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University of North Dakota School of Medicine & Health Sciences



Summer 2020 VOLUME 45 NUMBER 2

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ON THE COVER: The UND Physician Assistant Studies Class of 2020 celebrates graduation with departmental faculty online.



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Look for this graphic and discover stories of SMHS faculty and students grappling with COVID-19.





RESPONDING TO OUR NEW REALITY

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

I have met and talked with Andy on numerous occasions over the past few months, and feel that he will make a truly outstanding president for UND. We are lucky to have recruited him and his wonderful wife Kathy. My wife Susan and Kathy really have hit it off, and have spent some time together comparing notes and insights. Perhaps more important than my high opinion of the Armacosts is that of Susan-and she is mightily impressed! While I will miss some of the fun of being interim president-including learning more about UND and higher education through a wider lens than "just" that of the School of Medicine & Health Sciences-I'm really happy to get back to the School more regularly so that I can devote my full time and energy to it. We have so many wonderful things going on! And while it has been a pleasure and an honor to do all three UND jobs (president, vice president, and deannot to mention my practice as a cardiologist), it has been stressful from a time commitment standpoint, especially in the COVID-19 era! So I'm thrilled to be returning to my first lovethe UND SMHS. I am quite confident that UND is in superb hands going forward.

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

All of that said, just as my presidency was wrapping up, North Dakota Governor Doug Burgum came along with a unique and enticing offer: Would I be willing to spend the half of my time that I had been devoting to the interim presidency to a similar position for the state? I would continue as vice president for health affairs and dean of the UND School of Medicine & Health Sciences, but would also function as the chief health strategist for the state and report directly to the Governor. After discussing the offer with various individuals, including President Armacost, North Dakota University System (NDUS) Chancellor Mark Hagerott, and Lieutenant Governor Brent Sanford, I accepted the offer. As the state's chief health strategist, I will work with a team of colleagues that I'm in the process of selecting to create a vision and strategy for developing a world-class public health enterprise for North Dakota in partnership with the NDUS; local public health entities; the private sector; and local, state, federal, and tribal governments. This will be a time-limited appointment, and the Governor and I anticipate that we can develop and begin to launch a robust public health strategy for the state over the next eight months or so.

On a related note, a shout-out is in order to Assistant Professor of Family & Community Medicine Dr. Bryan Delage and his cardiac-ready team from across UND. This group recently learned that their efforts at improving cardiac event outcomes on campus—holding more CPR training, developing a map of automated external defibrillators (AEDs) on campus, and raising awareness of hypertension—convinced the North Dakota

Department of Health to designate UND the state's first and only "Cardiac Ready Campus." As a cardiologist, I can appreciate the significance of these efforts, which can literally save lives of our students, faculty, staff, and guests, should they experience a heart attack or similar health emergency on campus.

I'd like to end with another shout-out, this time to Dr. Donald Warne, our associate dean for Diversity, Equity, and Inclusion and director of our Master of Public Health and Indians into Medicine (INMED) programs, and his colleagues for instituting the first ever Ph.D. program in Indigenous health—not just in the U.S., but anywhere! Dr. Warne tells me that more than 300 potential students expressed interest in the program the first week that it was announced!

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

I am pleased to share that Associate Professor in the Department of Biomedical Sciences Jim Porter, Ph.D., has accepted my offer to succeed Dr. Dorscher as the new associate dean of Student Affairs & Admissions. I am sure that you join me in thanking Dr. Dorscher for her service and wishing her all the best in the future.

As we continue to deal with the pandemic, remember to stay safe, stay connected, and stay in touch!

Joshua Wynne, MD, MBA, MPH

Vice President for Health Affairs, UND

Dean, School of Medicine & Health Sciences







LEADERS IN RURAL HEALTH

Left to right: Current and former Directors of UND's Center for Rural Health L. Gary Hart, Mary Wakefield, and Brad Gibbens.

THE BIG FOUR OH OH (PART TWO)

Through several directors since 2000, the UND Center for Rural Health continues to be a national leader in rural health policymaking and research.

The following is the second in a two-part history of UND's Center for Rural Health, which turned 40 years old this year. Part one focused on the Center's early history while this article focuses on the Center's more recent past. Interviews for this story were conducted with former CRH Director L. Gary Hart shortly before he passed away in April 2020. A brief piece on Gary can be found on page 34.

The CRH continued to grow after 1996 when former Director Jack Geller left. Brad Gibbens, who'd been serving as associate director, stepped in as the interim director, a position he'd hold for about five years until Mary Wakefield was named director in 2001.

"My agenda was basically to maintain operations and continue to expand based on our core programs, which is what we did," Gibbens said. "I think one of the things that has always been part



CENTER FOR RURAL HEALTH BY THE NUMBERS

Federal grants the CRH holds

Rural hospitals the CRH works with in N.D.

Years serving rural North Dakota and the nation

of the landscape for rural health has been the viability of rural hospitals, so we continued our work in addressing rural hospital issues, doing assessments, doing strategic planning."

"In the late 1980s and early 1990s, a number of rural hospitals across the country closed, including 10 in rural North Dakota," Gibbens explained. "So I was really doing a lot of national work with our congressional offices and helping them understand what the issues were and looking at various options and trying to build momentum around what we've commonly called an alternative hospital model. That's really what the Critical Access Hospital was."

During this same period, the CRH secured funding to start a rural Emergency Medical Services (EMS) program.

"EMS has always been a focus within the Center for Rural Health," Gibbens said. "It has a lot of impact right now, but really our work in EMS goes back to the late 1980s."

EMS notwithstanding, many other issues have remained a focus of the CRH since its inception.

"Health workforce was [important from] day one at the Center for Rural Health forty years ago, and it still is today one of our dominant issues in terms of the viability of maintaining rural health systems, particularly the hospitals and clinic structure," Gibbens said.

Picking up the pace

Mary Wakefield was named CRH director in 2001. Her connections at the national level, including having served for senators Quentin Burdick and Kent Conrad, proved invaluable to the CRH.

"We thought we'd been clipping along at a pretty fast pace until Mary got here, and then we discovered what fast meant," Gibbens added with a smile. "That was an amazing seven-year period for the Center and also for myself, working for Dr. Wakefield—a truly amazing, intelligent person who was looking for the next big thing to address. We spent a fair amount of time just trying to keep up with her and trying to put in place some of the things she was looking at."

"I was really interested in strengthening ties within the state to rural communities and to rural health care infrastructure," Wakefield said. "That presence was already there, but I really wanted to execute on

that agenda of being a real resource to the communities and to the health care infrastructure."

She also wanted to focus on education.

"When we could, we would talk with health profession students about opportunities in medicine, nursing, and other health careers to try to strengthen those interests in working in rural communities," Wakefield said. "And research scholarship was a big focus. We really amped up in that area doing research that focused on some issues right here in North Dakota."

But the Center didn't focus just on North Dakota. Wakefield said the CRH expanded into regional, national, and international research efforts as well. Just one example is federal funding secured for veterans' health issues. Another is the Rural Health Information Hub.

"Through a lot of hard work of staff, we really strengthened our national presence through some key programmatic areas, one of them being the Rural Assistance Center, now the Rural Health Information Hub," Wakefield said. "That was a major foray into really positioning this Center for Rural Health, this university, and this rural state as a go-to place for a rich repository of information that was national and had expertise to be used by people across the United States-from policymakers in Washington to individuals in Alaska who might be interested in information about rural policy, new rural research findings, and so on."

Even though she moved on from the CRH in 2009, Wakefield said the Center is still a valuable resource for her. "I think the Center is incredibly fortunate to have the experts that they have, the technology, the support from the state, and the support from the University of North Dakota to do the really important work that they do," she said. "Not just for people in North Dakota, although that to me was always first priority, but to inform health across the country."

A respected organization

When he was named director of the CRH in 2010, L. Gary Hart was already familiar with the organization and its staff, which now numbers more than 50. Knowing the CRH's reputation, deciding to come here was easy.

"I'd had a long history of working with people here through several directors and, of course, this rural center clearly was one of the

57 100+ \$8,883,547

Employees across the state

Communities served in a single year

FY19 operating budget

preeminent centers in the country," Hart said. "I knew it would be a good place."

Gibbens added that he's not only proud of the success of the CRH, but also that the center's work has been seen as so valuable that it's been replicated in other places.

"In 1986 we received a grant from the Bush Foundation, \$500,000, that we used to create our first research efforts at the Center for Rural Health," Gibbens recalled. "Somebody from the Federal Office of Rural Health Policy had come out after that and started looking at what we were developing here in North Dakota. It was Jerry Coopey, who is really one of the true superheroes and architects of rural health at the national level. So Jerry really liked the idea, and he brought it back to the feds, and they said, 'Research in rural health, there's something there.' And it was from that idea, by looking at what we were doing here, they came up with the structure for the Rural Health Research Center grants, and again the Center for Rural Health was first generation. But Jerry always gave us credit for really starting that idea."

Coopey also looked at what the CRH was doing at the state level. He and Hart mapped out what the core functions would be for an office of rural health and that became the State Office of Rural Health grant program, Gibbens said.

"So we've been given credit, because of the efforts that got started in North Dakota first, with developing or being the impetus for the creation of the Rural Health Research Program and the State Office of Rural Health program," Gibbens said. "So I'm pretty proud of that."

He's also proud of the fact that the CRH has gained a reputation for getting things done. "Success breeds success," Gibbens said. "So you go from a period where you're constantly trying to find a funder to a point where sometimes funders come to you. We've done things for the Commonwealth Fund and other groups where they have come to us and said, 'We have an idea. Do you think you guys can carry it out?' That's a nice position to be in."

By Brenda Haugen



REMINISCING

Mary Wakefield and Brad Gibbens scan photos from the CRH vault at the UND School of Medicine & Health Sciences.



RETTING AHEAD OF THE NEXT PANDEMIC

UND researchers direct their focus to COVID-19 research, and make the case for expanded infectious disease research space at UND.



Dr. Nadeem Khan at his office in the UND School of Medicine & Health Sciences. (photo courtesy *UND Today*)

Anxious, but not surprised.

That's how infectious disease researchers at the UND School of Medicine & Health Sciences (SMHS) tend to characterize their response to the emergence of SARS-CoV-2, the source of COVID-19.

"[The influenza outbreak of 1918] infected one-third of the world, and killed around 50 million people, including 1 million in the U.S." said Nadeem Khan, Ph.D., assistant professor in the Department of Biomedical Sciences at the SMHS. "After that, every decade or two, you see the emergence of some pandemic flu or SARS or Ebola. These viruses emerge, they become lethal, they disseminate, they transmit. It doesn't happen every year, but it is likely every decade or two."

And because such pandemics seem to be getting more regular, said Khan, he and his Department of Biomedical Sciences colleagues Min Wu and Masfique Mehedi are moving as fast as they can to study not only coronavirus vaccines, but pandemic prevention, preparedness, and treatment.

Figuring it out

Each of these researchers are diving headfirst into a pandemic that, at the time of this writing, was only about a month old in the U.S.

A National Institutes of Health-funded influenza researcher, Khan shifted his attention quickly to COVID-19 in March.

"There are two lines of investigation going on now with coronavirus," Khan told North Dakota Medicine via video conference.
"The first is developing an effective vaccine, which is able to control infection. The other is understanding how COVID-19 causes disease. Once you understand how the virus causes disease in the respiratory tract, then you're able to selectively intervene in the disease process and stop the disease. We are interested in both aspects: understanding the disease pathogenesis as well as developing a

novel vaccine against COVID-19. We will attempt to understand how COVID-19 is initiating the disease process in the lungs and how this is leading to developing a fatal pneumonia."

As Khan put it, although COVID-19 is a novel virus, which emerged just last year, it is related not only to influenza but another coronavirus—SARS—that hit the world hard in 2003.

Therefore, coronavirus, whose genome was sequenced in China months ago, is less mysterious than it might seem to non-scientists. COVID-19 seems to be structured like the flu, for example. It is also transmitted and acquired in a similar way and produces similar symptoms.

This is all good news, said Khan, who sees similar proteins in each of the viruses in question.

"To develop an efficacious vaccine against COVID could take up to a year and a half," Khan shrugged. "By that time, you may not even see this virus present in the environment. So, you might get a vaccine that then is non-efficacious. That's not to say vaccines are not important—of course they're important. But you will need vaccines which are robustly cross-protective should the virus re-emerge in human circulation in modified form. Therefore, the race to vaccine must consider producing antibodies of better functionalities that can cross-protect against new form of virus."

This is why Khan is looking to inhibit whatever it is that elicits the human immune response to the infection and determine treatment options that help revert COVID-19 to more of a flu-like convalescence.

"Our goal is to make COVID-19 a less severe infection that transmits less easily and quickly."

A Marshall Plan for infection

Parting of making this happen, added Dr. Wu, hinges on all nations' ability to cooperate and coordinate research and response efforts, even before the next virus strikes.

That vision of preparation and coordination has been his focus since March. This past spring, the researcher specializing in respiratory disease submitted a "Notice of Special Interest" proposal to the NIH's National Institute of Allergy and Infectious Diseases. Titled "Sustained research fund and dedicated research center for preparing next pandemic," the short paper is geared not simply to the study of COVID-19 pathology but calls for an international infrastructure designed to prevent—or respond to more effectively—the next novel virus.

"I expect that this type of pandemic will come back, probably sooner and more often," said Wu, whose paper calls for nothing less than a global Marshall Plan for infectious disease prevention, research, and response.

"A large scale infrastructure, resource, and task force program is desperately needed at state, national, and even international levels to build many dedicated research centers to develop diagnostics, vaccines, and drugs, as well as basic research to understand the molecular and cellular pathogenesis and host-pathogen interactions," wrote Wu and his colleague Hongpeng Jia, M.D., assistant professor of surgery at Johns Hopkins University School of Medicine. "We call for governments, the World Health Organization, and the United Nations to rethink this need as a concerted effort to maximally prevent and curb future pandemics. We need not only research dollars but also infrastructure, hospitals, containments, and medical disposables."

UND is an obvious choice to coordinate such efforts locally, said Wu, given that the SMHS houses a strong team of researchers working in an NIH Centers of Biomedical Research Excellence (CoBRE) core dedicated to infectious disease. To that end, Wu has explored the possibility of housing a higher-level facility in Grand Forks to study COVID-19 and other emerging pandemics.

"The critical lesson we've learned from past experiences and the new pandemic is that we cannot continue to do the same as we have done before," said Wu. "Instead, we genuinely need an urgent and fundamental change. UND can and should be part of that effort."

Biosafety level-up

Such a scaled-up laboratory in the region would benefit research at UND generally—possibly expediting the Centers for Disease Control & Prevention certification process above and beyond UND's current Biosafety Level 2 lab.

"We don't have an active BSL3 lab at UND," noted Khan. "This is the minimum requirement of labs to be able to handle

coronavirus. We cannot do anything with the live virus. Instead we use those dead components of the virus in conjunction with human cells to see how they interact."

Khan's colleague Masfique Mehedi concurred.

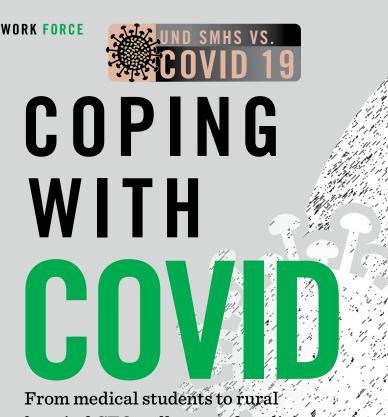
"I can't do COVID-19 infectious virus research here," said the researcher specializing in respiratory syncytial virus (RSV). "However, I have a collaboration with colleagues at the Rocky Mountain Laboratories in Montana. I am planning to do a couple of experiments through them, comparing SARS, MERS, and COVID-19 infection studies in human respiratory airway models developed from [chronic obstructive pulmonary disease] patients."

For his part, Mehedi echoes Khan in suggesting that it would be much easier for area researchers to have more specialized facilities in-house rather than having to work with labs at times thousands of miles away. There are no active BSL3 or BSL4 facilities anywhere in the upper Midwest.

Wu's view is that whatever the level of such a facility, a stronger, more coordinated research infrastructure is clearly needed globally to combat any number of pathogens and infectious disease processes—and it is in the world's interest to invest more heavily in such science.

"Fortunately, we have leadership at UND that is creatively outsourcing to seek the possibility to establish a laboratory on campus that could improve our infrastructure to support COVID-19 research," Wu concluded. "To improve our state's health and well-being, and to hasten diagnosis, prevention, and treatment, we are working on all fronts to find new mechanisms and develop new vaccines or treatments for this and other horrible diseases."

By Brian James Schill



From medical students to fural hospital CEOs, all areas of medicine are navigating through this global pandemic.

Fourth-year medical student Ashlyn Kamrath was preparing to gather with her classmates, family, and friends on Match Day, a nationally scheduled single-day event when medical students around the country find out if and where they matched to a residency program. Match Day, held this year on March 20, was supposed to be a meaningful celebration of achieving the next milestone on Kamrath's path to becoming a doctor.

Then COVID-19 hit, and the event was canceled just days before it was set to take place.

Stories such as Kamrath's are common these days—life interrupted, plans altered. However, medical education continues, albeit in an adjusted fashion, as does the rest of the health industry, including rural health care. Rural hospitals, like their urban counterparts, are under great financial strain due to the COVID-19 pandemic. They have had to reduce all non-emergent patient visits and scale down services to protect patients and staff.

According to Darrold Bertsch, CEO of Sakakawea Medical Center in Hazen and Coal Country Community Health Centers in Beulah, Hazen, Center, and Killdeer, the pandemic is putting a real financial strain on rural hospitals.

"Many rural hospitals find it challenging during the best of times to survive," he said. "Hospitals that have always operated on razor-thin margins are realizing additional challenges with decreased revenues."

Bertsch, who also collects annual financial data from all 36 Critical Access Hospitals (CAHs) in the state, noted that only about half of ND CAHs have a positive operating margin on a normal year.

"Certainly, through this, more hospitals will report a negative operating margin," he said.

In addition to reducing patient visits, such providers have also stopped training medical students at their facilities for the sake of both patient and student safety. This has affected rural facilities in a negative way in so far as such training experiences are a great recruitment tool.

The stoppage affects the students, too.

Third-year medical student Audrey Lane was in the midst of her Rural Opportunities in Medical Education (ROME) experience in Jamestown, where she had been training since December. Through this rural immersion program, she was learning valuable hands-on patient care. Her training was set to wrap up in mid-June, but the pandemic changed her training from in-person to virtual.

"I chose this experience for the chance to follow the same patients over an extended period of time," Lane said. "This has been one of the more disappointing parts of having my rotations stalled by COVID-19. I've seen patients for pre-op visits, prenatal visits, or even starting a new medication and it's disappointing not to see how this care will continue."



Additionally, missing clinical experiences is making it harder to decide confidently on the specialty Lane eventually wants to practice.

"With the shift to remote learning, I'll have to rely on the experience I've already had, and self-reflection, to develop that confidence for which residency I'll apply to," she said.

Brighter days ahead

For Pete Antonson, CEO of Northwood Deaconess Health System in Northwood, N.D., the pandemic could forever change the way his team approaches patient care, but not necessarily in a bad way.

"With so many asymptomatic people, I think this will make us more defensive in our day-to-day activities of caregiving, particularly in the areas of hospital and clinic, beyond the pandemic," Antonson said.

Northwood Deaconess also operates a nursing home on campus, a division of health care that has been on high alert since the beginning of the pandemic due to the high-risk nature of the virus to older individuals. Like many other nursing homes, Northwood Deaconess Nursing Home has had more one-on-one interactions between staff and residents (versus group activities), and technology has been used more frequently to connect residents to friends and family while maintaining social distance.

"I think we have learned, in the nursing home, the great benefit of these types of interactions, such as FaceTime and Skype," Antonson said, noting that geographical barriers that may have prevented family visits before are now no longer really a barrier at all with the increased comfort people have with technology.

Help is also on the horizon for rural North Dakota hospitals. In late April, the Health Resources Service Administration (HRSA) announced a grant for special crisis funding through the Coronavirus Aid, Relief, and Economic Security (CARES) Act. This funding was awarded to the Small Rural Hospital Improvement Program (SHIP) program at the University of North Dakota Center for Rural Health, which will be the mechanism for distributing funds to rural North Dakota CAHs. More than \$71,000 will be available for reimbursement for each of the 36 CAHs in the state as they prepare for and respond to the COVID-19 pandemic over the next 18 months. Rural hospitals were also able to take advantage of other funding opportunities through the CARES act, as well as the Paycheck Protection Program (PPP).

Lemons from lemonade

Even though her planned Match Day celebration was canceled, Kamrath, a Lakota, N.D., native, still found a way to virtually celebrate her milestone with her loved ones, and she was thrilled to receive news that she matched to her first choice of residency through the Altru Health System Family Medicine Residency in Grand Forks. While she wraps up her medical school career online, rather than in-person, she is still scheduled to begin residency training this summer. Kamrath, who hopes to practice rural family medicine someday, said that "There are always nerves present when preparing for something new, especially the transition into residency. The COVID-19 pandemic is definitely adding uncertainty."

And although it may be easy to focus on the negatives right now, Kamrath is instead choosing to look on the bright side. "I think this pandemic has forced change in the practice of medicine, the teaching of medicine, and how we all live in general," she said. "It has also fostered improvisation, ingenuity, and adaptability, which are key in the practice of medicine, especially rural medicine."

By Stacy Kusler



HURRY UP AND

Health sciences students navigate the tricky world of certification, clinical training, and job-seeking in the middle of a global pandemic.

In a way, Alyana Simpron is lucky.

As one of the 40-plus Master of Occupational Therapy (MOT) students at the UND School of Medicine & Health Sciences (SMHS) whose clinical training—and thus graduation—has been upended due to COVID-19, Simpron had been stuck in a strange limbo where she was neither a student nor a certified therapist.

And then she remembered her other job.

"I'm competing for the title of Miss North Dakota in July—so I'm busy with that," said the third-year student from her parents' home in Bismarck. "So I can't commit to a job yet anyway."

Occupied therapy

Simpron's story is familiar for most locked-down health sciences students at UND—including those in occupational and physical therapy, athletic training, medical laboratory science, and physician assistant studies—who are mostly sort of just waiting.

"I spent three weeks at home before getting information about how to proceed," sighed Simpron's classmate Karen Jaspers. "This 'unknown' was frustrating, and it was difficult feeling useless and having to just wait."

Both Jaspers and Simpron were waiting on direction not from the School's Department of Occupational Therapy, but



the Accreditation Council on Occupational Therapy Education (ACOTE), one of several organizations stuck with the difficult task of determining how to keep the pipeline of fresh health providers flowing despite a global pandemic.

"I'll be working on a couple projects for my supervisor that will benefit the facility I was at," Jaspers explained. "I'm creating a group curriculum using evidence from the Substance Abuse and Mental Health Services Administration and compiling some hands-on activities for one of the occupational therapy groups. Many of my classmates are doing other site-specific program development to fulfill their fieldwork requirements."

"But I am for sure on track to graduate in May," she added. "Some of my classmates may have to delay graduation if they hadn't gotten as far in their fieldwork experiences."

Serving as the mediator between ACOTE and the students is Janet Jedlicka, professor and chair of the OT Department, who sees both sides of the conundrum.

"We are working with sites and students, and have identified possible options,"
Jedlicka explained. "We have shifted level-one fieldwork placements to virtual simulations. And we're working with the UND Registrar and Financial Aid office to see if it would be possible for our year-two students to flip fall and summer semesters."

Jedlicka admits, though, that clinics that would typically accept OT students are in a tough spot too.

"Given the current status of the pandemic, many sites are not wanting to take on students, which we understand," she said. "We are looking into the possibility of having the fall didactic sessions taught this summer—hopefully with a longer semester—and trying to get our students out for their fieldwork in the fall and spring."

But none of this is crystal clear yet, which is why answers to these questions—will fieldwork sites accept students? will ACOTE waive certain requirements during an unprecedented pandemic? will students even be able to graduate?—have been slow in coming for some students.

Physical therapy while physical distancing

In the School's Department of Physical Therapy, things are much the same. Just ask Tyler Trumble.

"The pandemic resulted in me and my classmates being pulled from our final clinical rotation," wrote Trumble in an email to *North Dakota Medicine*. "While I am still able to get my degree, COVID-19 has prevented me from gaining valuable clinical experience."

According to Trumble, while the need for physicians and nurses has dominated headlines, therapists too are working on the front lines to help those affected by COVID-19, and are suffering themselves as a result.

Acute care notwithstanding, many outpatient physical therapy clinics are taking in much less revenue and are having to lay off therapists. Consequently, without therapy many clients are experiencing limitations and even declines in their function, Trumble said.

"Some outpatient clinics have implemented telehealth services to help



Tyler Trumble



Karen Jaspers



Alyana Simpron

patients progress in their rehabilitation, provide education, and answer any questions patients may have," he said. "A number of insurance companies have made changes to cover such telehealth visits with certain stipulations. This has been beneficial; however, telehealth services have their limitations and aren't appropriate for everybody."

Like Jedlicka, PT Department Chair Dave Relling is navigating the delicate path of maintaining standards, helping students graduate, and enabling faculty to perform for the University despite quarantine.

"From my perspective, it has been challenging as students, faculty, and staff ride a roller coaster of hope and concern during this unprecedented time," Relling said. "We continue to plan and respond to the shifting expectations and realities that this situation presents. Thankfully we have excellent faculty, staff, students, clinical partners, and SMHS leadership to assure that educational needs are strongly supported during this difficult time. The American Physical Therapy Association has used the #bettertogether hashtag for some time, and that sentiment seems to fit now for how things are working in the Department of Physical Therapy."

Making it up as they go

All of which is to say: everyone is sort of making this up as they go.

"My classmates and I would normally take our boards on specific dates in April or July," Trumble continued. "Unfortunately, due to COVID-19, the April test was canceled and has not been rescheduled yet. Having planned to take my exam in April, this uncertainty of when I might get to sit for my boards has caused some anxiety."

Likewise, both Simpron and Jaspers admit to studying as best they can for their board exam, the passing of which is required for students to become certified occupational therapists and which can be taken before students have officially graduated from an accredited OT program school.

"I will have to take my certification exam at least a month or two later than I had originally planned," Jaspers said.

Of course, tests can be rescheduled and passed. What can't be recovered is the hands-on clinical time each of these students has lost.

But like Jaspers, Simpron was fortunate to hear that she too has been approved to complete her remaining 56 hours of fieldwork at home in Bismarck.

This news will both allow her to keep up her skills and "make sure that I'm on track to graduate in May."

In any case, a job search still must wait the Miss North Dakota Pageant is calling.

By Brian James Schill

FROM RUSSIA WITH LOVE

Sitting in the West Atrium at the School of Medicine & Health Sciences building in Grand Forks in February, Rugby, N.D., native and MD Class of 2023 President Anja Selland is reflecting on her first year. It had been a busy one already. Not only had she adjusted to the rigors of medical school, but she was still working hard to keep up with her other passion—classical ballet. Over coffee, as snow flurries moved in from the west, the fluent speaker of Russian chatted with North Dakota Medicine about The Nutcracker, health care in Russia, and how the study of language and medicine really aren't so different after all.

[Conversation edited for clarity and space.]

So, I know you're from Rugby, but what did you study as an undergrad and where?

I attended St. Olaf College in Northfield, Minn. I majored in Russian Studies, which connects to my background in ballet.

ON POINTE

Anja Selland demonstrates her ballerina chops (photo courtesy North Dakota Ballet Company)

Hold on—you're from Rugby, N.D., but studied Russian in Minnesota?

This is a long story! From the time
I was four until I graduated from
high school, I took ballet lessons
in Minot from a Russian instructor.
When I was in middle school, our
family spent a sabbatical year in
Alaska. My dad is a family practice
physician, and my mom is a pastor.
This sabbatical year was a good
break from a busy medical practice
and a great family adventure. In
Anchorage, I had the opportunity to take
Russian language class and discovered

that I enjoy studying languages. Following high school graduation, I attended the Bolshoi Ballet Summer Intensive Program in New York City. This was followed by time in Moscow to study Russian and ballet through the U.S. State Department National Security Language Initiative for Youth. Language is a requirement at St. Olaf, so I studied Russian which was a nice fit with pre-med requirements and my dance scholarship there.

So where does medicine come in?

Medicine was my plan all along, but I chose a Russian major because it provided a nice balance to the mathematics, chemistry, and physics courses. Following college graduation, I received a Critical Language Scholarship to Vladimir, Russia, to continue my Russian language studies. After the summer program, I moved to Moscow, where I taught English for a year. I continued dancing at a local studio. Yet, I wanted to go to medical school, so I came home and worked as a scribe and CNA while I got my application ready. Now I'm here.

And loving life. Is it fair to say you're fluent?

Well, I was able to navigate life in Russia where English is not as common as one might think. I'm frequently in touch with my Russian host family and friends.

However, if I were to take, say, a history class in Russian, I would be greatly challenged. The vocabulary is quite expansive.

On that note, here's a two-part question: First, do you think your Russian language instruction will make you a better physician by helping you improve your communication skills generally? And, second, do you think your ballet training might shape how you will practice as a physician?

Yes to both. As I said, my childhood ballet instructor was Russian, and those teachers are known for their discipline. Growing up in that world has contributed to my own discipline, which you need to be a successful medical student. It takes a lot of work, energy and time. That's ballet. It is a challenging and disciplined art that has helped me in many ways. Like Russian language and ballet, medicine is also an art and a language. As a first-year medical student, I am now navigating a new language just like I did during my immersion in Russia.

Do you have experience with the Russian health care system?

Not much. Mostly through a friend who was sick. I met an American doctor who preferred to practice in Russia. He had left the U.S. years ago after frustration with the bureaucracy of the American system. They do have a universal health care system, but there are

also a lot of home remedies. When I was sick, my Russian friends had all these suggestions of what I should do, but none of them was "go to the doctor," even though I likely needed antibiotics!

Do you have any interest in returning to that part of the world to practice after you graduate with your M.D.?

For the longest time, my interests have been medicine, ballet, and Russian. Those three things don't often overlap. So, I'd like to see how I could integrate them.

Assuming you stick with medicine, rather than a career in dance, what do you hope to specialize in?

I think primary care would be a good fit for me because of its comprehensive nature. At this time, I'm pretty open-minded and excited about exploring various specialties.

Here's a toughie: What's your favorite ballet?

That's an impossible question! The most recent ballet I saw was Don Quixote at the Mariinsky Theatre in St. Petersburg. Every element of it is incredible—the orchestra, costuming, staging, and of course the dancers are just top-level. But there's a scene from La Bayadère that's my favorite too. Swan Lake is also amazing, so—every ballet!

And you performed in The Nutcracker locally, yes?

Yes. I decided to continue doing ballet even as a med student. And North Dakota Ballet Company has a pre-professional division. They're very flexible and accommodating so college students and adults can continue to be involved with dance. I auditioned for the Nutcracker during Block I, which was a stressful decision for a busy medical student. I was cast as the Sugar Plum Fairy. It is a very difficult solo which provided an exciting challenge. The performances followed three days of final exams. It was really fun and completely worth it. Often students don't feel like they have time for other interests in medical school, but this created an important balance for me. I'm surprised too—I didn't think I'd be dancing and performing in medical school; yet, we have it in Grand Forks and it's fun. I'm glad I tried.

Would you do it again?

[Hesitates] Yes, I would. I love *The Nutcracker*. When the music by Tchaikovsky comes on and it's just [smiles] ... wow.

By Brian James Schill

NN CLASS OF 2020 RESIDENCY SITES

Haley Amoth (Pathology), University of Michigan Health System, Ann Arbor, Mich.

Jason Barba (Emergency Medicine), Icahn School of Medicine at Mount Sinai, New York, N.Y.

Tyler Beattie (Anesthesiology), University of Wisconsin Hospitals & Clinics, Madison, Wis. (following a transitional year at the University of North Dakota School of Medicine & Health Sciences, Fargo, N.D.)

Antontrey Begaye (Family Medicine), University of Arizona College of Medicine, Phoenix, Ariz.

Ashley Blotsky (Family Medicine), Altru Health System, Grand Forks, N.D.

Trevor Braeger (General Surgery), Ascension St John Hospital Program, Detroit, Mich.

Alexis Brendible (Family Medicine), Swedish Medical Center/Cherry Hill, Seattle, Wash.

Kelsie Brooks (Family Medicine), Altru Health System, Grand

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

Beau Burkholder (Anesthesiology), SUNY Upstate Med University, Syracuse, N.Y.

Jared Buschette (Internal Medicine), Abbott-Northwestern Hospital Program, Minneapolis, Minn.

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

Rylee Christian (Internal Medicine), Cone Health Program, Greensboro, N.C.

Nicholas Colwell (Otolaryngology), University of Wisconsin Hospitals & Clinics, Madison, Wis.

Grant Edland (Internal Medicine), George Washington University, Washington, D.C.

James Evers (Internal Medicine), University of Wisconsin Hospitals & Clinics, Madison, Wis.

UND BY THE **NUMBERS**

medical students matched with a residency program in 2020.

of UND's MD Class of 2020 matched into primary care specialties (internal of UND's MD Class of 2020 matched medicine, family medicine, ob/gyn, pediatrics).

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

18

different specialties chosen by the MD Class of 2020.

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

Nicholas Geiger (Emergency Medicine), Western Michigan University - Homer, Stryker MD School of Medicine Program, Kalamazoo, Mich.

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

Jacob Greenmyer (Pediatrics), Mayo Clinic School of Graduate Medical Education, Rochester, Minn.

Zachary Hemann (Transitional Year), University of North Dakota School of Medicine & Health Sciences, Fargo, N.D.

Austin Hoggarth (Neurological Surgery), Carilion Clinic-Virginia Tech Carilion School of Medicine, Roanoke, Va.

Nicholas Hopkins (Neurological Surgery), University of Oklahoma College of Medicine, Oklahoma City, Okla.

Alexander Hron (Orthopaedic Surgery), Akron General Medical Center/NEOMED Program, Akron, Ohio

Elizabeth Husted (Family Medicine), Mayo Clinic School of Graduate Medical Education, LaCrosse, Wis.

Eric Jagim (Anesthesiology), University of Missouri Hospitals & Clinics, Columbia, Mo.

Brett Johnson (Internal Medicine), Cleveland Clinic Foundation Program, Cleveland, Ohio

Jeffrey Johnson (Obstetrics-Gynecology), HCA Healthcare Kansas City, Overland Park, Kan.

Ashlyn Kamrath (Family Medicine), Altru Health System, Grand Forks, N.D.

Shelley Kirkham (Family Medicine), Hilo Medical Center Program, Hilo, Hawaii

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

Ellen Kronzer (Internal Medicine), Mayo Clinic School of Graduate Medical Education, Rochester, Minn.

Naveena Lall (Internal Medicine), Rutgers Robert Wood Johnson Medical School Program, New Brunswick, N.J.

Ian Lancaster (Internal Medicine), HCA Healthcare/USF Morsani GME, Largo, Fla.

Brooke Lentz (Family Medicine), University of Nevada Las Vegas School of Medicine, Las Vegas, Nev.

Andrew Lesser (Internal Medicine), Abbott-Northwestern Hospital Program, Minneapolis, Minn.

Wendy Lim (General Surgery), Southern Illinois University School of Medicine Springfield, Ill.

Jordan Lindholm (Family Medicine), University of Minnesota Medical School, Duluth, Minn.

Elizabeth Loughney (Pathology), Madigan Army Medical Center, Tacoma, Wash.

Camille Lynn (General Surgery), Eisenhower Army Medical Center, Augusta, Ga.

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

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

Kirsten McCullough (Anesthesiology), University of Wisconsin Hospitals & Clinics, Madison, Wis.

Anna Melicher (Obstetrics-Gynecology), University of Utah Health Program, Salt Lake City, Utah

Anaas Mergoum (Transitional Year), University of North Dakota School of Medicine & Health Sciences, Fargo, N.D.

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

Lisha Murphy (Pediatrics), University of Washington Program, Seattle, Wash.

Erica Nelson (Pediatrics/Medical Genetics), Vanderbilt University Medical Center, Nashville, Tenn.

Shirin Nour (Internal Medicine), Mayo Clinic School of Graduate Medical Education, Rochester, Minn.

Jenie Ogle (Internal Medicine), Tripler Army Medical Center, Honolulu, Hawaii

Michael Osterholt (Family Medicine), Rapid City Regional Hospital, Rapid City, S.D.

Megan Pignato Confidential

Benjamin Prout (Diagnostic Radiology), University of Wisconsin Hospitals & Clinics, Madison, Wis. (following a preliminary Surgery stint at University of Wisconsin Hospitals & Clinics)

Shane Raza (Urologic Surgery), University of Nebraska Medical Center College of Medicine Program, Omaha, Neb.

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

Hunter Row (General Surgery), University of North Dakota School of Medicine & Health Sciences, Grand Forks, N.D.

John Schwartz (Pediatrics), Central Iowa Health System, Des Moines, Iowa

Jessica Schweigert (General Surgery), Gundersen Lutheran Medical Foundation, LaCrosse, Wis.

Emily Shawkat (Anesthesiology), University of Iowa Hospitals & Clinics, Iowa City, Iowa

Steven Smedshammer (Pediatrics), University of Minnesota Medical School, Minneapolis, Minn.

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

John Stacy (Internal Medicine), University of Colorado School of Medicine, Aurora, Colo.

Kristen Stenehjem (Pediatrics), Children's National Medical Center, Washington, D.C.

Annika Strand (Emergency Medicine), HealthPartners Institute, Saint Paul, Minn.

Alexandra Streifel (Dermatology), Louisiana State University School of Medicine, New Orleans, Lou. (following a transitional year at University of South Dakota Sanford School of Medicine, Sioux Falls, S.D.)

Grace Suk (Family Medicine), Mayo Clinic School of Graduate Medical Education, Rochester, Minn.

Whitney Tingle (Family Medicine), Altru Health System, Grand Forks, N.D.

Thomas Walter (Internal Medicine), HealthOne Program Sky Ridge Medical Center, Lone Tree, Colo.

Paige Williams (Family Medicine), Martin Army Community Hospital (BMACH), Fort Benning, Ga.

Ashley Wood (Internal Medicine), Mayo Clinic School of Graduate Medical Education, Rochester, Minn.

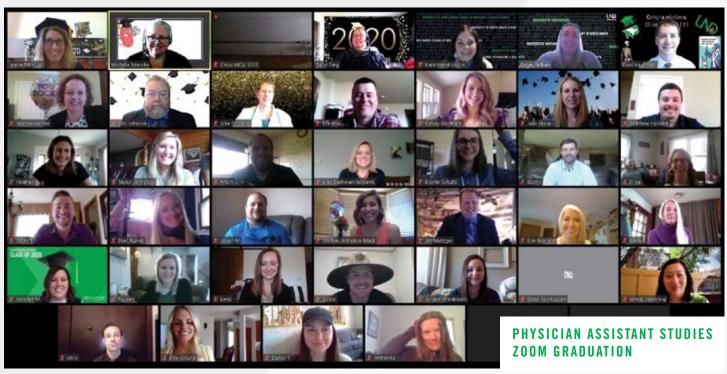
Tucker Zimmer (Psychiatry), University of Michigan Hospitals, Ann Arbor, Mich.

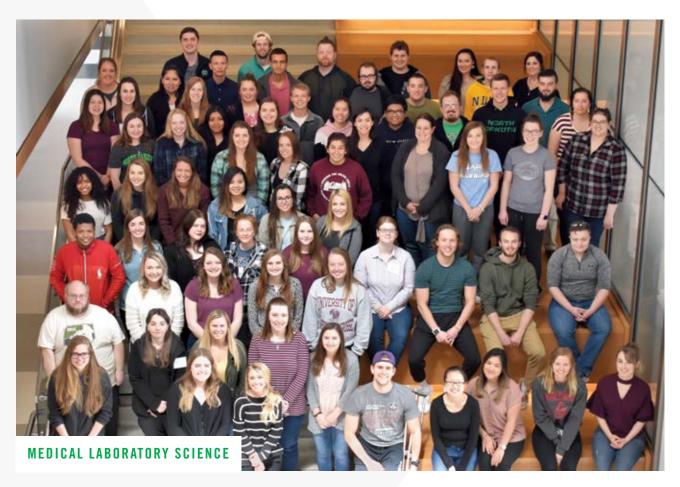
Nicole Zimmerman (Pediatrics), University of South Dakota Sanford School of Medicine, Sioux Falls, S.D.



The COVID-19 pandemic disrupted not only our UND graduation events, but our ability to produce group photographs of our many programs' Classes of 2020. Pages 20-23 represent our best effort at curating images of all of our UND School of Medicine & Health Sciences May 2020 graduates. All group photos taken before COVID emerged in the U.S.









MASTER OF OCCUPATIONAL THERAPY, CASPER, WYO., CAMPUS





BIOMEDICAL SCIENCES From left to right:

From left to right: Sayabtani Dastida-Ghosh, Moriah Hovde, and Mona Sohrabi-Thompson







ATHLETIC TRAINING

From left to right: Austin Hills, Carla Maurstad, Kyler Roteliuk, Taylor Vistad, and Benji Wilebski.







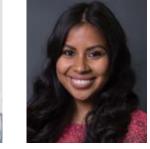




MASTER OF PUBLIC HEALTH

From left to right: Courtney Brackin, Ayli Pinedo Carrero, Zachary Hoggarth, Alyssa Huether, Sooyong Kim, Narysee Nicolet, Ashlee Nelson, Anna Ojczyk, Shay Schwimmer, Kshipra Sharma, Prachi Shukla, and Taylor Strand



























You never know the impact you have on other lives.

Just ask Charity Bishop, M.D.

"I once taught a Medical College Admissions Test class through [Indians into Medicine] in the summer, and years later, when I was a resident in New Mexico, a medical student walked up to me and said Charity, do you remember me?" recalled the 2015 graduate of the UND School of Medicine & Health Sciences from her home in Albuquerque. "She had been in my MCAT class and has since graduated from University of New Mexico School of Medicine too and is now practicing with Indigenous communities in Alaska."

This is the sort of connection to community that brought Bishop to UND so many years ago—and what keeps her interested in both rural medicine and Indigenous health today.

Go north! To Dakota!

After all, it was that sort of connection that was modeled for Bishop.

"Charity worked super-hard throughout year four and managed to match into a Family Medicine residency in Albuquerque," explained Kamille Sherman, M.D., who served as a mentor of sorts to Bishop at UND. "When I had an opportunity to visit her in Albuquerque in October 2019, at which time she was an attending physician, seeing her succeed in her corner of the world was a 'full-circle' moment for me, as an educator. She is an INMED graduate who is able to make a difference near the area where she grew up, one patient encounter at a time."

A member of the Akimel O'otham tribe and Arizona native, Bishop had always been interested in medicine. And whether it was wanderlust or a sort of rebellion against her parents, the 18-year-

TAKES KNIGHT

INMED alum Charity Bishop describes the challenges of rural medicine, especially in a pandemic.

old Bishop made it a point to start college almost as far away from home as possible—at Mount Holyoke College in Massachusetts.

After her undergraduate stint on the East Coast, though, Bishop felt the pull of more sparsely populated places. So she enrolled in the MD program at the SMHS, finding herself increasingly interested in not only Indigenous health, but rural medicine.

As it turned out, ending up in North Dakota sort of was like coming home.

"I was mostly interested in rural medicine because many native communities are rural," continued Bishop, who participated in UND's Rural Opportunities in Medical Education (ROME) program in Dickinson, N.D. "In rural settings I think there is often a broader scope of practice. There is not usually easy access to specialists, so you end up managing more yourself. I thought getting training in rural medicine would help equip me to practice this way."

It was an intense and eye-opening third year, said Bishop, who laughed that she essentially "lived" in the Dickinson hospital for six months.

Nevertheless, North Dakota "was actually an ideal place to learn since most patients and physicians were excited to see, teach, and work with a medical student," Bishop said. "I think someday I will practice in a rural setting, but at this time in my career I am working on growing and supporting Native Medical students."

INMED calling

This, too, was part of UND's appeal.

"I had gone to a small college on the East Coast where there were not very many Indigenous students," noted Bishop from her office at the University of New Mexico (UNM) in Albuquerque, where she completed her family medicine residency. "I was excited to go to a place that had more of an Indigenous community—and students."

And if the former student at the start of this story is any indication, that community is likewise glad Bishop ended up at UND.

"I know several graduates of the UND School of Medicine & Health Sciences who started as INMED summer institute students in junior high and went all through the program, becoming doctors! I think those doctors are true heroes. It also shows that pipeline programs do work."

As Bishop put it, UND's dual emphasis on Indigenous training and rural and family medicine are vital to the lives of American Indians, who even in the 21st century face stark disparities in health outcomes, whether the condition in question is cancer or coronavirus.

COVID-19 on the reservation

To that point, Bishop is also dealing with a COVID-19 pandemic that has ravaged American Indian communities in New Mexico.

At the time of this writing, the total number of confirmed COVID cases in New Mexico was 7,500, with well over 300 deaths.

But such statistics are especially high for the Navajo Nation, says Bishop, which spans New Mexico, Arizona, and Utah.

"Native American people account for more than 50 percent of the total cases in New Mexico, despite being only about 10 percent of the state's population," Bishop sighed. "There are health disparities on the reservation that existed prior to COVID-19, but this is exacerbating it. And it's multifactorial in origin-some is communication, some is resources. Many of those families are multi-generational [with persons of all ages in a home], plus many homes on the reservation don't have running water. That makes it pretty hard to wash hands."

Such economic disparities contribute to COVID on reservations, said Bishop, and make economic development there quite complex. Still, things might be even worse if New Mexico was less proactive than it was. Bishop said that public health was a major statewide focus even before the pandemic—and that the state had a stay-home order and social distancing back in early March, before much of the nation got in gear.

"Access to healthy food impacts health disparities as well, and many reservations are food deserts," she added. "I am trying to reduce those health disparities by working with Indigenous medical students, and we received a grant from [UNM] to work on an indigenous health curriculum for the medical school here."

All of which is good news for not only the Indigenous population in New Mexico, but the entire state.

"Both North Dakota and New Mexico are rural states with a few bigger cities, so patients often have to travel to see a specialist," Bishop concluded. "Primary care is important everywhere, but it is vital in states like ours."

Especially in a time of pandemic.

By Brian James Schill

110s

Jenny Brown, MPAS '19, has joined the Mid Dakota Clinic Center for Women in Bismarck, N.D. She provides obstetric and gynecologic care for women of all ages.

'00s

David Appert, M.D. '00, has joined Sanford North Clinic in Bismarck, N.D. As a dermatologist, he specializes in surgical and procedural dermatology, including Mohs micrographic surgery. His primary focus is treating patients with skin cancer.

Karin Willis, M.D. '05, has joined Mid Dakota Clinic in long term care, providing services to Bismarck, N.D., patients in area nursing homes and assisted living centers. Willis is medical director for St. Gabriel's Community and CHI St. Alexius Health Transitional Care Unit. She also serves as alternate medical director for CHI St. Alexius Health Hospice.

'90s

Dawn Mattern, M.D. '97, has been named a fellow in the American Medical Society for sports medicine. Mattern is a board-certified family practice/sports medicine specialist with Trinity Health in Minot, N.D.

Diane Weber, PA '94, is now at Philip Health Services, Inc. in Underwood, S.D.



Jenny Brown, MPAS



Karin Willis, M.D.



David Appert, M.D.



Dawn Mattern, M.D.



Cardiologist Wally Radtke explains why he and his spouse established a scholarship endowment in honor of another pair of cardiologists.

"I was fortunate to be involved in their recruitment," recalled Wallace "Wally" Radtke, referencing UND School of Medicine & Health Sciences Dean and recent UND Interim President, Dr. Joshua Wynne and his spouse, Dr. Susan Farkas.

Over 15 years ago, Wally and his wife JoAnne played a role in convincing the latter pair of cardiologists to move from Detroit, Mich., to the Red River Valley. "What impressed us both, as we got to know them and became colleagues and friends, was that although they came from big cities—New York, Budapest—and they didn't know much about North Dakota, they adopted the state as their own and began contributing to the state in so many different ways."

A cardiologist himself, who retired in 2013 after 37 years of cardiology practice in Fargo, Wally recognized Wynne's and Farkas's sincerity and willingness to work hard immediately.

"They became great colleagues, and Josh, supported by Susan, committed to make the North Dakota medical school one of the finest in the nation," Wally added. "In addition, he was instrumental in the creation of the beautiful new med school building, supported the development of a new curriculum, and increased class sizes to better serve North Dakota."

As a commendation of sorts for this success, Wally and JoAnne last year established the Drs. Susan Farkas and Joshua Wynne Scholarship Endowment, which provides scholarships to medical students from North Dakota who are interested in practicing in North Dakota.

"It really impressed us as North Dakota natives how valuable [Wynne and Farkas] have been to our medical school and our state and that's why we created the endowment," continued Wally. "It was an idea that came to us jointly as we contemplated a gift to the medical school."

Such a move by the Radtkes—establishing a major scholarship endowment in someone else's (not even family) name—is classic North Dakota.

Wally is a Hurdsfield, N.D., native and JoAnne is from Zahl (north of Williston, N.D.). They met at the former Minot State College where Wally graduated with B.S. in Education and JoAnne graduated from the Trinity School of Nursing.

For a few years after graduation, Wally taught mathematics and German at Williston High School and JoAnne was a registered nurse at Good Samaritan Hospital in Williston.

"At that time, I was looking to advance my education and I explored a number of options, which included the possibility of medical school," Wally explained. "I interviewed with the then-Assistant Dean of the Medical School, Dean Arneson. He had previously had a part of his larynx removed and held a microphone to his throat to speak. He was very encouraging and helped me set up three semesters of premed courses at UND which were required before I could apply to med school. I did get it all done and was accepted into med school."

After graduating with a BS Med degree in 1968, Wally transferred to the University of Nebraska where he earned his M.D. and did an

internship prior to moving to Rochester, Minn., where he completed his internal medicine residency and fellowship in cardiology.

"Both of us had a desire to return to North Dakota, so after looking around, I accepted a position at the Fargo Clinic in 1976 and the rest is history," he said.

Since retiring in 2013, Wally and JoAnne have kept busy with hobbies and travel. Wally does volunteer work at a clinic for the uninsured in downtown Phoenix, Ariz., where the Radtkes spend the winter months. They have also participated in the School's Adopt-a-Med Student Program which provides first-year medical students with a stethoscope for use during their education.

What always impressed Wally is how tight-knit the North Dakota medicine family can be.

"[As a child] our closest physician was in Harvey [N.D.], and our family physicians were Drs. P.A. Boyum and his son, Lowell Boyum," Wally recalled. "Prior to going to med school, I visited with Lowell Boyum who encouraged me to become a physician. His son, Peter Boyum, was one of my UND med school classmates. Another family physician who practiced in Harvey was Dr. Bohdan Hordinsky who cared for my father. His children also attended UND's med school."

It's these types of connections, these stories, Wally said, that convinced him and JoAnne to support students from North Dakota who have an interest in practicing in our state.

Collecting his thoughts, Wally concluded that whether one is teaching high school, practicing medicine, volunteering, or providing young students with financial support, there is always great satisfaction in serving others.

"Teaching in a sense is similar to medicine, in that to be successful you have to relate to people," he said. "The more you can become acquainted with people and their backgrounds and develop friendships with them, the more successful I think you are in any field."

THANK YOU TO OUR THOUGHTFUL DONORS

who recently gave gifts or made pledges.

Dr. T.A., BS Med '69, and Maureen Schultz of Sioux Falls, S.D., established the Dr. T.A. and Maureen Schultz Scholarship Endowment, which provides scholarships to UND medical students. Dr. Schultz was an endocrinologist at what is now Sanford Health in Sioux Falls for many years.

Karen Robinson of Fargo, N.D., continues to support the Clarine, Howard and Karen Robinson Scholarship Endowment, which provides scholarships to UND medical students. Karen served as associate director for patient care/diagnostics at the Department of Veterans Affairs in Fargo until her retirement in 2010. She named the scholarship in memory of her parents.

PA \$50 for 50

In March, the School's Department of Physician Assistant Studies asked alumni and friends to help celebrate the program's 50-year anniversary by making a gift, called \$50 for 50. Thus far, the initiative has raised more than \$500, which has primarily gone into scholarship funds for Physician Assistant Studies (PAS) students. Thank you!

This year, the following PAS students were awarded the Katherine Maryann Rasmussen scholarship: Jenna Zweirs, Aunica Novecek, Rebecca Beyer, Ben DeVries, and Heidi Artz. The Micky Knutson scholarship was awarded to PAS student Shelby Knox. Congratulations to these students, and thank you to our donors who help alleviate their student debt!

Jeff Dodson
Director of Development
701.777.5512
jeffd@UNDfoundation.org





Jessica Sobolik, '02, '17 Director of Alumni & Community Relations 701.777.6048 jessica.sobolik@UND.edu



The SMHS Simulation Center keeps third-year medical students on their toes through the SHaPE program.

Twenty percentage points.

That's how much UND medical students' average Clinical Skills Assessment (CSA) scores were dropping between the end of their first and third years back in 2015.

And Dr. Jon Allen was having none of it.

"The skills decline bothered me, and I felt we could do a much better job," explained Allen, director of the UND School of Medicine & Health Sciences (SMHS) Simulation Center. "So, I put a proposal together, ran it by [Senior Associate Dean for Medicine & Research] Dr. Marc Basson, then took it to the appropriate committees, which approved the proposal."

As Allen put it, third-year med students—who spend their year in the clinical setting away from the SMHS in North Dakota's four largest cities—gain a lot of medical knowledge in their six clinical rotations before returning to Grand Forks. But even as their breadth of knowledge increases, their attention to detail on the history and physical examination can sometimes wane.

This waning is typical for students at med schools across the nation, resulting in poorer performance on not only the "H&P" but

patient interviews conducted by students in their third year.

Using resources provided by North Dakota's Healthcare Workforce Initiative, then, Allen and his team at the SMHS Simulation Center set out to address this decline by strategizing a way to help third-years maintain their skills, even at a distance from campus.

Thus was the School's highly original Supplemental History and Physical Enhancement—or SHaPE—program born.

Shaping up

Managing the novel program is Stephanie Flyger. It's her job to coordinate all third-year students' supplemental H&P training in the context of their six rotations (family medicine, pediatrics, psychiatry, neurology, obstetrics/gynecology, and surgery).

Flyger does this by arranging practice sessions for students both on "real" standardized patients (who have been coached by the Simulation Center on how to act like a patient with certain health challenges) and on the School's robotic "manikins." These manikins are housed in the four mobile simulation trucks the SMHS keeps on each of the School's four campuses in Bismarck, Fargo, Grand Forks, and Minot.

"Our goal is to bring those third-years back up to 90 percent or higher."

STEPHANIE FLYGER Project Coordinator, Shape Program



"Also, it's a best practice to have simulation in student's third year," said Flyger, referring to standard of educational practice around the country. "To maintain a high quality education we need both to train our students in H&P and give them simulation training. So, we developed a 'distance' simulation H&P program that was standardized across the state, which is where our mobile sim trucks come in."

Once a session is arranged for a cohort, students meet with Flyger and their physician preceptors to practice their interview skills, physical examinations, and medical history-taking—often inside one of the four mobile sim units the School keeps on each of its campuses.

Students engage in these "extra" sessions six times in an academic year before returning to Grand Forks for their third-year CSA (also known as the Objective Structured Clinical Exam or OSCE).

And so far, both Allen and Flyger have been encouraged by the program's results.

According to Flyger's data, the average CSA score for UND thirdyears before SHaPE was implemented was 72.3 percent. After one year of SHaPE, however, third-year students' average scores jumped to 79.5% in 2018—and were even higher in 2019.

That greater-than seven percentage point increase is what has the Simulation Center and School administration so excited.

But Flyger still wants more.

"Our goal is to bring those third-years back up to 90 percent or higher," she said.

SHaPE at a distance

Of course, like everything else, COVID-19 upended Flyger's and Allen's program. But SHaPE continues, only in a "virtual" sort of way, allowing students to get a jump on their telemedicine skills, via the Zoom platform, which in any case may soon become a standard of medical practice, especially in rural settings.

"I was very impressed with how smoothly everything went—I was not expecting to get as much out of it as I did," admitted third-year student Matthew Soderberg of his recent virtual SHaPE session for psychiatry. "The interviewing part of it is not that much different than an in-person visit. It's essentially history gathering, searching for

other issues, and addressing the patient's primary concerns. I think it was a fantastic experience to help train us for telemedicine visits." Even if the physical distance made the H&P more of a challenge, Soderberg said that it has not only trained him for the future of medicine—telehealth—but for the next global health emergency.

"While this may be affecting the education we normally receive by being on site, interacting with patients for these rotations, there certainly is a unique educational value to being a part of the pandemic," he said. "It is valuable to see how the health care system responds to these extreme circumstances, especially when it comes to limited resources, and I like to think we're better prepared to handle similar scenarios in the future if we're called upon to do so."

The future is now

But assuming in-person SHaPE sessions will return in the near future, Sim Center staff anticipate helping students boost their CSA scores even more.

"And we're considering expanding this to fourth-year students as well," said Flyger, explaining how students are always looking for more direct experience with an even greater number of specialties. "There are certain residencies students want to go into, like emergency medicine. And we now have a Department of Emergency Medicine, whose [Bismarck-based] chair Dr. Jon Solberg wants to work with us for an ER sim in fourth year."

Allen too was looking forward and more than happy to credit everyone but himself for helping develop a program unlike most anything else in the country.

"Other schools do have programs for helping students improve their physical diagnostic skills, although I don't know of any that do it in such a specific and standardized way," he said. "And, it is all managed out of a single office—Stephanie's—at the SMHS for the whole third-year class as they work in various institutions across the state. Pretty amazing."

By Brian James Schill

SMHS announces 2020 Sophomore Awards

Several second-year medical students received sophomore awards on April 30 when the UND School of Medicine & Health Sciences announced its 2020 Sophomore Awards winners. In past years, these awards were presented in-person. This year's luncheon was canceled because of COVID-19. Nonetheless, academic, teaching, and service awards were awarded on behalf of the School and the North Dakota Medical Association, including:

North Dakota Medical Association

Awards, Awarded to second-year students nominated by their peers, the M.D. Class of 2022, and recognized for outstanding performance in the following three curricular areas:

Group Leadership and Professionalism

RaMae Harpestead, Minto, N.D., Engages in ethical conduct, facilitates group interaction and productivity, motivates others to learn, exhibits personal integrity, and



personal integrity, and interacts with others appropriately with

Peer Teaching
Donald Hamm,
Power, Mont.,
Outstanding
contributions to the
group's database
and facilitating group

respect and courtesy



learning, skillful and accurate presentations, and willingness to assist fellow classmates to learn concepts they do not understand

Integration of Basic Science and Clinical Application

Hunter Huff Towle, Bismarck, N.D., Ability to analyze problems, generate hypotheses, set priorities, test hypotheses and formulate alternative



hypotheses, draw appropriate conclusions, and apply the knowledge to patient cases

SMHS Academic Awards

The following awards are given to secondyear medical students in recognition of their overall academic achievements:

The DeBoer Memorial Award

Christina Krieger,
Galesburg, N.D., Given
in memory of Mrs.
Benjamin DeBoer
and presented by
the Department of
Biomedical Sciences



Philip H. Woutat Memorial Scholarship Award

Bradley Conant,

Fargo, N.D., Presented by the Department of Biomedical Sciences on behalf of Mrs. Philip Woutat in memory of her husband for his service as a radiology instructor



William Eugene Cornatzer Award

Marcus Osman, Fargo, N.D., Presented by the Department of Biomedical Sciences in memory of Dr. Eugene Cornatzer, founder and inaugural chair of the Department of



Biochemistry & Molecular Biology, and a pioneering and innovative leader in medical education and biomedical research

James Kelleher Award

Sarah Rasmussen, Hazen, N.D., Presented by the Department of Biomedical Sciences in honor of Dr. Kelleher's outstanding service to the School of Medicine & Health Sciences, and



his dedication and contributions to the teaching of medical students

SMHS Service Award Kevin Monk Award

Sarah Pippin, Williston, N.D., Given to a secondyear medical student for outstanding service to the School of Medicine & Health Sciences.



SMHS faculty were also nominated for Outstanding Teacher Awards by the firstand second-year medical student classes, including:

Portrait Award

Michelle Montgomery, M.S.W., L.C.S.W., For outstanding support of students during their first two years of medical education

Golden Apple Awards

For excellence in teaching, given to the instructor whose teaching has had the greatest impact

Nominated by sophomore students: Rhome Hughes, M.D., M.S.

Nominated by freshman students: **Patrick Carr, Ph.D.**

SMHS, Altru Health System team up to produce COVID-19 testing medium

Researchers at Altru Health System and the UND School of Medicine & Health Sciences have partnered on the production of a laboratory medium useful for testing COVID-19.

Marijo Roiko, Ph.D., microbiology program director in the Department of Pathology and Laboratory Services for Altru, and UND Department of Biomedical Sciences Associate Professors Catherine Brissette, Ph.D., and Matthew Nilles, Ph.D., have produced a viral transport media (VTM) solution used to maintain the stability of a clinical specimen from the point of collection to laboratory testing.

In laboratory science, VTM is a liquid medium used for collection, transport, maintenance and long-term freezer storage of clinical specimens containing viruses, including COVID-19. The UND-Altru team has produced enough VTM for more than 1,600 COVID-19 tests.

"Across the country, VTM has been in short supply since the COVID-19 outbreak began," noted Nilles. "However, this partnership between lab scientists at Altru and UND is helping alleviate the shortage in a significant way."

According to the researchers, the locally produced medium was developed from reagents available in laboratories at the two institutions. The compound was vetted by quality assurance testing at Altru and the North Dakota Public Health Laboratory.

"This medium has supported more than 90 percent of COVID-19 tests conducted in the Altru service area since April 1," added Roiko. "This has allowed local health care agencies to maintain a steady pace of testing, and additional production of the medium can be ramped up as needed."

As Roiko put it, although health care providers still need to manage shortages of

items like nasal swabs, they are now much less concerned about running out of VTM.

"Altru is very grateful for the partnership," she said.

"While lab scientists aren't necessarily on the 'front line' of this fight, they're crucial to helping our nation get through this," concluded Brissette. "And the more institutions can partner on solutions like this, so



Catherine Brissette, Ph.D.



Matthew Nilles, Ph.D.

much the better—it will save time, money and hopefully lives."

UND School of Medicine & Health Sciences recognizes nearly 250 graduating health sciences students

In addition to the 74 new medical doctors who recently graduated from the UND School of Medicine & Health Sciences (SMHS), the School recognized 249 students from its graduate and health sciences programs who also graduated on Saturday, May 16.

"We want to extend congratulations to all of the graduates of the health sciences," noted Thomas Mohr, PT, Ph.D., associate dean for health sciences at the SMHS. "Most of all, we want to recognize the impact that health sciences graduates will have on the thousands of patients they will work with throughout their careers."

Students representing the School at UND's spring Commencement include not only three graduates of Biomedical Sciences, but also those from Medical Laboratory Science (91), Occupational Therapy (62), Physical Therapy (49), Physician Assistant Studies (28), Master of Public Health (11), and Athletic Training (5).

And despite the pandemic throwing many student plans for a loop, most are on track and excited to be marking the start of health careers.

"I remember coming into the UND OT program my first day not knowing anyone," recalled Caelin Hansen, a new Master of Occupational Therapy grad. "Little did I know, this program would give me some of the greatest mentors and friends that I could ever ask for. The faculty in the OT program were some of the best supports that I had throughout my three years in the program. Because of them, my supportive classmates, and the opportunities that the program provides both in and out of the classroom, I feel prepared to take on my new role as an occupational therapist."

Over the past 50 years, the UND School of Medicine & Health Sciences has graduated nearly 10,000 professionals working in the health sciences in North Dakota and around the country.

UND designated state's first cardiac ready campus by North Dakota Department of Health

The North Dakota
Department of
Health (NDDoH) has
designated the University
of North Dakota the first Cardiac-Ready
Campus in the state.

"Your hard work is evident, and we see you as a model for Cardiac-Ready Campus designations," wrote Christine Brondyk, Stroke & Cardiac System Coordinator for the NDDoH, in a letter to Dr. Bryan Delage, assistant professor in the UND School of Medicine & Health Sciences (SMHS) Department of Family & Community Medicine. "Thank you for all that you have done and continue to do to make your community a healthier and safer place."

In 2016, the North Dakota Division of Emergency Medical Systems & Trauma partnered with the American Heart Association (AHA) to provide the Cardiac-Ready Community program through the North Dakota Cardiac System of Care. The program, which promotes the AHA's "Chain of Survival," is designed to promote survival from a cardiac event by making sure communities are prepared to respond and assist if an individual has a cardiac event.

"This is tremendous," added Dr. Delage, chair of UND's Cardiac-Ready Campus committee, who notes that while many campuses have plans in place to become Cardiac-Ready, none have yet accomplished the task. "The outcomes from an acute cardiac arrest vary widely, with the average nationwide survival rate being only about 10 percent. We're hoping that through this ongoing program of education, training and community awareness, we can improve survival of such events in our campus community and within the city of Grand Forks."

Requirements to keep the Cardiac-Ready program going throughout the designation period include continued community leadership, an ongoing community awareness campaign, additional blood pressure screenings (including referrals for blood pressure management and education on lifestyle change), continuing education of the community on CPR and automatic external defibrillator (AED) use, expansion of public access to AEDs, and development of a performance improvement program. The award lasts three years and will require re-designation in 2023.

Powered by a grant the NDDoH received in 2017 from the American Heart Association to make its state more "cardiac ready," UND is the first campus in the state to have implemented the program at the campus level.

"Now it's up to us and our community to continue to uphold this process and

to improve upon our ability to affect people's lives in the event of an emergency," said Terry Wynne, director of safety for the UND Department of Public Safety. "No longer can we or should



Bryan Delage, M.D.

we assume that we're powerless to help someone suffering a heart attack. The tools are in place for us all to help in an emergency."

The Cardiac-Ready Community Program of North Dakota will monitor the university's progress beyond its initial designation in the continued effort to educate the community and improve cardiovascular health awareness and acute cardiac event outcomes beyond 2020.

"As a practicing cardiologist, I appreciate how vital such a program is for any community," SMHS Dean Dr. Joshua Wynne said (no relation to Terry). "Given the rural character of North Dakota, where an ambulance might be more than just a few minutes away, it's especially important that we all work to prepare ourselves to respond to health emergencies like heart attack and stroke. I applaud Dr. Delage and his team on this life-saving work."

2020

RESIDENCY MATCHES



ERICA NELSON AND HER BOYFRIEND

"I matched into the Pediatric and Medical Genetics program at Vanderbilt University in Nashville, Tenn.

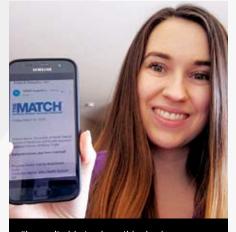


SHANNON CHAMBERLAIN

I matched into internal medicine at UND. My husband, Peter, and I are excited to be sticking around Fargo for three more years!



Ashlyn Kamrath (center) said: "I spent Match day with two of my classmates and best friends Alexis Brendible (left) and Elizabeth Husted (right), as well as my husband, Drew."



"I wasn't able to share this day in person with my family and friends due to COVID-19 restrictions nor did I receive an actual letter, but opening my match letter email was an incredible moment," said Whitney Tingle. "I matched at my top residency program in family medicine and I am extremely grateful to continue to care for the Grand Forks community."



TO THE BAYOU!

Alexandra Streifel, Bismarck, N.D., with her parents on Match Day 2020. Alex matched into the competitive specialty of dermatology at Louisiana State University in New Orleans, Lou.

Yvonne Claire (Kenner) Bonfield BS OT '87, was born December 28, 1961, the seventh of nine children born to Darwin and Ruth Kenner. She attended school and graduated from Devils Lake High School in 1980. While in college, Yvonne was united in marriage with the love of her life, Douglas Bonfield, on November 29, 1986. They loved each other deeply and danced together through life's great adventures, just the two of them for 20 years. After two decades together, they made the beautiful decision to share their love through foster care starting in July 2006. A year later, in October 2007, Yvonne and Doug adopted Nicole, Isaiah, Sabrina, and Jonathan. With the addition of four siblings, their family was complete. Throughout her career in occupational therapy, Yvonne worked at various health care facilities, transitioning to five years of home health visits and traveling to patients' houses, helping them regain strength and independence. Yvonne enjoyed spending time with family and friends and was committed to never missing a family event or reunion. She loved being a grandma to Ethan, Elijah, and Joseph, and was excited for baby Sanchez to arrive later this year. She had a love for all things musical and shared her beautiful voice with the world through song any chance she got. She and Doug shared their musical gifts in the Ol' Front Porch band and played a variety of gospel, bluegrass, and rock music. Yvonne left this earth to meet her Savior face-to-face on April 19, 2020, after a courageous battle with cancer. While our hearts are broken without her here, we look forward to seeing her again in heaven, the ultimate family reunion! We find peace in knowing that she is now home, free from pain, free from struggles and free from cancer. Though her earthly body has passed away, there is no doubt that she is more alive now than ever. Yvonne was predeceased by her parents, Darwin and Ruth Kenner, and sisters Jan and Deanna.

Dr. William Buckingham, BS Med '49, passed away January 20, 2020, in Encinitas, Calif., at the age of 97. Bill was born on September 11, 1922, and raised in Grand Forks before serving in the Army during World War Two as a medical corpsman on Guam and Guadalcanal. After the war, Bill received a bachelor's degree at UND and continued on to medical school in Winston-Salem, N.C., graduating as a general practitioner. Bill practiced in Fargo, Hillsboro, and Elgin, N.D., before settling with his family in Bismarck in 1960. In 1975, along with Dr. Dunnigan, he became the first Director of the Family Practice Residency Program in Bismarck, He served the North Dakota Academy of Family Physicians for many years as a secretary-treasurer and president, and was named North Dakota Family Physician of the Year in 1982. He was also active as a delegate for the American Academy of Family Physicians Congress of Delegates. Community and service were important to him. Bill was twice elected to the City Council and also served as the City Health Official. He was the volunteer physician for the Golden Gloves program for many years, and was on the founding board for the Missouri Valley Family YMCA. He was also involved with the Amigos de las Americas program, training and supervising volunteers to provide medical care to poor areas of Central America. Bill was asked to re-enter the military and did so, serving as commanding officer of the 193rd Medical Detachment before finally retiring as a full colonel in the North Dakota National Guard. Bill retired from medicine and moved to California in 1997. He was preceded in death by his wife, Marion (Grimm), on March 4, 2018. He is survived by his children, Mike and wife Gina, California; Ann and husband Mohamed, Saudi Arabia; and Vie and husband Paul, Texas; along with 10 grandchildren and 14 great-grandchildren.

REMEMBERING GARY HART

Center for Rural Health director was a leading researcher in rural primary care.

UND – and rural America – have lost a passionate health care advocate.

L. Gary Hart, director of UND's Center for Rural Health and professor of population health at the School of Medicine & Health Sciences, passed away April 13 after a recent illness. He was 72.

"Gary was one of the preeminent rural primary care researchers in the country," said Dr. Joshua Wynne, dean of the School of Medicine & Health Sciences. "Over the course of 40 years, he directed two Centers of Rural Health in Arizona and North Dakota,

and two rural health research centers in Washington and North Dakota. He was a respected rural health expert and advocate. During his tenure at UND, the Center for Rural Health grew in size, impact, and service to rural North Dakota. Staffing grew by 30 percent and funding support from grants, contracts, and the like increased by 25 percent."

Hart came to UND in 2010 to direct the Center for Rural Health, where he guided more than 50 faculty and staff in their mission to improve health opportunities and outcomes for rural Americans. Before joining UND, he served as director and endowed professor



INSTITUTIONAL MEMORY

Left to right: Current and former CRH Directors Brad Gibbens, Mary Wakefield, and L. Gary Hart.

at the Rural Health Office in the University of Arizona's College of Public Health. He also served on the advisory committee of the university's Arizona Area Health Education Center.

He had a large variety of research interests, including rural health, health workforce, access to healthcare, rural policy, and health care for the elderly, infants, and underserved. His work was published in professional journals in medical geography, family medicine, health education, health workforce, and rural health research and policy.

Hart was the recipient of 107 grants, published 160 peer-reviewed journal articles, including three in the prestigious journal Health Affairs and two in the *New England Journal of Medicine*, and delivered 149 invited national presentations at conferences and meetings.

A significant contribution

"Gary made a significant contribution to our understanding of rural health in this country," said Brad Gibbens, who was recently named interim director of the Center for Rural Health. "He was the leading researcher in rural primary care and influenced and mentored many. I think of Gary, too, as the father of rural definitions. He actually created the way we define what is or is not rural. These definitions are used to help determine where the federal dollars flow. He had his Ph.D. in medical geography, so he had the background to use demography and mapping to outline rural health care, and this tied into his research into primary care.

"He was just a heck of a nice guy," Gibbens continued. "He was kind and considerate and really cared for his staff and colleagues. He would talk up the skills and success of his staff, but was way too modest to brag about his success. And he was very successful, but he didn't tell anyone. He was a good, decent man. We will miss him."

"Gary made enormous contributions to rural health research and earned a national and international reputation as an innovative and meticulous researcher," said Eric Larson, who worked with Hart for 19 years at the University of Washington's Rural Health Research Center, which Hart directed for 18 years. "Gary was passionate about improving health care for rural people, and especially interested in using research to address a huge range of rural health care policy problems, including rural workforce supply, access to OB care, and improving rural hospitals. Gary was incredibly generous with his time and his ideas. He was always overflowing with research ideas! Over the years he coached and mentored scores of rural health researchers, many of whom went on to distinguished research careers all over the United States. He leaves behind a legacy of pioneering rural health services scholarship, generosity, and kindness. I'm really going to miss him."

Hart graduated magna cum laude and Phi Beta Kappa with a bachelor of science degree in geography and a secondary school teaching certification from the University of Utah in 1973, where he also earned a master of science degree in geography. In 1985, he graduated from the Doctoral Opportunities Program in the Department of Health Services at the University of Washington School of Public Health. He earned his doctorate in medical geography in 1985, also from the University of Washington.

During his lengthy academic career, he served as a scientific programmer, research analyst and programmer, research scientist, and project director. He spent much of his career at the University of Washington and University of Arizona. At Washington, he directed the Center for Health Workforce Studies from 1998-2007.

"Gary was very smart, but also very humble and considerate," said Gibbens. "You don't see that every day."

By Jan Orvik



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ATHLETIC TRAINING June 19, 2020 Atlanta, Ga.

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Alumni reception



UND SMHS HOMECOMING

Oct. 8-10, 2020 | Grand Forks, N.D.

This year, we will be celebrating our milestone alumni (e.g., 1970,1980, etc.) and 50 years of the Physician Assistant Studies Program (formerly MedEx and the Family Nurse Practitioner program).

Note: The current COVID-19 pandemic may affect UND Homecoming events. Please visit med.UND.edu/events for updates.