NINN NORTH DAKOTA MEDIC NE

University of North Dakota School of Medicine & Health Sciences

SUMMER 2019 Volume 44 Number 2



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NORTH DAKOTA MEDIC[®]NE 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 INMED Director Dr. Don Warne speaking at the Wacipi powwow on the UND campus in April 2019. (Photo Aspen Photography)

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JUST GETTING STARTED



As you'll no doubt notice, this issue of North Dakota Medicine focuses on our outstanding Indians Into Medicine program (INMED). Since its founding in 1973, INMED has graduated hundreds of American Indian physicians and other health professionals, and served as the model for similar programs that followed it, like the College of Nursing & Professional Disciplines Recruitment/Retention of American Indian Nurses (RAIN) program at UND. While the term "Inmed" is used elsewhere, we're proud to say that our INMED was the first and—in our humble opinion—remains among the best such programs dedicated to recruiting and retaining American Indians into health careers in the nation. And with Director Dr. Don Warne at the helm, we only expect the program to continue to grow and produce great health providers for the region working across disciplines.

Speaking of producing students across health disciplines, we recently made it through our School's spring graduation season, which is a good time to look back over the current academic year and forward to the coming one that starts this July. The most obvious major accomplishment of the UND SMHS for the current year is the graduation of over 300 medical and health sciences students who are destined for additional training, clinical practice, or other health-related employment. We are guite proud of them, and they are going forward with wonderful opportunities, thanks to the education and training they received here at UND. And more and more are staying in (or returning to) North Dakota. For medical students, for example, over the past decade or so, we've gone from well below the national average of retention of graduates for in-state practice to well above it. Part of the reason for this is that more and more college students from North Dakota are selecting UND for their graduate/professional studies. The UND SMHS used to matriculate about two out of every three undergraduates from North Dakota who got into medical school somewhere in the U.S. Now that split is up to about 5 out of 6.

Looking forward, two big developments in the short-term are the stability of our budget (thanks in large part to the ongoing strong support from the North Dakota Legislature) and the departure of President Mark Kennedy for the University of Colorado. I am convinced that many of Mark's initiatives will continue long after he has left, including the OneUND Strategic Plan, the focus on expanding UND's research enterprise, the 10 percentage point improvement in UND's undergraduate graduation rate, the redesign of the campus, the focus on addressing the University's infrastructure, and the push for several new buildings (including the Memorial Union and a new home for the College of Business & Public Administration). Importantly, I think that the trajectory of the UND SMHS is solid and clear, irrespective of changes in the President's Office. Our mission of educating the next generation of health care providers, discovering new knowledge important to North Dakotans, and serving the people of the state (especially

through health care workforce development) remains just as clear and unambiguous as it was before President Kennedy's announcement. On that note, as you may have heard, the State Board of Higher Education (SBHE) asked me to be UND's interim President as it conducts a search for Mark's successor. I look forward to this role, but told the Board that I'd only accept the temporary role if I could continue to serve as Dean of the School of Medicine & Health Sciences. The SMHS is my passion, of course, and I think that the School and its faculty, staff, and students will begin the new academic year on July 1, 2019, full of enthusiasm, energy, and optimism. I certainly share that sense of excitement and optimism as we—together—address a number of topics of particular interest, including:

- Redesign of the medical school curriculum with a goal of expanding clinical experiences, helping students prepare better for the national licensure exams that they all take midway through medical school, and more effectively reintroducing biomedical science concepts during students' clinical experiences
- Expanding and enriching the School's clinical and translational research activities, with the ultimate goal of speeding the application of discoveries in research laboratories to clinical patient care
- Expansion of the School's virtual health care delivery activities, where through the use of technology we can effectively bring the clinic to the patient, rather than the other way around

So the School's direction and agenda for the upcoming biennium (July 2019 through June 2021) is unambiguous and clear—and exciting! Fortunately, we have the requisite funding available to enable us to carry out our tri-part mission of teaching, discovery, and service. As I indicated above, this is a consequence of a very solid legislative appropriation; strong philanthropic support from our friends, alumni, and other donors; and, quite frankly, good business management of our operations by Associate Dean for Administration and Finance and Chief Operating Officer Laura Block and her colleagues. Because of this stable budget situation, we'll be able to continue (and expand as appropriate) our health education and other programming. In fact, we are now able to reward (with dollars) our faculty and staff for their outstanding efforts—something that was not possible during the past two years during which time we (and others) had to reduce our expenditures. None of our employees got a raise during that time period, so I'm delighted that now we will be able to provide at least modest salary increases.

I am proud of what our faculty, staff, and students do day in and day out. I hope that you share my gratitude to all of them for the work they do (and yes, being a student is work!). If you'd like to see some of our folks in action, please stop by the new building if you are in Grand Forks or at one of our regional campuses in Fargo, Bismarck, or Minot; we'd love to show you around. And please email me (joshua.wynne@UND.edu) with any questions or issues you have. I'd love to hear from you.

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



TENDING THE HEALING FLOCK

UND SMHS Associate Dean for Diversity, Equity & Inclusion Don Warne works to engage students, prepare health professionals

Outside Don Warne's office is a popular spot for students to gather and chat.

Inside, Warne is surrounded by books, degrees, and awards. The centerpiece of his office—and always in sight—is a large whiteboard filled with rows and columns of neat writing. Some boxes on this grid are crossed off, while others have notes.

There are a lot of projects ongoing, and they're always topof-mind said Warne, who wears multiple hats as the director of the Indians Into Medicine (INMED) Program, director of the Master of Public Health (MPH) Program, and associate dean for Diversity, Equity & Inclusion at the UND School of Medicine & Health Sciences.

His ultimate goal is to prepare the next generation of health professionals.

"I love engaging all students, American Indian or not," said Warne. "I find students energizing. They are why we're here. I feel good about the next generation of healers."

Holistic vision

Warne has a holistic vision for a program that starts with educating middle school students and takes them through high school and college, medical school, and beyond.

"We just admitted seven outstanding American Indian students who will start medical school this summer," Warne said, noting that more than 240 American Indian physicians practicing across the continent are INMED alumni. "Our graduates are serving tribal communities across the nation."

Medical doctors notwithstanding, INMED supports college students who want to work in medical education, physical therapy, and occupational therapy, as well as some other undergraduate programs like medical laboratory science, starting with kids in seventh grade. Established at UND in 1973, INMED offers a Summer Institute for students in grades 7-12 and supports medical and health professional students once they reach UND. Services include academic and personal counseling for students, assistance with financial aid applications, and summer enrichment sessions at the junior high through professional school levels.

"Kids from all over the country want to be here," said Warne, who noted that they've received more than 100 applications for the Summer Institute in 2019, an enrichment program that offers classes in science and health, along with field trips. "We have the resources to support 48 students but the capacity to serve 100 on campus. The program is in demand."

But the program isn't only there for students.

Warne and other faculty members at the UND SMHS recently received a multi-year, \$322,000 grant to help high school teachers at tribal schools improve their STEM curricula and create engaging lessons. The goal of the grant is to develop a new program called the Native Educator University Research Opportunity [NEUROscience] that will both train educators from tribal communities and pique student interest in STEM.

"The idea is to work with tribal high school teachers to increase capacity for STEM education, to learn teaching techniques but also incorporate indigenous perspectives on STEM," Warne added, explaining how indigenous people have been practicing science and developing technology for millennia. "We just didn't call it STEM. If you look at the indigenous population in the Americas, a great example is Guatemala. The Mayans there built these megacities that at the time they were occupied [in antiquity] were larger than any city in Europe. Look at the science and engineering there. That has to be part of the [educational] framework."

NEUROscience places teachers in a UND Department of Biomedical Sciences research lab at the SMHS where they gain first-hand experience conducting scientific research. Teachers will also work with science educators to translate their research experience into the classroom.

In addition to the NEURO award, Warne has brought in more than a \$1 million in other grants since becoming INMED director in May 2018.

Unique program

As if all of this wasn't enough, next fall, Warne plans to launch the world's first doctorate in public health emphasizing indigenous health. And he's also launching the first accelerated MPH program, which will enable students to earn both a bachelor's and master's degree in five years. Warne has also revised the MPH program by adding a specialization in indigenous health. According to the program's website, the specialization is designed to provide students with a critical understanding of determinants of Indigenous health and solutions to health disparities.

"Students will examine Indigenous populations, histories, cultures, societies, traditional healing systems, food sources, patterns and impact of colonization, and health inequity," the website notes. "Students will also evaluate the impact of historical and ongoing traumas associated with colonization and colonialism, explore Indigenous concepts of health and healing, and will synthesize new approaches of moving toward health equity in a culturally relevant manner."

"We will offer the only indigenous health, the only online bachelor's/master's degree combination, and one of very few health policy MPH degrees," continued Warne, who holds both an M.D. and M.P.H. "We're collaborating with faculty all over the world, including Canada, New Zealand, Australia, Guam, and Norway. And for the first time, we are offering an online 'asynchronous' program for physicians and clinicians. This means health professionals can work on the degree when they have time—evenings, weekends."

Warne is also working to increase the number of American Indian professors of medicine, as well as administrators.

He is one of just two American Indian associate deans at a U.S. medical school. The other, Joycelyn Dorscher, M.D., associate dean for Student Affairs & Admissions, is also at UND.

That's good news for UND, Warne said, as he added that he is hiring more faculty with the goal of becoming full professors.

"There are 37,000 professors of medicine in the U.S., and only 10 are American Indian," Warne said. "We are working to change that. I want to promote diversity, equality and inclusion at the School."

Warne said great things are happening at INMED and in the public health program.

"It's an honor to do this," he said. "This doesn't feel like work."

By Jan Orvik

ON THE BACK OF BIG TURTLE

Or, how the UND Indians Into Medicine Program came into being.

Below is the first in a two article series on UND's historic Indians Into Medicine Program. The following piece focuses on INMED's early history. A forthcoming story will emphasize the program's growth and change in the 21st century.

According to Ojibwe [Chippewa or Anishinaabe] tradition, the world was made when Woman fell from the sky to the endless sheet of water below. Two swans saved Woman from drowning and took her to Big Turtle, master of all animals. Turtle, who is at times described as female, called a council to determine how to bring up earth from the ocean to make an island for Woman. Many animals tried, but died in the attempt. Finally, Old Lady Toad dove down into the water and emerged with earth, which she put on Turtle's back before dying of exhaustion. Turtle then supported the earth on her back as it grew into the island of the world we know today.

Various Lakota/Dakota/Nakota tribes in the Northern Plains whose lore often includes a healing turtle named Keya expound upon such a creation story by describing how during a time of great famine and sickness White Buffalo Calf Woman came to save the Indian people. The woman in white buck skin was sent by the Great Spirit to provide the people with a pipe "made from the blood stone of all who gave their lives that you might live," former Chair of the UND Department of Indian Studies Art Raymond wrote in the book *Medicine Woman*, hinting at the pipe's healing potential. "The Woman of the Clouds walked slowly and majestically from the camp out to the plain. There she disappeared without a sign, and in her place stood a white, female buffalo calf."

These tales are recounted in *Medicine Woman*, the chapters of which were written predominantly by Raymond and the women who produced UND's Indians Into Medicine (INMED) Program— Twila Martin Kekahbah, Lois Steele, Phyllis Old Dog Cross, Connie Jackson, and others—which this year turns 46 years old.

Origin story

It makes sense that a program dedicated to cultivating American Indian health care providers of all types would see in Big Turtle and White Buffalo Calf Woman a model for its own founding, of course. As with earth, America's premier Indian health education program, whose symbol for years was a turtle, was likewise built from nothing largely on the

STANDING PROUD INMED board member Twila Martin Kekahbah

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backs of the tireless women and men who dedicated their lives to finding solid ground for American Indian healers journeying far from home.

Just ask Kekahbah, a charter member of the INMED Advisory Board.

An enrolled member of the Turtle Mountain Band of Chippewa, the UND alumna (BS '72) understood both the difficulty American Indians faced in trying to engage formal health education and hospital systems, and the need to change such systems that kept too many American Indians from attending college.

"When I started [at UND] there were only three identifiable American Indians in attendance," Kekahbah noted over the phone from Belcourt, N.D., describing how INMED was the catalyst that generated sister programs like Recruitment/ Retention of American Indians into Nursing (RAIN) and Indians into Psychology Doctoral Education (INPSYDE). "Now, we can identify nearly 300 Indian physicians—and even more nurses and psychologists."

Kekahbah's colleague Deb Wilson agrees. The current director of the RAIN program began her career with INMED in 1982 before moving across campus in 1991.

"When I started at INMED, the University had just graduated only its *third* American Indian nurse," Wilson explained, still astonished at the number. "Today, we can claim over 260 Indian nurses, many of whom have gone on to get master's degrees and a few PhDs. INMED helped lay the groundwork for this."

Kekahbah's and Wilson's efforts notwithstanding, dozens of hands helped get INMED and RAIN off the ground, say the women, including Raymond, former UND President Tom Clifford, then-dean of the UND College of Education and Human Development Vito Perrone, and education professor Don Lemon—all deceased—not to mention former North Dakota senators Quentin Burdick and Mark Andrews.

Also on this team was UND School of Medicine & Health Sciences grad (BS Med '59) and former Chair of its Department of Family & Community Medicine Robert Eelkema, MD, who too saw the wisdom in creating a program that would recruit, train, and graduate American Indians into the health professions and send them off to practice on reservations or otherwise underserved rural communities in the region.

"We knew we had to encourage science and enrichment programs for grade schools and high schools, so we developed a program that incorporated extra help in schools on reservations and brought students in for a summer program and worked with the medical school for students," said Eelkema, who did much of the heavy lifting locally and with North Dakota's congressional delegation in Washington, D.C., and retired from the SMHS in 2000.

In Eelkema's memory, although the program witnessed a lot of "storming and forming" early on, it started strong and has stayed so for nearly half a century.

Representatives of more than one federal agency "decided to come and visit us to see what we had," Eelkema continued. "So we took them to the reservations—Spirit Lake and Belcourt. They supported the program. And we had a great president in Tom Clifford. He said, 'It



Robert Eelkema, M.D.



Lois Steele, M.D.

works—we're gonna fly with it.' So we put it all together and got the first grant."

These administrators assembled a team to write the initial INMED grant, which Eelkema says was submitted to a federal agency then known as the Office of Minority Health Manpower. The team, which also included Gary and Nancy Dunn, won the more than \$300,000 grant and the rest is history.

"After the season is over"

Once the group had secured funding for INMED, the next order of business was to find a strong director. And for those closest to the program, there was never a doubt about whom this person should be.

So did Eelkema, Raymond, and Dr. Lionel DeMontigny, Eelkema's classmate and the first American Indian graduate of the UND School of Medicine & Health Sciences, visit Dr. Lois Steele at Dawson Community College in Glendive, Mont.

"They approached me right in the middle of basketball season," recalled Steele, who was at the time teaching and coaching women's basketball at Dawson. "We'd had two unbeaten seasons in a row at that point. So I told them I could be there in March—after the season was over."

Steele's first order of business was convincing all of the state's tribes and some American Indians living on the reservations to jump on board with a program devoted to "white" medicine. Because this posed a challenge in some communities, Steele helped put together a so-called "travelling medicine show" with INMED grads Edwin Chappibitty and Richard Asher that featured an American Indian doctor, nurse, and other health professionals that road-tripped to reservations across the fivestate upper-Midwest region.

"We wanted to show our people what a brown person in a white coat with a stethoscope looked like and what they could do," added Kekahbah.

Herein lies the value of INMED as not only an educational program, but a cultural one. In most American Indian traditions, "medicine" is less something external to the human body that treats disease than an energy or spirit embodied in or demonstrated by a person, place, or object. For Steele, who left INMED after a year to enter a medical residency in Minnesota before eventually returning to INMED, it is this definition that many classically trained physicians were missing, at least in the past century.

"Too often, Western medicine asks you to take a few pills and underestimates the power of the mind in keeping you well or making you sick," Steele said. "Indian medicine, in the traditional sense, recognizes that when you're unwell, you need a lot of people to help you get well."

The same could be said of INMED, which likewise was made strong with the help of so many healers in the more than 40 years since Kekahbah, Steele, Raymond, Eelkema, and others first laid soil on the shell of their own "Big Turtle."

After the team's initial grant expired, for instance, Steele and the INMED Board helped secure additional grant monies from the Health Resources & Services Administration's Health Career Opportunities Program (HCOP). Then, former North Dakota Senator Mark Andrews helped write INMED into the



MEDICINE OF N GRANN ON THE ROAD AGAIN The truck used for INMED's "travelling medicine show" that roadtripped to reservations across the upper-Midwest in the early-1970s.

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federal Indian Health Service budget as a line item that today cannot be eliminated without an act of Congress.

In this way did INMED become practically indispensable.

"INMED is more important than ever," concluded Steele, recalling just how hard it was for those first students in the 1970s and 1980s to come to Grand Forks from the reservation and succeed in school. "Looking back, it amazes me that so many did so well. I remember the tears and heartbreak at all levels, even in med school in older students. Students still see some of the same problems [today], but the causes are different."

But that story—INMED's evolution into the 21st century—will be explored in the fall 2019 issue of *North Dakota Medicine*.

By Brian James Schill

BOARD MEMBERS INNED

- Twila Martin Kekahbah (Charter)
 Turtle Mountain Band of Chippewa
- David Gipp (Chair & Charter)
 Standing Rock Sioux Tribe
- Ashleen Blackbird
 Omaha Tribe of Nebraska
- David "Tally" Plume
 Oglala Lakota Nation

- Iris Walking Eagle
 Spirit Lake Nation
- Linae Big Fire
 Winnebago Tribe of Nebraska
- Ryman LeBeau
 Cheyenne River River Sioux Tribe
- Diane LaPointe
 Santee Sioux Tribe

- Harold DustyBull
 Blackfeet Nation
- James Ironshell
 Rosebud Sioux Tribe
- Brandon Mauai
 Standing Rock Sioux Tribe
- Ira Taken Alive
 Standing Rock Sioux Tribe

📕 '10s



Josalynne Hoff, M.D.



Lori Wolff, M.P.A.S. '12, has joined the family medicine team at Trinity Health Care Center-Medical Arts in Minot, N.D.

Brock Norrie, M.D. '11, is now at

Medallus Medical in Jamestown, N.D.

Norrie, a native of Kenmare, N.D., is

a board eligible orthopaedic surgeon

with fellowship training in surgery of

specializes in treatment of the upper

the hand, elbow, and shoulder. He

extremity, including endoscopic

carpal tunnel surgery, peripheral

nerve surgery, upper extremity

trauma, and rotator cuff surgery.

Josalynne Hoff, M.D. '16, has

N.D. in August 2019.

signed a contract to join Heart of

America Medical Center in Rugby,

Lori Wolff, PA-C



Brock Norrie, M.D.

'00s



Todd Schaffer, M.D. '02, has been named vice president of clinics for the Bismarck region of Sanford Health. Throughout Dr. Schaffer's four years at Sanford, he has shown strong leadership and dedication to Sanford's mission and physician-led culture. In addition to his practice at the Sanford North Walk-in Clinic in Bismarck, Dr. Schaffer serves as the clinic chair of walk-in clinics

and teaches the next generation of physicians as an assistant professor of family medicine at the University of North Dakota School of Medicine & Health Sciences.

'90s



Nate Larson, B.S.A.T. '99, has been hired by Michigan Tech Athletics as the assistant athletic director for Sports Medicine. Larson has worked for UP Health System-Portage as a Certified Athletic Trainer since 2002. He has worked in many aspects of athletic training while at Portage, including in the rehab clinic, high school athletics, and at Finlandia

Nate Larson, ATC

University. He worked with Michigan Tech Athletics from 2002-08 with the volleyball, cross country, Nordic Skiing, mens' basketball, and track & field programs. He returned to the Huskies in September 2018 with the hockey team.

Kimberly Krohn, M.D. '96, has been named the program director of the KUSM-Wichita Family Medicine Residency Program at Wesley Medical Center in Wichita, Kan. Dr. Krohn joins the department from North Dakota where she has served as the program director of the UND School of Medicine & Health Sciences family medicine residency program in Minot. She has held a number of leadership positions including serving as president of the North Dakota Medical Association, president of the North Dakota Academy of Family Physicians Foundation, and president of the North Dakota Society of Obstetrics and Gynecology. Dr. Krohn received her bachelor of science degree in dietetics from Michigan State University's Honors College and her Master of Public Health/Health Services Administration degree from the University of Minnesota. She earned her Doctorate of Medicine in 1996 at the UND School of Medicine & Health Sciences and completed her residency at the Minot Center for Family Medicine where she was chief resident.

'80s



Eric Lunn, M.P.A., M.D.

Eric Lunn, BS Med '82, retired from Altru Health System in Grand Forks, N.D., in March. Lunn had served as president of Altru since Jan. 1, 2015, when he took over for Dr. Casey Ryan, who had been in that post for 17 years. Lunn was the second person to serve as president after United Hospital and Grand Forks Clinic merged to form Altru Health System in 1997.

YOU BELONG HERE Indians Into Medicine Program alum Michael

Indians Into Medicine Program alum Michael LeBeau, M.D., discusses INMED, belonging, and his new role in Bismarck.



Thanks for your time, Dr. LeBeau. First—congratulations on the new job title: President of Sanford Health - Bismarck. How is it going so far?

We have unbelievable volumes. We're struggling with a full house. I like to say it's a good problem to have, but it's still a problem. It's going well, though. I've been part of the enterprise leadership team here for the past five years—was vice president of the clinic side. We have an excellent team in Bismarck, so there haven't been a lot of new surprises around our operations table. I have lots of learning to do and lots of people to meet. As you serve the community, you want to meet all the main stakeholders, and it can be overwhelming.

I assume you have a vision for your organization? Are you looking to chart a new path or one similar to what former President Craig Lambrecht [M.D. '87] followed? We're working hard on that now. Nothing very new, but we're hoping to continue our growth and want to be the premier tertiary care center in central and western North Dakota. That means we're going to increase services offered, increase locations, commit to ongoing improvements in education and patient care. That is the mission here in Bismarck.

What would you say are the top two or three health issues in the Bismarck-Mandan region at this moment?

Continuing to recruit physicians, nurses, and workforce in general is an ongoing challenge. That's true everywhere, but it is easier for larger urban areas to recruit. It's challenging in all of rural North Dakota, and even more so on the reservation for all health professions. But in terms of health, the top two issues here are managing diabetes and its complications and continuing to work on the opioid crisis. The needs are similar between the American Indian and non-Indian populations. But [on the reservations] we need much more in the way of ancillary services: home health, hospice, and physical and occupational therapy.

I think the Indian Health Service has a figure that shows diabetes-related kidney failure is dropping for American Indians but is still double the rate of Caucasians, for example. I imagine a figure like that is part of the reason you chose to specialize in nephrology?

My interest has always been diabetic kidney disease. I grew up on the Canadian border in Portal, North Dakota. But I think of New Town [on the Fort Berthold Reservation] as my home. Yes, we see a lot of diabetes and other kidney issues on the reservation. From a personal standpoint, I love the diversity of my practice. I've been in the ICU and spend a lot of time in hospitals. I've also done outreach in outlying communities—I spent 10 years in Fort Yates and Standing Rock doing nephrology care. I've also done outreach in kidney care in New Town and Jamestown. The unique thing about nephrology is those bonds you develop with dialysis patients, whom you spend much more time with than anyone else. It was always a really diverse day with lots of variety in it.

So you got your M.D. degree from UND in 2002, right, and you got there with some help from UND's INMED team. What did that program do for you as a student?

I was part of INMED as an undergrad and in medical school, and I appreciate the support they gave me throughout. They have resident experts to help you through the college or med school application process start-to-finish. Very supportive staff. One thing that has rang true from one grad to another in my experience is that the staff are there for you during tough times—they're the shoulder you lean on. I was just at the INMED office on Friday and had a chance to speak to graduates. It was a good thing. I said all of this to the grads last week—that I took this fact for granted as a student many years ago. As I think back now, having a place to go where people pat you on the back and are there when you need help was invaluable.

And that's a big deal, especially for American Indian students. INMED Director Donald Warne talks about how there are fewer American Indian medical students as a percentage of the total med student cohort in the U.S. today than in the 1970s—

One thing I always preach to our students is that we're all the same—it's not a handicap to be American Indian in medical school. Our students do think a bit differently about where to offer care. There's going to be a huge push for them to go to underserved areas with the Indian Health Service. I think a lot of it, too, is confidence—reminding these students that they belong here, with everyone else. That's sometimes a challenge for American Indian students. INMED is very supportive of this idea—they really help a lot of people with this idea, that "You belong here." When I spoke to these graduates I told them to take pride in who you are, act responsibly, and care for others. Use the gifts you've been given to serve others and be part of others' lives. A lot of people work very hard and do great stuff but never really get invited into patients' lives like a caregiver does. This is special.

That is special. I imagine that's not a message students hear enough.

I spend a lot of time speaking to med students. Any chance I get, I mention that we, as graduates of UND SMHS, are fortunate—we belong, whether here or at Mayo or Johns Hopkins. Some of the best candidates these places get are from North Dakota. My message to INMED students is exactly the same. When you graduate, you should be proud to be from the UND School of Medicine & Health Sciences. To me, that sets us apart and gives us the preparation we need to succeed when we get to the next level.

> Interview conducted and edited by Brian James Schill



CLASS OF 2019 RESIDENCY SITES

Houda Abdelrahman (Urology) Creighton University School of Medicine Program, Omaha, Neb

Farikh Ali (Anesthesiology) University of California Davis Medical Center, Sacramento, Calif.

David Anderson (Ophthalmology) Geisinger Medical Center, Danville, Penn. (following a transitional year at the UND School of Medicine & Health Sciences, Fargo, N.D.)

Neil Antonson (Surgery) University of Nebraska Medical Center, Omaha, Neb.

Kate Berg (Family Medicine) McKay-Dee Hospital Center, Ogden, Utah

Larae Beth (Internal Medicine) University of North Dakota School of Medicine & Health Sciences, Fargo, N.D.

Theodore Betting (Radiology) Mayo Clinic School of Graduate Medical Education, Rochester, Minn. (following a transitional year at the UND School of Medicine & Health Sciences, Fargo, N.D.)

Beau Billadeau (Transitional Year) Gundersen Lutheran Medical Foundation Program, La Crosse, Wis.

Mark Bushaw (Transitional Year) Naval Medical Center Program, Portsmouth, Va.

Michael Dancer (Anesthesiology)

University of Nebraska Medical Center, Omaha, Neb.

Dylan Dangerfield (Urology) University of Tennessee Medical Center at Knoxville, Knoxville, Tenn.

Elise Dick (Family Medicine) Rapid City Regional Hospital, Rapid City, S.D.

Rachel Ellens (Pediatrics) University of Utah Affiliated Hospitals, Salt Lake City, Utah

Zachary Elliott (Emergency Medicine) Southern Illinois University School of Medicine and Affiliated Hospitals, Springfield, III.

und by the **NUMBERS**

71

NEARLY

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59

16

medical students matched with a residency program in 2019.

41% of UND's MD Class of 2019 matched into primary care specialties (internal medicine, family medicine, ob/gyn, pediatrics).

20% of graduates matched into a family medicine residency, more than double the national average of fourth-year medical students matching into family medicine.

graduating medical students applied to the National Resident Match Program's residency match service in 2019.

different residency programs will take on UND graduates this year.

different specialties chosen by the MD Class of 2019.

John Evenocheck (Family Medicine) University of Minnesota Medical School, St. Cloud, Minn.

Brenna Fanning (Surgery) Oregon Health & Science University, Portland, Ore.

Alexander Fife (Obstetrics-Gynecology) Montefiore Medical Center/Albert Einstein, Bronx, N.Y.

Lejla Gasevic (Psychiatry) University of North Dakota School of Medicine & Health Sciences, Fargo, N.D.

Casey Goodyear (Surgery) University of Illinois College of Medicine, Peoria, Ill.

Rory Guenther (Surgery) Medical University of South Carolina, Charleston, S.C.

Melissa Gunderson (Surgery) Drexel University College of Medicine/ Hahnemann University Hospital, Philadelphia, Penn.

Casey Grantham (Internal Medicine) University of Louisville School of Medicine, Louisville, Ky.

Shyleen Hall (Family Medicine) Altru Health System, Grand Forks, N.D.

Christine Hanish (Family Medicine) Mayo Clinic School of Graduate Medical Education, La Crosse, Wis.

Alexis Hanson (Obstetrics-Gynecology) University of Nebraska Medical Center, Omaha, Neb.

Sean Henley (Family Medicine) Altru Health System, Grand Forks, N.D.

Tyson Holm (Internal Medicine) University of Nebraska Medical Center, Omaha, Neb.

Daniel Hoy (Family Medicine) Altru Health System, Grand Forks, N.D.

Carter Hruby (Internal Medicine) Carolinas Medical Center, Charlotte, N.C.

Jessica Johnson (Pediatrics) University Hospitals-Columbia, Columbia, Mo.

Sean Johnson (Emergency Medicine) Beaumont Health Program, Royal Oak, Mich.

Janet Julson (Surgery) University of Alabama Medical Center, Birmingham, Ala.

Kadra Kalamaha (Radiology) Creighton University Affiliated Hospitals, Phoenix, Ariz. (following a transitional year at Gundersen Lutheran Medical Foundation, La Crosse, Wis.)

Robert Kraft (Internal Medicine) Mayo Clinic School of Graduate Medical Education, Rochester, Minn.

Brooke Kubat (Neurology) University of Iowa Hospitals and Clinics, Iowa City, Iowa

Jace Kusler (Surgery) SUNY Upstate Medical University, Syracuse, N.Y.

Alysa Lerud (Pathology) University of Iowa Hospitals and Clinics, Iowa City, Iowa

Ciciley Littlewolf (Internal Medicine) University of North Dakota School of Medicine & Health Sciences, Fargo, N.D.

Anna-Lisa Martino (Pediatrics) University of South Dakota Sanford School of Medicine, Sioux Falls, S.D.

Morgan McCarthy (Internal Medicine) St. Joseph Hospital SCL Health, Denver, Colo.

Andrew Milbridge (Internal Medicine) Dartmouth-Hitchcock Medical Center, Lebanon, N.H.

Shanalee Mountan (Physical Medicine/Rehabilitation) University of Utah Affiliated Hospitals, Salt Lake City, Utah

Leigh Moyer (Internal Medicine) Kaiser Permanente Hawaii, Honolulu, Hawaii

Shauna Newton (Internal Medicine) Massachusetts General Hospital, Boston, Mass.

Jacy O'Keefe (Emergency Medicine) HealthPartners Institute, St. Paul, Minn.

Emily Olig (Obstetrics-Gynecology) University of Kansas School of Medicine, Kansas City, Kan.

Mylan Panteah (Family Medicine) Memorial Medical Center, Las Cruces, N.M.

Sara Paulson (Obstetrics-Gynecology) University of Kansas School of Medicine, Wichita, Kan.

Jason Reardon (Pathology) Virginia Commonwealth University Health System, Richmond, Va.

Kristen Reede (Surgery) University of North Dakota School of Medicine & Health Sciences, Grand Forks, N.D.

Erin Reis (Neurology) University of Nebraska Medical Center, Omaha, Neb.

Conor Roche (Surgery) University of North Dakota School of Medicine & Health Sciences, Grand Forks, N.D.

Quinn Rufsvold (Family Medicine) St. Mary's Medical Center, Grand Junction, Colo.

Lucas Schnaidt (Ophthalmology) SUNY Upstate Medical University, Syracuse, N.Y. (following a transitional year at the UND School of Medicine & Health Sciences, Fargo, N.D.)

Hannah Schradick (Internal Medicine) University of North Dakota School of Medicine & Health Sciences, Fargo, N.D.

Alessandra Spagnolia (Surgery) University of North Dakota School of Medicine & Health Sciences, Grand Forks, N.D.

Zachery Staskywicz (Surgery) University of North Dakota School of Medicine & Health Sciences, Grand Forks, N.D.

Nicole Stewart (Surgery) Orlando Health, Orlando, Fla.

Britta Stjern (Obstetrics-Gynecology) University of California Davis Medical Center, Sacramento, Calif.

Taylor Studsrud (Radiology) Mt. Auburn Hospital, Cambridge, Mass. (following a transitional year at Blake Medical Center in Bradenton, Fla.)

Faith Thompson (Pediatrics) Central Iowa Health System, Des Moines, Iowa

Mara Thorsen (Family Medicine) Altru Health System, Grand Forks, N.D.

Lucas Titus (Family Medicine) University of North Dakota School of Medicine & Health Sciences, Bismarck, N.D.

Dylan Torgerson (Family Medicine) Indiana University Health Ball Memorial Hospital, Muncie, Ind.

Eric Torkelson (Surgery) University of North Dakota School of Medicine & Health Sciences, Grand Forks, N.D.

Spencer Uetz (Otolaryngology) Southern Illinois University School of Medicine and Affiliated Hospital, Springfield, Ill.

Alanna Velo (Anesthesiology) University of Minnesota Medical School, Minneapolis, Minn.

Christopher Waind (Family Medicine) Altru Health System, Grand Forks, N.D.

Jared Weinand (Radiology) University of North Carolina Hospitals, Chapel Hill, N.C. (following a transitional year at the UND School of Medicine & Health Sciences, Fargo, N.D.)

Tirzah Wethern (Family Medicine) St. Mary's Medical Center, Grand Junction, Colo.

Matthew Winkels (Ophthalmology) Ohio State University Medical Center, Columbus, Ohio (following a transitional year at Ohio State University Medical Center)













STUDENTS IN ACTION

NORTH DAKOTA

HEROES COME IN MANY DISGUISES

Master of Occupational Therapy student Tiana Brown talks to North Dakota Medicine about teaching, superheroes, and living in North Dakota.

When asked about how the transition from South Carolina's heat to North Dakota cold was for her, Tiana Brown just smiled.

"You're not going to believe me, but when it first snowed after I came here, it felt like home to me," said the graduating Master of Occupational Therapy student who, it turns out, knows all about the cold and has made a living adapting to new environments. "I was born and raised in Germany—was there for 12 years. So, I love the snow. The negative 65 degree wind chill here is a bit much, but it wasn't a shock coming here."

The daughter of a decorated U.S. Army veteran father and breast cancer survivor and patient advocate mother, Brown didn't experience the United States until a military transfer brought her family to Columbia, S.C., in May 1999. After an airman she was dating there was sent to the Grand Forks Air Force Base, Brown—who made that man her husband—soon followed suit.

And if the graduate degree and lifelong friendships she has made over the course of five years in North Dakota are any indication, she's glad she did.

Living Bold

When she first arrived in North Dakota, Brown wondered if the prairie was the right place for a personality as bold as hers.

A graduate of the University of South Carolina's exercise physiology program, Brown was looking for not only the right profession but an environment open to her *joie de vivre*, or exuberance in life.

And after shadowing an occupational therapist in Grand Forks, she knew she had found both.

"I was trying to figure out whether I should do med school or PA or something else and found that occupational therapy was the perfect fit for me," said Brown, who plans to subspecialize in either chronic wound care or work rehabilitation. "The UND program molds us to be generalists and specialists at the same time, and I realized that I can go into mental health or acute care, rehab, work community, or public health—I can do anything I want to do. That's what I love about OT."

More than its versatility, occupational therapy, said Brown, seemed open to her big personality and sense of style.

"I am expressive through my clothes and hair, and I've found that people just seem interested," she added, reflecting on how her style has been received in the upper Midwest. "I think with my military background—traveling a lot and being different from everyone else, especially in Germany—I learned to assume that people are good and will accept me for who I am. I'm an optimist and I've met some really great people, some lifelong friends here, people I'd call family."

Superheroine

Still, Brown insists she's a homebody.

"I enjoy hanging out with my husband and dog. I like to travel, but in the winter months, especially, I like watching a movie at home with a cup of hot cocoa," she explained.

That said, Brown admits to being a "huge lover of

superheroes"—Batman in particular—who dresses up whenever she can, especially when doing so gives her and her husband an opportunity to give back to their community. The two try to read to children at public libraries in the region in costume and go to the pediatrics wing of the local hospital as their schedules allow.

"When you put on a superhero mask, it does give you a certain 'power' to connect with people, young and old, I think," she said, explaining how as an OT she identifies with the Batman character. "He's this hero without super powers who turned his pain into passion for the good. He has to be a master of everything to achieve his goal. And I think that's like OT in a way. You have to be a master of so many things communicating with people, understanding science, making the most of resources around you—all without 'real' super powers."

But Brown also has a soft spot for the Black Panther, explaining how she'd not seen African culture portrayed so positively in a graphic novel or film before.

"I thought it was beautiful. Mind-blowing," Brown said. "I think a lot of people identify with that [the film], and with the nuance where the Black Panther was not always this great guy and the so-called bad guy was not really completely bad—he was a product of his environment."

A foot in all worlds

Her superheroing notwithstanding, Brown has made it her mission to take advantage of every opportunity that has presented itself at the UND School of Medicine & Health Sciences. This has meant trying everything from participating in Student Occupational Therapy Association meetings to staffing the Library Resources help desk on the School's second floor to volunteering to give anatomy demonstrations to area high schoolers when they come to UND for a tour.



"I thought it sounded fun," continued Brown, describing her presentation of human organs to young students, only a handful of whom were squeamish. "I've always been interested in teaching, especially now that the OT program has given me that confidence in my abilities to present material."

So it is that Brown has begun considering whether or not she wants to add teaching to her skillset.

"Basically what I would love to do is be a clinical researcher connected to a university to help teach incoming students like an adjunct," she concluded. "I want to keep in touch with both academia and the clinic. As a student, I've found that we learn all these great things in the classroom, and the theories behind it all, and then we go into our clinicals and sometimes the clinicians are doing treatments that aren't evidence-based. I like the idea of getting the data from research and applying it directly to a clinical practice."

All in a day's work for a caped crusader and do-gooder who is off to Nebraska for an advanced clinical doctorate degree in occupational therapy in August.*

"It's a hybrid program—some classroom, some in-clinic, and some online—which allows me to work while I get the degree," said Brown, a bit wistfully. "I've had the best experience here in North Dakota—me and my husband. The people here were immediately just so nice—they're very interested in where you're from and what you do. I found 'North Dakota nice' to be very true."

By Brian James Schill

LEARNING SERVICE

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As the trend toward "service learning" has become more common across colleges and universities in the United States, disciplines of all sorts have made an effort to get students off campus and into environments where classroom-based skills and concepts can be applied to the broader community in a direct way.

Medical schools, perhaps obviously, are no exception: from medicine to occupational therapy, public health to physician assistant studies, the UND School of Medicine & Health Sciences (SMHS) too has been cultivating its service learning programs over the past decade.

And in many cases, such efforts are being led by students themselves.

"We were both members of the UND Honors Program, and that is where I was first exposed to the concept of service

Departments across the School of Medicine & Health Sciences get way into Service Learning—and learn a lot about the health system and their community in the process.

learning," recalled Michael Storandt, second-year medical student at the SMHS and referring to his partner in crime Jacob Greenmyer, a third-year medical student at the SMHS. "In the Honors Program, we began to dive deeper into service experiences by asking questions: Are we actually helping anyone with our service? Why do we choose to do the service that we do? This provided a foundation for me to begin to better understand my community involvement and how to take it to the next level."

Having brought his undergraduate training with him to the SMHS, Greenmyer launched the School's first Service Learning Day, wherein more than a dozen medical students discussed service learning with an audience of faculty, staff, and students, in 2018.

While Greenmyer did much of the work in 2018, he was off-campus at clinical rotations this year, meaning Storandt managed this year's event.

"I had been volunteering for various things since high school," continued Storandt, who has devoted the bulk of his volunteer work to North Dakota Special Olympics and credits his service work with making him a better student of medicine. "[This work] has prepared me to be a better physician. If there was a specialty that solely dealt with individuals with intellectual disabilities, that's what I would do. But I am also interested in oncology, and I believe Special Olympics has better equipped me to work in any field that is extremely challenging in that you are working with patients dealing with very serious conditions, helping them navigate and cope with what is likely one of the most stressful situations they will experience."

Avoiding "drive-by service"

Although university-based volunteer initiatives have been around for decades, they came under increasing scrutiny near the end of the past century for engaging in so-called "driveby service" or (in the case of the often religiously affiliated medical mission trips abroad) "slum humanitarianism." The critique of such programs was that although they often made volunteers feel good about helping those suffering from a lack of resources as much as illness, they did nothing to change the conditions that contributed to the community's poverty or poor health outcomes in either the long or short term. Responding to such critiques, schools of all types have made more of an effort to embed genuine, long-lasting, and selfcritical service learning programs into their curricula.

Greenmyer's and Storandt's Service Learning Days notwithstanding, the SMHS medical curriculum includes elective courses that send faculty and students to places like Peru and Haiti to gain hands-on experience treating a variety of medical needs in resource poor environments.

Or consider the courses that fall under the health sciences umbrella at UND.

"We needed a link between in-class academics and fieldwork," explained Associate Professor in UND's Department of Occupational Therapy Cindy Janssen, PhD, OTR/L, CLA. "Service learning is a high-impact learning practice which facilitates hands-on learning in a way that benefits clients, organizations, schools, and students."

Explaining how for a decade now she has followed the "Prepare, Act, Reflect, Evaluate" (PARE) model of service learning, Janssen noted too that students are told early on that the needs of the community come first.

"Our number one focus has to be on win-win scenarios," she said, referencing her department's partnerships with organizations that serve everyone from senior citizens to immigrants. "The best outcomes are when the clients and organizations feel they've gotten something positive and sustainable out of the experience."

UND's Department of Physician Assistant Studies too has embedded service learning into its curriculum, including in the course PA567 ("Professional Issues & Role Development II"), which asks students to develop, execute, and reflect upon a service learning project in students' clinical communities.

Getting to the core of not only the PARE model, but the service learning scholarship of innovators in the field like Barbara Jacoby, the PA567 assignment encourages students to "Develop insight into racial, ethnic and socioeconomic health disparities on health care delivery," asking them to answer hard questions like "Did the 'service' empower the recipient to become more self-sufficient?" and "How, specifically, has the community benefited?"

"This type of assignment gives students a grounding for continued community service work in their home areas throughout their careers," said Jeanie McHugo, PA-C, PhD, chair of the School's Department of Physician Assistant Studies, who helped her department embed service learning into the PA curriculum in a more formal way in 2016. "Our hope is that these students will become a vibrant part of that community in which they will be practicing, so we want them to be thinking about how they can work on blood drives or hypertension screenings or other community-based service opportunities. When assignments are done well, you can have students who have that 'wow' moment where they realize the [socioeconomic] variability of people in their community and how that connects to their access to care, for example."

Service Learning Day

Hoping to expand medical students' Service Learning Day to all departments in the School, Storandt wants to see the event grow to "something comparable to [graduate



Carissa Klarich



Mike Storandt

researchers'] Frank Low Research Day, where we could have a poster session in addition to an oral presentation portion."

In each case, it seems the "learning" that occurs on students' behalf goes way beyond medicine or clinical practice.

"Much of my service work and volunteerism wasn't directly in medicine," said second-year medical student Carissa Klarich, who spoke on a bicycling program she helped develop in Bozeman, Mont. Calling the exercise program a "gateway to becoming better acquainted with my community," Klarich added that the service taught her less about medicine than the social determinants of health.

"It helped to teach me about the needs of my community as well as the socioeconomic issues affecting my community," she said. "Above all, it made me acutely aware that if we don't understand the socioeconomic and environmental issues within our community and local or state populations, we will be hamstrung in our medical practices, unable to fully help our patients improve their health and manage their conditions."

By Brian James Schill

CHANGING TIMES

As behavioral health issues arise, CRH helps rural areas tackle problems.

Not long ago, the Center for Rural Health (CRH) at the University of North Dakota (UND) School of Medicine & Health Sciences wasn't very involved with behavioral health issues. But times have changed. Several tracking organizations have noted recently the increasing incidence of depression and anxiety among Americans—youth in particular—over the past decade. As needs have grown around this issue, the number of projects the CRH is involved with has grown as well.

"Behavioral health—mental health and substance use disorder—has come to the forefront as a significant health issue in the past few years," said Brad Gibbens, deputy director of the CRH. "Over the years we have done some work in this area and certainly assisted rural providers if they were developing a grant to address behavioral health. However, about five years ago through some assessment work we started hearing more and more from a range of rural providers, [about] how behavioral health was becoming an emerging issue, a common problem. As is often the case, they did not have resources. They had needs but limited options to address the problem."

Not only do many communities have limited resources for prevention, treatment, and recovery, some of the social determinants of health are working against rural communities and contributing to behavioral health problems, including higher rates of poverty, lower educational attainment, high risk behaviors, isolation, higher unemployment, and an aging population, Gibbens said.

But the CRH is trying to help.

"The CRH stepped up and started talking with other groups, including the North Dakota Department of Human Services (NDDHS), our state office in charge of behavioral health," Gibbens said. "Basically, using some federal and some state resources, we developed a number of programs or services. With some we take the lead. With others we are a partner organization. Some are multiple year efforts, while others are much shorter. Some are stand-alone projects, and others are behavioral health sections of a larger project."

Right now, the CRH is involved in 14 behavioral health projects that tackle everything from behavioral health workforce issues to treating opioid use disorder.



HEALTHY BEHAVIOR

From left to right: Stacy Kusler, workforce specialist at the Center for Rural Health, Project ECHO coordinator Julie Reiten, and Dr. David Schmitz, SMHS professor of Family & Community Medicine, participate in a Project ECHO clinic.

"It is not simply an urban issue, as it impacts many rural areas," Gibbens said of behavioral health issues. "Data shows that issues such as opioid abuse and heroin use are prevalent in rural regions. Rural adults have higher rates of alcohol abuse, tobacco use, and methamphetamine use."

The CRH exists to connect resources and to increase knowledge to strengthen the health of people in rural and tribal communities.

As evidenced by the breadth of these projects, CRH staff possess a wide range of skills to help with behavioral health issues in the state, including assessment and research, evaluation, planning, information dissemination, technology, and program development.

"All of these are capacities we apply through our behavioral health efforts," Gibbens said. "We don't believe we have all the answers, but we do believe we have the skills and ability to work with others, particularly people in rural areas, to develop viable solutions. After 39 years of working directly in the rural arena, we understand rural communities and providers. Rural is a different environment than urban, and our history and experience relies on building rural community capacity and transmitting skills."



And everything comes back to caring about rural communities.

"The reason for this growth [in behavioral health programs] is there is simply a lot of need," Gibbens said. "We are interested in helping."

Brad Gibbens, M.P.A.

Among the projects the CRH is involved with are:

- Project ECHO: Management of Opioid Use Disorder.
 With funding from the Substance Abuse and Mental Health Services Administration (SAMHSA), the program is administered through the NDDHS. Through Project ECHO, the CRH is developing a broad, flexible continuum of care delivery specifically to treat opioid use disorders, offering both medication assisted and psychosocial treatments.
- Behavioral Health Workforce Education and Training.
 With funding from the Health Resources & Services
 Administration, this program develops and expands the behavioral health workforce through improved training and by providing stipends to graduate students in UND behavioral health programs.
- Behavioral Health Workforce Development. With funding from the NDDHS, this project is developing a multi-focused behavioral health workforce strategic implementation plan for North Dakota that includes provider workforce inventory, review of telebehavioral health policy, and development of behavioral health education roadmaps.
- Evaluation of the North Dakota State Targeted Response to the Opioid Crisis. With funding from SAMHSA administered through the NDDHS, the CRH is evaluating the North Dakota State Targeted Response to the Opioid Crisis (Opioid STR). The Opioid STR's goal is to reduce opioid-related deaths through increasing access to treatment and recovery services, awareness, and prevention, and reducing stigma surrounding opioid use disorder.
- The National Institute of Mental Health (NIMH) Outreach Partnership, funded by the National Institutes of Health. The CRH is the NIMH Outreach Partner for North Dakota. Through this partnership, CRH provides free publications on various mental health topics. The Outreach Partnership also provides access to information on participating in clinical trials through NIMH.

- The Rural Community Opioid Response Program Planning Grant, funded by the Federal Office of Rural Health Policy. The CRH is working with consortium members in North Dakota to develop and strengthen multi-sector collaborations that will lead to targeted interventions addressing specific opioid use disorder prevention, treatment, or recovery needs in high-risk rural North Dakota communities.
- The State Epidemiological Outcomes Workgroup (SEOW).
 Founded in 2006 by the NDDHS Behavioral Health Division, SEOW's purpose is to identify, analyze, and communicate key substance abuse and related behavioral health data to guide programs, policies, and practices. The CRH develops the State Epidemiological Profile and provides ongoing consultation and support for the SEOW, which is funded by the NDDHS.
- The North Dakota Primary Care Office (PCO), funded by the North Dakota Department of Health. The PCO's mission is to improve primary care service delivery and workforce availability.
- The North Dakota Brain Injury Network (NDBIN), funded by the NDDHS. NDBIN provides information and support to people with brain injury and their family members.
- The Mental Health Technology Transfer Center, funded by SAMHSA. The Mountain Plains – Mental Health Technology Transfer Center provides resources, training, and technical assistance to mental health providers and other practitioners in Region 8.
- Wac'in Yeya: The Hope Project, funded by Sanford Research - Collaborative Research Center for American Indian Health. Wac'in Yeya is a pilot research grant in partnership with Oglala Sioux Lakota Housing to conduct focus groups with Lakota youth and develop creative projects about what gives them hope. The data from this project will be used to develop suicide prevention programs, provide hope to Lakota youth, and determine culturally specific causes of hopefulness.
- The Mood Disorder Assessment Validation Study, funded by the National Institute on Drug Abuse through the Northern Plains Tribal Epidemiology Center Native American Research Center for Health. This study addresses validation of clinical and research assessments of depression, anxiety, substance abuse, quality of life, and rumination to determine if and how they should be used with Northern Plains American Indians.

By Brenda Haugen

NURTURING NELSON COUNTY Left to right: Darlene Kelly, NP, NCHS receptionist

Left to right: Darlene Kelly, NP, NCHS receptionist Laurie Ophaug, Christina Brooks, PA-C, and Kim Iverson, RN, Clinic Nurse Manager.

PEOPLE MAKE IT POSSIBLE

Rural community members are a big part of new recruit's decision to stay.

Christina Brooks didn't enter the University of North Dakota (UND) physician assistant (PA) program planning to go into rural practice. The Grand Forks, N.D., native and 2018 graduate of the UND PA program didn't really have any experience in a rural setting until her three-month clinical rotation took her to the North Dakota town of McVille, population 331. She went there to complete the clinical portion of her training, a requirement of the PA program, but that's it.

In her three short months at Nelson County Health System (NCHS), however, Brooks found that a lasting impression had been made and a mind had been changed.

A nurse practitioner for 39 years, Darlene Kelly has been caring for patients at NCHS for 29 years. She and her clinic nurse manager, Kim Iverson, have seen their share of students from every health profession come through the door to complete various training assignments for their degrees. They weren't prepared for anything different when Brooks began her rotation.

But many health care facilities and systems use student training as a recruitment strategy. In fact, statistics show that more than half of all medical residents select jobs in the communities where they complete their training. Both Kelly and Iverson noticed something special about Brooks during her training time in McVille.

"Patients really responded well to her," Kelly said. "She expressed a lot of caring for what was going on and was truly interested in patients' lives, their families, and their health concerns."

Iverson added that Brooks was "eager to learn and absorb what we were trying to teach her." And while neither Iverson nor Kelly treated Brooks differently than other students they train, Brooks's energy and bubbly personality struck Iverson as important traits for someone who would make a great addition to the team.

The extra care and attention Brooks took with the patients she saw during her training was reciprocated, and those patient relationships were one of the main reasons she loved her time in McVille.

"I really got to know the patients, and the patients were interested in me and how I was liking [school and training]. I really got to know them, and I loved that aspect," Brooks said.

Kelly noted that patients in McVille are typically open to having students alongside her because they know how important it is for new health care providers to learn. "They know the students have to start somewhere," Kelly said.

But little did the patients know that in allowing Brooks into their lives they were performing the important role of recruiter for their community hospital. Brooks signed a full-time employment contract and began working for NCHS in July 2018.

Today, as she quickly approaches a year in practice, Brooks is loving her role and fitting in well with the care team.

"I felt like a celebrity when I came back to practice," Brooks said. The patients remembered her as a student and expressed their happiness to see her back working.

"I hear all the time from patients that they feel blessed to have me, and they thank me for coming back," she said. "I feel equally blessed because of how welcoming people are and that I get to care for them."

Kelly and Iverson have noticed the positive reaction from patients too, and enjoy having an extra set of hands in the clinic and hospital.

"She absolutely fits in well with the team here," said Iverson. "She is confident in her abilities and it shows. She is not shy to ask questions."

As for Kelly, who was the sole full-time provider until Brooks joined, she's glad to have some help. "It's certainly a relief to have her around. It can be hard to work alone in the clinic. Having some companionship is nice," she said.

Brooks attributes the PA program's focus on rural experiences to connecting her with McVille in the first place. Her positive experience with the patients, community, and her mentors, Kelly and Iverson, solidified her choice to work there full time. In addition, because McVille is considered a health professional shortage area, Brooks was eligible to apply for, and subsequently receive, loan repayment funding through the federal state loan repayment program.

"The loan repayment program is a great perk. But I loved it here so much that I probably would have come back anyway," Brooks said.

By Stacy Kusler



THE ECONOMICS **OF GENOMICS**



with the School's MiSeq genome sequencer.

In 2018, Bony De Kumar had a choice to make: Columbia University in New York City, or the UND School of Medicine & Health Sciences.

And De Kumar does love jazz

But nearly a year after opting to become manager of the Genomics Core at UND, De Kumar is happy with the choice he made, even if there are fewer jazz clubs in Grand Forks.

"When I came to UND for an interview, I found a lot of energy and people were talking about doing good things in genomics," says De Kumar, adding that he finds the stereotype that universities can be bureaucratic backwaters untrue. "The kind of support I've received here has been great. When I interviewed, I realized UND was not just looking for a service provider, but a collaborator. It was a good decision."

"Junk" DNA?

Genomics is the study of the structure, function, mapping, and editing of genomes-the genes and noncoding DNA material that constitute an organism. The Genomics Core at UND is an interdisciplinary research center, originally financed by the National Institutes of Health as a Center of Biomedical Research Excellence (CoBRE), dedicated to providing state-ofthe-art genomics resources-technical training, data analysis, grant assistance-to investigators at UND and from institutions across the region, as well as external commercial clients.

New Genomics Core Manager Bony De Kumar talks with North Dakota Medicine about genomics, personalized medicine, and the new ethical terrain humans are treading.

"Only 2 percent of any genome is used for coding genes or proteins," says De Kumar, who specializes in epigenetics and bioinformatics. "Researchers initially called that remaining 98 percent of material 'junk' DNA, and that's where I got my start. Now we know that this stuff is not junk, but is unique to each person and plays a role in genes' regulation."

Such technology for identifying and manipulating genes has come a long way in a very short time. To hear De Kumar tell it, in the 1980s, nearly \$20 billion and 20 years were required to sequence one human genome. Thirty years later, researchers are sequencing a genome for under \$1,000 in a few days, with the next goal of sequencing a genome for under \$100.

This type of work is valuable in so far as it helps biomedical researchers, clinicians, and even private firms tailor their diagnostic and treatment protocols to individual patients dealing with often complex conditions like cancer and diabetes. There are already companies that claim to be able to determine the likelihood that someone will develop any number of conditions based on their genetic profile.

This simultaneous reduced cost and explosion in commercial services have brought genomics into the cultural mainstream and helped usher in the era of "personalized medicine"-not to mention attracted resources to North Dakota that gave the core a "mandate" to broaden its reach, says De Kumar.

But even though private firms exist for genetic sequencing and analysis, De Kumar argues that it's still more advantageous to the state and region to maintain a core facility-run by and for researchers-at a public institution.

"Having a [nonprofit] core here helps create that leadership group who can handle genomics-based studies," he continues, explaining his vision of turning UND into one of the top training facilities for genomics researchers in the country. "Beyond providing services to clients like the smaller regional colleges or the USDA's [Human Nutrition Research Center], my focus here is to train people-principal investigators, postdoctoral researchers, graduate students, even medical students. If they learn these techniques here, they can see how they can use it in their own work, wherever they end up."

Learning from Henrietta Lacks

There is, after all, money in genomics, and building a good team around genomics at UND can help attract not only federal research dollars but private investment. Multiple industries have already spent heavy sums on the field, seeing the technology and its applications as a cash cow; public universities would be remiss not to maintain their seat at the table.

Beyond attracting resources, though, such institutions also tend to be the only places where the tricky ethical and legal questions new technologies raise are taken seriously. After all, how much should humans know about themselves, how do we grapple with the "probability" of developing this or that disease, who "owns" genetic material, and how will our genetic data be used (and by whom)?

These philosophical questions—which both drew De Kumar to the study of genetics and forced him to second-guess his former career trajectory—are inescapable. Having begun his career in agricultural biotechnology, and genetically engineering bananas in particular, De Kumar says he grew concerned by what he saw as the short-changing of family farmers, whose seeds—and thus livelihoods—were being taken from them.

"I'm not worried about the argument that [genetically modified organisms] are bad for us, but I do feel that seed should be the property of farmers, not corporations," he says. "These farmers bred these seeds over generations and that's a lot of hard work—selecting the best seeds and passing those down through families. And then some company takes that seed and manipulates it and then claims that they own it, ignoring the thousands of years of hard work other people did to create that seed. I wasn't comfortable being part of that."

Although similar ethical questions have been answered in part for Americans worried about the use of their genes through passage of the Genetic Information Nondiscrimination Act (GINA) of 2008, which bans the use of personal genetic information in health insurance and employment, emerging technologies are forcing researchers and policymakers to consider new questions all the time.

Imagine your genetic information is acquired by a pharmaceutical industry, for example. Are you entitled to any revenues the company generates based upon information that emerged from your genome? De Kumar says that, despite GINA, there aren't yet many state or federal regulations helping individuals or firms navigate such questions. "The business model [of gene sequencing companies] is that while they give you some fun facts about your genome, they make money selling your data to the pharmaceutical companies working on developing new drugs" he says, referencing the \$300 million deal genomics firm 23 and Me signed with pharma giant GlaxoSmithKline in 2018. "This is what happened to Henrietta Lacks [the source of the still-used line of HeLa research cells]. The question there was if a tumor is taken out of the patient, which she didn't want since it was going to kill her, and some researcher develops a cell line that makes someone else a lot of money, who owns that material and who benefits from that? Because we're talking potentially millions of dollars."

Scaling down a bit, De Kumar, who hasn't had his own genome sequenced, too wonders how much he really wants to "know" about himself.

"Do you want to live with that fear that you have X percent chance of heart attack," he asks with a smile. "I don't want that. Even if I'm predisposed to something, I don't want to live in that fear."

In a silent way

In the end, it makes sense that De Kumar is a jazz fan— Dizzy Gillespie, Miles Davis, and Duke Ellington in particular. Listening to such improvisational and often irreproducible tunes is like studying genomics. Miles Davis never performed any song the same way twice, after all.

And so it is with people.

"We think of human beings as a single entity or group, but everyone is different," De Kumar says, calling the current moment in history the most exciting one for biomedical researchers perhaps ever. "How we metabolize, how we respond to medications. Every cancer is different, and so the genome is where the biology is going."

De Kumar predicts in a decade or less, most medicine will revolve around genomics in one way or another.

"Researchers see cancers and sequence those cells from patients and put this data into the database and see what drugs worked or not, what was the chance of recurrence, and so on," he concludes. "In this way, physicians can already make more informed decisions about what therapies to offer or not based on the genetics of the patient."

And that's no jazz.

By Brian James Schill



"UND GIVES" TO INMED

The UND School of Medicine & Health Sciences (SMHS), in conjunction with the UND Alumni Association & Foundation (AAF), raised more than \$27,000 from more than 70 donors as part of the University's inaugural UND Gives day on April 24, 2019. These funds will be directed primarily to the University's Indians Into Medicine (INMED) Program.

UND Gives was a 24-hour online fundraising challenge that aimed to rally philanthropic support for UND initiatives. In particular, the SMHS challenged donors to give a donation supporting INMED's priority needs, which benefit middle and high school students, pre-med students, and medical and health sciences students.

Although the School pulled in more than \$10,000 for INMED that day, an additional \$10,000 was provided by UND alumnus Greg Shega and his spouse Amy Weber, giving INMED more than \$20,000 for the day.

UND's trailblazing Indians Into Medicine Program sees more than 70 donors during UND inaugural UND Gives campaign.

All eight UND colleges—plus athletics—participated in the campaign, which was designed to provide scholarships, program support, and expanded experiential learning opportunities to UND students across campus.

"We can't thank enough everyone who donated to INMED for UND Gives, and to everyone who made the campaign possible," noted Donald Warne, M.D., M.P.H., director of the INMED Program at UND. "These gifts will directly support students of all classes—whether middle school students from tribal communities hoping to come to our Summer Institute, pre-med students looking to apply to one of the professional programs here at the SMHS or practicing for their MCAT test, or our current medical students honing their clinical and scientific skills."

Established in 1973, INMED is a comprehensive education program assisting American Indian students who are preparing for health careers. The program addresses three major problem areas: too few health professionals in American Indian communities, too few American Indian health professionals, and a substandard level of health and health care in American Indian communities.

"Growing up in northern Minnesota, we saw the challenges and biases that many Native Americans faced, and it is even more evident down here in Arizona," Shega told the UND Alumni Association & Foundation last year. "It is obvious that we lose too many bright young minds from the professional fields as a result of them being unable to navigate the cost hurdles of a university education. We hope that we, in some small way, help a young person realize her or his dream of entering the medical or STEM field."

"I'd always wanted to be a physician, and INMED played a crucial role in that journey," added first-year medical student and Michigan native Eric Leveille. "I've been in three different INMED programs—MCAT Prep, CLIMB, and as a med student. Besides providing resources and opportunities, INMED was a driving force in my decision to attend med school at UND. INMED's staff and students gave me a feeling of home away from home, which has been crucial during med school."

"Our INMED Program is responsible for graduating a considerable number of the American Indian physicians practicing in the United States today," added SMHS Dean and UND's Vice President for Health Affairs Joshua Wynne, M.D., M.B.A., M.P.H. "It's no exaggeration to say that this historic program is changing the face of health care and its provision across the country. We're very proud of INMED and all it's done for North Dakota and the region over the past 46 years."

Learn more about giving opportunities available through the UND Alumni Association & Foundation by visiting <u>UNDalumni.org/smhs</u>.

By Brian James Schill

THANK YOU TO OUR THOUGGHTFUL DONOGRS who recently gave a gift.

Warren Stanchfield, BSMed '77, and his wife Dena of Wayzata, Minn., recently supported the Medical School Dean's Scholarship Endowment, which provides scholarships to medical 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

Solberg named chair of Emergency Medicine at UND School of Medicine & Health Sciences

Jon Solberg,

MD, FACEP,

FAWM, has

been named

inaugural

chair of

the new

Department

Medicine at

UND's School

of Emergency



John Solberg, M.D., F.A.C.E.P., F.A.W.M.

of Medicine & Health Sciences. Solberg is a Stanley, N.D., native and 2006 graduate of the SMHS.

Solberg trained as an emergency medicine physician at Madigan Army Medical Center, Fort Lewis, Washington, and deployed to a combat support hospital in 2011 at Forward Operating Base Dwyer, in Helmand Province, Afghanistan. Following military service, he and his wife Agnieszka, also a former military physician, moved several times before coming home to North Dakota in 2017. He is currently the medical director of the Emergency and Trauma Center at CHI St. Alexius in Bismarck, and the medical director of several rural ambulance squads and fire departments.

"UND already does a fantastic job training family physicians and encouraging them to come home to North Dakota," said Solberg, "and we hope the same will soon be true for our state's emergency departments, which historically have relied on recruiting providers educated mostly out-of-state. Creating an independently functioning Department of Emergency Medicine is a logical response to this development, and I'm honored to be the Department's first chair."

A fellow with the American College of Emergency Physicians and the Academy of Wilderness Medicine, Solberg is certified by the American Board of Emergency Medicine and licensed to practice in California, North Dakota, and New Mexico. He made local headlines last year by serving as the medical officer aboard Expeditions 7, a team which drove specially modified Arctic Trucks for 3,500 miles across the long axis of Greenland, becoming the first humans in the world to have driven a motor vehicle completely across the ice sheet.

"I have a sincere love for teaching and mentoring," Solberg continued. "As a former ROME [Rural Opportunities in Medical Education] student and ER physician in rural hospitals, I understand and appreciate what it will take to staff our state with quality ER physicians. As chair of the Department of Emergency Medicine, students will have access to my diverse background in the military, in academic and rural emergency departments, and in wilderness medicine, mission work, and the EMS community."

UND kicks off campaign to be designated a Cardiac Ready Campus

The UND

School of

Medicine

& Health

Sciences

(SMHS), in

partnership

UND College

with the

of Nursing &



Bryan Delage, M.D.

Professional Disciplines, UND Work Well, and Altru Health System, is pleased to announce the kick–off of the University's campaign to be designated a "Cardiac Ready Campus" (CRC) by the North Dakota Department of Health (NDDH).

As part of its longitudinal Cardiac Ready Community Project, the Health Department is encouraging North Dakota's colleges and universities to bolster their cardiac event readiness and heart disease awareness programs. This includes educating faculty, staff, and students on the risk of heart disease, screening them for conditions such as hypertension, and training them in both CPR and use of automated external defibrillator (AED) devices.

The campaign will focus on four distinct aspects of cardiac health and readiness: stroke, hypertension, heart attack, and CPR/AED training. To date, no college campus in North Dakota has earned the designation, making UND's effort the first of its kind. "The outcomes from an acute cardiac arrest vary widely, with the average nationwide survival rate being only about 10 percent," said Dr. Bryan Delage, chair of the CRC committee and assistant professor in the SMHS Department of Family & Community Medicine. "But in some communities survival rates are as high as 60 percent. We're hoping that through education, training, and community awareness we can improve the potential survival of such events in our campus community and within the city of Grand Forks as we work together to become more cardiac ready."

UND announces Frank Low Research Day award winners

The 39th annual Frank Low Research Day was held at the UND School of Medicine & Health Sciences (SMHS) on Thursday, April 25. Following the event, several of the more than 150 participants were given awards for their presentations. Congratulations to the winners of the best poster awards, who earned \$100 each from the SMHS Office of the Dean. The winners, by category, are the following:

Biomedical Sciences Graduate Students Moriah Hovde – "Impact of Insulin Signaling on the Dopamine Transporter" (coauthor James Foster)

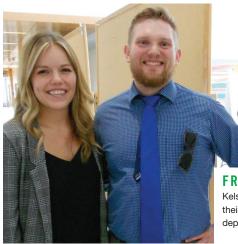
Taylor Schmit – "IL-6 deficiency exacerbates allergic asthma and promotes S. pneumoniae pathogenesis" (coauthors Ganesh Ambigapathy, Nadeem Khan)

Medical Students - Biomedical Sciences Brett MacLeod – "Fine-tuning nuclear processes: hit and run vs long-term activation of PARP-1 by its different domains" (coauthors Colin Thomas, Yingbiao Ji, Chao Wu, Haily Datz, Cody Boyle, Michelle Ampofo, Shri Patel, Michelle Currie, Jonathan Harbin, Kate Pechenkina, Niraj Lodhi, Sarah Johnson, Alexei Tulin)

Riley Moore – "A novel trivalent vaccine against Streptococcus pneumoniae infections" (coauthors Taylor Schmit and Nadeem Khan)

Medical Students - Clinical Sciences Jacob Greenmyer – "Responsiveness of newly-diagnosed rheumatoid arthritis to low-dose prednisone (coauthors James Beal, Abe Sahmoun, and Erdal Diri)

Christopher Walden – "Comparing gene expression profiles between a head and neck cancer mouse model and human tumor samples" (coauthors Daniel Vermeer, Paul Colbert, Caitlin Williamson,



William Spanos, Paola Vermeer, and Steven Powell)

Health Sciences Graduate Student Ian Watson – "Does Health Plan Type Influence Receipt of an Annual Flu Vaccination?" (coauthor Cristina Oancea)

Occupational Therapy

Miranda Hosking – "Occupational Therapy Community Reintegration for Inmates with Co-occurring Disorders" (coauthors Kara Moore and Sarah Nielsen)

Madelin Buscho – "The Level of Knowledge of Evidence-Based Practice by OT Managers" (coauthors Samantha Scheel and LaVonne Fox)

Biomedical Sciences Post-Doc

Rachana Trivedi – "Multi-factorial attenuation of the murine heat shock response with age (coauthors Donald Jurivich, Gunjan Manocha, Mary Lizakowski, Rakoczy Sharlene, and Holly Brown-Borg)

Medical Resident

Rohan Oberoi – "Eplerenone for Central Serous Chorioretinopathy: How a Potassium-Sparing Diuretic is Saving Vision" (coauthor David Jacobs)



FRANK LOW DAY

Kelsey Brooks and Michael Osterholt in front of their poster on the link between chronic illness and depression at Frank Low Research Day 2019.

Undergraduate

Zachary Krill – "Determining Specific Isoforms of Palmitoylating Enzymes that Regulate Sodium Hydrogen Exchanger Isoform 1 Palmitoylation" (coauthors Moriah Hovde and James Foster)

The event's keynote speaker was Tak Mak, PhD, director of the Campbell Family Institute for Breast Cancer Research at the University of Toronto's Princess Margaret Cancer Centre. Dr. Mak gave a talk entitled "Fire and Water are Good Servants but Bad Masters," which examined the role of physiological "balance" in the prevention and treatment of cancer from the perspective of immunology.

Named in honor of the former SMHS anatomy professor who came to UND in the 1960s and pioneered a series of new techniques for the electron microscope, Frank Low Research Day is the culminating event of the academic year for many area researchers working in the biomedical and health sciences.



Jeffrey Wayne "Jeff" Adkins, PA '02, age 49, of Abilene, Texas, died Sunday, March 10, 2019, at Baylor Hospital in Dallas following a lengthy illness. Jeff was born August 12, 1969, in Lubbock, Texas, to Jess W. "Bud" and Marie "Brooks" Adkins, who died Feb. 9, 1998. He graduated from Vernon High School in 1987. After graduating from nursing school at Vernon Regional Junior College, he worked as an RN on the night shift at UMC for several years. He graduated from the Physician Assistant program in 2002 from the University of North Dakota. He was a dedicated medical professional and helped many in his short life. He moved to Abilene in 2017 and in 2018 he began construction on his own orthopedic clinic on Danville Drive. It was about to open beginning the first of April. In his adventure through life he was able to touch an untold number of folks. His nature is giving and caring. His main priority in life has been to devote his life to caring for his fellow human. He will be missed by many. He is survived by his father, Bud Adkins, and his wife Beverley of Lake Stamford, Texas. He has a brother, Corey (Jana), in Abilene and a sister Heather (Donald) Garrett in Rockwall, Texas. Also surviving are nephew Jordan Adkins, who was raised as Jeff's little brother, as well as several other nieces, nephews, cousins, and other family members.

Janeen Kay (Saure) Baier, BS MT '91, of Denver, Colo., passed away at her home on February 3, 2019, after a long illness. She was born on July 13, 1955, to the late Ordean and Eleanor Saure of Reynolds, N.D. Janeen attended the Central Valier public school system. She was confirmed and a member of St. Olaf Lutheran Church. She graduated from what was then called the North Dakota State School of Science with an Associate's degree. In 1974 she married David Baier of Battle Lake, Minn., who passed away in 1980. She worked for the University of North Dakota in the business office while taking classes there. She received her Bachelor of Science degree in Medical Technology in 1991. She worked as a medical technologist until her recent illness. Janeen was an ardent fan of UND hockey. In her spare time she loved to ride her motorcycle. She also loved bird-watching and enjoyed seeing birds feeding at the many feeders in her backyard. She is survived by her spouse, Max McAdams of Denver; a brother, Mitchell (Cheryl) Saure; nephews Jon (Nicole) and Andrew (Jordan) Saure, and a grandniece, Quinn, all of Omaha, Neb.; and uncle Reg Jechart and aunt Ethel Ramstead of Grand Forks, N.D.

Clarence Thompson, age 88, formerly of Grand Forks, passed away peacefully on April 2 in Grand Rapids, Mich. He was preceded in death by his parents, Emma (Hemsing) Thompson and Carl Thompson of Kindred, N.D., and his wife of 47 years, Maxine (Dyrdahl) Thompson. Clarence is survived by his only child, Anne Thompson, and daughter-in-law Gabrielle Calkins of

Grand Rapids, Mich. Clarence was an educator for over 40 years in Grand Forks Public Schools and the UND School of Medicine & Health Sciences, and received many honors during his career. He was active in many community organizations and at Calvary Lutheran Church. He sang with the Concordia College Choir and continued singing into adulthood with the Calvary Lutheran Church Choir and the Grand Forks Master Chorale. After the passing of his wife in 2007, Clarence moved to Grand Rapids to be with his daughter. His travels were many and diverse including several trips to his ancestral homeland Norway.

John H. Bond, BS Med '64, of Minneapolis died in peace at age 78, fully at home from complications following a traumatic brain injury four years ago. He was preceded in death by parents, Dr. John and Kathryn Bond, and sister Terry. He is survived by his wife, Mary; children Christopher (Michele) Bond and Jennifer Bond; their mother Georgia Bond; step-children Aaron (Cary) Percy and Jennifer (John Santelices) Percy; eight grandchildren; brother James Bond; and sister Mary Ann Bond. Born in Fargo, N.D., John was a true Renaissance man. When he graduated high school, he packed his trunk and headed out alone to begin life at Harvard where he had been awarded a full scholarship. Upon graduating "out of money and tired of the east" he returned to N.D., married Georgia, his high school sweetheart, and began medical school at UND. Later John received his MD from the University of Pennsylvania. Residency and his gastrointestinal fellowship were done in Minnesota where he soon became a professor of medicine and chief of GI at the Minneapolis VA medical center, positions which he held until his retirement. John was a pioneer in colonoscopy and screening for colon cancer and polyps. He was involved in clincial trials around the world, and published hundreds of papers. John wrote editorials and contributed many chapters to medical textbooks. He became very involved in the work of many GI societies and served as president of the American Society of Gastroenterology. His expertise in the field brought him speaking engagements around the world, and together with his wife Mary (whom he married in 1991) they discovered the joys of travel. John was an accomplished runner and completed 28 marathons and 30 triathlons, many of them with Mary. He loved the theater, especially musicals, and enjoyed singing in his booming voice. He loved reading and had eclectic tastes, devouring everything from the classics to history. John retired in 2008, but he and Mary continued to travel. John pursued athletic activities, and enjoyed his beloved family and friends until his last days.

Reetha E. (Dodd) Connors, PA '98, age 64, formerly of West Frankfort, passed away Friday, Feb. 1, 2019, at her home in LaVernia, Texas. Reetha was born Dec. 26, 1954, in Quincy, Texas, to the Rev. James F. Dodd and Agnes (Stewart) Dodd. Reetha is survived by her loving husband, William (Bill) Connors of LaVernia; her children, Danielle Guminski and Josh Guminski, both of Paducah, Ky.; her grandchildren Molli, Lucas, Ethan, Charlie, Henry, Katie, and Jack; and her siblings Gene Dodd of Shawneetown, Carmen Sipes of Benton, Jim Dodd of Carbondale, Lewis Dodd of West Frankfort, Lewie Dodd of Marion, Kay Gordon of West Frankfort, and Lee Dodd of West Frankfort-all in Kentucky. Reetha was preceded in death by her mother and father; brothers Lloyd and Sam; and sisters Frances, Shirley, and Thalalia. Reetha was a registered nurse in Bismarck, N.D., where she also worked as a registered flight nurse. Reetha worked as an ER nurse in Paducah before earning her physician assistant license from Minot State University in North Dakota, graduating at the top of her class. Reetha later worked as a physician assistant for Dr. Luigs, Dr. Finney, Dr. Cecil, and Dr. Runciman in Paducah. After moving to LaVernia, Reetha worked as a physician assistant to Dr. Ekmark. Reetha loved spending time with family and friends, especially her husband Bill Connors, and her grandchildren. Reetha enjoyed antiquing, scrapbooking, and cooking her famous chicken and dumplings and chocolate cake for family and friends.



Clayton Jensen, M.D.

Clayton Jensen, BS Med '56, age 90, died on Saturday, Feb. 9, 2019, at Ecumen-Emmanuel Nursing Home under the care of Hospice of the Red River Valley. Clayton was born on February 22, 1928, to Edward and Florence (Flint) Jensen. He grew up and received his secondary education in Stanley, N.D. He enlisted in the

U.S. Army and served as a medical corpsman in Germany from 1946 to 1948. He graduated from

Concordia College, Moorhead, Minn., in 1952. Clayton married Gloria Lorraine Palm on September 27, 1952, in Fargo. He received a BS in medicine at UND, transferring to Bowman Grav School of Medicine, Winston Salem, N.C., where he received the MD degree. After residency, Jensen settled in Valley City, N.D., in 1960 to pursue a career in family medicine. He took a year-long sabbatical in 1974-75, joining the Department of Family Medicine to assist in the development of the family practice curriculum for the fledging 4-year medical school at UND. He also participated in the development of Family Medicine residency programs in Fargo and Minot. He returned to active practice in Valley City until 1985 when his family moved to Fargo and he rejoined the faculty practice of the School of Medicine & Health Sciences (SMHS) and was named chair of the Department of Family Medicine. Clayton also served as Interim Dean of the SMHS for two years prior to his retirement in June 1996. He served on a host of non-profit boards, pre- and

post-retirement. Clayton was passionate about his faith, family, education, and medicine. Clayton is survived by his sons Paul (Julie) of Kindred, N.D., and Mark of Detroit Lakes, Minn.; brother Thomas (Judy) Jensen of Fargo, N.D.; sister Marlene (Don) Hoirup of Winston Salem, N.C.; sister-in-law Pat Jensen of Stanley, N.D.; three grandchildren: Kristen (Barrett) Haugan of Belgrade, Mont., Kara (Brian) Koelzer of Manhattan, Mont., and Andrew of Belgrade, Mont.; and three beautiful great-grandchildren: Taylor, Blake, and Bowen. He was preceded in death by his parents, his wife Gloria, and brothers Jerome and Bill.

Glenn Everett Kerr, BS Med '70, age 75, of Hermosa, S.D., passed away at Rapid City Regional Hospital on Wednesday, March 13, 2019. Glenn was born on Jan. 21, 1944, in Bowman, N.D., to Lewis and Marie (Phillips) Kerr, the first of five sons and one daughter. He received his elementary education in a country school setting, Star School, near Bowman. He then graduated Sheyenne River Academy, a Seventh-Day Adventist boarding school in Harvey. He graduated from Union College in Lincoln, Neb., with a Bachelor of Science degree in biology in 1968. During his college years, he married Cassandra (Sandy) Little on August 22, 1965. Glenn attended UND from 1968-70 before earning his medical doctorate from Loma Linda University School of Medicine (LLUSM) in 1973. While he was in medical school, he and Sandy had two sons. He returned to his home state and completed a rotating internship at what was then St. Luke's Hospital in Fargo. Following this, he joined an established practice in Thief River Falls, Minn., for two years. In 1976, he and a LLUSM classmate opened a clinic in Jamestown, N.D., where he and the family remained for 12 years. He then received a Master's degree in public health at Loma Linda University. He continued to practice in California until he retired from clinical practice in January 2009, when he and Sandy moved to Hermosa, S.D., in the Black Hills. For the past 10 years, he has been a provider for telemedicine company TelaDoc. Glenn greatly loved and enjoyed his grandchildren. Other interests were Bible study, fine art, gardening, and canoe trips with family and friends in the Minnesota Boundary Waters. He frequently mentioned how he had enjoyed his varied medical practice. Glenn was preceded in death by one brother, Ervin. His survivors include wife Sandy, of Hermosa; son, Kevin (Tamara) of Grand Terrace, Calif.; son Kimber of Riverside, Calif.; and brothers, Ralph (Vonnie) of Coeur d'Alene, Idaho, Harry (Gloria) of Bowman, N.D., and George (Melodee) of Red Lodge, Mont., and sister Ethel (Rick) Buhler of Hazelton, British Columbia-as well as several grandchildren, nieces, nephews, and their families.



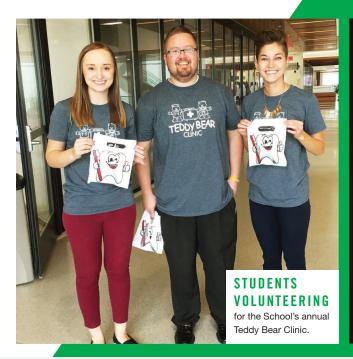


FOUNDERS Day 2019

Dr. David Schmitz (right) was one of three SMHS faculty (including Drs. Othman Ghribi and Marc Basson) to receive a Founders Day award from former UND President Mark Kennedy.

MEMBERS OF THE MD CLASS OF 2019 open envelopes to find out where they'll complete their residency training.







former UND President Mark Kennedy.













NEW MD GRAD RACHEL ELLENS

with Mary and Darcy Ehmann. Ellens won the Laura Ehmann Memorial Pediatric Scholarship Award given by the Ehmanns to a senior student entering a pediatric residency.



ASSISTANT PROFESSOR OF PHYSICIAN ASSISTANT STUDIES JAY METZGER accepting his PA of the Year Award at the state Primary Care

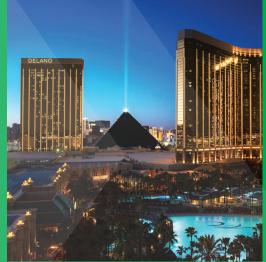
Seminar in Fargo, May 2019.



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INTERVIEW OF SAVE THE DATE



Athletic Training June 25, 2019 - Las Vegas UNDalumni.org/at2019





UND Night at Target Field Pre-Game Party July 18, 2019 - Minneapolis UNDalumni.org/twins2019 Photo by Bruce Kluckhohn/MN Twins Courtesy of Meet Minneapolis



UND Homecoming 2019 Oct. 4-5, 2019 - Grand Forks med.UND.edu/events/homecoming