NINN NORTH DAKOTA MEDIGNE

University of North Dakota School of Medicine & Health Sciences

MATCHED Class of 2022 #MatchDay





SUMMER 2022 VOLUME 47 NUMBER 2



BY GIVING A GIFT OF REAL ESTATE

You can help open doors for UND students by donating appreciated real estate. A home, vacation property, undeveloped land, farmland, ranch or commercial property can make a great gift to UND through the UND Foundation.

BENEFITS

- Avoid paying capital gains tax on the sale of the real estate
- Receive a charitable income tax deduction based on the value of the gift
- Leave a lasting legacy at the University of North Dakota

Appreciated property may be given outright or may also be used to create a life-income-producing gift through the UND Foundation. If you have any questions about gifts of real estate, please contact us at 701.777.2611 or giftplanning@UNDfoundation.org.

This information is provided as an educational service to our donors. It is not legal or tax advice. Please consult your own professional advisors on how any charitable gift may affect your own tax situation.



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

Vice President for

Joshua Wynne

Health Affairs

and Dean

Brian James Schill Editor

Writers **Stacy Kusler**

Jena Pierce

Jessica Rosencrans

Contributor Kristen Peterson

John Lee Graphic Design

Laura Stutrud

Kristen Peterson Photography

Shawna Schill

ON THE COVER: Bethany Freeland LeClair shows us where she will be spending the next few years for her post-graduate medical residency. Below: Katrina E. Johnson is headed for a residency in St. Cloud, Minn.



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

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

POSTMASTER: Send address corrections to: ND Medicine Address Correction UND School of Medicine & Health Sciences Office of Alumni and Community Relations Attn: Kristen Peterson, 1301 North Columbia Rd Stop 9037 Grand Forks, ND 58202-9037

E-mail: kristen.peterson@UND.edu Phone: 701.777.4305

www.med.UND.edu/nd-medicine

NORTH DAKOTA MEDICINE

FEATURE

Get in the game	6
UND fires the starting pistol on a bold new Master of Athletic	
Training program.	
Class of 2022 Residency Sites	9
Together again!	12
Grad pictures from May 2022.	
	40
The horse and the muskrat	18
Oklahoma native Judge Muskrat turns a desire to help his	
community into medical training in North Dakota.	
An ounce of prevention	26
Department of Biomedical Sciences researcher Kumi	
Nagamoto-Combs discusses depression, diet, and dairy in	
the animal model.	
DEPARTMENTS	
Dean's Letter	1
Deall's Letter	
Faculty in Action	16
Center for Rural Health	20
Philanthropy	24
Alumni Notes	28
News Briefs	29
In Memoriam	32
Parting Shots	35



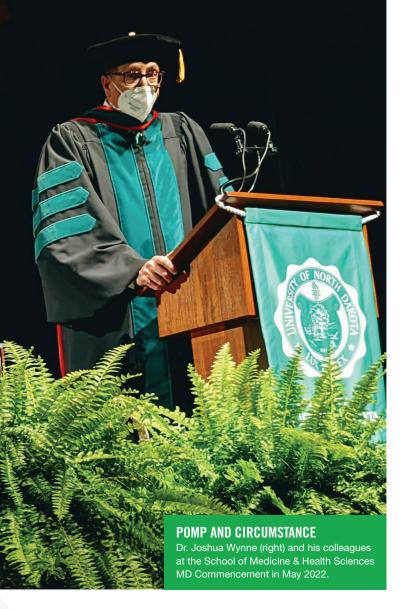






As we come to the close of the 2022 academic (and fiscal) year at the end of June, it is traditional to look back – and forward. As I prepared this column, I looked back at the column I wrote a year ago. In that report, I commented on what an extraordinary year it had been, largely impacted by the pandemic. Now, a year later, it is striking how much is the same – and how much has changed. The specter of a cloudy and troubled outlook due to COVID-19 has receded but not gone away, and now has been exacerbated by the war in Ukraine, supply chain shortages, inflation, and all the rest.

Despite all of that, our faculty, staff, and students have not only persevered but excelled. There is no better demonstration of this than the UND Commencement ceremonies that took place on consecutive weekends in early May. The first commencement was for the medical student Class of 2022, with 69 graduates. These newly minted doctors will be joining residencies in North Dakota and elsewhere. Over forty percent of the class matched into the primary care specialties of family medicine, internal medicine, obstetrics & gynecology, and pediatrics. Almost twenty percent of the cohort is set to enter family medicine, which



is especially important and reassuring for a rural state like North Dakota. Also noteworthy were the higher-than-national average percentages of the class going into psychiatry and pathology. Given the shortages and needs in those two specialty areas, this is a positive step forward in addressing staffing issues.

The speaker for the medical student ceremony was Dr. Rhome Hughes, a former SMHS faculty member who was invited back by the class and who generously agreed to return for his address. His address was personal, poignant, and moving. He certainly helped the students conceptualize the transition that they now face from student to practitioner. But as he pointed out, even as practitioners, our new doctors must remain students for the duration – and learn as they grow as physicians.

The following week we celebrated our health sciences, graduate, and athletic training graduates at UND Commencement. UND now separates general commencement into two ceremonies: the first for master and doctoral-level degrees in the morning and the second in the afternoon for undergraduate degrees. The guest speaker at both ceremonies was General John W. "Jay" Raymond,

chief of space operations for the U.S. Space Force. Several of our programs sponsored their own recognition ceremonies prior to the commencement event itself.

Another milestone was the completion of the reaccreditation process for the School's medical student curriculum by the Liaison Committee on Medical Education (LCME). Accreditation lasts for eight years, after which time a team from the LCME returns for a several-day visit. But a huge amount of preparatory work by our faculty, staff, and students preceded the actual site visit, including the preparation and submission of hundreds of pages of documents and narrative. We won't hear the official results of the visit until the LCME makes it determinations in October 2022.

Another area where the faculty and staff of the SMHS have excelled – again, despite the pandemic – is in the area of research and sponsored activity. Over the past few years, the research and discovery enterprise of the School has grown at a remarkable rate. If one uses the amount of external funding awarded to the SMHS to support such activities as one important metric of this growth, such funding has more than doubled in the past decade. That is a remarkable achievement that has moved the School higher on the list that compares our funding with other medical schools. Of course, funding is not, in and of itself, a direct measure of the impact and importance of the ensuing research, but it is a widely accepted surrogate.

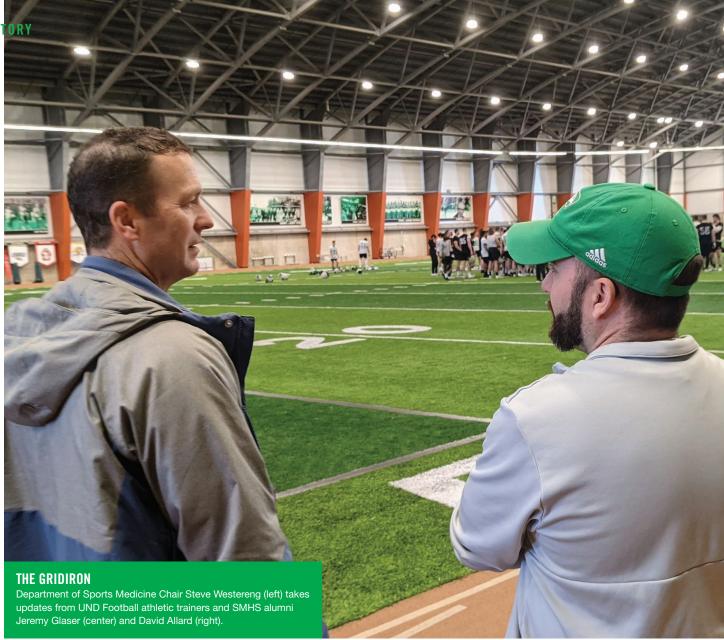
Finally, as the articles in this magazine attest, several incredible developments have unfolded at the SMHS this year, including our first-ever wilderness medicine "elective," the unveiling of a brand-new Master of Athletic Training program, our first Indigenous Trauma & Resilience Research Center symposium, and much more.

Thus, despite the challenges presented by the pandemic, the faculty, staff, and students of the SMHS have continued to do an amazing job in the face of adversity. I am incredibly proud of them – and know that you are too!

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

Dean, School of Medicine & Health Sciences

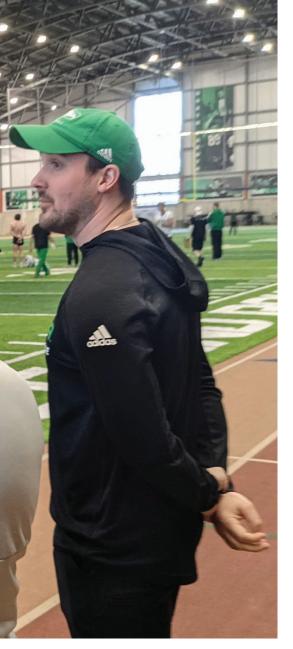
d Uljune



GET IN THE GAME

UND fires the starting pistol on bold new Master of Athletic Training program

"It's so different than what Dave and I did," explained Jeremy Glaser as he and David Allard surveyed the helmeted players wrapping up a spring practice for UND Fighting Hawks Football at the Fritz Pollard Athletic Center. "The big shift is that entering students will have a bachelor's degree and will use their time in graduate school to learn to become certified athletic trainers."



Past graduates of the UND School of Medicine & Health Sciences (SMHS) athletic training program and current faculty members, Glaser and Allard were chewing the fat regarding the School's new Master of Athletic Training (MAT) degree, which came online in June 2022.

Such an upgrade matters, added Allard, because it will diversify the profession in ways even they can't anticipate.

"What's cool about the new program is that [students] can get their bachelor's degree in almost anything as long as they meet the prerequisites," said the athletic trainer who interned with the NFL's Indianapolis Colts. "That broadens the scope for trainees—you

"WE'VE REALLY BEEN ON THE FOREFRONT OF BEING WITHIN THE HEALTHCARE SETTING—AND WE'RE PUSHING EVEN MORE."

could do psychology or kinesiology or whatever. Because when you look at healthcare, and especially athletic training, there are a lot of different settings you can go into. It's good that now we can get people from those different backgrounds to do athletic training."

'Maximizing clinical experience'

This, at least, is the plan, added Alicia Champagne.

From a conference room in the SMHS in Grand Forks, the assistant professor in the School's Department of Sports Medicine described how the years-long effort to convert a bachelor of athletic training program into one of only a few MAT programs in the upper-Midwest will both boost enrollments at UND and diversify the applicant pool.

"All of this will improve the care future athletes receive on and off the field,"

In other words, the new degree is literally a game-changer.

As Champagne is quick to point out, though, "athletic training" is no longer just for persons on the field, court, or rink.

"Athletic training has moved from primarily the sidelines, to where now we're in clinics, industrial settings, and really anywhere there are active people," she said. "We're much more ingrained in the healthcare setting generally. Being in the School of Medicine and Health Sciences, we've been the anomaly in that most athletic trainers were hired solely within university athletic departments. We've really been on the forefront of being within the healthcare setting—and we're pushing even more."

Part of that push, said Department of Sport Medicine Chair Steve Westereng, is to give more students more clinical experiences sooner.

"We wanted to maximize the amount of clinical experience that a student garnered," he explained. "We're huge believers in the clinical education portion of our curriculum."

Such a move for more and better "real world" training better aligns UND with developments in the profession industry-wide, Westereng said.

A foot in both pools

And being housed within a medical college gives UND athletic training students another advantage, added Westereng.

"All of our university athletic trainers also teach in our program," he said, referring to Glaser and Allard. "A lot of other places have a couple of instructors and then students have clinical preceptors out in the field."

But Westereng's department follows a medical preceptor model, where providers working in the field double as classroom instructors. Likewise, all of Westereng's core faculty provide athletic training services to area athletes.

"It's easy to forget some of that technique and to lose touch with what students really need to learn, and what they need to do to stay current," he said. "It's a huge benefit that we are able to use our expertise and then show the students what we've learned and what we're currently learning [on the field], because you learn something new every single day."

Both Glaser and Allard agreed, noting that because things evolve so quickly in sports medicine, having educators that can give AT students the most current treatment protocols—which they've used on injured athletes in real time—makes all the difference.

"With football, the culture has changed so much within the past 10 years, because of concussions," explained Glaser, who began his career primarily in soccer and baseball before transitioning back to football five years ago. "They've changed the way they teach the game. For example, 15 years ago when I was a student here working with football, we'd have two-adays in August before the season started. We'd go three or three-and-a-half hours for practice. We don't do that anymore. We're lucky if we hit two hours."

Such developments, whether in coaching, practice regimes, and training, all have helped reduce injuries, added Allard.

"I think that's because we know more about the human body and its response to various injuries than we did in the past," he said. "The athletic training profession especially has voiced a lot of those concerns [for athletes' safety] over the years because of what we've seen. Whether it's sudden death or whether it's fatigue-related injuries, we have more data on all of this. When you have athletes getting injured, and you have the metrics and data to show where it may be coming from – that's huge for player safety."

Athletic trainers in the marketplace

In the end, the new degree should also help give UND graduates a leg up on the competition come hiring time—which is all the time these days as the world emerges from a pandemic, said Westereng.

"I've never received this many calls in a year from organizations saying they need athletic trainers—I get calls from the Twin Cities from Fergus Falls from Connecticut from Oregon," Westereng winced. "All I'm hearing from all over the country: 'Hey, we're hiring. Do you know of anyone?'"

"There is a huge need, because there are so many different places that are looking for athletic trainers—because we are very versatile, right?" smiled Champagne, explaining that for many institutions looking to trim costs as the pandemic spread, athletic training programs were often the first to go. "When there are no sporting events, that funding [for athletic trainers] was allocated other places. And then, on the other side, there was also a lot of burnout for the athletic trainers who still had jobs. We were fortunate here, but in some other places you might have two people covering all those schools' sports while also being in charge of new COVID-19 protocols which were constantly changing."

With the job market finally reopening, though, both Westereng and Champagne say that students graduating with an MAT—now the entry-level degree in their field—will be in a better position to have their pick of jobs.

"We have a former student who works in the U.S. Army," said Westereng, driving the point home, "and he said they need a bunch of athletic trainers because of the physical training that they do. They need more help, so the Army is starting to buy-in on hiring athletic trainers for these soldiers. He told me: 'We'll be hiring a dozen athletic trainers, so if you know anybody—send them.'"

By Brian James Schill

CLASS OF 2022

RESIDENCY SITES























MATCHED!

Top row: Daniel Todorovic, Lalangi Marasinghe, Anne Sandstrom, and Marcus Osman **Middle row:** Mariah Cooper, Abby Jessell, Andrew Brown, and Mitchell Sand **Bottom row:** Ryan Norris, Erika Mojica, and Abby Wilmer

Matthew Amundson, Family Medicine, Altru Health System, Grand Forks, N.D.

Seth Arntz, Transitional Year, Gundersen Lutheran Medical Foundation, La Crosse, Wis.; Diagnostic Radiology, University of Wisconsin Hospitals & Clinics, Madison, Wis.

Jordan Barth, Family Medicine, University of North Dakota School of Medicine & Health Sciences, Bismarck, N.D.

Ashley Bartlett, Pediatrics, Phoenix Children's Hospital Program, Phoenix, Ariz.

Makayla Bretschneider, Family Medicine, University of North Dakota School of Medicine & Health Sciences, Fargo, N.D.

Hayden Brodersen,

Anesthesiology, University of Nebraska Medical Center, Omaha, Neb.

Andrew Brown, General Surgery, Hennepin County Medical Center, Minneapolis, Minn.

Andrew Carman, Psychiatry, University of North Dakota School of Medicine & Health Sciences, Fargo, N.D.

Jessica Carruth, General Surgery, Central Iowa Health System-Iowa Methodist, Des Moines, Iowa

Celeste Colegrove, Obstetrics/ Gynecology, University of Washington Affiliated Hospitals, Seattle, Wash. **Bradley Conant**, Pediatrics, Cincinnati Children's Hospital Medical Center, Cincinnati, Ohio

Margarita Consing, Pathology, University of Wisconsin Hospitals & Clinics, Madison, Wis.

Marcus Cooley, Anesthesiology, Medical College of Wisconsin Affiliated Hospitals, Milwaukee, Wis.

Mariah Cooper, Psychiatry, University of Wisconsin Hospitals & Clinics, Madison, Wis.

Allison Cregg, Diagnostic Radiology, University of Minnesota Medical School, Minneapolis, Minn.

Hannah Drazenovich, Family Medicine, Memorial Hospital of South Bend Program, South Bend, Ind.

Jesse Ewaldt, Emergency Medicine, Southern Illinois University School of Medicine & Affiliated Hospitals, Springfield, Ill.

Samantha Fabrizio, Transitional Year and Diagnostic Radiology, Naval Medical Center, San Diego, Calif.

Emily Falcon, Family Medicine, University of North Dakota School of Medicine & Health Sciences, Minot, N.D.

Kemin Fena, Internal Medicine, Providence Health-Oregon/St. Vincent, Portland, Ore.

Mikayla Forness, Orthopedic Surgery, University of North Dakota School of Medicine & Health Sciences, Fargo, N.D. Bethany Freeland LeClair,

Pathology, Duke University Medical Center, Durham, N.C.

Ashley Gao, Internal Medicine, Indiana University School of Medicine, Indianapolis, Ind.

Kirsten Hager, Preliminary Surgery, University of North Dakota School of Medicine & Health Sciences, Grand Forks, N.D.

RaMae Harpestad, Pathology, University of California - San Francisco, San Francisco, Calif.

Veronica Harrison, Preliminary Surgery, Hennepin County Medical Center, Minneapolis, Minn.

Alexandra Hopkins, Pediatrics, University of Nebraska Medical Center, Omaha, Neb.

Hunter Huff Towle,

Otolaryngology/Head and Neck Surgery, University of Nebraska Medical Center, Omaha, Neb.

Abby Jessell, Psychiatry, University of Oklahoma College of Medicine, Oklahoma City, Okla.

Katrina Johnson, Family Medicine, University of Minnesota Medical School, St. Cloud, Minn.

Luke Keller, Psychiatry, University of North Dakota School of Medicine & Health Sciences, Fargo, N.D.

Adam Kemp, Urology, University of Iowa Hospitals and Clinics, Iowa City, Iowa

UND BY THE NUMBERS 66

medical students matched with a residency program in 2022.

41%

of UND's MD Class of 2022 matched into primary care specialties (internal medicine, family medicine, obstetrics & gynecology, pediatrics).

17%

of graduates are set to enter family medicine almost twice the national average of students matching into family medicine.

Carissa Klarich, Psychiatry, University of Nevada Reno School of Medicine, Reno, Nev.

Matthew Kretschmar, Internal Medicine, University of Nebraska Medical Center, Omaha, Neb.

Christina Krieger, Family Medicine, Medical College of Wisconsin Affiliated Hospitals (Fox Valley) Program, Appleton, Wis.

Eric Leveille, Family Medicine, Mayo Clinic School of Graduate Medical Education, Rochester, Minn.

Mariah Mack, Internal Medicine, Gundersen Lutheran Medical Foundation, La Crosse, Wis.

Jared Magnuson, Diagnostic Radiology, Aurora St. Luke's Medical Ctr-Wl, Milwaukee, Wis.







MATCHED!
Left to right: Hannah Drazenovich, Kirsten Hager, Celeste Colegrove, and Emily Falcon

Lalangi Marasinghe, Psychiatry, Creighton University School of Medicine Program, Omaha, Neb.

Erika Ysabelle Mojica,

Transitional Year, Mercy Health Grand Rapids Program, Grand Rapids, Mich.; Diagnostic Radiology, University of Michigan Hospitals, Ann Arbor, Mich.

Sean Montgomery, Neurology, University of North Dakota School of Medicine & Health Sciences, Fargo, N.D.

Megha Mudireddy, Family Medicine, Montana Family Medicine Residency Program, Billings, Mont.

Destiny Nguyen, Internal Medicine, Icahn School of Medicine at Mount Sinai (Beth Israel), New York, N.Y.

Edmond Njua, Transitional Year, Gundersen Lutheran Medical Foundation, La Crosse, Wis.

Ryan Norris, Anesthesiology, Wake Forest University School of Medicine Program, Winston-Salem, N.C. Marcus Osman, Internal Medicine, University of Iowa Hospitals and Clinics, Iowa City, Iowa

Andrew Pasek, General Surgery, Ascension St. John Hospital Program, Detroit, Mich.

Sarah Pippin, Pediatrics, Children's Mercy Hospital-MO, Kansas City, Mo.

Zachary Podoll, Orthopedic Surgery, University of Missouri School of Medicine Program, Kansas City, Mo.

Sarah Rasmussen, Obstetrics/ Gynecology, University of Iowa Hospitals and Clinics, Iowa City, Iowa

Ann Renner, Pediatrics, Spectrum Health/Michigan State University, Grand Rapids, Mich.

Casey Ricker, General Surgery, Hennepin County Medical Center, Minneapolis, Minn.

Nora Rimatzki, Psychiatry, University of North Dakota School of Medicine & Health Sciences, Fargo, N.D. Joshua Robak, Psychiatry, Creighton University School of Medicine Program, Omaha, Neb.

Mitchell Sand, Internal Medicine, University of Nebraska Medical Center, Omaha, Neb.

Anne Sandstrom, Thoracic Surgery, University of Texas Health Science Center, San Antonio, Texas

Jared Schommer, Urology, Mayo Clinic College of Medicine and Science, Jacksonville, Fla.

Nolan Schwarz, Plastic Surgery-Integrated, University of Minnesota Medical School, Minneapolis, Minn.

Rachel Silkey, Family Medicine, Altru Health System, Grand Forks, N.D.

Tanner Simonson, Pathology, University of Iowa Hospitals and Clinics, Iowa City, Iowa

Cole Sogge, Family Medicine, Mercy Health System, Janesville, Wis. **Signe Thorpe**, Pediatrics, Johns Hopkins All Children's Hospital Program, St. Petersburg, Fla.

McKenzie Titus, Emergency Medicine, Western Michigan University Homer, Stryker MD School of Medicine Program, Kalamazoo, Mich.

Daniel Todorovic,

Anesthesiology, University of Wisconsin Hospitals & Clinics, Madison, Wis.

Jonah Warwick, Internal Medicine, HealthOne-Colorado (Sky Ridge), Lone Tree, Colo.

Abby Wilmer, General Surgery, Gundersen Lutheran Medical Foundation, La Crosse, Wis.





After a two-year hiatus on large gatherings, the UND School of Medicine & Health Sciences participated in its own MD Commencement ceremony and the UND General Commencement ceremony in May 2022. The following are graduate class photos for all May 2022 program cohorts housed within the SMHS:











BIOMEDICAL SCIENCES From left to right: Zahra Afghah, Sayem Bhuiyan, and Betsy Young



UND BY THE NUMBERS

Since 1905, the UND School of Medicine & Health Sciences has produced

2,459 PHYSICIANS

more than

9,480 HEALTH SCIENCE GRADUATES

and

271 INDIGENOUS PHYSICIANS



INTO THE WILD

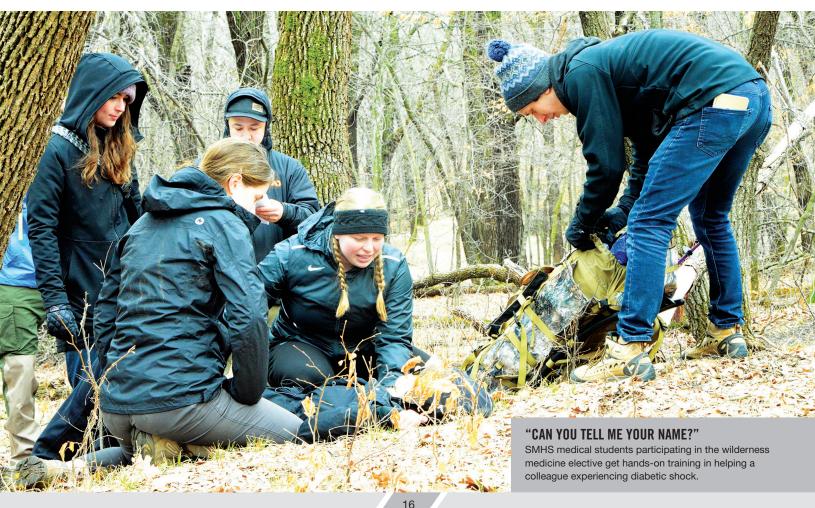
UND Department of Emergency Medicine hosts advanced wilderness life support training for medical students at Turtle River State Park

On a rainy April weekend in eastern North Dakota, UND's Department of Emergency Medicine within UND's School of Medicine & Health Sciences (SMHS) hosted its first-ever Advanced Wilderness Life Support (AWLS) course for medical students at Turtle River State Park.

From April 29 to May 1, Dr. Justin Reisenauer, Dr. Jon Solberg, and several faculty members from the Department managed the course, which involved hands-on workshops and lectures to teach future medical professionals how to respond to emergencies outside of the typical reach of the 911 service call area.

"Dr. Solberg and I share a passion for wilderness medicine and taught a Wilderness First Responder course a few years ago that was very well received," said Reisenauer, an emergency medicine physician certified in "wilderness and expedition" care, after the event. "We saw an opportunity, with this training course, to provide the medical students handson medical training and application of wilderness medicine knowledge that they





usually don't receive in their four years of medical school education."

According to Reisenauer, the course, which went extremely well, utilized training models to teach students how to "assess and stabilize victims in austere environments," outside of the clinic/hospital. In so doing it introduced students to the concept of searching for "hidden victims" with avalanche beacons, controlling simulated life-threatening bleeding events with improvised tourniquets, and transporting injured persons over difficult terrain.

"We were outside in the elements—rain and shine, but mostly rain," laughed Solberg, who chairs UND's Department of Emergency Medicine, "getting muddy while building splints from skis and poles and constructing rope-litters to transport patients. It was an absolute blast."

UND students and a multi-disciplinary collection of faculty from the region worked together to build camaraderie and try to earn the coveted AWLS certification badge, Solberg said.

"Although some of the medical curriculum is hands-off for first- and second-year students, this portion was very hands-on. The skills learned here will undoubtedly help our students and faculty save a life outside the hospital someday."

This course is not an elective available through the SMHS but an extracurricular opportunity for medical students not offered anywhere else in the state. The certification provided by the course was developed by AdventureMed, a Colorado-based firm that trains and certifies health providers of all backgrounds, first responders, and other agencies in wilderness medicine.

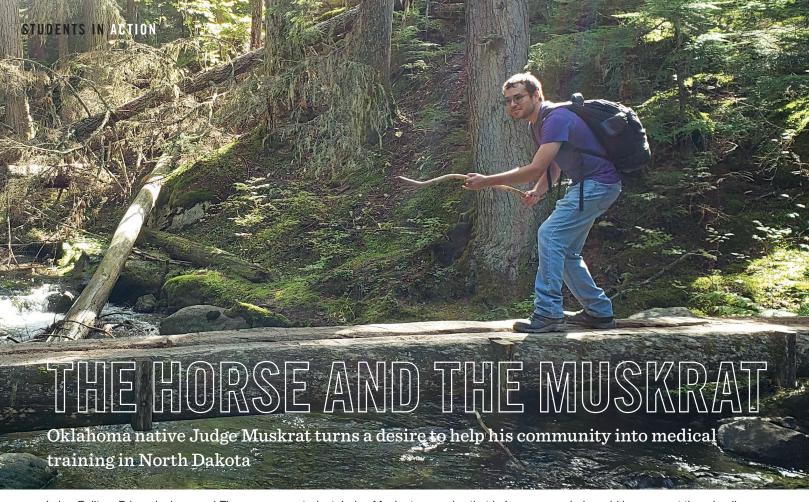


"Loved doing this," smiled SMHS grad and emergency medicine physician in Ortonville, Minn., Dr. David Collins. "It was fun to give back to the program that put so much into me. I'm looking forward to future events like this."

"There are no other options for this type of training locally," concluded Reisenauer. "The UND School of Medicine and Health Sciences and Department of Emergency Medicine have graciously funded this training. We saw 25 eager student-

physicians participate in the course and 10 faculty from the Department who also partook. We are extremely excited to educate students on these skills and provide them with a rare educational opportunity that not only will benefit them, but others whom they will encounter throughout life."

By Brian James Schill



In her Pulitzer Prize winning novel *The Night Watchman*, Louise Erdrich tells the story of Thomas Wazhashk, a night watchman for a jewel-bearing plant on the Turtle Mountain Reservation in North Dakota. Based on Erdrich's grandfather, the title character's surname is the Ojibwe word for "muskrat," says Erdrich, that "lowly, hardworking" creature that can be found everywhere on the reservation.

And like the muskrat, although Thomas and his family—extended members of the wazhashkag clan—were "numerous and ordinary," they were also "crucial."

"In the beginning, after the great flood, it was a muskrat who had helped remake the earth," Erdrich writes of the figure who helped Indigenous Americans resist the United States Government's assimilation policies in the 1940s and 1950s. "In that way, as it turned out, Thomas was perfectly named."

Smiling at the notion, at the reference to his own surname, third-year UND medical

student Judge Muskrat concedes that he's more of a Cormac McCarthy kind of guy.

"I read No Country for Old Men," laughs
Muskrat from his apartment in Grand
Forks. "I liked that, but it was kind of dark.
I didn't read All the Pretty Horses, but I
read The Road. That was good."

All the pretty horses

Even though he's not yet read McCarthy's National Book Award winner, the Oklahoma native and tribal member of the United Keetoowah Band "grew up riding horses" on a ranch outside of a small town called Webbers Falls in eastern Oklahoma, south of Muskogee.

With its endless acres of untrammeled grasslands, hills, and trees, plus lots of horses, it's a landscape to which he hopes to return.

"That's my home," Muskrat says, describing the shift from rural to more urban living. "I feel like the ranch definitely taught me the value of hard work, because my dad would have us out there hauling hay during summer time. Building fences, working with cows. There's always something to do on the ranch, and that's where I learned how to weld, how to work on cars. I learned a lot of life skills there."

It's also where he learned the perseverance and grit that have served him well these past few years.

"I'm used to living in the middle of nowhere, where it was nice and quiet and all I heard were crickets and frogs at night," he explains. "Up here it's car horns. It definitely took a while to get used to North Dakota—especially the winters."

Frigid winters notwithstanding, the first-generation medical student ran into another challenge early on in his medical education up north.

"Med school hasn't been easy for me,"
Muskrat admits, noting that he took a
leave of absence after his first year. "Living
on a ranch, our family motto has been: 'it's

okay to give in—just don't give up.' Get back on the horse. Because if it bucks you off and you don't ride it again, that horse has won. But you get back on it, you ride it, and you train it not to buck. Just keep getting back on it."

The road

So Muskrat is back, and on track to begin his clinical training. And in continuing to get back on the medical college horse despite the setback, Muskrat says he is thinking less of himself than his Indigenous community in Oklahoma, which is in desperate need of health providers.

Reciting the statistics—lower life expectancy for American Indians and much higher rates of obesity, diabetes, and hypertension relative to non-Indians-Muskrat says that at least some of the health disparities that continue to plague Indigenous communities are a result of the lack of trust many Indigenous people harbor for non-Indigenous physicians. That is to say: a lack of faith in the entire western health system-particularly one affiliated with the United States government keeps many American Indians from going to the doctor.

"My mom, she grew up in a boarding school," he continues.
"The first language she ever spoke was Cherokee. She learned English as a second language. When she was in boarding school, and that's all she knew was Cherokee, every time she would speak it [the instructors] hit her with a ruler.

"Plus the illegal sterilization of Native American women..." he trails off.

Such evidence—personal experience combined with documented anti-Indian policies carried out by health providers less than a century ago—have contributed to a general mistrust of western medicine

by many in the Indigenous community, says Muskrat.

"Indigenous people, we have long memories. Even though these things happened a long time ago, we haven't forgotten."

"NO ONE IN MY
FAMILY IS A
DOCTOR, OR
HAS ANYTHING
TO DO WITH
HEALTHCARE. I
HAD TO THROW
MY FOOT IN
THE DOOR, YOU
KNOW?"
JUDGE MUSKRAT

So does Muskrat hope to counter what he suggests is a too-high turnover rate of physicians in the Indian Health Service (IHS) system by being that Indigenous provider who wants to be where he is—and intends to stay.

"And so right there, I can eliminate that mistrust in the hospital system. If there's a local-born doctor, who is Cherokee and from the community, practicing there—that's huge."

The crossing

This lack of local mentors—Indigenous providers from and dedicated to Oklahoma—is part of the trend Muskrat hopes to reverse. Having began his adult life as a high school science teacher, he says that although he had considered medicine earlier in life, the lack of resources and local physician mentors in the field in and around his community means that as a youth he doubted medical school was even an option.

"No one in my family is a doctor, or has anything to do with healthcare," he says. "I had to throw my foot in the door, you know? Go ask for shadowing opportunities."

So the science teacher applied to medical school, got in, and made his way up to North Dakota, in part because of its nationally-recognized Indians Into Medicine (INMED) program, which Muskrat discovered during an American Indian Science & Engineering Society (AISES) conference he had attended.

In this way did his effort to play a "crucial" role for his tribe shift. Just a bit.

"My goal is to hopefully get into residency in Oklahoma and practice back at home for my tribe," he says, noting that the Cherokee Nation falls under the section P.L. 93-638 of Title I (the Indian Self Determination and Education Assistance Act) of U.S. Code, meaning that while the IHS provides healthcare funding to the tribe, the agency doesn't serve the tribe directly.

"And I like the fact that I can serve my own community. Why would I leave home? That's where my family is."

Louise Erdrich couldn't have said it better.

By Brian James Schill

MENTAL HEALTH NEEDS OF THE HOSPITAL WORKFORCE

A 2021 study looked at the mental health of North Dakota's hospital workers during the pandemic, and compared the results of rural versus urban environments



There was a time when Dan Kelly was the CEO of McKenzie County Healthcare System in Watford City, N.D. He led his organization through the first wave of COVID-19 in his rural community of 6,200, with his staff serving a county of 14,700.

Two years into the pandemic, Kelly retired from his position.

"Early in the pandemic," said Kelly, "there were some [mental health] studies coming out of other countries about workforce, but they only looked at physicians and nurses, and nothing was coming out of the U.S. We wanted to look at all healthcare workers within the state of North Dakota and we wanted to understand what

the impact was going to be in a rural community, versus urban."

So Kelly reached out to Brad Gibbens, acting director of the Center for Rural Health (CRH) at the UND School of Medicine & Health Sciences (SMHS), asking if Gibbens knew of any such studies from the U.S.

Gibbens put Kelly in touch with Dr.
Shawnda Schroeder who was thenassociate director of research and
evaluation at CRH and a trainer with the
Mountain Plains Mental Health Technology
Transfer Center (MHTTC), and Kristen
Leighton, a research analyst at CRH.
The group then sought out Mandi-Leigh

Peterson, a senior research analyst with CRH, to help round out their research team, which has direct ties to the North Dakota Healthcare Workforce Group within SMHS.

The study

The group developed a study geared to assess the levels of anxiety, depression, stress, and professional quality of life among all hospital staff in North Dakota during the COVID-19 pandemic. Before the pandemic, healthcare workforce had a history of dealing with depression and anxiety. Kelly was curious to know how the added stress of the public health crisis impacted an already stressed workforce.

"I think what made this interesting," said Kelly, "is this particular pandemic brought its own set of stressors in a very precise period of time. At first, the healthcare workers were the heroes. We were getting accolades. Then, societally, we were turned against. We were shunned and ridiculed. We were working short staffed, we didn't have proper supplies, initially there was no vaccine, and we did not know what tomorrow would bring."

Kelly continued, "Then add to all of that the reality that you may incur this illness yourself, or worse, bring it home to your family. It makes perfect sense that we have individuals that are saying they are starting to experience burnout, stress, depression, anxiety."

The study was conducted in May and June of 2021, after the initial wave of COVID-19 throughout North Dakota. Over 800 people responded to the survey.

"I think what really sets our study apart," said Leighton, "is that we chose to include not just physicians and nursing staff, but really everybody involved in the hospital system. Within a hospital, everyone plays an important role and everyone has felt the effects of COVID-19, so it's important to include all those voices."

The results

The general findings show the hospital staff who had direct contact with COVID-19 patients had higher levels of anxiety, depression, and stress than those without direct contact. However, staff in rural areas demonstrated higher levels of compassion satisfaction and lower levels of burnout than their counterparts in urban hospitals.

Most respondents were women, and most were between 25-56 years of age. Many were nursing staff and other direct care staff.

"Our sample size was really great," said Leighton. "I really appreciate those healthcare workers who took the time to respond to our survey. Having a large sample size is really important in research. It helps to ensure that the results are generalizable and applicable to the most people."

The study did not answer "why" there are differences between rural and urban staff compassion, satisfaction, and burnout, but the team believes this difference exists because rural staff are caring for their community, people they know, and that fact becomes a protective measure.

"There is much more of a cohort in rural healthcare," continued Kelly. "We don't have 200 physicians on our staff. Our employees know our providers and likewise. We only have 200 employees total, so there is more of a sense of support that comes from a family. You are going to church with these folks, you are in the store with them. There is more the sense of togetherness in a rural facility you likely can't get in a larger urban facility."

An article on the study was published in the *Journal of Rural Health* in April 2022. Titled "Anxiety, Depression, Stress, Burnout, and Professional Quality of Life Among the Hospital Workforce During a Global Health Pandemic," the article is available for public access.

Healthy coping mechanisms

"The data tell us how healthcare workers have been impacted by COVID-19, but what I think is more interesting is the idea that our results can be instrumental in providing support for our healthcare workers and their mental wellness," added Leighton.

It is vitally important that individuals work to find healthy ways to cope. Just as important is having the healthcare organizations provide support and show employees that they are appreciated and valued.

"At an organizational level [we need to] promote the reality that the workers are providing a valuable service," said Kelly, who says his retirement was not directly related to the stress of COVID. "This can be done through announcements during the day, sending an email, demonstrate you care for your workers. Buy them food. If you can show you are supportive of your workers, that helps to offset some of the stress and anxiety that occurs."

The Mountain Plains MHTTC created a toolkit specifically to address these issues: Building Resilience Among Physical and Behavioral Healthcare Providers During a Global Health Pandemic. It provided some system level and individual recommendations.

The toolkit was developed under the premise that there is likely burnout, fatigue, and stress being experienced by providers, said Schroeder, adding that after completing the study researchers now know coping mechanisms can only start at the individual level if the system is supporting them first—and allowing staff the time and space to engage in self-care.

"Hospitals need these studies to make data-driven decisions, and it is not feasible to require them to pay to access journal articles to provide better care," concluded Schroeder. "Now all of the hospital staff who participated in the survey, all of the hospital CEOs in the state, and all of the hospital workforce can access this with no cost barrier, no paywall, and they can read it and see what the results were."

By Jena Pierce

Read an extended version of this story at ruralhealth.UND.edu



THE NEXT GENERATION OF HEALTHCARE WORKERS

Future Health Professionals, or HOSA, introduces youth to healthcare careers

Healthcare has always played a central role in Kyan Woodruff's life. His sister was diagnosed with severe epilepsy when she was three years old. Woodruff grew up watching his sister suffer seizures, fall, and injure herself, all as a part of his daily routine. Even now, as a 29-year-old, Woodruff's sister requires constant care and support.

It was because of his sister that Woodruff began educating others about seizures and the importance of proper care during and after a seizure. When he became a national ambassador for epilepsy as a youth, a position he still holds today, little did he know that enrolling in a medical careers class at Bismarck High School would change his perspective of healthcare entirely.

Through this class, Woodruff would be introduced to the organization – Future Health Professionals, which would ignite a passion for helping others.

HOSA

The Future Health Professionals, generally known as HOSA, is a student organization that reaches middle school to postsecondary

students. (HOSA once stood for Health Occupations Students of America but has since dropped the title.) Its mission is to introduce students to the expanse of the healthcare industry and guide them to becoming the next generation of healthcare workers. It proudly boasts the title of being the only career and technical student organization that is 100% healthcare-focused.

Katelyn Brinkman, the North Dakota state director for HOSA, was introduced to HOSA through her work at the North Dakota Area Health Education Center (AHEC). As the AHEC eastern director, she was asked to oversee North Dakota HOSA in December 2020 when the previous state director stepped away. The AHEC program office is held within the Center for Rural Health at the UND School of Medicine & Health Sciences, and houses the eastern and western regional AHEC offices.

"Due to the positive impact that I had with the other programs I run, AHEC asked me if I would be interested in taking on HOSA," she said. "They thought I could take it to the next level."

HOSA has gained traction in 49 states, Washington, D.C.,
American Samoa, Mexico, Canada, Korea, Puerto Rico,
and China. North Dakota, which first gained a HOSA
charter in 2012, now has 16 chapters at middle and
high schools around the state.

One of the current goals for North Dakota
HOSA is to increase rural chapters.

"AHEC was able to receive grant funding for new chapter development in rural areas," said
Brinkman. "So, we are able to provide \$5,000 for rural chapter start-ups. This amount can pay for stipends for an advisor or supplies for a hands-on experience."

Brinkman is also working to develop postsecondary chapters at North Dakota colleges and universities.

Hooked from the start

Woodruff became captivated with HOSA from the very beginning. His medical careers teacher, Heather Frey, was the advisor for his local HOSA chapter.

"She introduced me to HOSA, and from there I just ran with it," Woodruff said.

Not long into his first year of involvement, Woodruff knew he wanted to serve HOSA and North Dakota on a higher level. His ambitions were realized when he was elected to the North Dakota HOSA state officer team as the vice president of communications in March 2021. Through this position, Woodruff has expanded his leadership abilities, sharpened his public speaking, and become a healthcare advocate.

"I'm out giving speeches, and I was able to represent HOSA in front of the State Legislature. It's a never-ending cycle of opportunities," he said.

Hands-on opportunities

HOSA is unique from similar organizations, such as FFA (formerly known as Future Farmers of America) or Future Business Leaders of America, because it does not receive funding from the federal Carl D. Perkins Career and Technical Education Act. This means that HOSA relies heavily on sponsorships to fund its events.

"It's a win-win," Brinkman says. "[Sponsors] offer funding and they get recognition across the state. This is their pipeline; these are their future employees."

North Dakota HOSA hosts two main events throughout the year: the Fall Leadership Conference, and the State Leadership Conference. These two conferences allow participants to learn about the variety of opportunities within the healthcare industry and showcase their knowledge and skills. Competitive events range from written tests to hands-on skill demonstrations, such as CPR.

In between events at the HOSA State Leadership Conference, students listen to keynote speakers and attend workshops hosted by local healthcare facilities.

"We bring in healthcare professionals and host social hours, so our students get a broad interaction with the healthcare industry," Brinkman said. "We expose them to a lot of different opportunities."

At the 2022 State Leadership Conference, held March 20-22, students were able to participate in workshops, providing firsthand experience in dentistry, pediatric care, and trauma, among other professions. Woodruff also ran for re-election to the state officer team and was reinstated as vice president of communications.

Between the two conferences, the North Dakota HOSA state officer team engages local chapters with smaller events on social media.

"This year we are doing an online competition and health-focused Question and Answer," Woodruff said. These smaller events allow students to stay active within HOSA throughout the year, and continually learn more about the healthcare industry.

Future goals

Woodruff's time in HOSA has changed his perspective of healthcare and helped him focus on his future goals.

"Originally, I wanted to be a doctor," he said. "But when I started with HOSA, I got the insight that healthcare isn't this picture-perfect thing. There will always be inequalities within healthcare, so you start to understand the true meaning of what healthcare is. It's not like in the movies. It humbles you."

Woodruff's current plans include graduating from high school and attending college to get a nursing degree. Eventually, he would like to become a nurse administrator. But no matter where life takes him, he can go confidently knowing his experiences in North Dakota HOSA helped him become a better healthcare advocate and nurtured a lifelong passion for caregiving.

By Jessica Rosencrans

PEACE OF MIND

Retired neurologist and alumnus Dr. Ross Pettit chats with North Dakota Medicine on retirement, giving, and his namesake scholarship for UND medical students

The last time I saw Dr. Ross Pettit, he gave me a box full of anatomical models.

"Oh, those belonged to my father-in-law," laughs Ross (BS Med '70) over coffee recently, referencing Dr. John Taylor, who in 1960 helped establish North Dakota's first electron microscopy laboratory within the UND School of Medicine & Health Sciences (SMHS). "That stuff was in his house after he died. Donna and I were cleaning his place out and thought that UND should have it."

Giving back, it seems, is just something Ross and DonnaLee Pettit are inclined to do.

That's why, a few years ago, the pair sought to give back to the SMHS in a more formal way by establishing the Dr. Ross and DonnaLee Pettit Medical Scholarship Endowment.

Each spring, the fund distributes allocations to one or more medical students with "financial need."

"We both have relatively strong feelings that it's important to give back," Ross continues of the latter gift. "For me, a big part of this is expressing our appreciation to North Dakota for giving us this opportunity. I really wonder how many of my contemporaries

would have been able to have a career in medicine if it hadn't been for this school."

Medicine in the family

Born in New York, Ross Pettit ended up in Grand Forks when his father, pediatrician Dr. Samuel Pettit, began practicing in North Dakota in the early-1950s. Growing up around a father who made house calls, Ross says that it was never really a question for him about what career path he would follow.

"I think I just assumed that as a college student I was going to go into medicine," he says. "I don't recall ever having any other aspirations. I liked the sciences, so I applied [to UND] and got in. Although I did take the Air Force officer's qualification test as a fallback."

After completing his two years at UND to earn what was then a Bachelor or Science in Medicine degree in 1970, all while DonnaLee worked as a medical librarian at the old Harley E. French Medical Library at UND, Ross transferred to St. Louis University to finish his M.D.

Initially pursuing pediatrics, like his father, Ross says he eventually fell into neurology,



completing a neurology residency—after an internship in pediatrics and a stint in the U.S. Air Force—at Vanderbilt University in Nashville. Tenn.

Having married DonnaLee in the interim, the pair made their way back to the upper-Midwest in the late 1970s. After practicing for nearly 40 years in Grand Forks and around the region, Ross retired in 2015—the same year as his brother Bill Pettit, who earned his M.D. from UND in 1980.

Awakenings

Along the way, the pediatric neurologist saw incredible change both in the healthcare system and neurology as a practice.

"The [neurology] oral exam when I went through was four hours long, and one full hour of that was dedicated to psychiatry," Ross explains, still sounding surprised at the number. "Twenty-five percent. Neurologists are still certified by the American Board of Psychiatry and Neurology, but the one-hour oral exam in psychiatry was dropped for neurologists in the mid-1980s."

Jeff Dodson
Director of Development, SMHS
UND Alumni Association & Foundation
701.777.5512
jeffd@UNDfoundation.org





Brian Schill, '00, '05
Director
Office of Alumni & Commmunity Relations
701.777.6048
brian.schill@UND.edu

Such a "divorce" is good, says Ross, in that while there is still overlap between the specialties, the domain knowledge required by providers within each profession and the demand for both types of healthcare is increasing. That is to say, not only are mental health diagnoses on the rise, also increasing is the scholarship on and diagnoses for neurodegenerative conditions like Alzheimer's disease and Parkinson's. According to one report from the National Institute for Neurological Disorders and Stroke, for instance, the number of people diagnosed with Parkinson's in the United States "is expected to double by 2040."

"Neurology has become more therapeutic," Ross suggests, referencing English neurologist Oliver Sacks and his work on the drug levodopa (L-dopa). "Prior to L-dopa there was nothing you could do for some of these patients. Same with epilepsy. But today it's much different. If I were in neurology today I would consider

subspecializing in epilepsy. Neurologists can subspecialize in a number of areas, from multiple sclerosis and neuromuscular disease to movement disorders."

Paying it forward

When asked about the explosion in not only pharmaceuticals for neurological conditions, but preventive practices and therapies such as probiotic supplementation or certain diets like gluten- or dairy-free, Ross waves the question away.

"Part of quitting means not keeping up with that stuff," he says explaining that the decision just came to him one day: it was time to be done. So he retired. "I have literally not kept up at all. I thought I would, but haven't."

These days, Ross says he and DonnaLee spend a lot of time at the lake, a lot of time reading, and a lot of time enjoying greater peace of mind—which for a neurologist is no idle phrase.

Even so, the profession's loss is the University's gain as the Pettits can dedicate more time to giving back—or paying it forward.

"I feel a real debt of gratitude to North Dakota," Ross concludes. "I think for a lot of us, the State Legislature establishing this medical school created opportunities for North Dakota students that they may not have otherwise realized. That's part of why we decided to do this. I think it's important to give back and I feel pretty strongly about that."

For more information on the Dr.

Ross and DonnaLee Pettit Medical

Scholarship Endowment, or to give
to the UND Alumni Association &

Foundation, call 701.777.2611 or email

Jeff Dodson at jeffd@UNDalumni.org.

By Brian James Schill



Samuel Wilke and Zachary Mohs (center) with Drs. Joshua Wynne (left) and Dev Mannuru (right).

SCHOLARSHIP ENDOWMENT

In May, the inaugural Clinical Preceptor Recognition Scholarship was awarded to fouth-year medical students Zachary Mohs and Samuel Wilke. Likewise, UND's fourth-year medical students selected Dr. Devendranath "Dev" Mannuru as the "Clinical Preceptor of the Year" and namesake for the Clinical Preceptor Recognition Scholarship Award.

The fund is still accepting gifts on behalf of next year's top clinical preceptor, to be selected by the MD Class of 2025 soon. Your gift will help to grow the Clinical Preceptor Recognition Scholarship Fund and benefit UND medical students far into the future.

Give online at UNDalumni.org/clinicalpreceptor or mail your gift using the prepaid envelope in this magazine.

AN OUNCE OF PREVENTION

Department of Biomedical Sciences researcher Kumi Nagamoto-Combs discusses depression, diet, and dairy in the animal model

A researcher with her doctorate in neuroscience from the University of Rochester in New York, Kumi Nagamoto-Combs has been with the SMHS in a variety of capacities—neuroanatomy instructor,

research associate, biomedical technology transfer officer, assistant professor—since 2005. Fresh off news of receiving a two-year, \$380,000 R21 grant from the National Institutes of Health's (NIH) National Institute for Allergy and Infectious Diseases (NIAID) in 2020 and a five-year, \$1.8 million R01 grant from NIH/NIAID this year, the assistant professor in UND's Department of Biomedical Sciences sat down with *North Dakota Medicine* in March 2022 to talk allergies,

inflammation, the gut, and the brain—all of which are connected, she says.

Thank you for your time, Dr. Nagamoto-Combs. Tell me first about your NIAID grants.

We're studying the long-term effects of chronic allergen exposure in mice with non-anaphylactic food allergy. For this, we sensitize mice to a milk allergen to establish mild milk allergy, and we put them on a diet that contains the offending allergen. Because they are asymptomatic, they can eat the food without any observable symptoms. But because they're sensitized, they still develop inflammation. For the R21-funded

project, we are using a mouse strain that is genetically predisposed to develop Alzheimer's disease-like pathologies and investigating whether the development or progression of their pathologies can be exacerbated or accelerated by the allergen-induced inflammation. For the R01-funded study, we are elucidating whether allergen-activated peripheral immune cells are involved in the development of neuropathologies. We will also test whether the food allergy-associated inflammation can be prevented by pharmacologically protecting intestinal integrity.

Incredible. So, you're a neuroscientist by training who focuses on how changes to intestinal microbiota affect not only Alzheimer's but behavioral health, right? Hives or asthma aside, do we have evidence that things like anxiety or depression may in part be the result of inflammation or allergies to foods in the gut?

Yes. In our mouse model of non-anaphylactic milk allergies, we have seen anxiety- and depression-like behavior. We showed previously that these mice have intestinal inflammation and altered gut microbiota. We've also seen neuropathological features in the brain, such as reactive glia and blood-brain barrier impairment that indicate neuroinflammation. But perhaps the most interesting finding we have in the brain of allergic mice is cortical demyelination. The axons of many neurons are coated with insulating material called myelin that protects electrical signals during neurotransmission. But if that coating gets damaged, neurons can't send signals efficiently. An example of such a condition is multiple sclerosis. We don't know what's causing the cortical demyelination in our mice, but at least we may have a possible explanation for their behavioral abnormalities.

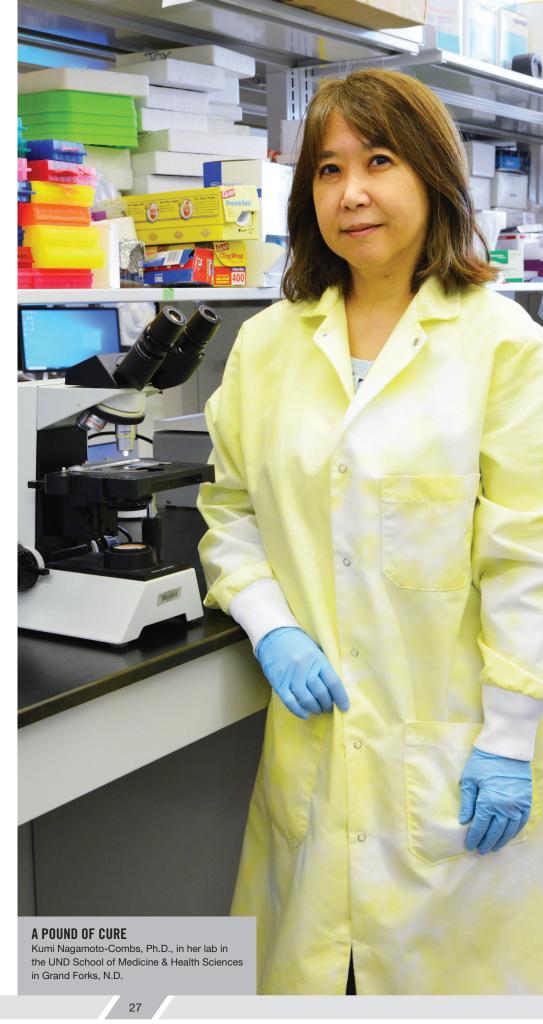
We were discussing our kids earlier. Has your experience as a mother of children with allergies influenced your interest in this sort of research?

I do have a lot of allergies in my family with different severity, so I started wondering what the long-term consequences of allergies might be. People with severe allergies with immediate reactions, like throat swelling, hives, and vomiting, know to avoid the offending food. But some people are asymptomatically sensitized, meaning they have elevated levels of antibodies toward allergens, but they don't react severely. They might not even know that they are sensitive to something they eat because their symptoms are mild, if any, or symptoms happen a few days later so they don't make the connection and continue to eat allergens. But what happens if they keep eating the offending allergens? What is the long-term effect, especially on brain function? We don't know much about this population because most studies are focused on more severely sensitized people with life threatening symptoms.

To that point, gluten free diets, dairy free, low carb, and so on are everywhere.

Do we know enough as researchers to be able to say that even if people don't seem to be exhibiting obvious symptoms, things like dairy or gluten or soy might be causing inflammation in ways that have consequences for some of us down the road?

So, in something like celiac disease, people are sensitive to gluten in wheat products. They have chronic inflammation in the intestines, which can lead to changes in microbiota, gut physiology, and the immune system. These changes are thought to influence brain function by altering the levels of bacterial metabolites, nutrient absorption, and inflammatory factors. Although the trigger is different, our sensitized mice have intestinal



inflammation, neuroinflammation, and behavioral abnormalities, so it is likely that intestinal "insults" by dietary allergens can affect the health of the brain and body, especially when the inflammation persists. We looked at microbiota in our allergic mice and found altered intestinal bacterial populations, or dysbiosis. One of the most drastic changes was a decrease in Akkermansia muciniphilia. a bacterial species that helps protect the mucus layer by stimulating mucus production. This bacterium is known to be important for diabetes and obesity, but also its decreased levels have been associated with autism spectrum disorder and Parkinson's disease. So, there are connections to the loss of Akkermansia and brain disorders. If that's the case. we're wondering if we can restore or supplement Akkermansia to prevent or attenuate the intestinal pathology and improve behavioral outcomes.

Has this research influenced the way you eat or how you feed your family, or changed the way you shop?

[Laughs] Yes. We've been doing that ever since we had children. Not for "health food" per se, but in our family, we have a severe allergy case and because of that we read every single label when we shop. That has been a part of our life. When we feel tired or when we feel so-called "brain fog"

we wonder "What did I eat last night...or two days ago?" We think that immediately.

Exactly. And to that point—feeling sick generally and food exacerbating inflammation—can you make a connection between food allergies, microbiota, anxiety behavior, and what's going on with the population in terms of SARS-CoV-2 broadly these days?

Sure. Being a neuroscientist, I'm always interested in what can affect brain function and ultimately behavior. When I was going to graduate school, the brain was believed to be an "immune privileged" site, but that concept has completely broken down. We know that immune cells can communicate with the brain, although the communication is tightly regulated. We see immune cells in and around the brain. If these immune cells are activated by food allergy and become the culprits of a brain disorder, then it's a lot easier to prevent them from going to the brain than trying to target the brain itself through the protection of the skull and the blood-brain barrier. Recent observations of cognitive problems in some COVID sufferers have indicated that viral infections can affect the brain. My colleague Dr. Catherine Brissette is studying how bacterial infections from tick bites affect the brain. The notion that peripheral inflammation influences the brain is now well-accepted. And since

food allergy can be a chronic inflammatory condition, why can't we include food allergy-induced gut inflammation in this category?

If I'm hearing you right, you're implying that while we obviously need to treat people who are suffering from Alzheimer's or diabetes, one of the takeaways from your work is that prevention is key, and we can potentially prevent a lot of this stuff through diet.

Yes. Prevention is way better than palliative care, in my opinion. Once something is broken, it's hard to fix it. Around seven years ago, I was hit by a pick-up truck—

-Oh no!-

—I really hit the concrete hard and had a concussion and whiplash. I went to a lot of rehab, but I've never been the same. Even right now I'm suffering from neck pain. I'd be much better off without the accident. Again, pain is another chronic inflammatory condition. So, I sometimes wonder what it's doing to my brain. But, yes, prevention is definitely a lot more effective than trying to patch up something that has been broken. And it's a lot more cost-effective!

Interview conducted and edited by Brian James Schill

ALUMNI NOTES

110s

Rachel Marohl, M.D. '16, has joined the obstetrics & gynecology department at the Mid Dakota Clinic's Center for Women in Bismarck, N.D. Marohl most recently worked in private practice in northwestern North Dakota.



'90s

Sara Bjerke, BS AT '95, was recently inducted into the North Dakota Athletic Trainers Association Hall of Fame. She was inducted at the NDATA Clinical Symposium and State Meeting on Saturday, April 9, 2022, and is the first female in North Dakota to win the honor.



NIH Tribal Health Research Office Director David R. Wilson speaks at UND's first annual ITRRC symposium

David R. Wilson, Ph.D., Director of the National Institutes of Health's (NIH) Tribal Health Research Office (THRO), served as lead speaker for the University of North Dakota Indigenous Trauma & Resilience Research Center's (ITRRC) first annual symposium on Friday, April 22, 2022.

"American Indians in North Dakota and throughout the region suffer from significant health disparities, relative to the non-Native population, much of which is related to historical trauma, adverse childhood experiences, forced boarding school participation, and toxic stress," explained Dr. Don Warne, ITRRC program director and director of the UND School of Medicine & Health Sciences (SMHS) Indians Into Medicine (INMED) program. "The goal of the ITRRC is to address the impact of historical and unresolved trauma on health inequities within the American Indian and Alaska Native population."

Wilson, who came to the NIH from the Department of Health and Human Services Office of Minority Health where he served as Public Health Advisor and the American Indian/ Alaska Native Policy Lead, fits both bills.

As the NIH puts it, the TRHO Director assembles representatives from across the NIH to leverage resources and "build collaborations through the research portfolio to address tribal health concerns." A member of the Navajo Nation, Wilson was appointed as the first Director of the Tribal Health Research Office in Jan. 2017.

Featured event speakers included:

- David R. Wilson, Ph.D., Navajo, Director of the National Institutes of Health's Tribal Health Research Office.
- Donald Warne, M.D., M.P.H., Oglala Lakota, Program Director for the Indigenous Trauma & Resilience Research Center.
- Alison Kelliher, M.D., Koyukon
 Athabascan, Director of the American
 Indian Collaborative Research Network
 (AICoRN).
- Ursula Running Bear, Ph.D., MS, Sicangu Lakota, Assistant Professor the UND

- Department of Population Health, teaching in the Public Health Program at UND SMHS.
- Andrew Williams, Ph.D., M.P.H., Assistant Professor the UND Department of Population Health, teaching in the Public Health Program at UND SMHS.
- Nicole Redvers, ND, M.P.H., Deninu K'ue, Assistant Professor in the Departments of Indigenous Health and Family & Community Medicine at the UND SMHS.
- Amanda Mae Fretts, Ph.D., M.P.H., Mi'kmaq, Assistant Professor, University of Washington School of Public Health, Department of Epidemiology.

"It's an exciting time to be doing this type of work," concluded Warne, who helped UND establish the world's first doctoral program in Indigenous Health and world's first standalone Department of Indigenous Health. "And it's incredible that the University of North Dakota has come to serve as a major center for Indigenous Health scholarship worldwide."

Eight North Dakota hospitals named among top 100 Critical Access Hospitals

Eight Critical Access Hospitals (CAHs) in North Dakota have been named to the Top 100 CAHs for 2022, according to the Chartis Center for Rural Health. Top 100 hospitals are top performers, excelling in financial efficiency, achieving higher quality, securing better outcomes, increasing patient satisfaction, and operating at a lower cost than their peers across the U.S.

"We are proud to see so many North
Dakota CAHs represented this year," said
Jody Ward, program director of the North
Dakota CAH Quality Network. "Throughout
the state, our hospitals have continually
kept up with an influx of patients while
maintaining the high-quality patient care



we are known for. To see eight of our hospitals being recognized in the Top 100 means we are doing things correctly."

The North Dakota CAHs recognized were:

- Towner County Medical Center in Cando
- Pembina County Memorial Hospital in Cavalier
- CHI St. Alexius Health in Dickinson
- Jacobson Memorial Hospital Care Center in Elgin

- Sakakawea Medical Center in Hazen
- West River Health Services in Hettinger (pictured)
- Jamestown Regional Medical Center
- Linton Hospital

The Chartis Group provides comprehensive advisory services and analytics to the healthcare industry. The Chartis Center for Rural Health is a division of The Chartis Group.

UND School of Medicine & Health Sciences announces faculty and student award winners



ALPHA OMEGA ALPHA HONOR MEDICAL SOCIETY RECOGNITION

Front row (left to right): Zachary Podoll, Sarah Rasmussen, Hunter Huff Towle, Bethany Freeland LeClair, Anne Sandstrom, Samantha Lambert, Alexandra Hopkins Back row (left to right): Nolan Schwarz, Bradley Conant, Dr. Joshua Wynne, Seth Arntz, Ryan Norris, Andrew Brown, Mikayla Forness, Dr. Cornelius "Mac" Dyke, Abby Wilmer, Marcus Osman

The University of North Dakota School of Medicine & Health Sciences (SMHS) presented a number of awards to its graduating medical students and the School's faculty and other community volunteers during its Commencement ceremonies on Saturday, May 7.

The winners of the Dean's Special Recognition Awards for Outstanding Volunteer Faculty:

- Jo Ellison, Ph.D., ABPP, '12, Clinical Assistant Professor of Psychiatry & Behavioral Science, Essentia Health, Fargo, N.D.
- Jessie A. Fauntleroy, M.D., Clinical Instructor of Obstetrics and Gynecology, Trinity Health, Minot, N.D.
- Karalee Harper, MMGT, LAC, Clinical Instructor of Psychiatry & Behavioral Science, Heartview Foundation, Bismarck, N.D.
- Tana S. Setness Hoefs, M.D., Clinical Instructor of Obstetrics and Gynecology, Altru Health System, Grand Forks, N.D.

The graduating medical student class selected the following outstanding physicians-teachers at each campus:

Bismarck: Peter Klemin, M.D., '07, Clinical Assistant Professor of Obstetrics & Gynecology; Fargo: Neil Karjalainen, M.D., Clinical Instructor of Surgery: Grand Forks: Bernie Dallum, M.D., Clinical Assistant Professor of Radiology; Minot: James Schmidt, M.D., '04, Clinical Instructor of Family & Community Medicine

Awards given to graduating medical students included:

North Dakota Medical Association Awards
Ryan Norris, Sarah Pippin, Cole Sogge

North Dakota Medical Association Alliance Award

Andrew Carman, Emily Falcon

North Dakota District Medical Society Awards

First District (Fargo): Bethany Freeland LeClair, Anne Sandstrom; Third District (Grand Forks): Seth Arntz; Fourth District (Minot): Erika Ysabelle Mojica; Sixth District (Bismarck): Bradley Conant

University Alumni Special Awards

Ryan Norris, Donald Hamm, Seth Arntz

Dr. John Wahl Memorial Rural Health Scholarship Endowment Award

Matthew Amundson

Kokila and Raman Patel, M.D., Family Practice Award

Rachel Silkey

George and Margaret Seaworth Scholarship Endowment Award

Hunter Huff Towle

Dr. Frank E. Stinchfield Award, academically outstanding student

Mikayla Forness

Dr. Nadim and Rola Kanafani Koleilat Award

Cole Sogge

The Welsh Award

Donald Hamm, Zachary Podoll

Robert C. Painter, M.D., Internal Medicine Award

Mikayla Forness

Lloyd S. Ralston, M.D., Memorial Endowment Award

Samantha Fabrizio

Dr. Louis B. and Thelma K. Silverman Medical Award

Sarah Pippin

Altru Clinic Senior Medical Student Fund Award

Ann Renner, Cole Sogge, Donald Hamm

Preceptor Recognition Student

Scholarship (given this year in honor of Dr. Dev Mannuru) Zachary Mohs, Samuel Wilke

American College Of Physicians – Department Of Internal Medicine Mack V. Traynor Award

Marcus Osman

Department Of Obstetrics & Gynecology Senior Award

Sarah Rasmussen

Department Of Pathology Senior Awards

Margarita Consing, Bethany Freeland LeClair, RaMae Harpestad, Tanner Simonson

Bradley Neil Meyer, M.D., Diagnostic Radiology Award

Seth Arntz, Jared Magnuson

Department of Surgery Senior Award

Mitchell Sand, Zachary Podoll

Michael Kaspari Recovery Award

Andrew Carman

Richard P. Stadter Excellence In Psychiatry Award

Luke Keller

Joy M. Query Prize For Social & Behavioral Science

Nora Rimatzki

Additional Faculty Awards:

Reverend Elmer and Min West Memorial Faculty Award

Stephen Tinguely, M.D., Professor of Pediatrics, Assistant Dean for Medical Accreditation, and Chief Medical Accreditation Officer

School of Medicine & Health Sciences Faculty Excellence Endowment Award

Jon Solberg, M.D., Chair and Clinical Assistant Professor of Emergency Medicine; Colin Combs, Ph.D., Chair and Professor of Biomedical Sciences; Peter Sandroni, M.D., Assistant Professor of Family & Community Medicine, and Program Director, UND Center for Family Medicine, Minot

UND School of Medicine & Health Sciences recognizes more than 240 graduating health sciences students

In addition to the 69 new medical doctors graduating from the University of North Dakota School of Medicine & Health Sciences (SMHS), the School is recognizing more than 240 students from its health sciences programs who graduated on Saturday, May 14, 2022.

One of those 240-plus students is Jacob Tupa, who graduated with a Bachelor of Sciences degree in Medical Laboratory Science (MLS).

"My experience in the Medical Laboratory Science program at the SMHS has been wonderful," beamed the Larimore, N.D., native. "Surrounded by professors who care about student success and top-notch facilities—I was set up to succeed in my educational experience every step of the way. I am thankful for the opportunities UND provided me to grow as a leader in healthcare and as an individual."

Tupa is one of 90 MLS students who graduated on May 14.

Laboratory science notwithstanding, health sciences departments represented at UND's spring Commencement also included not only three doctoral graduates of the Department of Biomedical Sciences, but students from programs in occupational therapy (49), physical therapy (51), physician assistant studies (33), public health (10), and athletic training (7).

Some of these programs will graduate students this summer as well. The SMHS public health program, for example, will see 10 August graduates.

"I really enjoyed my time at SMHS, even though some of it was cut short or modified by the pandemic," added graduating Bismarck, N.D., native and new pediatric occupational therapist Ben Germolus. "School was challenging, but I was able to make some lifelong friends who also happen to be my new colleagues. I am still unsure of how I feel coming into this new title of 'occupational therapist.' It all feels fast and like my OT

training happened in a flash."

Despite the pandemic presenting a variety of challenges, the vast majority of students remained on track and are excited to be starting their health professions.

"We want to extend congratulations to all of the graduates of our many health sciences programs," added David Relling, P.T., Ph.D., associate dean for health sciences at the School. "They have completed rigorous educational programs during the adversity of the pandemic. Most of all, we want to recognize the substantial impact that health sciences graduates will have on the thousands of patients they will work with throughout their careers."

Over the past 50 years, the UND School of Medicine & Health Sciences has graduated nearly 12,000 professionals working in the health sciences in North Dakota and around the country.

Jolanda 'Jody' Faye Bjerke Glendenning, BSOT '63, passed away peacefully on December 15, 2021. She was born in Grafton, N.D., graduated from Hoople High School in 1959, and went on to attend the UND School of Medicine, where she earned a degree as an occupational therapist and was a member of Kappa Alpha Theta. As an OT, she was patient and kind, working with "her kids" to improve their lives. Her fondest memory was riding her horses, the Appaloosa or the Red, to school. One of her residencies was at then-St. Luke's Hospital in Duluth, beginning in January 1964, when she met John, whom she subsequently married in October 1964 in Hoople. She began working in Duluth for the Polinsky Rehabilitation Center, later known as the Miller-Dwan building, and designed a turtle for patients to crawl through. Later, when the St. Luke's OT Department expanded to the overpass at 10th Avenue East, Jody began working there. After a few years, a position became available at the school district, and she applied. At the Merritt Creek Academy, she met many of her "pals." Later on, she began working at Northwoods-Chester Creek Academy, where she really became attached to "her kids." She enjoyed traveling with her family, camping, Shrine parades, and just being at home. She was preceded in death by her parents, Clifford and Doris Bjerke. She is survived by her husband, John; children, John, Scott, and Heather; six grandchildren; and her sister, Barbara Brubakken.

Stephen Lloyd Hanson, BS Med '64, was born July 23, 1940, and died March 23, 2022. Stephen dedicated his life to serving others throughout his life: 47 years as a family physician, 20 years military service, and 35 years as a Gideon distributing Bibles and training others to do the same in many countries. He sought out people everywhere to connect to them in some way.

Leo Hoffer, BS Med '73, age 76, of Victorville, Calif., died peacefully on the morning of Feb. 18, 2022, at Providence St. Mary Hospital in Apple Valley, Calif. Leo passed away after a protracted struggle with complications from knee surgery. Leo hailed from Turtle Lake, the only child of Ed and Aletha Hoffer. Leo earned his master's degree in toxicology from the University of North Dakota and became a pharmacist. In 1976, Leo moved to Southern California, where he lived until he passed away. Standing 6'5" tall. Leo was an active and physical man, even into his later years. He ran sub-40 minute 10k races and he enjoyed playing basketball at beachside courts well into his 50s. Leo reminisced about playing pickup basketball against North Dakota legend Phil Jackson while both were at the University of North Dakota. Leo was well known for his sense of humor and keen intellect. Leo was passionate about his work as a pharmacist. He was licensed for over 50 years and, long after he could have retired, he worked as a temporary pharmacist all over Southern California. Being a retail pharmacist allowed him to combine his love of hard work, his intellectual

curiosity, and his enjoyment of meeting people from all walks of life. Leo truly was one of a kind. His friends and family will miss him. Leo is survived by his son, Michael, and his grandchildren, Jude and August (all residing in Atlanta, Ga.).

Michael Joseph Kihne, BS Med '76, age 76 of Sioux Falls, S.D., passed away surrounded by his family and his beloved boxer, DJ, on February 11, 2022. Michael was born in Grand Forks, N.D., on December 1, 1945, to Dick and Freda Kihne. He grew up in Cavalier, N.D., the oldest of five brothers: Robert, Jack, Barney, and Mark. The family were members of St. Brigid's Catholic Church where he was an alter server. He graduated from high school in Cavalier where he participated in football, basketball, and track. He was a member of the science club and school newspaper and would occasionally DJ at the local school dances. He then continued his educational journey at North Dakota State University where he received a degree in pharmacy. During that time, he was a member of Sigma Nu fraternity and bought his first car, a red Ford Torino, which he spoke fondly of over the years. Mike then moved back to Cavalier where he worked at Salaba's Drug, this time as a pharmacist, for the next two years. While he was back in Cavalier he met the light of his life. He and Darlene Joy Bjelde were married in Cavalier on July 12, 1969. The two of them then made moves to Texas and Virginia during Mike's military service in the Army Medical Corps. While in Fort Eustis, Va., they had a son, Todd. Once completing their military commitment. Mike and Darlene moved to Detroit, Mich., where Mike worked as a pharmacist. During that time, the pair had the unfortunate event of losing girl twins, whom they miss dearly. Never one to be idle, Mike then decided to continue his guest for knowledge and enrolled in medical school at the University of North Dakota in Grand Forks, N.D. He then completed his medical training and radiology residency at the University of Nebraska at Omaha in 1982. While in Omaha, Mike and Darlene welcomed their second son, Bryan. The following years entailed a few moves and different radiology practices, including stops in Hays, Kan., Fargo, N.D., and finally Sioux Falls, S.D., where he spent the final 27 years of his career as a radiologist working at many of the local and surrounding hospitals and clinics. He worked up until age 72, when he decided to finally retire. He loved the challenge of his radiology practice which he worked at for 35 years.

Joseph "Joe" Morris Mattson, BS Med '63, age 82, passed away peacefully surrounded by family on February 12, 2022, in Littleton, Colo. Joe was born on February 22, 1939, in LaMoure, N.D., to Jul Morris and Dorothy Cecelia (McGregor) Mattson. After attending LaMoure Public Schools, Joe graduated from Jamestown College, Jamestown, N.D. He began medical school at the University of North Dakota, completing his medical degree at the University of Washington in Seattle. Joe completed his

medical residency at Saint Paul Ramsey Hospital before serving in the United States Air Force. In 1968, Joe joined United Clinics P.C. and Community Memorial Hospital (later West River Medical Center and Clinics) in Hettinger, N.D. Soon after arriving, he helped establish the ambulance service, teaching the first formalized sessions in emergency care in North Dakota to local volunteers. Dr. Mattson served all the affiliated clinics, helping to shape rural healthcare and innovate the satellite clinic system model. Board certified in family practice and geriatrics, he shared his experience by mentoring medical students on their rotations. For many years. he was the medical director of Hillcrest Care Center (later Western Horizons Care Center) in Hettinger and was the founding medical director of a community hospice. Joe retired in 2010, after 41 years of dedicated service to his patients and the communities of southwestern North Dakota and northwestern South Dakota. Joe married Patricia "Pat" Ann Fisher in 1969. Together they raised seven children in Hettinger. Those who will miss him most include his wife, Pat; his children, Co-Bin (Sarah), Stacie, Don (Paula), Jennifer (Steve), Chris (Tara), Nathan, Amy (Andrew), and Tahna; his brother, Michael Mattson (Colleen); sisters-in-law, Rose Mattson, Jan Mattson, and Marge Mattson; twenty-one grandchildren and one great-grandchild; and many much-loved nieces and nephews. Joe is preceded in death by his parents; sister, Mary Ellen Kluever; brothers, Clem, Larry, Max, and Don James Mattson; and grandson, Elijah Joseph Kjolsrud.

Myra Christine (Janke) Rada, BS MT '54, was born December 12, 1931, in Fredonia, N.D., the daughter of Arthur and Alma (née Schlecht) Janke. She died on February 23, 2022, at the age of 90 years. In 1954, she received her Bachelor of Science degree in medical technology from the University of North Dakota and worked in the Department of Biochemistry at UND from 1954-1959. She was employed as a medical technologist at the Ellendale Clinic and Dickey County Hospital from 1959 to 1994. On May 30, 1958, she was united in holy marriage to George Rada in Webster, S.D. They made their home in Ellendale, N.D., and God blessed their marriage with two children, Kevin and Tina. Her hobbies included bowling, gardening, quilting, knitting, crocheting, and meeting her friends for coffee. She loved spending time with her siblings. She is survived by her son, Kevin, and his wife, Yi Ju Huang (Tiffany Rada), Edmond, Okla.; her daughter, Tina, and her husband, Toby Heller, Beulah, N.D.; seven grandchildren, Carol Kerr, Susan, Marianne, and Jeremy Rada, and Eric (Hayley), Christian (Laura), and Andrew (Lindsay) Heller; and two great-grandsons, Kase and Aden Kerr; two sisters, Pansy (Gerald) Raatz and Joyce (Harvey) Weimann; two brothers, James (Marlys) Janke and Joel (Joyce) Janke; and one brother-in-law, Lyle Albertson. She was preceded in death by her parents, Arthur and Alma Janke; her husband, George Rada; and one sister, Alida Albertson.

Albert Frank Samuelson, BS Med '54, age 92, died Jan. 23, 2022, surrounded by his family. Albert was born in Turtle Lake on September 24, 1929, to Gus and Marian Samuelson. He attended the local public school, Class of 1947, was active in sports, and for his entire life treasured the many friendships made during his youth in that very unique community. He was active, a hard worker, and at age 15 spent a summer working on a commercial purse seiner, fishing salmon in Puget Sound and southeastern Alaska. He went on to attend the University of North Dakota, where he graduated in 1950 with a Bachelor of Science degree in chemistry. Shortly after graduation, the Korean War erupted and he entered active duty in the U.S. Army, 231st Combat Engineer Battalion, an N.D. National Guard contingent from Grand Forks. After two years of active service, he was released and returned to UND. He enrolled in medical school where he received a Bachelor of Science in Medicine degree in 1954. In 1956 he received his medical degree (MD) from the University of Cincinnati. On August 27, 1950, he was united in marriage to Betty Laverne Carson from Buxton. They spend 49 years together until Betty's death in 1999. In 2000, he married Carol Nelson Neubauer and were married until her death in 2019. Except for periods of training, Albert's professional career was spent exclusively in the Bismarck area. He practiced general medicine with the Q&R Clinic for two years after medical school, then entered a psychiatric resident training program at the Menninger Clinic/Veteran's Administration program in Topeka, Kans. After completion of that program, he returned to Bismarck to work for the North Dakota Department of Health as a director of the Mental Health Services program whose responsibility was to plan and develop Community Mental Health Centers in North Dakota. While with the health department, he also served as Medical Director of the State Psychiatric Clinic, located in the former Governor's mansion, which was the first outpatient psychiatric facility in western North Dakota. Dr. Samuelson was one of the first psychiatrists in western North Dakota. His primary interest was the development of community treatment services for the seriously mentally ill. Though he entered private practice in 1966, he continued to provide psychiatric services to mental health programs in Williston, Dickinson, Minot, and Bismarck, where he served as a director of the first mental health center, located in the basement of the WW Memorial Building. Consultative services to the State Penitentiary, Indian Health Service, Social Security Administration, and the Veteran's Administration were also provided during varying periods of his professional career. As a clinical professor of neuroscience, he was very involved in the development of the fouryear medical school program at UND. For many years he served as the local coordinator of neuroscience teaching and for two brief periods as interim assistant dean on the Bismarck campus. He was involved in the training of many UND physicians currently practicing

in North Dakota whose friendship and collegiality he always treasured during his long medical career. Dr. Samuelson was vitally interested in several professional and community organizations. He served as President of the North Dakota Medical Association, the North Dakota Psychiatric Society, Blue Shield Board, and as Secretary of the North Dakota Board of Medical Examiners. He is survived by his two daughters, Kathryn (Randy) Heim, Anthem, Ariz., and Theresa (John) Finck; brother, Warren, Seattle, Wash.; stepchildren, Kelly, Paul, and James Neubauer and Kristi Dovich; numerous grandchildren and great-grandchildren; and a foster child, Elsy Lopez. He is preceded in death by his first wife Betty and his second wife Carol.

David Allen Simundson, BS Med '68, died December 16, 2021, and was a resident of Napa, Calif. David Simundson, son of a Lutheran pastor and nurse from Minot, N.D., was a charming family man whose infectious dad jokes were best served quiet and dry. Not one of his three kids followed in his medical career footsteps. after he brought home a recording of himself performing eye surgery, which they vividly remember. His kids are convinced that he measured success either by how many times he could justify going to Costco per month, how far he could drag the ill-behaved family dog, Muffin, up and down Mount Burdell on runs, prepping for triathlons with the Rolling Hills Club Mudsharks swim team, or how many times he could run the Dipsea Trail. A fan of anything and everything Norwegian, he could be identified easily by his gleaming white and red UFF-DA coffee mug, spreading Gjetost on sourdough and singing to himself the world-famous hit song, "Yaoughta go ta, North Dakota," while cleaning out the garage for the millionth time, just to put it all back again. David received his M.D. from the University of Vermont College of Medicine in 1970. He did his internship and residency at Tulane Medical Center in New Orleans, while serving in the U.S. Air Force Reserves with the rank of captain. He specialized in ophthalmology and later was distinguished as an eye surgeon at Kaiser Permanente in Northern California. David became a widower suddenly in 2005 when his wife Susan passed away unexpectedly, devastating the family. He remarried in 2012 to Allison Saether, who whisked him away to countless wine tastings, happy hours, concerts, and international travel. David was an avid runner who transitioned into bike riding in his late 60s. He had multiple memorable bike rides with the Eagles Cycling Club in Napa. He is survived by his wife, Allison; three children, Bjorn, Brett, and Krista, and their spouses and four grandchildren; as well as a sister, Judith.

Stanton H. Sykes, BS Med '46, of Belvidere, N.J., passed away at his home on March 25, 2022, after a brief illness, with his family by his side. He was 97 years old. Born in 1924 in Phillipsburg, N.J., he was a son of Joseph B. and Mary G. (nee Pope) Sykes. He attended Phillipsburg High School, graduating in 1942, and enlisted in the United States Army in 1943. After scoring well on an aptitude

test, he was recruited into the Army Specialized Training Program and took pre-med courses at the University of Illinois Urbana/ Champaign. It was there he met his future wife, Audrey Benedict, whom he married in 1946. He completed his first two years of medical school at the University of North Dakota in Grand Forks, and then received an M.D. degree from Temple University School of Medicine in 1948. He completed internship and residency programs in Indiana, Ohio, and Pennsylvania, and worked briefly as a physician at Standard Oil in Linden, N.J. In 1951, he was called back to serve as a physician for two years in Allied-occupied Germany. He was one of 15 doctors who, along with other Army personnel, established the 320th General Hospital in Landstuhl, Germany, which later became the renowned Landstuhl Regional Medical Center. He was honorably discharged in 1953, attaining the rank of captain. After returning to the States, he and his wife moved to Belvidere, N.J. Upon moving to Belvidere in 1954, Stanton opened his private medical practice, which he maintained until the 1990s. He resided in Belvidere with his wife of 75 years, Audrey Sykes, for his remaining years. Over the years, he made numerous house calls in Belvidere and the surrounding area. He assisted in bringing many newborns into the world, often in their own homes. He was on the staff at Warren Hospital in Phillipsburg, where he served as president of the medical staff and also as chairman of the Division of Family Practice; was the Medical Director of Warren Haven nursing home for 36 years, which was especially dear to his heart; served as the school physician for the Belvidere School District for over 30 years; and was the plant physician at the Hoffmann-LaRoche facility in Belvidere for a number of years. He served his community well for over 40 years. An advocate of education, Stanton assisted other physicians through the Family Practice Resident Training Program; taught CPR classes for the American Heart Association at various locations in Warren County; and enjoyed hosting international students for many years as a member of the Belvidere Rotary Club. Stanton was a member of The Society of the Sigma Xi, the Scientific Research Honor Society; a life member of the American Academy of Family Physicians; a Diplomate of the American Board of Family Practice; and a long-time member of the Warren County Medical Society, where he also served as president. He received an In Home Care Award from the Center for Home Health Development in 1991, and a Community Service Award from the Belvidere Lions Club in 2001. Stanton is survived by a daughter, Stephanie Ann Sykes Stover and husband, Gerald, of Bethlehem, Penn.; a son, Jeffrey Stanton Sykes, M.D., of Sergeant Bluff, Iowa; and three grandchildren, Elizabeth, Andrew, and Katie Sykes. He was predeceased by his wife, Audrey Benedict Sykes; a sister, Anne Sykes Wright; and a brother, Charles William Sykes.

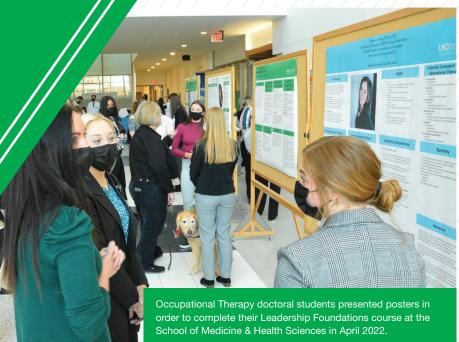


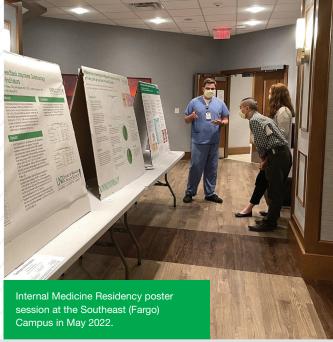
PARTING SHOTS

Did you attend an event related to the UND SMHS? Share it with your colleages. UND SMHS alumni, faculty, staff, students, friends, and family are welcome to send a high resolution photo to kristen.peterson@UND.edu for possible inclusion in the next *North Dakota Medicine*.











A National Leader in Rural Health - Serving North Dakota since 1905 1301 N Columbia Rd Stop 9037 | Grand Forks ND | 58202-9037 701.777.4305 med.UND.edu

ADDRESS SERVICE REQUESTED



SAVE THE DATE

UND Night at Target Field June 24 (Minnesota VS. Colorado)

Alumni Association & Foundation pre-game reception 4–6 p.m. | The Pourhouse, 10 South 5th St., Minneapolis mlb.com/twins/tickets/specials/university-of-north-dakota

UND Homecoming Sept. 26-Oct. 1 UNDalumni.org