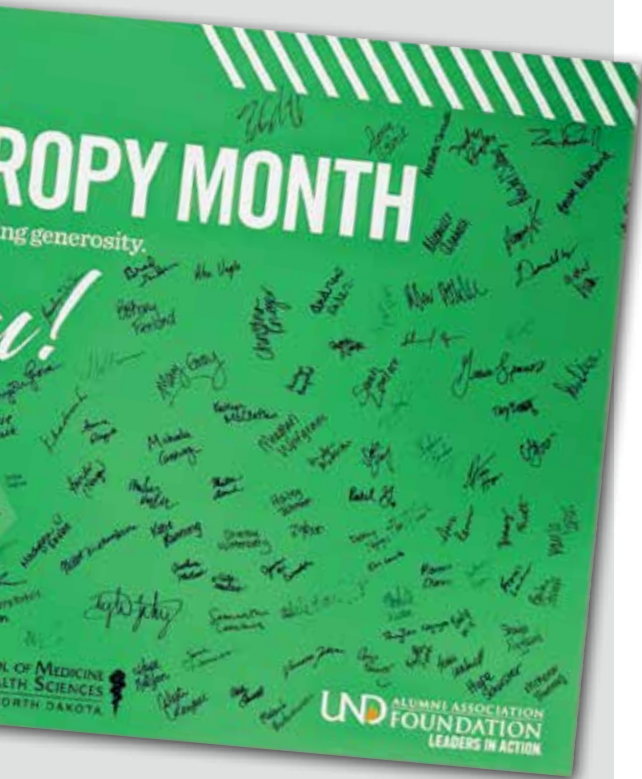
Director of Alumni & Community Relations
701.777.6048
jessica.sobolik@UND.edu



Results are in from Dakota Medical Foundation's Giving Hearts Day 2020! The winners of three \$12,500 scholarships are:

- Ashley Bartlett, second-year medical student
- Jadyn Koppenhaver, junior Medical Laboratory Science student
- Zach Podoll, second-year medical student

Thanks again to our generous donors and Pat Traynor and crew at DMF for managing this great event!



- Stephen, BS Med '64, and Oronah Hanson of Minneapolis, Minn.
- James, MS Biochem '68, and Janet Gilsdorf, BS Med '68, of Ann Arbor, Mich.

THANK YOU TO OUR THOUGHTFUL DONORS

who recently gave gifts or made pledges.

Dr. John, BS Med '75, and Suzanne Shore of Fredericksburg, Texas, established the Dr. John W. and Suzanne B. Shore INMED Scholarship Endowment, which provides scholarships to students in the School's Indians Into Medicine Program.

Dr. Robert, BS Med '62, and Kay Hedger of Oak Park, Ill., continue to support the Dr. Walter Wasdahl and Dr. Robert and Kay Hedger Endowment, which provides scholarships to medical students who demonstrate financial need.

The Edson & Margaret Larson Foundation of Grand Forks, N.D., established the Edson & Margaret Larson Foundation ROME Scholarship, which provides scholarships to medical students who participate in the Rural Opportunities in Medical Education (ROME) Program (see page 28).

Don and Mary Ann Sens of Grand Forks, N.D., continue to support the School's Pathology Excellence Fund and the Dean's Scholarship Fund, which provide scholarships to medical, health sciences, and graduate students at the SMHS.

Betty Wold Johnson of Hopewell, N.J., continues to support the Karl Christian Wold MD Medical Library Endowment, which supports the School's Library Resources, and the Katherine Maryann Rasmussen Memorial Scholarship Endowment, which provides scholarships to Physician Assistant Studies students.

Dr. Thomas, MD '88, and Rep. Michelle Strinden of Fargo, N.D., established the MD Class of 1988 Scholarship Endowment, which provides scholarships for medical students.

Larry Mullins, BS PT '75, of Oakwood, Ohio, established the Larry Mullins PT Scholarship Endowment, which provides three scholarships annually to physical therapy students with preference given to single parents, veterans, a member of an LGBTQ+ community working to promote the needs of that community, or members of underrepresented groups.

Dr. Wallace, BS Med '68, and JoAnne Radtke of Peoria, Ariz., established the Drs. Susan Farkas and Joshua Wynne Scholarship Endowment, which provides scholarships to medical students from North Dakota with financial need. Preference shall be given to students who intend to practice in North Dakota.

Department of Physician Assistant Studies presents White Coats to Class of 2021

Thirty University of North Dakota School of Medicine & Health Sciences (SMHS) students began the clinical portion of their studies in January in an effort to earn their Master of Physician Assistant Studies (MPAS) degree.

The White Coat Ceremony for these future physician assistants (PAs) was held at 9:30 a.m. on Friday, Jan. 17, in the Charles H. Fee, M.D., Auditorium at the SMHS.

Randy Perkins, MPAS, PA, FNP, and Christina Brooks, MPAS, PA-C, presented the ceremony's keynote address. Welcome remarks were given by Associate Dean of Education and Faculty Affairs Ken Ruit, Ph.D. Closing remarks were given by Eric Johnson, M.D., medical director for the MPAS program and associate professor in the SMHS Department of Family and Community Medicine.

This Class of 2021, which was given their white coats during the PA Studies program's 50th anniversary year, is the first group to benefit from the School's Adopt-a-PA-Program. Based on the School's Adopt-a-Med-Student Program, where donors to the SMHS provide engraved stethoscopes for first-year medical students, the School launched an Adopt-a-PA-Student Program. In this case, nearly 20 generous donors to the School provided professional white coats for second-year physician assistant studies students who are about to begin their clinical experiences.

"The presentation of the white coat is symbolic of the new profession the students are entering," said Department of Physician Assistant Studies Chair Jeanie McHugo, Ph.D., PA-C. "The coats will be worn by students through the clinical phase of their training and denote their involvement with the PA program at UND."

Students who received white coats have already completed their first two semesters

of basic science instruction, and now will spend four weeks in the didactic setting in Grand Forks before returning to their home communities, where most of their training will take place under the supervision of physician and PA preceptors. Over the next 18 months, they will return to UND

for several weeks at different junctures for education and training.

Seventy percent of the Class of 2021 is from North Dakota, South Dakota, and Minnesota. Students range in age from 21 to 45 years, with an average age of 30. The class includes seven males and 23 females.



UND Master of Physician Assistant Studies Class of 2021:

Heidi Artz, West Fargo, N.D.
 Sierra Baxter, Morehead City, N.C.
 Rebecca Beyer, Casselton, N.D.
 Ben DeVries, Hibbing, Minn.
 Cherie Dowell, Fargo, N.D.
 Stephanie Frentzel, Benson, Minn.
 Julie Harmon, Resaca, Ga.
 Quinn Jacobs, Glenwood, Minn.
 Shelby Knox, Ray, N.D.
 Savanna Kramer, Mandan, N.D.
 Stephanie Krogen, West Fargo, N.D.
 Katelyn Krueger, Grand Forks, N.D.
 Breanna Krueger, Jamestown, N.D.
 Alexander Lee, Plymouth, Minn.
 Traci Leitheiser, Moorhead, Minn.

Drew Marx, Lakeland, Fla.
 Abigail Moeller, Forest Lake, Minn.
 Steve Moore, Maple Grove, Minn.
 Aunica Novacek, Greenbush, Minn.
 Christina Rasanen, Rapid City, S.D.
 Natasha Richesin, Riceville, Tenn.
 Brian Schiller, Fargo, N.D.
 Melissa Severson, Preston, Minn.
 Manpreet Sheabat, San Antonio, Texas
 Samantha Simley, West Fargo, N.D.
 Brady Srna, Great Falls, Mont.
 Toby Steen, Grand Forks, N.D.
 Kelli Strege, Fargo, N.D.
 Kayla Terrel, Noble, Okla.
 Jenna Zwiers, Nelson, Minn.

Porter named associate dean for Student Affairs & Admissions



Jim Porter, Ph.D.

Jim Porter, Ph.D., associate professor in UND's Department of Biomedical Sciences, has been named associate dean for Student Affairs & Admissions at the UND School of Medicine & Health Sciences (SMHS).

A 21-year veteran of the SMHS, Dr. Porter is filling the role previously held by Joycelyn Dorscher, M.D., who retired from UND on February 19, 2020.



Joycelyn Dorscher, M.D.

A pharmacologist by training, Porter earned his doctorate from the Creighton University School of Medicine in Omaha, Neb., in 1993. He then worked as a postdoctoral fellow for

both the National Institutes of Health and the American Heart Association in Nebraska and Ohio before making his way to North Dakota in 1999.

"I'm very enthusiastic about being given the opportunity to take on this new and exciting challenge, which assists in the guidance and preparation of medical students to succeed in our state's health care future," said Porter.

A veteran researcher and grant-writer who has spent much time in the lab, Porter is also an award-winning and student-focused instructor. Among other awards, he has been recognized as an "Outstanding Block Instructor" by UND medical students several times over, is well-known for his work in helping develop the School's patient-centered learning (PCL) curriculum, and earned an "Elements of Effective Instruction" certification from UND.

As associate dean for Student Affairs & Admissions, Dr. Porter will provide guidance, counseling, and referral for medical students with academic, personal, career, financial, and/or family concerns as needed. He will also monitor medical student academic progress and professionalism; support residency applications and medical students' annual residency "match" process; serve as a member of the School's Executive, Admissions, and Governance committees as an advocate for students; act as the SMHS Title IX liaison; and maintain Liaison Committee on Medical Education (LCME) accreditation standards.

He remains a member of the American Society for Pharmacology and Experimental Therapeutics and the North Dakota Academy of Science, and is a United States Pharmacopeia (USP) Convention Delegate.

Khan awarded five-year, \$1.78 million R01 grant from NIH to study pneumonia, influenza

Nadeem Khan, Ph.D., assistant professor in the UND School of Medicine & Health Sciences (SMHS) Department of Biomedical Sciences, has been awarded a five-year, \$1.78 million, five-year grant by the National Institute of Allergy and Infectious Diseases, a division of the National Institutes of Health (NIH). This prestigious R01 grant will support Dr. Khan's research into Streptococcus pneumoniae-influenza co-infections, including potential innovative treatment options for the multiple illnesses caused by the bacteria and virus, respectively.

Influenza infection in the host's respiratory airway may lead to an increased likelihood of secondary pneumonia caused by Streptococcus pneumonia bacteria, among others. A major invasive bacteria, Streptococcus pneumonia contributes to a series of human illnesses, including strep throat, ear infection, bronchitis, pink eye and pneumonia.

"Our lab is helping to explain the complex interplay between inflammation and disease pathology in the respiratory airway," explained Dr. Khan. "The outcome of these interactions determines many aspects of inflammation and the pathogenesis of respiratory infections and allergic diseases."

Exploring the interaction of this bacteria and the influenza virus, Dr. Khan is looking to develop novel treatment strategies to fight influenza and influenza-associated bacterial pneumonia, which constitutes a significant disease burden in the U.S. This current project is an extension of Dr. Khan's earlier work, most of which has been focused on respiratory infection and other lung pathologies, including allergic asthma.

"This is a great recognition of the innovative work that Dr. Khan is doing to investigate the mechanisms by which the flu virus weakens the system and interacts with

other infectious diseases," added SMHS Senior Associate Dean for Medicine & Research, Marc Basson, M.D., Ph.D., M.B.A. "And it's especially timely as we move through flu season amid concern over the coronavirus outbreak."

Dr. Khan's lab is one of several at the SMHS dedicated to studying host-pathogen interactions. Led by Dr. Jyotika Sharma, the School houses a team of researchers investigating disease-causing microbes and viruses—including Francisella, Lyme disease, HIV, and Zika. Much of this research is funded by a Centers of Biomedical Research Excellence (CoBRE) grant through the NIH.

Thomas Anthony Abe (Leads the Way) “Iduga Niidish”, BS Med ’76, age 74, New Town, N.D., died Wednesday, Nov. 27, 2019, at his home. Thomas Anthony Abe was born on Nov. 2, 1945, four miles north of Elbowoods in Blue Water (Mini Tohe) to Tatsuji and Rita (Grinnell) Abe. He was close to his mother, “Ma,” and his grandmother, Maggie (Old Dog) Grinnell. Both women instilled in him the value of hard work and love for his Indian traditions. He had many fond memories of his childhood on the farm. Tom attended various schools in his early education—Riverdale, Underwood, Chicago—and graduated from Parshall High School in 1963. After high school, he attended Minot State College, earning his Bachelor of Arts in Chemistry. Tom was proud to serve his country in the United States Army, 101st Airborne “Screaming Eagles,” and served his tour of duty in Vietnam. After completing his service, Tom returned home to continue his education at the University of North Dakota where he earned his Bachelor of Science in Medicine. In 1980, Tom began his teaching career at the Fort Berthold Community College as a science and math instructor. He assisted in planning and implementing a standard science laboratory for the college’s General Chemistry Courses. Tom will be greatly missed. He leaves behind his wife, Jonelle, and his children: Terri Provancial (Michael), Maggie Abe, Damon Abe, Samuel Ledesma (Shawna), Marita Abe, Sierra Spotted Bear (Cory); and siblings: Kay Mason, George Abe (Karen), Fay Box (Jim), James Abe, and Gay Nordquist.

Ernest Victor Gilbertson, BS Med ’56, passed away on Dec. 22, 2019. After years of living with an ailing heart condition, he spent his final two months at Bethany in the expert care of the nursing staff, aids, and Ethos Hospice staff. In the end, when asked if he was ready to go “home,” he answered all who asked with a strong yes. Ernest (Ernie) was a Christmas baby, born in Williston, N.D., in 1932 to Reverend Victor and Wilma Gilbertson. Wilma was able to get word to Victor that they were the proud parents of a new baby boy, just as he was preparing to start the evening Christmas Service. The oldest of five children, Ernie was a lively start to their growing family. As the son of a pastor, Ernie moved with his family to a number of communities in the Midwest. Ernie attended public school in each of the towns in turn, and in his senior year attended Augustana Academy. He graduated with a BA from Augustana College and started his first two of four years at the University of North Dakota medical school in Grand Forks, N.D. His final two years were spent in Kansas City at the University of Kansas School of Medicine. It was in Kansas City that Ernie joined the Air Force and was deployed to Oxnard, Calif., where he was a USAF Flight Surgeon, Medical Commander at Geigen AFB. During those years at medical school, Ernie would travel

back to Reynolds, N.D., to visit his parents. It was on one of those breaks from medical school that Ernie met and fell in love with local spelling bee champion and beauty, Beryl Tweten. They were married on June 15, 1957, in Reynolds, N.D., and began their life together in Kansas City, Kan. Over the years, Ernie served on the ND Medical Association: State Board of Medical Examiners, the Lake Region State College Foundation, Rotary, and was a board member at Our Saviour’s Lutheran Church. Ernie is survived by his four children: Kristen, Maren, Stephanie, and David; six grandchildren; two great-grandchildren; and his siblings: Esther Johnson; Paul Gilbertson, and Ruth Matson. Ernie is preceded in death by his wife, Beryl, parents Wilma and Victor Gilbertson, and sister, Lois Olsen.

Daniel Will Goodwin, BS Med ’62, died at home surrounded by his loving family on Nov. 13, 2019, at the age of 81. He was born May 2, 1938, in Grand Forks, N.D. Dan was the youngest of six children. He attended Central High School, UND, and the University of Minnesota School of Medicine. He married Shirley Johnson Feb. 20, 1960, and together they had five children. After medical school, Dan and his family settled back in Grand Forks. He proudly served as a Captain in Vietnam for a medical unit. In Grand Forks he was a partner at Valley Medical where he practiced medicine for 28 years. He then completed a Bush Fellowship so he could serve as a locum physician to help small towns and rural communities receive health care. During his years in GF he served on multiple committees and community organizations. He was honored and recognized for his many contributions to medicine but most memorable was as ND Family Physician of the year in 1989. He practiced medicine for 50 years until retirement in 2014. He is survived by: Shirley, his loving wife of 59 years; four children and their spouses; 11 grandchildren; one great grandson; brothers Walter and Gene; sister Marilyn; and many beloved nieces and nephews. He was preceded in death by his parents, Lloyd and Marion Goodwin, son Jeffrey, brother Donald, and sister Ellen.

Robert Wayne Hamilton, MD ’76, died on Oct. 16, 2019. He was the youngest of three sons born to Ken and Marian Hamilton on Feb. 3, 1945, in Langdon, N.D. He was raised in a loving home and a wonderful small community. He graduated from Langdon High School in 1963 and the University of North Dakota School of Medicine in 1976. He started his medical career with an internship at Maricopa County General Hospital and a two year residency in family practice at Scottsdale Memorial Hospital. He was in solo practice for 15 years, then joined North Scottsdale Family Medicine and completed 40 years of family practice this year. He is remembered with love by his wife of 27 years, Julia; daughter Chelita; son Austin and

his wife Patty and their children Brady and Tatum; brothers Gene (Judy) and Jim; and mother-in-law Bebe Winterberg. He was predeceased by his parents and his first wife of 14 years, Nancy Tangen Hamilton.

Dr. James Oliver, BS Med '41, of Moorhead, Minn., was born April 1918 in Kulm, N.D., the son of Otto and Otile (Gackle) Isaak. He moved to Fargo during his high school years where he graduated in 1935. James graduated from North Dakota State University in Fargo and went on to study medicine at the University of North Dakota in Grand Forks and Northwestern University in Chicago. It was in Chicago he met and married Alice Larson in 1943. They moved to Moorhead where he was a General Practitioner at Saint Ansgar's and Saint John's Hospitals, as well as having a private practice from 1945 to 1955, until he was called to serve as a doctor in the U.S. Army. James was stationed in Germany for two years, and Alice and their two daughters all very much enjoyed this time in Europe. In 1966 they moved to Minneapolis where James specialized in Urology at the VA, after which he went into private practice in Fargo with Dr. Richard Seifert for many years, until retiring at age 65. At 101 yrs old Jim was the last surviving member of his five siblings. He is survived by his daughters, Dr. Susan Oliver of Boulder, Colo., and her son Gabriel and his wife Jennifer, and Kathy Oliver and her daughter Chelsea in Los Angeles, Calif. He was a loving and supportive father and grandfather and will be deeply missed.

Erwin Samuelson, BS Med '54, passed away on Nov. 3, 2019. A product of West Fargo, N.D., Dr. Erwin Lewellyn Samuelson attended Moorhead State Teachers College, North Dakota State University, and the University of North Dakota, supporting his studies by working as a plumber and playing the saxophone in dance bands. He graduated from Temple University Medical School (1956) where he met fellow medical student and the love of his life, Alberta Woodworth. Following their marriage in 1957, they moved to California where he served in the United States Navy Medical Corps, ultimately being discharged with the rank of Lieutenant. Erv established his medical practice in Redondo Beach in the early 1960s, caring for people and families as a general practitioner and focusing on Aviation medicine toward the end of his career. He retired in 2013 due to his deteriorating health. He is predeceased by his parents, Ernest Ludwig and Mattea Hexom Samuelson, his sister Margaret Martenson, and his oldest daughter Karen Samuelson Perkins. He is survived by his loving wife of 62 years, Dr. Alberta Woodworth Samuelson, and his four children and seven grandchildren: Karen's children Daniel and Clarice of Auburn, Calif.; Margery (Don) Beierschmitt of Redondo Beach, Calif.; Eric (Lisa) Samuelson

and Andrew of Alexandria, Va.; Lisa Claire (Perry), Christine and John Vermillion of Marble Falls, Texas; and Anne (John) Declan and Finn Williams of Hermosa Beach, Calif., as well as his many nieces and nephews.

Dean R. Strinden, BS Med '50, age 95, longtime Williston Physician, passed away Sept. 21, 2019, at Bethel Lutheran Home in Williston, N.D. Dean Roland Strinden was born Nov. 29, 1923, to Teddy Isaac and Martha Ovidia Eidsvig Strinden. He grew up in Litchville, N.D., where his parents instilled values of faith, family, and community service. He was preceded in death by his parents; sisters Lone and Marcelle; and brothers Keith, Osmund Alfred, and Theron Strinden. He is survived by his wife of 69 years, Cathleen Leona Wallgren Strinden; daughter Susan (Lyle) Hall and children; son William (Sarah) and children; daughter Carol (William) Hineman and children; 18 great grandchildren; brothers Earl (Jan) and David (Ella); sisters-in-law Cleone and Mavis Strinden; and numerous nieces and nephews. After graduation from Litchville High School, he served in the Army in World War II stationed in the Philippines and New Guinea. He entered UND Medical School after completing his undergraduate degree then transferred for the final two years, graduating from the University of Colorado Medical School in 1952. While at UND he met and married his beloved wife Cathleen. They moved to Williston in 1954. Dean co-founded Harmon Park Clinic in 1954 and served the community as a family doctor doing everything from delivering babies to trauma surgery. He reluctantly retired from active medical practice in 1993. Over his career he served as president of the ND Chapter of the American Academy of Family Physicians, ND Society of Obstetrics and Gynecology, and the ND State Medical Association, and served on the State Health Council by Governor's appointment. He was the recipient of the Sioux Award in 1994 and was the chairman for the UND Alumni Association & Foundation and UND School of Medicine Campaign for Excellence. He has been ever-dedicated to his family. There were pony rides and long walks in search of agates. His words of wisdom included "life is too short to have bad days." For the past few years he fought health issues to continue caring for his wife. He wanted nothing more than to remain in their home spending time on the porch overlooking their peaceful valley together. He had a passion for life, learning and doing the right thing. He was fiercely proud to be a North Dakotan and would take any opportunity to teach others about his great state. He was an excellent and loving husband, father, grandfather, and great-grandfather leaving a legacy of service and lessons learned and cookies for Cathleen and the grandchildren.



WEAR RED

SMHS faculty and staffs wore red for cardiovascular disease awareness in Feb. 2020.



AND EAT IT TOO

Faculty and staffers from across UND and Grand Forks UND celebrated being named the state's first and only Cardiac Ready Campus by the North Dakota Department of Health in Feb. 2020.



DOCTORS OUGHT TO CARE

Med students after hanging with Grand Forks elementary schoolers for the Doctors Ought to Care program, where medical students teach kiddos about what to expect from a doctor's appointment.



CRH GOES TO WASHINGTON

Members of the North Dakota Rural Health Association and representatives from the UND Center for Rural Health met with North Dakota lawmakers in Washington, D.C., to discuss rural health issues.

Pictured l-r: Matt Shahan, West River Health Systems, Hettinger; Darrold Bertsch, Sakakawea Medical Center, Hazen; Ben Bucher, Towner County Medical Center, Cando; Daniel Kelly, McKenzie County Medical Center, Watford City; Pete Antonson, Northwood Deaconess Health Center, Northwood; Ralph Llewelyn, Eide Bailly; Kylie Nissen, Center for Rural Health.

HOLIDAY PARTY

Dr. Joshua Wynne (right) and his spouse Dr. Susan Farkas at the SMHS Grand Forks campus Holiday Party in Dec. 2019. Joining them are SMHS professors of biomedical sciences Sergei Nechaev (center) and Barry Milavetz (far left).



SERVICE LEARNING DAY

Participants of the School's annual Service Learning Day poster session in January 2020. At the event, medical students present on their recent service-oriented health projects and endeavors.



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ADDRESS SERVICE REQUESTED

SAVE THE DATE

Alumni receptions

ALL-SMHS ALUMNI & FRIENDS SOCIAL

March 19, 2020
Minneapolis, Minn.
UNDalumni.org/msp2020



PHYSICIAN ASSISTANT

May 17, 2020
Nashville, Tenn.
UNDalumni.org/pa2020
Photo by the Nashville Convention
& Visitors Corporation



OCCUPATIONAL THERAPY

March 27, 2020
Boston, Mass.
UNDalumni.org/ot2020
Photo by Kyle Klein



ATHLETIC TRAINING

June 19, 2020
Atlanta, Ga.
UNDalumni.org/at2020
Photo by Ralph Daniel

