



NORTH DAKOTA MEDICINE

University of North Dakota School of Medicine & Health Sciences

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MATCHED!

Class of 2023

#MatchDay

In Family Medicine

At UND CFM-Bismarck



UND SCHOOL OF MEDICINE
& HEALTH SCIENCES
UNIVERSITY OF NORTH DAKOTA



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1,000

scholarships

50

students per year

1

generous heart

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Mary Jenó, '14, '18

Resident/Fellow of Pediatric Neurology at University of Iowa Health Care

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ON THE COVER: Recent M.D. grad Sarah Lesmeister announces her residency match site at UND's Center for Family Medicine in Bismarck, N.D. Below: Leesha Heitkamp and Christy Jesme smile at their residency match sites.



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THE RIGHT DIRECTION



TEAM HEALTH

SMHS Dean Dr. Joshua Wynne (standing) and his team of faculty, administrators, students, and guests at the 48th M.D. Commencement Ceremony at UND's Chester Fritz Auditorium on May 6, 2023.

As we come to end of the 2022-23 academic year and look forward with great anticipation to the new one that begins in July, here are some of the highlights for *your* UND School of Medicine and Health Sciences – looking both backward and forward.

Most importantly, we recently celebrated the graduation of 75 medical students and nearly 230 health sciences students, all of whom have bright futures in a variety of health-related settings. Three separate commencement ceremonies were held in May – one for medical students, one for graduate students, and a third for undergraduate students. Most of our students were in the medical school or graduate celebrations. After graduation, medical students will be heading for residencies both in North Dakota and elsewhere, with North Dakota and Minnesota being the most common destinations. But our M.D. students – now doctors! – matched in great programs across the U.S., including the Mayo Clinic, the Cleveland Clinic, Oregon Health & Science University,

Dartmouth-Hitchcock Medical Center, and the University of Utah. Just more than half the class matched into a primary care specialty (defined as internal or family medicine, Ob-Gyn, or pediatrics), and as has been the tradition, the UND SMHS matched a higher percentage of graduating students in a family medicine residency than the national average.

The School's research and service efforts have grown substantially over time, especially over the past few years. Perhaps the most easily quantifiable metric to measure such growth is the amount of external sponsored funding received by our faculty and staff. The majority of such funding comes from federal agencies, most commonly the National Institutes of Health. Average sponsored funding has increased (using a three-year rolling average methodology) from \$22.2 million to \$39.3 million in fiscal year 2022. Last year was, in fact, a record year for us as we garnered about \$48 million in sponsored funding in 2022!



One of the critically important factors that has enabled and helped accelerate the growth of the School and its various programs in education, research, and service has been the unwavering – and generous! – support we have received over the years from the people of North Dakota through legislative appropriations and the mill levy on property taxes. Together these funding sources account for more than a third of our operating revenue. The very good news is that the UND SMHS did well from a funding standpoint again this year during the recently concluded 68th Legislative Assembly, with almost a 19% increase in funding. Appropriated funding grew from around \$68.12 to \$80.86 million for the coming biennium, a \$12.74 million increase! The largest component of the increase went to funding a salary merit increase pool for faculty and staff averaging 6% in the first year of the biennium and 4% in the second. This is an important recognition by the legislature of the negative impact of inflation on our team members' salaries, as well as a recognition of the excellence with which

they perform their duties. The legislature also thoughtfully provided additional funding for anticipated upcoming increases in health insurance premiums as well as funding targeted at addressing some salary inequities when our salaries are compared with market values. And because the School has enjoyed an increase in student credit hour production in the recent past, we garnered about \$1.9 million more through the student credit hour formula that determines the level for the majority of appropriated funding for higher education.

As we look forward, there are many more great things to come – starting with our incoming medical student Class of 2027 that starts in July and is followed not long after by new and returning students from our wide and varied spectrum of health-related fields, including physical and occupational therapy, medical laboratory science, physician assistant studies, athletic training, public and Indigenous health, and biomedical sciences.

We also will be welcoming new senior leadership to the School as we adjust to the departure of several individuals and the need for new positions occasioned by the growth of our programs. Notable individuals who have left (or will be leaving) include Dr. Don Warne, associate dean for Diversity, Equity, and Inclusion and multiple other roles (who left for a senior position at Johns Hopkins University); Dr. Marc Basson, senior associate dean for Medicine and Research (who is the new dean at the Northeast Ohio College of Medicine), Dr. Janet Jedlicka, chair of the Department of Occupational Therapy (who is retiring), and Brad Gibbens, acting director of the Center for Rural Health (also retiring). The searches for these and the other positions are progressing nicely, and we expect to welcome the new team members to fill these positions in the not-too-distant future. While the incoming folks have large shoes to fill, I am confident that they will be up to the task and will help move us forward.

Thank you again for your interest in and support of the School. Our students, faculty, and staff members are well-aware of the important support – financial and otherwise – we get from our friends, fellow citizens, the legislature, our clinical affiliates and partners, donors, and other advocates, and we thank you sincerely for that support. We truly couldn't do it without you!

Joshua Wynne, M.D., M.B.A., M.P.H.
Vice President for Health Affairs, UND
Dean, School of Medicine & Health Sciences



MATCHED!

Above: Leesha Heitkamp, Christy Jesme, Sa Kong, Nadia Toumeh, Brett Cornforth, Therese Carson, and Erin Eidsness

Page 7: Anne Pius and Mitchell Floura

CLASS OF 2023 MATCH DAY RESULTS

Ali Al Saegh, Emergency Medicine, Campbell University/Southeastern Health Regional Medical Center, Lumberton, N.C.

Mitchell Annis, Emergency Medicine, Florida State University College of Medicine, Sarasota, Fla.

Tiffany Azzarello, Obstetrics-Gynecology, Mercy St. Vincent Medical Center, Toledo, Ohio

Summer Bernard, Pediatrics, Mayo Clinic School of Graduate Medical Education, Rochester, Minn.

Ryan Bjerke, Family Medicine, University of Minnesota Medical School, Minneapolis, Minn.

Kirsten Bokinskie, Obstetrics-Gynecology, Akron General Medical Center/NEOMED Program, Akron, Ohio

KC Braaten, Emergency Medicine, Detroit Medical Center/Wayne State University, Detroit, Mich.

Peter Bueide, Surgery (Orthopedic), University of North Dakota School of Medicine & Health Sciences, Fargo, N.D.

Therese Carson, Internal Medicine, Gundersen Lutheran Medical Foundation, La Crosse, Wis.

Brett Cornforth, Internal Medicine, Hennepin County Medical Center, Minneapolis, Minn.

Natisha Corum, Emergency Medicine, Albany Medical Center, Albany, N.Y.

Emily Decker, Obstetrics-Gynecology, Good Samaritan Hospital, Cincinnati, Ohio

Erin Eidsness, Internal Medicine, Maine Medical Center, Portland, Maine

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

William Fedje-Johnston, Anesthesiology, University of Minnesota Medical School, Minneapolis, Minn.

Mitchell Floura, Neurology, University of Nebraska Medical Center, Omaha, Neb.

Kayla Fussy, Family Medicine, Altru Health System, Grand Forks, N.D.

Rylan Graber, Emergency Medicine, Medical College of Wisconsin Affiliated Hospitals, Milwaukee, Wis.

Liana Haven, Surgery (Preliminary), St. Joseph Hospital General Surgery Program, Denver, Colo.

Alex Hecker, Surgery (Preliminary), University of North Dakota School of Medicine & Health Sciences, Fargo, N.D.

Leesha Heitkamp, Internal Medicine, University of North Dakota School of Medicine & Health Sciences, Fargo, N.D.

Mikaela Herberg, Obstetrics-Gynecology, University of Minnesota Medical School, Minneapolis, Minn.

Brandi Hoffart, Psychiatry, University of North Dakota School of Medicine & Health Sciences, Fargo, N.D.

Christy Jesme, Internal Medicine, University of Utah Health Program, Salt Lake City, Utah

Annabel Jiran, Family Medicine, Oregon Health & Science University, Klamath Falls, Ore.



Merrick Johnson, Transitional Year, University of North Dakota School of Medicine & Health Sciences, Fargo, N.D.

Sa Kong, Internal Medicine, Kaiser Permanente, Los Angeles, Calif.

Heidi Kuznia, Internal Medicine, Dartmouth-Hitchcock Medical Center, Lebanon, N.H.

Wyatt Lutt, Transitional Year, University of North Dakota School of Medicine & Health Sciences, Fargo, N.D.; Diagnostic Radiology, Cleveland Clinic Foundation, Cleveland, Ohio

Sarah Lesmeister, Family Medicine, University of North Dakota School of Medicine & Health Sciences, Bismarck, N.D.

Wyatt Limke, Pediatrics, University of Iowa Hospitals and Clinics, Iowa City, Iowa

William Litchfield, Transitional Year, University of North Dakota School of Medicine & Health Sciences, Fargo, N.D.

Cooper Love, Transitional Year, Campbell University/Cape Fear Valley Medical Center, Fayetteville, N.C.

Jonah Lund, Neurology (Children), Children's Mercy Hospital, Kansas City, Mo.

Talus McCowan, Emergency Medicine, University of Iowa Hospitals and Clinics, Iowa City, Iowa

Alexandria McLearn, Family Medicine, Providence Hospital, Anchorage, Alaska

Zachary McMiller, Neurology (Children), University of Wisconsin Hospitals & Clinics, Madison, Wis.

Timothy Moore, Family Medicine, St. Joseph Hospital, Eureka, Calif.

Brandon Morehart, Obstetrics-Gynecology, Good Samaritan Hospital, Cincinnati, Ohio

Jessica Nelson, Obstetrics-Gynecology, University of Toledo, Toledo, Ohio

Ann Marie O'Connell, Pediatrics, University of Arizona College of Medicine, Tucson, Ariz.

Tracer Overland, Obstetrics-Gynecology, Sparrow Hospital, Lansing, Mich.

Amanda Palme, Internal Medicine, Hennepin County Medical Center, Minneapolis, Minn.

Mikayla Patel, Pediatrics, Spectrum Health/Michigan State University, Grand Rapids, Mich.

Anne Pius, General Surgery, Christiana Care, Newark, Del.

Sarah Prochniak, Obstetrics-Gynecology, Mercy Hospital, St. Louis, Mo.

Zain Qarni, Internal Medicine/Preliminary, University of Chicago Medical Center, Chicago, Ill.; Diagnostic Radiology, St. Louis University School of Medicine, St. Louis, Mo.

Mishell Quiridumbay Verdugo, Pediatrics, University of Texas at Austin Dell Medical School, Austin, Texas

Anna Reinholz, Surgery (Orthopedic), Baylor Scott & White Medical Center, Temple, Texas

Cody Riggle, Psychiatry, University of North Dakota School of Medicine & Health Sciences, Fargo, N.D.

Parker Rosenau, Psychiatry, Hennepin County Medical Center, Minneapolis, Minn.

Keaton Rummel, Transitional Year, University of Tennessee Graduate School of Medicine, Knoxville, Tenn.; Radiation Oncology, Mayo Clinic School of Graduate Medical Education, Rochester, Minn.

Karan Saravana, Emergency Medicine, University of Arizona College of Medicine, Tucson, Ariz.

Justin Schafer, Psychiatry, Hennepin County Medical Center, Minneapolis, Minn.

Natalie Scherr, Obstetrics-Gynecology, HCA Healthcare Kansas City, Overland Park, Kan.

Anja Selland, Internal Medicine, University of Minnesota Medical School, Minneapolis, Minn.

Jordan Shearer, Surgery (Orthopedic), University of North Dakota School of Medicine & Health Sciences, Fargo, N.D.

Seth Sherlock, Family Medicine/Rural (Williston, N.D.), University of North Dakota School of Medicine & Health Sciences, Minot, N.D.

Kalvin Slaubaugh, Family Medicine, Altru Health System, Grand Forks, N.D.

Oliver Sogard, Surgery (Orthopedic), Guthrie/Robert Packer Hospital, Sayre, Penn.

Michael Solc, Psychiatry, University of North Dakota School of Medicine & Health Sciences, Fargo, N.D.

Jacob Stern, Diagnostic Radiology, University of Minnesota Medical School, Minneapolis, Minn.

Luke Teigen, Internal Medicine/Preliminary, University of South Dakota Sanford School of Medicine, Sioux Falls, S.D.; Diagnostic Radiology, Mayo Clinic School of Graduate Medical Education, Rochester, Minn.

Wyatt Telken, Emergency Medicine, University of Nebraska Medical Center, Omaha, Neb.

Mitchell Thelen, Transitional Year, Gundersen Lutheran Medical Foundation, La Crosse, Wis.; Diagnostic Radiology, Mayo Clinic School of Graduate Medical Education, Rochester, Minn.

Drew Thompson, Internal Medicine, University of North Dakota School of Medicine & Health Sciences, Fargo, N.D.

Ryan Toledo, Internal Medicine, University of Arizona College of Medicine, Phoenix, Ariz.

Nadia Toumeh, Internal Medicine, Mayo Clinic School of Graduate, Medical Education, Rochester, Minn.

Allison Valerius, Neurology, Mayo Clinic School of Graduate Medical Education, Rochester, Minn.

Cody Weisel, Family Medicine, University Hospitals, Columbia, Mo.

Joseph Wood, Family Medicine, Swedish Medical Center, Port Angeles, Wash.

UND BY THE NUMBERS

71

medical students matched with a residency program in 2023.

52%

of UND's M.D. Class of 2023 matched into primary care specialties (internal medicine, family medicine, ob/gyn, pediatrics).

13%

of graduates matched into a family medicine residency, well above the national average of fourth-year medical students matching into family medicine.

12

different specialties chosen by the M.D. Class of 2023.



MATCHED!

Back row: Second-year student Bo Lauckner, Wyatt Limke, Tracer Overland, and Karan Saravana.

Bottom Row: Mikayla Patel, Mikaela Herberg, and Ann Marie O'Connell



'UNLEARNING'

An Indigenous Health student (left) shares a laugh with Julie Smith-Yliniemi, director of community-engaged research for the Department of Indigenous Health, and department manager Zauna Synnott.

/// FIRST NATIONS, FIRST GRADUATES

The first graduates of the world's first doctoral program in Indigenous Health walk across the stage at UND

"I have a dream of testifying before Congress," smiles Cole Allick from his Washington State University office in Seattle. "I know it's probably not a high priority for a lot of other people, but I want to be on C-SPAN."

Fresh off the successful defense of his doctoral dissertation on Alzheimer's in the Indigenous community, Allick is set to be the first graduate of the UND School of Medicine & Health Sciences (SMHS) doctoral program in Indigenous Health, managed by the School's first medical college-based Department of Indigenous Health.

Graduating this summer, and being the first program grad by virtue of a surname that starts with "A," Allick, who hails from a small town on the edge of the Turtle Mountain Reservation called St. John, N.D., recognizes the implicit "nerdiness" of his dream to appear on America's public affairs television network. Even so, such an advocacy-oriented goal is a result of the pragmatism he had cultivated even before matriculating into the Ph.D. program in 2020.

"I already see a lot of really great opportunities to use my research and my science as a tool to

help people,” continues Allick, who took an undergraduate degree from UND to Washington State, where he earned a Master of Health Administration degree before “coming home” to UND’s online Ph.D. program. “I can’t just [research] for the sake of a publication. A publication on my [curriculum vita] is wonderful, but I need it to turn into something else. Actionable steps.”

Research in action

This community-based orientation is, in a way, a core feature of UND’s newest doctoral program, admits Melanie Nadeau, M.P.H., Ph.D., interim director of both the degree program and the Department of Indigenous Health.

“One of the beautiful things about our program is that we really represent an interdisciplinary applied research portfolio for students, as well as an academic track,” explains the Turtle Mountain native who was the first epidemiology doctorate with an Indigenous background to graduate from the University of Minnesota’s School of Public Health. “These individuals have a research focus in all areas that you can imagine. Cole – he’s really focused at the policy level. And we have students studying maternal child health, Indigenous methodology, and trauma. We have a student who is a director of tribal health looking at reducing suicide. So, these students are all over the place, and the work they’re already doing is just amazing.”

Established in 2020 by Dr. Donald Warne, the former director of the SMHS Indians Into Medicine (INMED) program who in 2022 became the Provost Fellow for Indigenous Health Policy at Johns Hopkins University, the UND doctoral program in Indigenous health was something of a leap of faith, says Nadeau. The Indigenous faculty at the SMHS had long recognized the nationwide lack of such a degree program in the U.S., and that there was a cohort of potential students interested in such a program. But no one knew if or when such hypothetical students would actually apply to a new program without a track record – in North Dakota, no less.

Apply they did, though. In droves.

“It’s obvious that it was a huge need,” continues Nadeau, noting that the program’s initial student cohort of 18 total students has grown to more than 40 students of various years and backgrounds. “I have to say that right out of the gate we’ve been competitive. And we’ve pretty much reached our max now.”

Part of the program’s success and attractiveness, she says, hinges on its design: a mostly-online program offering two tracks (applied and academic studies) and multiple plans for completing coursework in three, four, or five years, depending on the student’s level of experience and lifestyle, for example working full-time while going to school. In that spirit, the

program’s dissertation design asks students to produce not a single extended research study but multiple policy papers or research studies that give students more than one potential publication before they even graduate.

Local, national, and international

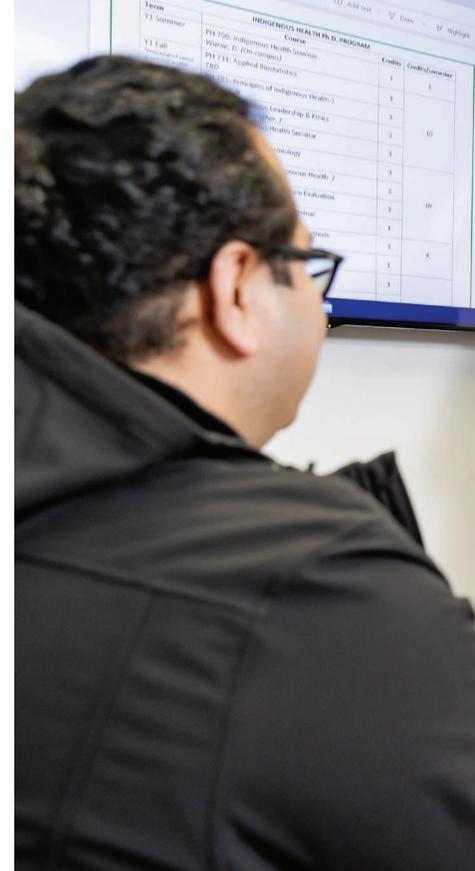
Furthermore, the program’s faculty relish the opportunity to mentor students and connect them with relevant players in the field of Indigenous health from around the country – and world.

This, at least, has been soon-to-be graduate Courtney Fischer-Claussen’s experience.

“I’ve already been able to present on the preliminary results of our research at the International Diabetes Federation Congress in Portugal this past December,” explains the Eagle Butte, S.D., native of her effort to help develop a systematic review of diabetes prevalence among Indigenous populations across the globe. “This has been a really incredible experience. It was nice to be able to meet our international team made up of Indigenous and non-Indigenous researchers from all over. We’re preparing our manuscript now, which is the part of my dissertation, and we’re hopefully submitting it to *The Lancet’s Diabetes and Endocrinology*.”

This “international” component of her doctoral dissertation is but one of three projects Fischer-Claussen has been working on over the past several years at UND. The “local” part of her dissertation is a “concise and comprehensive guide,” she says, that provides cultural protocol to researchers and other professionals who approach Indigenous communities as research subjects. Likewise, her “national” project involves drafting a policy brief that will help, she hopes, remove the federal restrictions on dual participation in the Supplemental Nutrition Assistance Program (SNAP) and the Food Distribution Program on Indian Reservations (FDPIR).

“One of my previous positions was as the American Indian Foods Program Assistant Director, which is housed under the Intertribal Agriculture Council,” Fischer-Claussen says. “It’s prohibited to participate in both FDPIR and SNAP simultaneously, so we’re looking at the health impact of restricting dual participation in these





TRAILBLAZER

Interim Director of the UND Department of Indigenous Health Melanie Nadeau, right, in class with Indigenous Health doctoral students at the UND School of Medicine & Health Sciences.

programs and tying that to food insecurity and the health of Indigenous populations on a national level.”

Despite her interest in national and international Indigenous health policy, Fischer-Claussen knows that her heart remains in the Dakotas.

“I’m definitely very connected to my family, to my home community,” she reflects, thinking about her own pending graduation. “I’m currently a little bit outside of my home community, being in the Black Hills, but it’s still traditionally Lakota land out this way. I definitely see myself working within the region that I’m in now.”

The state of Indigenous health

This new, cross-disciplinary generation of Indigenous health specialists can’t come soon enough, says Nadeau, whose own research tends to focus on longevity and mortality in the Indigenous population, not to mention the continuing health disparities between the Indigenous and non-Indigenous communities.

“The North Dakota tribes range from 6 to 9 percent of the population who are age 65 and older, while in North Dakota generally that number is 14 percent – and this population in Tribal communities is significantly more likely to suffer from one or more disabilities,” she laments, adding that many such statistics are a result of both the persistent poverty within the Indigenous community and the historical trauma that continues to affect contemporary American Indians. “Infant mortality is through the roof for Native people compared to whites. Then, the things we have less of – Alzheimer’s, hypertension – are because we just don’t live long enough.”

Such figures are proof-positive of the need for not only a Department of Indigenous Health in a medical college setting – one which complements an INMED program that has produced 274 Indigenous physicians over the past 50 years – but a doctoral program that is now producing graduates primed to make a direct impact on Indigenous health at the research, policy, and public health levels.

Having fallen quite by accident into Alzheimer’s research, Allick adds that the relative absence of Alzheimer’s disease in the Indigenous

community means that both resources for and knowledge about the condition are hard to come by in Indian Country.

“I think patchwork is the best way to describe it – and that’s not just for resources like insurance and access to facilities, but even education,” he says, describing his dissertation, which will help fill the knowledge gap on culturally-competent Alzheimer’s resources and care for Indigenous Elders. “There’s basically one place for you to go: the Alzheimer’s Association. They’re trying to do a lot of really great work to be kind of that one-stop shop. But there are still some opportunities to really solidify resources at the Tribal level, map out how each tribe is providing those resources, or at least helping direct elders in their communities to these resources.”

The other portion of Allick’s thesis is a chapter on long-term care support and services for Elders slated to be included in a forthcoming textbook on American Indian health policy being edited by Warne. Such a book follows Warne’s and Chair of the SMHS Department of Surgery Cornelius “Mac” Dyke’s 2021 anthology *American Indian Health Disparities in the 21st Century*. Published by Cambridge Scholars on Indigenous People’s Day 2021, the first-of-its-kind book describes in often painful detail the disparities in both incidence and outcomes between the American Indian/Alaska Native community and the rest of the population living in the United States – for the same conditions.

All of this, suggests Nadeau, signals that things are moving in the right direction for Indigenous health, if slowly. Part of that movement includes embedding more Indigenous health content, including an elective on health equity, into the medical curriculum.

“[The class] is currently an elective, but we’re hoping that we can move this conversation into a space where it’s required for all of the students,” says Nadeau, thinking of not only medical students, but future physical and occupational therapists, physician assistants, and medical laboratory scientists. “And then there’s some holistic healing [education] that’s going across the [interdisciplinary] curriculum. We really want to be unified in those efforts to ensure that we’re including the breadth and depth of what’s needed.”

By Brian James Schill

CLASS OF



MEDICAL DOCTOR



PHYSICIAN ASSISTANT STUDIES



INDIANS INTO MEDICINE
Grand Forks, N.D., campus

'23

The UND School of Medicine & Health Sciences hosted an M.D. Commencement ceremony on May 6 and saw many students cross the stage at the UND General Commencement ceremony on May 13, 2023.

The following are graduate class photos for all May 2023 graduating cohorts housed within the SMHS:



UND BY THE NUMBERS

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

2,534 PHYSICIANS

more than

9,700 HEALTH SCIENCE GRADUATES

and

274 INDIGENOUS PHYSICIANS



DOCTOR OF OCCUPATIONAL THERAPY
Grand Forks, N.D., campus



DOCTOR OF OCCUPATIONAL THERAPY
Casper, Wyo., campus



MASTER OF PUBLIC HEALTH



ATHLETIC TRAINING

Left-to-right: Braden Prochnow, Jamie Thorvilson, Harley Walking Eagle, Morgan Kroshus, and Bryson Stastny



INDIGENOUS HEALTH

Cole Allick

USING DATA TO CARE FOR NATIVE ELDERS

The Navajo Nation is hoping a needs assessment survey can help shape real change for Native Elders

Often driving on dirt roads, meal delivery drivers provide a much needed lifeline for the elderly population of the Navajo Nation. In rural locations where phone lines are rare and Internet connections are rarer, when an elderly individual or family needs something, they discuss the matter with their local driver. Whether the need is wood to keep a house heated during the winter; water to use for drinking, cooking, or cleaning; or medical care, it is the delivery drivers who are in touch with these residents and who bring their needs and concerns to one of 80 senior centers across three states: Arizona, New Mexico, and Utah.

Reflecting on all this, Anslem Lewis, Jr., shares something his grandma reminds him: the reason he has a job is because of the Elders on the Navajo Nation reservation. So he needs to continue to take care of them. It is advice he has taken to heart. He uses it in his everyday work and with it helps inspire the drivers and other staff that serve the Elders.

“It goes back to our teaching,” shares Lewis, interim health service administrator charged with overseeing the Division of Aging and Long-term Care Support for the Navajo Nation. “We do as much as we can to respect our Elders, take care of them, no matter whose grandma or grandpa they are.”

Having worked with the Division for three years, he is all too familiar with the needs of the Elders his department serves. Heat, food, reading glasses, hearing aids, dentures, and knowing others care for them are some of the most pressing needs his office sees.

Lewis oversees five agencies, 80 senior centers, and a staff of 250, including drivers, cooks, program supervisors, and office staff. He is also overseeing the finance personnel, including the vital Title VI funding. And he understands the significance of grasping the needs of the elderly population.

COVID challenges

Lewis knows he wouldn't be able to serve the large Elder community without the dedication of his staff. This was especially true throughout the pandemic, when congregate meals were halted at the senior centers. Only curbside or home-delivered meals were available.

“Big shout out to my team,” Lewis continues. “If it wasn't for them, a lot of the Elders wouldn't get the supplies they need. It was the field staff, senior center staff, the supervisor, cook, and drivers; they are the ones that kept giving our Elders hope. We are thankful, because without them none of this would have been possible.”



The pandemic presented several challenges for Lewis and his staff. One of the team's primary goals is to ensure Elders have nutritional options. So when the senior centers closed indoor dining, requests for home-delivered meals greatly increased, leading to food shortages from their vendors. These vendors were competing with other organizations for food supplies, often had limited hours, and the number of people allowed in facilities was reduced.

Another challenge was transportation. The additional wear and tear on vehicles making the deliveries created breakdowns and increased time spent trying to secure another vehicle. Another transportation need from Elders was bringing them to get vaccinated or, if they were sick, a ride to get tested.

The Navajo Nation, like many reservations across the country, had many great losses of all sorts due to the pandemic, including Elders and even Lewis's staff.

"We lost some staff," says Lewis, "who were still working and caught the virus. It didn't end well for them. It hit home for us, because we lost some Elders, and when it is a routine to deliver to someone and they aren't there anymore, it takes a toll. And when you lose staff, that hurts too. We lost six or seven drivers."

The Elders really missed the socializing that COVID took from them, so Lewis's staff worked to hold five to six Elder Fests around communities to bring people together and provide lunch. To help people stay active, they have been providing some exercise activities, stress balls, exercise bands, and are working on procuring more crossword books and puzzles.

Little things, big rewards

The most rewarding part of his job is when he hears stories from the senior centers. One of the programs allows Elders to apply for items such as reading glasses, hearing aids, or dentures. Often

Elders are not aware of the program, so a meal delivery driver might ask about a need. One woman was asked if she needed glasses. Her response was that she was able to see, so it was good enough. But when she put the glasses on and was handed a newspaper, she was able to read the news herself. She no longer had to rely on anyone to read it to her. Because of a simple item, she gained some of her independence back.

"The price of everything is going up," Lewis says, "so we try to help out as much as we can. Sometimes Indian Health Services (IHS) or Medicaid will provide services, but often we are a last resort. This program has been really successful. I think within our first quarter we served over 800 Elders with one of those three needs: glasses, hearing aids, and dentures. I would like to advocate more with our council because that funding is based on the stock market since it's in a trust fund. If the stock market does well, we do well, but I wish we could have a set allocation for that."

He is grateful for a recent donation of 10,000 reading glasses that his department was able to distribute in January. "It really is the little things that most of us take for granted that bring light into people's life," he said.

The importance of data

In 1978, the Older Americans Act was amended to include Title VI, which established programs for the provision of nutrition and supportive services for American Indians, Alaska Natives, and Native Hawaiians, according to the Administration for Community Living (ACL).

The program has since expanded to include caregiver support services. Eligible tribal organizations receive grants in support of the delivery of home- and community-based supportive services for their Elders, including nutrition services.



The National Resource Center on Native American Aging (NRCNAA), within the Center for Rural Health, at the UND School of Medicine & Health Sciences, facilitates the Title VI Needs Assessment, *Identifying Our Needs: A Survey of Elders*.

This survey assists tribes, villages, and homesteads in creating a record of the health and social needs of their Elders. Survey results document the needs of Elders to help with tribal planning, long-term care discussions, and grant applications. The results also satisfy the requirement for Title VI grants from ACL, which are awarded every three years.

The following services are provided to participating organizations: a survey instrument, assistance with sampling, technical support, data entry, data analysis, statistical profiles of our Elders, comparisons with national norms, and infographics.

Typically, the surveys are given to Elders at congregate meals or events. This allows more Elders to participate, and if they have questions, staff are available to assist. The anonymous surveys are mailed to NRCNAA to process. After the data analysis is completed, NRCNAA provides data results to participating organizations.

Dr. Collette Adamsen, the director of NRCNAA, oversees the needs assessment survey process and says the staff understood the challenges the Title VI programs had trying to complete the surveys throughout COVID. Senior centers had to move away from congregate meals as more were picked up curbside or delivered to homes. Prioritizing the health and safety of Elders, families, and staff, programs were encouraged to add measures such as COVID-19 testing, mask requirements, and distancing when Elders were brought together.

In order for tribes to take part in the survey, they must have a signed tribal resolution. In a previous cycle, the Navajo Nation began the survey inquiry. Due to the lack of the tribal resolution, however, the Nation was unable to get the survey results processed. This time, the Navajo Nation Council signaled its full support through a resolution.

Planning for future needs

When asked why the council was ready to complete the survey process this time, Lewis said, “We want to extend our contract with Title VI through the 2023-26 cycle, but also the information we provide will play a big part in helping us plan for the future. We now have accurate and up-to-date numbers we can present to our council and oversight committee. It will lead us to where we need to be, where services will be needed in the future.”

The Elder count the Navajo Nation provided for the needs assessment was 31,741. Based on that number, a random sample size of 389 was recommended. A total of 397 surveys were completed and analyzed.

“We were very pleased with the number of surveys we received from the Navajo Nation,” said Adamsen. “As the largest reservation in the country, we understand the importance of finding out what the Navajo Elders might be missing, or what they are pleased with. The data we are able to provide to Anslem and his team helps them advocate for the specific needs and resources to allow them to continue to serve their Elders.”

By Jena Pierce



HELPING THOSE WHO HELP OTHERS

The North Dakota Qualified Service Provider Hub assists rural caregivers

Rural communities are idyllic places to live for many. The remote and quiet qualities of such places become conductors for relaxation and tranquility. The strong bonds formed with neighbors and friends likewise root families to the area. But as residents age, the characteristics that may have drawn them in often become barriers. The tranquility becomes isolation. Limited healthcare services in small towns transforms into long commutes for care. In time, people face a painful question: will it be necessary to leave their homes and move to a location where care is more easily accessed?

Qualified Service Providers (QSPs) may provide at least a partial solution to this dilemma by bringing caregiving services to rural residents in their homes. A QSP is any person who provides care for individuals who qualify for home and community-based services

from the North Dakota Department of Health and Human Services (ND DHHS). The individuals needing care are generally aging adults or adults with a physical disability. A QSP can provide an array of services, including personal care, chores, homemaker services, companionship, and transportation.

A QSP can either work as an individual, where they run their own business and have more autonomy over which clients they serve, or as an employee of a QSP agency. A select number of QSPs are considered Family Home Care Providers -- someone who directly provides care to an individual who lives with them, usually a family member or a spouse. Currently, North Dakota has over 1,000 individual QSPs, 144 agencies, and 236 Family Home Care Providers.

A hub of information

Because QSPs work to allow aging in place to become a viable option in rural communities, the QSPs themselves need support and guidance. To support this ever-growing and vital segment of the workforce, the North Dakota QSP Hub was established.

Housed at the Center for Rural Health (CRH) at the UND School of Medicine & Health Sciences, the North Dakota QSP Hub is just what it sounds like – a hub of information to help QSPs around the state with any questions they have. The basis for the QSP Hub was founded in the Money Follows the Person (MFP) grant. The MFP program focuses on increasing the use of home and community-based services and reducing the use of institutionally-based services.

“The idea of the grant is that individuals should be able to receive services in the least restrictive environment possible,” Rebecca Quinn, director of the QSP Hub, explained. “It is meant to encourage the development and utilization of community-based services to allow residents to live where they want for as long as they would like.”

When supplemental funding became available in 2021, creating a resource center for QSPs became a priority. CRH partnered with the ND DHHS to develop the work plan. The Hub, which hosts a QSP advisory group, began receiving phone calls in April 2022 and now provides one-on-one technical assistance for enrollment, billing, and renewal support, small business development, topical training, and new QSP orientation.

A rewarding experience

Missy Johnson, vice president of home care services at Home Care Companions, a QSP agency, has utilized the QSP Hub’s services and notes how important they have become to QSPs. “The QSP Hub has been essential for individual QSPs. We’ve had people call us for help, but there wasn’t a lot we could do for them. The Hub has stepped up as that resource that they can go to.”

Johnson has worked at Home Care Companions for 15 years, owning and running the business for much of that time. In her time with the QSP agency, Johnson has watched it grow from a client base of about 50 to over 120 and expand to having locations in Grand Forks and Bismarck, N.D.

One of the 72 QSPs working at Home Care Companions is Jessa Anderson, a junior at UND majoring in biology with a goal to become an optometrist. As a caregiver, she provides personal care, meal assistance, transportation services, and medication management, all the while gaining experience and furthering her passion for helping others.

“The people that I care for are so grateful to be able to stay in their home,” Anderson said with a smile. “It is so rewarding to build

relationships with them and know you are making a huge difference in their lives.”

Becoming a valued resource

One particular challenge that the QSP Hub has helped navigate has been the implementation of the Electronic Visit Verification (EVV) System. The EVV System is a way to track care provided and hours worked by a QSP with a phone or computer. Before it was implemented, many QSPs were tracking the hours they worked on paper. Throughout this new process, QSPs have struggled to transition to the new digital system. Without a resource to turn to, many QSPs felt burnt out.

“It really hurt Family Home Care,” said Johnson. “Some QSPs joined an agency to manage the paperwork, but others became overwhelmed and bailed. We lost a lot of individual QSPs because of it, but with the QSP Hub, that doesn’t have to be the outcome anymore.”

Daniell Deis, education coordinator for the QSP Hub, expressed the appreciation the Hub has received from QSPs. “A lot of people are looking for reassurance that someone received their call or email and are usually okay if we don’t have an answer right away. They’re just looking for someone to talk to and acknowledge their challenges. We tend to be a resource that people hang on to.”

Johnson agrees: “These services are necessary. Just a two-hour visit a week can be life or death to some people and the Hub is playing a vital role to keep it going and aid those who are there. It wasn’t always possible to stay at home and age in place, but now it’s being supported and there are organizations in place that will help that happen.”

Looking ahead

The QSP Hub has made large strides in its first year of operation, and it is not slowing down anytime soon. Recruitment is one avenue that the organization – which is aiming to visit schools and campuses and host a career class on QSPs to bring new people to the field and educate the community – is excited to pursue.

“What we’re doing now and everything that we’ve accomplished is just the beginning. Our plan is to continue to evolve and provide more and more support,” said Deis. “We want to be the solid, supporting foundation for QSPs.”

“When I think about rural health,” Quinn reflected, “it does not get more rural than providing personal care for someone in their home to allow them to be able to stay in our communities. This is the most basic, direct form of rural healthcare that you can provide. Our impact is two-fold. We’re providing assistance so the individuals who need services can stay and keep communities vibrant, and it’s creating employment opportunities in those rural areas.”

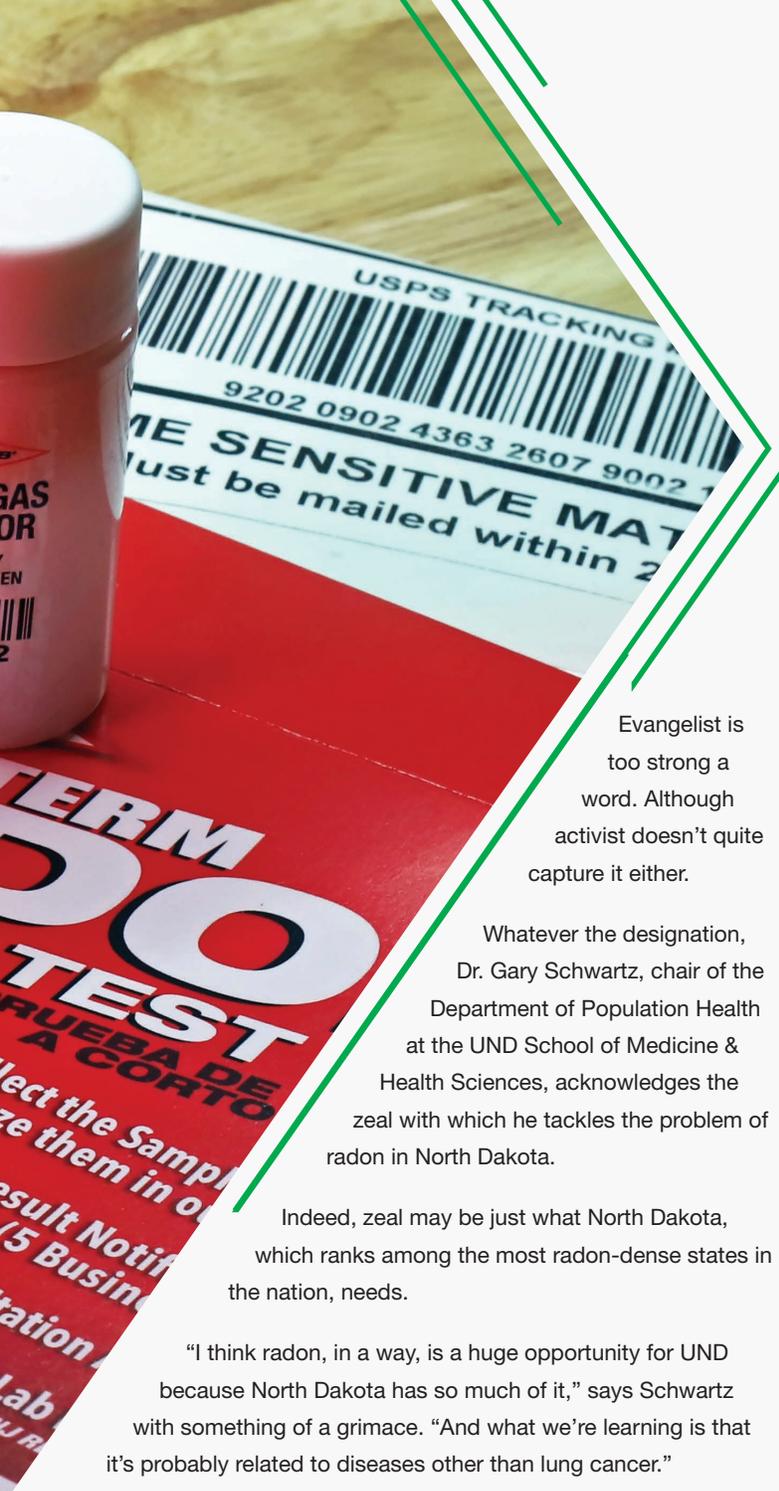
By Jessica Rosencrans

YOU'RE GONNA HEAR ME

ROAR

SMHS researchers partner with the UND Department of Communication and Grand Forks Public on radon testing.





And as rafts of studies suggest, average levels of 4 picocuries per liter (pCi/L) and higher are known to increase the risk of at least lung cancer, and likely stroke, says Schwartz, adding that nearly every North Dakota county has an average radon level that exceeds 4 pCi/L and one out of every 15 homes nationwide has high radon levels.

Steeped in such studies on the effects chronic radon exposure has on cells, tissues, and organ systems, Schwartz means that while the radon-lung cancer connection is well-established, it is very likely that radon contributes to a host of other conditions, from chronic obstructive pulmonary disease (COPD) to stroke to some forms of leukemia.

“If radon contributed even modestly to stroke or COPD, that’s incredibly important to know, so there are a lot of reasons why we’re studying radon – not just for lung cancer,” he says. “And the fact that we have such massive exposure to it here in North Dakota means we have an opportunity to become an expert in something big. And it’s a good thing to be an expert on the stuff in your own backyard, because no one else is going to do it for you.”

You’re gonna hear me ROAR

To that end, Schwartz helped establish the Radon Outreach and Research (ROAR) project at UND. The goal of ROAR, he says, is to improve community health not only through directed radon research, but by informing the public of the risks of radon and, subsequently, providing access to radon detection and mitigation resources.

ROAR initiatives already underway include partnering with Grand Forks Public – the city’s public library – on free radon test kit lending; a project with chair of the SMHS Department of Family & Community Medicine, Dr. David Schmitz, wherein callers to the ND Quits Tobacco Quitline are offered free radon counseling and free radon test kits; and the development of an experimental radon test chamber, to be used in animal studies.

This last task has been embraced by newly-minted Ph.D. Mark Williamson, a research assistant professor in the Department of Population Health. Calling such test chambers rare in institutions of higher education, particularly in the Midwest, Williamson says that his association with the UND-based Dakota Community Collaborative on Translational Activity (DaCCoTA) provided him and Schwartz with an equipment grant to help purchase materials for a radon test chamber, soon to be housed at UND.

“There are a couple of these [chambers] worldwide, but there really isn’t a lot of infrastructure for that type of research – at least at a reasonable price,” Williamson explains. “We hope to build that infrastructure here to be able to have mechanistic radon-based studies.”

Evangelist is too strong a word. Although activist doesn’t quite capture it either.

Whatever the designation, Dr. Gary Schwartz, chair of the Department of Population Health at the UND School of Medicine & Health Sciences, acknowledges the zeal with which he tackles the problem of radon in North Dakota.

Indeed, zeal may be just what North Dakota, which ranks among the most radon-dense states in the nation, needs.

“I think radon, in a way, is a huge opportunity for UND because North Dakota has so much of it,” says Schwartz with something of a grimace. “And what we’re learning is that it’s probably related to diseases other than lung cancer.”

Radon – number 86 on the periodic table of the elements – is a colorless, odorless, naturally-occurring radioactive gas. It emerges from the breakdown of the uranium and thorium embedded in our state’s topsoil. North Dakota has higher levels of ground-based radon, relative to many other states, due to its geological history, wherein bulldozing glaciers brought these elements closer to the Earth’s surface millennia ago. After the glaciers melted and humans began building increasingly well-sealed homes on such a terrain, radon gas levels tended to collect in prairie basements, especially if the homes’ foundations had even small fissures in them.

By “mechanistic,” Williamson means research studies that go beyond mere observational studies of the most superficial effects of radon on animals to produce papers that focus on biological processes and the pathophysiology of a disease – research that’s cell-based and data-driven.

“There’s a lot you could do with a chamber here,” Williamson continues. “We’ve purchased the parts and have most of the approvals. Now we’re really just working hard to find a location that can be approved and renovated. That’s a still ongoing process, but we’re doing our best to make that a reality.”

Williamson, who hopes to have the chamber up and running by the middle of 2024 at the latest, adds that the scholarship such a project could produce would both launch a variety of interdisciplinary radon studies in the region and serve to enhance UND’s reputation nationally. Describing the type of animal studies his team could design, he says, tongue-in-cheek, that the sky’s the limit with radon.

“There’ll actually be four different chambers. You could have a control group – who have no radon exposure – and increase the levels of radon in the other chambers and see if there’s higher incidences of cancer, or if exposure makes existing conditions worse.”

A cancer test for your house

And that’s just the beginning. For his part, Schwartz, who specializes in cancers of unknown etiology, says that the local data implicating radon in a variety of conditions is already compelling – and that a public university-based test chamber could do a world of good in building on existing literature.

Pointing to North Dakota’s statistically outsized incidence – first out of 50 American states – of chronic lymphocytic leukemia (CLL), a cancer that occurs primarily among the elderly, the researcher says that it’s quite possible that radon is involved.

“About 70% of CLL is diagnosed accidentally, in the course of other medical care,” says Schwartz. “I saw these data and thought ‘gosh, what’s that about?’ I didn’t know. Nobody does – we don’t know what causes chronic lymphocytic leukemia. But most leukemias are caused by exposure to radiation. So I asked myself, naively, ‘do we have any radiation in North Dakota?’ Well, it turns out that the most common source of ionizing radiation, the kind that causes cancer, is radon at home.”

This is where the test chamber might help determine the cause and/or contributing factors of something like CLL.

Even so, Schwartz understands the general lack of awareness about radon in the region: getting the public’s attention about the dangers of a colorless, odorless gas that might produce a health



TEAM RADON

Left-to-right: Tonya Palmer, Wendy Wendt, Gary Schwartz, and Soojung Kim discuss radon communication and outreach at Grand Forks Public in April 2023. (Photo courtesy Joonghwa Lee/UND Department of Communication)

problem years from now can be a hard sell. This is why good data and good communication are keys to helping change community behavior. And part of the way to do that, he says, is to adapt the literature on cancer screening and human behavior to radon testing.

To that end, Schwartz has been working with UND Department of Communication chair and associate professor Soojung Kim on communicating the risks of radon. Kim met Schwartz when she was earning her Master of Public Health degree at the SMHS. The pair bonded over changing behavior through communication and recognized that getting people to test their homes for radon involved solving communication issues more than anything.

“Our recent clinical trial data on the results of distributing short-term charcoal radon test kits show that despite the receipt of free



radon test kits, they are rarely returned to the laboratory,” Kim says, adding that simplifying the testing and remediation process – and communicating the ease of such home tests – has been enormously productive. “These findings strongly suggested that an alternate means to promote radon testing was needed.”

Nodding at his colleague’s comments, Schwartz says that he’s happy to be at the forefront of both the on-the-ground research into radon and the campaign to communicate the results of that research.

“The beauty of free, electronic tests is that they remove that particular barrier. You don’t have to put a test in an envelope or mail it. You don’t have to do any of those things, because the answer is right there,” Schwartz concludes of the Grand Forks Public’s digital take-home radon tests. “It’s much more like a COVID test that you

can get for free. And those work because people take them and 10 minutes later you get a positive result or you don’t. If you think about testing your house for radon, it’s a cancer test for your house. And I think if you look at it with that much wider lens, you get a better sense of how to fix the problem.”

*By Brian James Schill
Patrick Miller contributed to this story*

A BREATH OF FRESH AIR

Respiratory virus researcher Masfique Mehedi tackles RSV, COVID, and influenza at the UND School of Medicine & Health Sciences

As with many papers in the sciences, a series of seemingly benign phrases belied a more significant result: “We confirmed RSV infects primarily ciliated cells by detecting RSV [nucleoprotein] mRNA in the infected ciliated but not in the goblet or basal cells,” wrote Masfique Mehedi, Ph.D., and his research team in a paper published in *Virus Research* early in 2023.

Translation: we now know what’s happening at the cellular level that makes respiratory syncytial virus (RSV) dangerous for infants in particular – and it’s not systemic in nature.

This is all good news, said Mehedi, an assistant professor in the UND School of Medicine & Health Sciences (SMHS) Department of Biomedical Sciences specializing in RSV, in so far as knowing better the pathology of the virus allows researchers to focus on better treatments for the disease.

This knowledge also, somewhat fortuitously, helps researchers understand just a bit more about that other high-profile lung infection: SARS-CoV-2, the coronavirus behind the COVID-19 pandemic.

RSV and/or bronchiolitis?

But first RSV.

Identified in 1956, RSV is a common viral infection of the lower airway. It takes its name from the fact that infected cells fuse to produce multi-nucleus cells, or syncytia, in the airway’s outermost cell wall, or epithelium. These infected cells become inflamed and expand into the airway, narrowing the host’s bronchioles (those branches within the human lung that end in the alveoli where oxygen is absorbed) and complicating respiration in a condition known as bronchiolitis.

While the infection is usually unremarkable in healthy adults and children ages two and up, it can be serious for infants in particular because the inflammation of babies’ already tiny airways can obstruct breathing very quickly.

But the specific mechanism of that inflammation, which is key to how the virus functions, has been less well-known, said Mehedi.

“In our bronchial model, upper-layer cells are infected by RSV and the infection is limited to that specific cell type – it does not infect other cell types,” explained Mehedi to *North Dakota Medicine* from his second-floor office in the SMHS. “As a result, [RSV] does not damage the epithelium. This means that over a period of time the infection resolves on its own. It may recapitulate – some of us may get RSV often – but most adults have no problem.”

More specifically, Mehedi’s team found that the bronchiolitis experienced by RSV patients was occurring because the cytoskeletons of infected airway cells – the complex network of interlocking proteins in cells’ cytoplasm – was swelling, in some cases to double the size of uninfected cells. Despite this swelling, RSV left the cells’ membrane or “skin” intact, resulting in an undamaged cell wall after the inflammation had subsided, almost as if there had never been an infection in the first place.



“RSV is diagnosed as ‘bronchiolitis’ 99% of the time, so physicians previously didn’t even test for it,” continued Mehedi, speaking of the pre-COVID adult population, which is typically given nothing by way of treatment other than the tried-and-true

prescriptions of bedrest, fluids, and anti-inflammatory medications – with the occasional bronchodilator. “They know that bronchiolitis is RSV, so what’s happening is that adults are generally okay during and after infection.”

A baby’s airway is much thinner, though, which is why providers tend to see “severe pathophysiology” in that population. So it is that finding novel treatments for the infection feels especially important this year, Mehedi added, given the high rate of RSV infection among children that providers have seen of late.

As Mehedi put it, the United States experienced a surprisingly early and notably severe surge in cases of RSV in late-2022. Pointing to one Centers for Disease Control and Prevention (CDC) report, Mehedi noted too that after a few years of reduced prevalence of the virus – due likely to the infection control protocols brought on by the pandemic – the rate of RSV hospitalizations jumped by a factor of ten in Nov. 2022, relative to Nov. 2019.



GOING VIRAL

Dr. Masfique Mehedi in his lab on the UND campus.

“Because we don’t have a vaccine for people under age 60, or therapeutics to treat RSV, the virus still causes 34 million acute lower respiratory infections globally,” he said. “Pre-term babies, infants, and young children are the most vulnerable to getting a severe disease from RSV infection, so we need to find better ways of helping this population.”

Wherefore vaccines?

All of this begs two questions: why the surge now and what is the status of an RSV vaccine, for children in particular?

This is where the conversation gets thorny, admitted Mehedi, who, after working with former National Institute of Allergy and Infectious Diseases (NIAID) principal investigator and RSV specialist Dr. Peter L. Collins, has been managing his own lab at UND since 2017.

On the surge question, it’s likely that the increased incidence of RSV is due not only to a relaxing of pandemic protocols but the more frequent testing of children for the virus, Mehedi said, which is another result of COVID-19.

“Generally, clinicians confidently identified RSV as the cause of bronchiolitis without generic RSV testing, since RSV is known to cause bronchiolitis,” he said. “However, since 2022, RSV has been included in the diagnostic panel with COVID testing. Therefore, RSV has been detected in higher numbers than usual.”

Concerning the vaccine, Mehedi, who is very much in favor of vaccination generally, admits that the necessity of an RSV vaccine for a large majority of the population and for infants remains an open question in the field. Citing the distinction between the variety of potential RSV vaccines currently undergoing clinical trial, Mehedi suggests that the “live attenuated” vaccines – which utilize a reduced form of the virus in question to induce the immune system to produce antibodies against that virus – seem to be the safest and most effective option for the infant population.

But not all vaccines being reviewed are live attenuated. And recently, the FDA approved an adjuvanted RSV vaccine for patients age 60 and older only.

“For kids, the vaccine platform should be live attenuated,” Mehedi insisted, referencing one paper authored by Collins that notes how the “live-attenuated approach continues to offer a number of advantages for development of an RSV vaccine for RSV-naive infants and young children.” “That is the best way of vaccination for those under two years old.”

RSV vs COVID

And given his interest in infections of the airway, Mehedi was obviously primed to study SARS-CoV-2 as soon as it emerged in 2019. Since 2020 his team has contributed to five published papers on coronavirus, helping researchers and physicians understand the differences between SARS-CoV-2 and RSV.

“Both viruses use a similar droplet or airway transmission, but they differ in their pathophysiology,” explained Mehedi, adding that while both viruses contact the bronchial wall, only RSV sticks. “What I mean by that is that RSV always causes bronchiolitis, and only in rare cases pneumonia. But SARS-CoV-2 never causes bronchiolitis. It very often causes pneumonia – and almost anything you can name – because it becomes a systemic infection.”

This ability to move past the epithelium and, thus, enter the bloodstream is what has made SARS-CoV-2 so serious, he added.

Discussing one of his other papers from 2023 that records the “translocation” of mRNA and “spike” protein from the cytoplasm into the nucleus of the SARS-CoV-2 virus – something no researcher had seen before in the laboratory setting in a coronavirus – Mehedi chooses his words carefully.

Researchers have seen this “nuclear localization signal” in viruses before, he said, just not in the spike protein of SARS-CoV-2. Given the media hype over the virus’s origins, this discovery is both a big deal and remains difficult to explain in so far as proving definitively that the insertion of such protein and/or mRNA into a nucleus was done intentionally, as opposed to being the result of one or more genetic mutations, is hard to do.

In any case, this novel feature of SARS-CoV-2 may be the culprit behind what is being called “long COVID” wherein some COVID sufferers feel the virus’s aftereffects – brain fog, loss of taste/smell, headache, lethargy – for months after infection.

COVID-19 aside, RSV at least remains incapable of producing such systemic or long-term illness. And Mehedi and his lab are doing everything in their power to help keep it that way.

By Brian James Schill

McLean named Associate Dean for Wellness at UND School of Medicine & Health Sciences

Andrew J. McLean, M.D., M.P.H., clinical professor and chair of the Department of Psychiatry & Behavioral Science at the UND School of Medicine & Health Sciences (SMHS), has been named the School's Associate Dean for Wellness.

This appointment follows a trend at the School and across the nation to dedicate more resources to student, staff, and faculty wellness in the wake of demonstrable increases in burnout, depression, substance use disorder, and suicide among the medical student and health provider populations over the past two decades.

"We know that, nationally, behavioral health concerns among trainees and practitioners have been increasing for some time," said McLean, explaining the "profound" reward and risk that come with dedicating one's life to the provision of

healthcare. "The UND School of Medicine and Health Sciences is committed to preparing our students and residents to be successful and healthy both in training and in practice. I believe this position is a reflection of that commitment."

Referencing the School's "fantastic" wellness advocates Michelle Montgomery and Dr. Melissa Naslund, McLean added that his vision for the new position is both "to expand on the work being done with and for students and residents by this team, and to look systemically at wellness from an interdisciplinary and prevention standpoint."

In addition to his existing responsibilities, McLean will now assume the role of designing, implementing, and overseeing an organization-wide strategy to advance wellbeing among all members within the SMHS – and students in particular. Specific responsibilities of the role include

leading the School's effort in education and practice regarding health promotion and integrative wellness as well as issues related to substance use and mental health; advocating for programs that foster and maintain an institutional culture of well-being; serving as the SMHS representative to external partners in efforts related to health promotion; and serving as an ad hoc member of the SMHS Dean's administrative leadership team.

A longtime clinical faculty member at the SMHS and Fargo-based provider of psychiatric care, McLean obtained his medical degree from UND in 1987 and completed residency training in psychiatry at the University of Wisconsin. Prior to joining UND's Department of Psychiatry & Behavioral Science on a full-time basis, McLean was medical director of the North Dakota Department of Human Services.

UND School of Medicine & Health Sciences recognizes nearly 230 graduating health sciences students

In addition to the 75 new medical doctors graduating from the University of North Dakota School of Medicine & Health Sciences (SMHS) this year, the School recognized nearly 230 students from its health sciences programs who graduated on Saturday, May 13, 2023.

"I have learned so much about myself professionally as well as personally during my years at UND," beamed Lakeville, Minn., native Dominique Menard, who is taking home an occupational therapy doctorate (OTD) degree this weekend. "I am so excited about being able to make an impact on the next generation of children and youth. I'm confident that the UND OT Department has prepared me for what's to come."

Menard, who is set to begin a position as a pediatric occupational therapist in August, is one of 48 Department of Occupational Therapy students who graduated on May 13.

Occupational therapy notwithstanding, health sciences departments represented at UND's Spring Commencement included not only one doctoral graduate of the new Department of Indigenous Health, but students from programs in medical laboratory science (77), physical therapy (49), physician assistant studies (33), public health (15), and athletic training (5).

Some programs will graduate students this summer as well. Both the SMHS public health program and the Department of Biomedical Sciences, for example, will see four August graduates from their respective programs, while the Department of Physical Therapy will see one student take a Doctor of Physical Therapy (DPT) degree this summer.

"It's really been an incredible experience," added Eagle Butte, S.D., native Courtney Fischer-Claussen, who is part of the first graduating cohort of UND's world-first doctoral program in Indigenous health.

"The process of unlearning certain practices and focusing on Indigenous health, plus respectfully conducting research with Indigenous people and creating health programs, will be very impactful in Indigenous communities."

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

"I'm definitely excited for this next step, and I definitely believe the medical laboratory science program and its faculty have made me well-prepared not just for the field but for my professional career in general," added Bowman, N.D., native Brady Roemmich, who is graduating with his Bachelor of Science degree in medical laboratory science and continuing a role he is already in at the Altru Health System hospital laboratory. "We're very fortunate to have such a great program here at UND."

Ruit appointed SMHS senior associate dean for education, medical accreditation, and faculty affairs



Kenneth G. Ruit, Ph.D., associate professor in the Department of Biomedical Sciences and associate dean for education and faculty affairs, has

been named senior associate dean for education, medical accreditation, and faculty affairs at the UND School of Medicine & Health Sciences (SMHS).

In addition to his existing responsibilities, in this new role Ruit will provide leadership, support, and oversight for accreditation and continuous quality improvement efforts at the SMHS. This means Ruit will support SMHS administration, faculty, staff, and medical students as they work to meet the accreditation requirements of the Liaison Committee on Medical Education (LCME)

for the medical student educational program. He will also work with SMHS curriculum committees of the medical program on an ongoing basis to oversee and support the review and quality improvement of the curriculum; review the current and future LCME standards and elements through engagement with LCME; and lead the Office of Medical Program Accreditation and Quality Assurance (OMPAQA).

“Graduates from our high-quality programs and our faculty’s scholarly achievements are impacting healthcare in North Dakota and nationwide every day,” said Ruit, who with the new title is taking on the work of retiring SMHS Chief Accreditation Officer Dr. Stephen Tinguely. “That’s a reflection of the value we place on fostering an environment where students and faculty members can achieve their personal and professional goals. This also shows our School’s commitment to excellence and ongoing quality improvement – a value strongly emphasized by accrediting bodies

like the LCME. I am excited to be given the opportunity to serve the School in this role.”

Following an April 2022 site visit to the SMHS by the LCME, North Dakota’s only school of medicine was given full reaccreditation status in October 2022. This accreditation will last eight years, meaning the next full survey visit by the LCME will not occur until 2030. Sponsored by the Association of American Medical Colleges (AAMC) and the American Medical Association (AMA), the LCME is recognized by the U.S. Department of Education as the nation’s authority for the accreditation of medical education programs leading to the M.D. degree.

Ruit received his Ph.D. in cell biology, neurobiology, and anatomy from Loyola University of Chicago in 1989. A faculty member at the SMHS since 1991, he teaches human anatomy and neuroscience to undergraduate, graduate, and medical students. He has served UND in a variety of administrative roles since 1998.

Rural and Public Health Awards recipients announced

The 38th Annual Dakota Conference on Rural and Public Health, held this year in Bismarck, included the Rural and Public Health Awards Banquet to recognize outstanding North Dakota rural and public health advocates for their accomplishments. The recipients of 2023 Rural and Public Health Awards included:

- Outstanding Rural Health Provider – **Joel Johnson**, Medical Director, First Care Health Center, Park River
- Outstanding Rural Health Professional – **Darla Roder**, Compliance Officer and COO, Langdon Prairie Health, Langdon
- Emerging Rural Leader – **Josalynne Hoff Rue**, Family Practice Physician, Heart of America Medical Center, Rugby
- Excellence in Diversity, Equity, and Inclusion – **RAIN Program**, University of North Dakota, Grand Forks

- Outstanding Rural Health Volunteer – **Fred Stern**, Board Member, Sakakawea Medical Center/Coal Country Community Health Center, Hazen/Beulah
- Outstanding Rural Health Educator/Mentor – **Teree Rittenbach**, Professor of Nursing, University of Jamestown, Jamestown
- Rural Health Legislator of the Year – **Judy Lee**, North Dakota Senator, West Fargo
- Outstanding Rural Health Career – **Darold Bertsch**, Interim CEO, Sakakawea Medical Center/Coal Country Community Health Center, Hazen/Beulah
- R-COOL-Health Scrubs Camp of the Year – **Grafton Scrubs Camp – Unity Medical Center**, Grafton

- Flex Quality Reporting Award – **Sanford Hillsboro Medical Center**, Hillsboro
- Public Health Worker of the Year – **Brenton Nesemeier**, Director of Field Services, North Dakota Department of Health & Human Services, Bismarck
- North Dakota Public Health Association Outstanding Service Award – **Theresa Will**, Administrator at City-County Health District, Valley City
- Public Health Team of the Year – **North Dakota Healthy Outcomes Program**, **North Dakota State University**, Fargo

Congratulations to each of the recipients!

UND School of Medicine & Health Sciences announces research awards totaling more than \$3 million for multiple faculty

As the temperatures rise across North Dakota this spring and summer and students gear up to take a break on their studies, a number of research projects at the UND School of Medicine & Health Sciences also are warming up.

Several SMHS faculty have been awarded research grants in recent months, allowing researchers at the School to dive into several new and continuing projects, including studies on breast cancer, Lyme disease, the neurological effects of allergies, and more. Here is a brief round-up of research projects ramping up now:

Motoki Takaku, Ph.D., an assistant professor in the Department of Biomedical Sciences, was awarded a four-year, \$792,000 award by the American Cancer Society to continue his study of breast cancer. Takaku's laboratory uses a combination of genomics, biochemistry, and gene editing techniques to study the basic mechanisms and cancer-specific functions of the components of cells that regulate the protein-DNA complex known as chromatin. "Approximately 30,000 new cases of invasive breast cancer in the U.S. each year will carry mutations in the gene called GATA3," said Takaku, who has been studying the GATA3 gene for several years. "Our project aims to identify the roles of GATA3 mutations in breast cancer, and this award will stimulate our research activities. GATA3 mutations are frequently found in metastatic breast tumors, and we think the results from this project will have a significant impact on the breast cancer community. We hope we will eventually find a strategy to target GATA3-mutant metastatic breast tumors."

Likewise, **Alexei Tulin, Ph.D.**, professor in the Department of Biomedical Sciences, was awarded a \$740,691 grant from the National Science Foundation to fund a project that extends his laboratory's focus on the function of "PARP1" (specifically, poly(ADP-ribose) polymerase 1), a family

of proteins involved in a number of cellular processes such as DNA repair, genomic stability, and cell death. "The goal of this research is to use the *Drosophila* – or fruit fly – system of PARP1 metabolism as a model to investigate how any cell can undergo quick, local, and reversible chromatin reprogramming, fine-tuning the induction of local gene activity," explained Tulin. "Understanding how PARP acts within normal, undamaged chromatin will advance our knowledge of gene regulation, and facilitate the possible development of new drugs and methods to reprogram genes involved in certain health conditions."

For her part, **Kumi Nagamoto-Combs, Ph.D.**, assistant professor with the Department of Biomedical Sciences, recently received a \$30,000 Early Career Scholars Program Award from UND's Division of Research and Economic Development for her collaborative project with **Bo Liang**, from the UND Department of Biomedical Engineering, for a project entitled "A window into the mind: monitoring the activities of intracranial immune cells." As Dr. Nagamoto-Combs put it, she and Liang "plan to track immune cell trafficking in the brain," in an effort to establish a novel imaging system by which the activities of immune cells within the central nervous system can be visualized and monitored. "Upon completion of the project, we intend to use the resulting imaging and histological data for submitting a National Institutes of Health (NIH) R01 grant application or equivalent to further continue our investigation." Such news comes on the heels of Nagamoto-Combs receiving the second-year portion – \$370,791 – of her own multi-year R01 grant from the National Institute of Allergy and Infectious Diseases of the NIH being used to explore the link between food allergies and neurodegeneration. This latter project looks to determine the role of immune cells in allergy-associated changes in the brain.

Mikhail Golovko, Ph.D., associate professor in the Department of Biomedical Sciences, has also been awarded an NIH R01 Supplement Grant in the amount of \$323,800. This supplement will build on the award that Golovko's group was given in 2021 to study a novel brain pro-growth mechanism activated under low-energy conditions. The project originally funded by the NIH's National Institute of Neurological Disorders and Stroke and National Institute on Aging will address alterations in this mechanism in the aging brain and its contribution to age-related neurodegenerative disorders such as Alzheimer's disease and Parkinson's.

And in case you missed it, late in 2022 the NIH awarded a \$1.6 million R01 grant – the highest award researchers can receive from the NIH – to **Catherine Brissette, Ph.D.**, associate professor in the Department of Biomedical Sciences, to continue her studies into Lyme disease. This grant will allow Dr. Brissette's team, including co-investigators and SMHS faculty **David Bradley, Ph.D.**, and **Timothy Casselli, Ph.D.**, to study bacterial and host factors in the pathogenesis of Lyme-induced neuroborreliosis, a neurological condition caused by Lyme disease that can range from headaches and mild meningitis to more serious manifestations like vasculitis.



POWERFUL GIFT

Medical student Madeleine Flanders (right) accepts from SMHS Dean Dr. Joshua Wynne a stethoscope gifted to Flanders by SMHS alum Dr. Don Person.

A RISING TIDE LIFTS ALL BOATS

School of Medicine & Health Sciences expands its “Adopt” campaign to cover more health professions

Most of us are familiar with the term “adopt” in the legal context as it revolves around the notion of parenthood.

At the UND School of Medicine & Health Sciences, though, the term’s additional meanings – embrace and assume, establish and sponsor – have for more than a decade defined the School’s Adopt-A-Med-Student and Adopt-A-PA programs.

Through these programs, generous donors to the SMHS provide engraved stethoscopes for first-year medical students and white coats to physician assistant students starting clinical rotations. This important moment in students’ lives not only provides them with a necessary tool-of-the-trade but connects them with what UND hopes is a lifelong provider-mentor – a lasting, supportive connection between students and donors.

Jeff Dodson

Director of Development
UND Alumni Association & Foundation
701.777.5512
jeffd@UNDfoundation.org



Brian Schill, '00, '05

Director
Office of Alumni & Community Relations
701.777.2733
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This year, more than 12 years after unveiling the original concept, the SMHS is expanding its Adopt campaign to include all patient care programs at the School.

The move to increase the overall donor pool at the School and create a sweeping Adopt-An-SMHS-Student campaign is a big deal, suggests UND Alumni Association & Foundation Chief Executive Officer DeAnna Carlson Zink.

“The ‘Adopt’ campaign is an easy way to give back to multiple programs within the School of Medicine & Health Sciences,” said Carlson Zink. “By giving a gift of any size, our donors can create invaluable opportunities for our students. Not only will our students receive the necessary items to complete their education – like stethoscopes, white coats, or association memberships – they will be paired with mentors in the health profession who have walked in their shoes.”

Dr. Don Person (B.S. Med, '61), a longtime donor to the medical and physician assistant campaigns, agreed, calling himself an “avid supporter” of the program. What brings him back each year, said Person, is the opportunity to engage students directly and serve as a mentor to them as they begin their training. This is why he makes sure to write personalized letters to each student he “adopts.”

“I consider those letters an essential part of the program,” said Person from his home in San Antonio, Texas. “I have tried to make my comments encouraging, relevant, and timely. Separated by distance and time – current first-year students will be graduating from medical school 65 years after I did – I write letters of welcome to students that reflect the historical and unique underpinnings of their program at UND SMHS and provide the contrast that a half a century of medical and scientific discovery has brought.”

One of the recipients of Dr. Person’s “Person-alized” letters is second-year medical student Madeleine Flanders, who received her stethoscope in August 2022.

“When I received my stethoscope from Dr. Person, I felt that his knowledge, experience, and wisdom were symbolized in that gift,” said Flanders. “As I wear this stethoscope throughout my career, it will remind me that it is a privilege to practice medicine. As a

first-generation medical student, I am grateful for his support and mentorship. Like Dr. Person, I hope someday to be able to provide another student the same direction and optimism through this powerful gift.”

And not only medicine. Person has likewise supported the Adopt-A-PA-Student program since its inception in 2019.

“Having spent nearly 50 years in the U.S. Army, I was familiar with the origins and history of physician assistants or physician associates,” added the donor who established, with his spouse, the Dr. Donald and Blanche Person Scholarship Endowment in support of medical students at the SMHS. “The gift of a white coat as a second-year PA student begins clinical studies is a tangible way to connect the provider with the patient. I have thoroughly enjoyed writing letters to the PA students and just as with thank you letters from medical students, I know when that spark of recognition occurs!”

Today, such a spark is available not only to students of medicine and physician assistant studies, but physical and occupational therapy, medical laboratory science, athletic training, and public health.

For a minimum gift of \$100 for health sciences students or \$250 for medical students, sponsors can provide students with a valuable tool of the trade or help them secure professional association memberships for continued educational opportunities.

Gifts of \$100, \$250, or any amount can be:

1. Mailed to the UND Alumni Association & Foundation, 3501 University Ave., Stop 8157, Grand Forks, ND, 58202. (Include “Adopt” and the program in question in the memo line);

OR

2. Submitted online at: undfoundation.org/smhs-adopt.

Letters of support to students can be included in option 1 above, added to the “Leave a comment” box when giving online via option 2, or emailed to kristen.peterson@UND.edu.

By Brian James Schill

“ADOPTING” A STUDENT FROM ONE OF THE PROGRAMS BELOW WILL PROVIDE THE FOLLOWING:

- \$250 Medicine: An “entry-level” Littmann stethoscope
- \$100 Physician Assistant: An embroidered white coat
- \$100 Physical Therapy: A gear bag for holding a variety of tools useful to the practicing physical therapist
- \$100 Public Health: A student membership to the American Public Health Association
- \$100 Occupational Therapy: A student membership to the American Occupational Therapy Association
- \$100 Medical Laboratory Science: A student membership to the American Society for Clinical Laboratory Science
- \$100 Athletic Training: A membership to the National Athletic Trainers Association

Jonathan Andrew Flom, M.D. '98, age 57, passed away unexpectedly on January 10, 2023, at Cape Fear Valley Medical Center, surrounded by his family. Born October 21, 1965, in Fargo, N.D., to parents Harold and Alida Flom, Jonathan was a survivor. He was an Eagle Scout and served in the 82nd Airborne division, completing Airborne training along with PsyOps training and was assigned to the Special Operations Command at Fort Bragg, N.C. A graduate of Concordia College (Moorhead) and the University of North Dakota School of Medicine & Health Sciences, Jonathan practiced psychiatry at Cape Fear Valley Medical Center where he was known for his kind and gentle nature. He was well-loved and is survived by his children Jillian (Torrance, Calif.), Laurel, and Benjamin (both in Wilmington, N.C.). He is also survived by his parents Harold and Alida Flom of Fargo, his brother Matthew (Nora) and nephew Jonathan of Blaine, Minn. He is preceded in death by his nephew Erik Flom.

Nicole (Nikki) Marie Jagodzinski, BS OT '92, age 53 of Andover, Minn., and so beloved by friends and family, passed away unexpectedly March 13, 2023. She will be sorely missed by her husband Brett, daughters Lydia and Carly, sister and brother-in-law Stacia and Jason Sichler, parents Gordon and Eva Johnson, and in-laws from the Jagodzinski family. Nikki graduated from Anoka Senior High in 1987 and went on to UND to earn her occupational therapy degree. Later in life, she continued her education at SCSU and earned her master's degree in college counseling and student development. She was always advocating for people with disabilities, the LGBTQ+ community, and her students. Nikki was a beautiful, kind soul. She was a strong example of how to plow through life's adversities with courage and grace. She was a positive role model for every life she touched.

Tony A. Knecht, M.D. '94, age 56 of Grand Forks, N.D., entered the arms of his Savior on March 21, 2023, with his family by his side. Tony was born June 3, 1966, in Minot, N.D., the son of Otto and Hertha (Filler) Knecht. He was raised in Grand Forks and graduated from Central High School in 1984. He attended the University of North Dakota and received a bachelor's degree in natural science and a Doctor of Medicine Degree in 1994. He worked as an emergency room physician at Altru Health System from July 1997 until his retirement in May 2019. Tony married his high school sweetheart Joan Klava on July 11, 1987, in East Grand Forks, Minn. Tony was a gifted gardener with a love for flowers and landscaping. He enjoyed golfing, playing basketball, annual fishing trips to Canada, spending time at the lake, and sharing his passion for wake surfing with everyone willing to learn. Loving family members of Tony include his wife, Joan, of Grand Forks; daughter, Ashley (Riley Ewert) of Phoenix, Ariz.; son, Jacob, of Lakewood, Colo.; sister Rhonda (Don) Hollarn and brother Mike (Leanne) Knecht; sisters-in-law Cheryl Knecht and Connie Trapp; as well as many nieces and nephews. Tony is preceded in death by his parents, and twin sons Jeremiah and Zechariah; brothers, Donald, Larry, and James; and bonus mother, Ruth Knecht.

Sharon Miller, BS MT '60, age 84, of Cando, N.D., passed away Monday, February 27, 2023, at the Towner County Medical Center in Cando. Sharon Miller was born June 19, 1938, to Charles R. and Mabel (Robertson) Miller in Cando. Sharon graduated in 1956 from Cando High School as valedictorian. She went to college at UND where she got a Bachelor of Science degree in medical technology. After college graduation Sharon moved to San Jose, Calif., and worked for two years. She then moved to Denver and worked for two years. Sharon moved back to N.D. and worked in Bottineau for a year, then spent the next 31 years employed with the Towner County Medical Center. Sharon's hobbies included gardening, knitting, needlepoint, and reading. Sharon was an avid sports fan, especially football. Sharon is survived by brothers Bob (Lois) and Henri (Bernice); sister Patricia Miller; brother-in-law Ardell Loken; and many nieces and nephews. She was preceded in death by her parents Charles and Mabel, brother Douglas, and sister Suzanne Loken.

Joy Ann Emily Reading, BS MT '58, passed peacefully at home on January 31, 2023, in Draper, Utah. Born to Harry and Hazel Lykken of Grafton, N.D., Joy Ann moved to Salt Lake City, Utah, after college and married George Richard "Dick" Reading on October 10, 1958. In 1983, her beloved husband, Dick, passed away, leaving Joy Ann to raise her five children: Daniel Lee (Nancy) of Draper, Utah; Patricia Cresalia of Piedmont, S.D.; Dr. Stephanie Wallace of Colorado Springs, Colo.; Michael (Penny) of Grafton N.D.; and Emily (Roger) Barrell Colchester, England. She is survived by her children, grandchildren, and brother Lee C. Lykken of Grafton, N.D., plus the families of Joseph Reading, Calvin and Dottie Reading, and Robin and Jean Reading.

Dr. Jon Bunde Tingelstad, BS Med '58, age 88, of Greenville, N.C., passed away on Tuesday, February 28, 2023. A native of McVie, N.D., Dr. Tingelstad was born on January 15, 1935, the son of S.B. and Mabelle Tingelstad. He graduated from UND in 1958 and Harvard Medical School in 1960. He trained in pediatrics at the Children's Hospital Medical Center in Boston, Mass., and the University of Colorado Medical Center in Denver, Colo., and in pediatric cardiology at the Children's Hospital in Buffalo, N.Y. He served as a pediatrician at the U.S. Air Force Hospital in Wiesbaden, Germany, and was a member of the Department of Pediatrics at the Medical College of Virginia, Richmond. In 1976, he and his family moved to Greenville, and he was named Professor and Chair of the Department of Pediatrics at the ECU School of Medicine, a title he held for 23 years. Tingelstad retired from East Carolina University in 2000 and was named Professor Emeritus, Department of Pediatrics. He was preceded in death by his mother, Mabelle Tingelstad Hart, his father, Sophus Benjamin Tingelstad, and his son, Paul Ayers Tingelstad. He is survived by his wife of 62 years, Marcia; daughter, Catherine of Huntersville, N.C.; son, David, his wife Laura, and their children, Anna and Josh of Wilmington, N.C.; Paul's wife, Lisa Tingelstad Finley and their daughters, Kristyn of Apex, N.C., and Kaleigh of Panama City Beach, Fla. He also leaves many devoted relatives and friends.



Emily Kringle, M.O.T.,
Ph.D.

■ '10s

Emily Kringle, M.O.T. '10, an Assistant Professor of Physical Activity and Health Promotion at the University of Minnesota, has been awarded a 2023 Intervention Research Grant by the American Occupational Therapy Foundation. The grant will help Emily develop a program to reduce sedentary behavior among people who have suffered stroke.

■ '20s

Danielle Tretbar, M.P.A.S. '22, has joined the family medicine team at Sanford Health in Park Rapids, Minn. Danielle obtained her undergraduate degree in nutrition and dietetics from Concordia College in Moorhead, Minn., before practicing as a clinical dietitian for 10 years, specializing in medical nutrition therapy, diabetes education, weight management, and bariatric care. She later received her Master of Physician Assistant Studies degree from the University of North Dakota School of Medicine & Health Sciences. She is board certified by the National Commission on Certification of Physician Assistants (NCCPA).



Danielle Tretbar, PA-C

■ '90s

Joel Johnson, M.D. '93, is the recipient of the 2023 National Rural Health Association's Rural Health Practitioner of the Year Award as well as the Outstanding Rural Health Provider award from the Center for Rural Health in North Dakota. Johnson practices in Park River, N.D.



Joel Johnson, M.D.

■ '80s

Tom Arnold, M.D. '84, a Dickinson-based obstetrician and gynecologist is retiring from CHI St. Alexis Health Dickinson after more than thirty years in practice. "Throughout my practice, I believe it's somewhere just under eight thousand deliveries," Arnold told KFYZ TV. "The last several years, I've had the opportunity to have a couple come in and sit down and say, 'By the way Dr. Arnold, you delivered both of us too,' so there's something special about that." A long-serving member and current Chair of the UND School of Medicine & Health Sciences Advisory Council, Arnold received an undergraduate degree from Dickinson State University and his M.D. from the University of North Dakota School of Medicine & Health Sciences.



Tom Arnold, M.D.

SMHS Department of Geriatrics faculty wins local "Shark Tank" competition

Jeremy Holloway, Ph.D., director of geriatrics education for the UND School of Medicine & Health Sciences Department of Geriatrics and founder of Tellegacy – a healthcare service looking to reduce isolation



among senior citizens in the region – won the Grand Forks/East Grand Forks Chamber of Commerce's annual "Shark Tank" competition in May 2023. The event featured contestants providing a one-minute pitch of their business plan, followed by a brief question-and-answer session judged by two "sharks" – business leaders in the community who assess contestants based on the plan's marketability and the strength of the contestants' presentation. Holloway's platform, called "Tellegacy," looks to connect university students in health professions with isolated and/or lonely elderly adults. "The students go through the questions and curriculum I designed with the older adults, which reinforces the value of their story," Holloway told the *Grand Forks Herald*. "At the end of those sessions, we give the older adult a book, called a legacy book, summarizing those stories. It also includes the impact the student felt they had on the experience. The most important thing I want to come out of this for both the older adult and the student is that their story has a place in health care." Holloway said the idea behind his business was conceived after hearing about the effects of the pandemic on the elderly. "In March of 2020, I heard from a chaplain in Michigan about older adults who couldn't leave their rooms, and were socially isolated and dying," Holloway said. "At the time, I was finishing my Ph.D. dissertation and decided to get involved."



INMED FOUNDERS

Indians Into Medicine founders, grads, and former staffers gathered at the School in April 2023 to participate in the program's 50th anniversary. Left-to-right: Barb Anderson, Deb Wilson, Nancy Everling, Linda Gourneau, M.D., and Lois Steele, M.D. Steele was the first official director of INMED in the 1970s.



PARTING SHOTS

Did you attend an event related to the UND SMHS? Share it with your colleagues. 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*.



BRAINTRUST

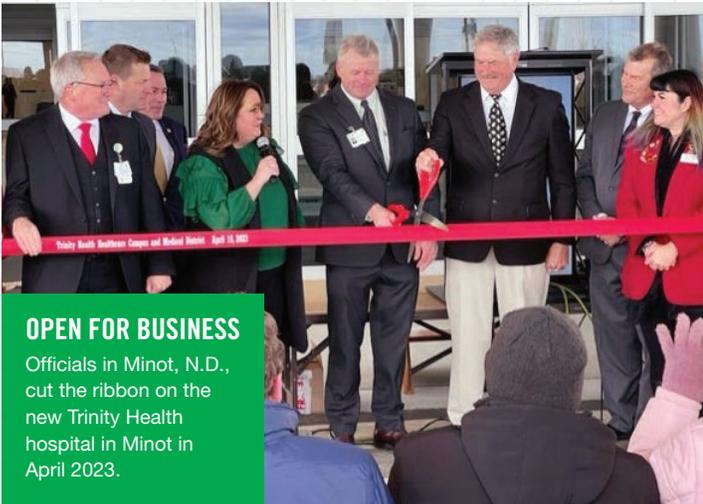
UND President Andrew Armacost (kneeling) and his team. Back row (left-to-right): Colleen and Werner Nistler, DeAnna Calson Zink, Eric Link, Casey Ryan, Scott Correll, Art Malloy, Joshua Wynne, Rebecca Bichel, and Alex Pokornowski. Front Row (left-to-right): Kathy Armacost, Karla Mongeon-Stewart, Meloney Linder, and North Dakota Poet Laureate Denise Lajimodiere.



HERE YOU GO
Assistant professor of Indigenous Health Dr. Shawnda Schroeder (right) accepts the William Crozier and Edith Magwood Fawcett Faculty Enhancement Award.



TOY MODIFICATION
Doctor of Occupational Therapy students participate in the program's annual toy modification training event.



OPEN FOR BUSINESS
Officials in Minot, N.D., cut the ribbon on the new Trinity Health hospital in Minot in April 2023.



BE THE MATCH
UND Medical Laboratory Science Club students help with a "Be The Match" bone marrow donor registration drive held on-campus in May 2023. The drive netted 21 new donors, each of whom signed-up for the national bone marrow registry. That's at least 21 more lives potentially saved by bone marrow donation right here in North Dakota.



MASTERS
UND Master of Public Health students at the UND School of Graduate Studies Commencement at Alerus Center in Grand Forks, May 13, 2023.

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SAVE THE DATE!



June 20 UND Night at Target Field
Minneapolis, Minn.



Sept. 14
Joggin' with Josh
5K/10K walk/run on
the UND campus



Oct. 6 SMHS Homecoming
Celebrating 30 years of Athletic Training @UND!

For more information on these and other events, contact the
Office of Alumni & Community Relations at 701.777.4305.