





From the CHAIRMAN



DEBRA J. ROMBERGER, MD

When we created our last biennial report, we did not comprehend the degree to which the world would continue to change with a global pandemic and the overdue recognition of health care disparities and other injustices in our communities of color in this country. There certainly has been much pain through these last two plus years to process and I am grateful for the resiliency our faculty, trainees and staff have shown day after day. I could not work with better people!

It is amazing to me as I look through this report to see all the forward movement, despite formidable challenges. We have new fellowship programs in hospice and palliative care and allergy. We launched a new house officer track HEAL (Health Educators and Academic Leaders) to promote the development of future medical educators. Like the rest of the world, we have grown telehealth programs for patients and virtual learning experiences for trainees. We were centrally involved in early COVID clinical trials and developing protocols for our state, region and the country, but also have grown research in new fields unrelated to that virus. We have welcomed new division chiefs, grown our total faculty, opened a new inflammatory bowel disease center and expanded our programs in diversity, equity and inclusion and in faculty development. We have much to be excited about as we look to the future in the department of internal medicine at the University of Nebraska Medical Center.

In this report, we also celebrate the work of several faculty who have retired and one of our senior faculty who has passed away. We learned much from each of them and give thanks for their commitments to our department and medical school. Just another demonstration of the great people we have been privileged to have with us in Nebraska.

While we never know what is around the next corner, we are excited for the future! We will soon welcome another academic year with more students and trainees. We have a vibrant relationship with our health care system partners, Nebraska Medicine and the VA Nebraska Western Iowa Healthcare system, and are looking forward to new ventures with each of them. At the center of it all, it is our honor to care for our patients while we train future health care providers and discover new knowledge. I am ever grateful to be a part of the UNMC Internal Medicine team.

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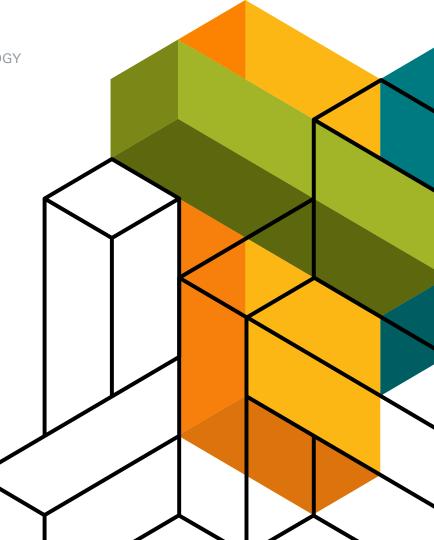
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Clinical Feature

HEALTH CARE DELIVERY SHIFTS TO VALUE-BASED CARE

For UNMC faculty member Stephen Mohring, MD, leading the population health team at Nebraska Medicine meant a chance to help more people.

And in the two-plus years since being named medical director of population health, he and his team have done just that.

- "I wanted to help my physician colleagues have the resources they need to take care of their patients," said Dr. Mohring, who serves as assistant professor in UNMC's Division of General Internal Medicine.
- "Population health is about equipping health teams to do the job they're already trying to do, but it's also making sure we don't have patients fall through the cracks."

Unlike public health, which works to protect and improve the health of society, population health builds on public health's work to provide quality, value-based (not fee-based) care that benefits both patients and health care systems.

The clinical work being done at UNMC and its hospital partner, Nebraska Medicine, is reflective of a national shift in how health care is delivered and paid for — a move from fee-forservice or volume-based care, where

the more you do the more you get paid, to value-based care, where physicians are rewarded for providing high-quality, efficient care. Such a shift is necessary, leaders say, because health care costs are increasing at an unsustainable rate. In fact, it's estimated that if the price of everyday items had increased as rapidly as the price of health care since 1945. consumers would pay \$55 for a dozen eggs and \$48 for a gallon of milk.

Population health or value-based care focuses on:

- + the quality of care provided, which includes preventive care, controlling chronic disease and reducing unnecessary utilization. Insurers set targets for specific measures, which if met, qualify health systems for shared savings.
- + cost efficient care, which includes being good stewards of resources and, as providers, noting the complexity of a patient's health picture. In doing so, health plans are compensated appropriately for the costs associated with taking on members with chronic health conditions.

+ the patient experience, which includes getting timely care and having access to specialists and health information.

Population health requires layers of robust and coordinated behind-thescenes work to help patients follow through on preventive screenings and chronic disease measures that both keep them healthy and out of the hospital.

"It's easy for a patient to have a scheduled visit and then life happens," Dr. Mohring said. "That appointment gets cancelled and suddenly you're six months, 12 months down the road and you're behind on your health care. Population health is trying to put so many layers in place that missing something like a colon cancer screening becomes a 'never event.' "

Population health, however, is not about more work for the health team, he said; it's about making sure systems are in place to prevent providers from missing tests that a patient might need.

"We talk, in the hospital, about the wrong dose or a patient fall as a 'never event,' " Dr. Mohring said. "I challenge our population health team to put that same framework in the outpatient setting."

Creating a layered Swiss cheese model of care — think face-to-face visits, physician support tools, gap lists for clinics and dashboards — makes sure that a missed screening or test is a 'never event'

"We don't want to let a patient fall through the cracks," Dr. Mohring said.

The mission of Nebraska Medicine's population health team is to empower care teams with tools, actionable insights and innovations to provide results-driven, highvalue care for our population based on risk and need.



In fact, through its transitions of care management process, nurse care coordinators within the Nebraska Medicine Patient Centered Medical Home (PCMH) clinics reach out to patients post-hospitalization. That connection reduces readmission rates by ensuring that patients understand their post-discharge medications and instructions, ensures a follow-up appointment within 14 days with their primary care provider and provides support resources that enable patients to resume care at home.

"The No. 1 thing we can do to proactively identify patient needs and reduce readmissions is to complete the transitions of care management process," said Dr. Mohring.

In 2021,

- 70% of PCMH patients discharging from a Nebraska Medicine facility received a transitions of care outreach by their nurse care coordinator, resulting in countless patient safety stories.
- + 59% of PCMH patients discharging from a Nebraska Medicine primary care service completed the transitions of care workflow, including nurse outreach and follow-up face-to-face visit.

The population health team's success at Nebraska Medicine has led to shared

savings from insurance companies, which creates a win-win, Dr. Mohring said, as patients are healthier, and the health system can reinvest savings to benefit both patients and provider teams.

Implementing population health takes a huge, well-oiled team. Dr. Mohring and his dyad partner, Katie Miller, PharmD, who serves as value-based care and population health program director, work closely with quality support coordinators, gap closure analysts, informatics, operations and other areas to build systems and dashboards that help physicians work smarter, not harder, to ensure a patient's health care needs are met.

"Changing the way we think about health care delivery is a journey," Dr. Miller said. "It is only with collaboration and a commitment to team-based care that we will achieve our goal of keeping our healthy patients healthy and preventing the progression of chronic diseases."

The work also has enabled the med center to join a new alternative payment model called Primary Care First, a Medicare program that incentivizes taking care of patients in their home clinic. Out of 16

Quality Metric Performance

Nebraska Medicine's commitment to never missing an opportunity to complete a screening resulted in the following impacts for primary care patients in 2021:

CANCER SCREENINGS

- **5% increase** in our colorectal cancer screening rate (1,825 additional patients screened)
- 2% increase in our cervical cancer screening rate (748 additional patients screened)

MANAGEMENT OF PATIENTS WITH DIABETES

Primary Care First clinics in Nebraska, 11 are Nebraska Medicine clinics, Dr. Mohring said.

With savings realized, Nebraska Medicine has been able to build and staff a medical call center to remove (and centralize) triage from its primary care clinics. That change enabled nursing care coordinators to focus on more proactive diabetes outreach, as well as the transitions of care management process. "Instead of waiting for symptoms and then triaging care, we reach out weekly and monthly to our patients with poorly controlled diabetes and are proactive about their care," Dr. Mohring said.

Doing so prevents hospitalizations down the road, again creating wins for both the patient and the health care system.

"Value-based care is the health care delivery model of the future," he said.

Research Feature

RESEARCHERS STEP UP SCHOLARLY WORK DURING PANDEMIC

At a time early during the SARS-CoV-2 pandemic, when most COVID-19-related publications were editorials, and a lack of funding for the new disease put a lot of potential serious research on the back burner, the UNMC Department of Internal Medicine was doing meaningful work that dealt with real data.

The pandemic is unprecedented in the modern history of academic medicine. With safety measures, unknown unknowns, temporary campus closures (though not in areas deemed essential), not to mention a legitimate concern for one's own health, it might have been a lost era

But, instead, the UNMC Department of Internal Medicine deftly used the pandemic to be scholarly.

"The department is proud of the investigators who rapidly saw the need for well-designed, thoughtful studies that would address important clinical COVID questions and mobilized teams to perform these studies, despite being busy caring for patients in person and virtually," said Debra Romberger, MD, Lehnhoff Professor and chair of the UNMC Department of Internal Medicine. "Their commitment to science, which

is needed in challenging situations, is impressive."

Here are a few highlights among the department's pandemic-related research:

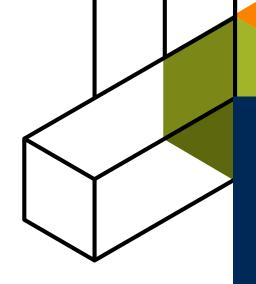
Andre Kalil, MD, in early 2020, worked with some of the nation's first COVID-19 patients, overseeing the first clinical trial in the United States to evaluate an experimental treatment for COVID-19. The randomized, controlled clinical trial to evaluate the safety and efficacy of the investigational antiviral remdesivir, was sponsored by the National Institute of Allergy and Infectious Diseases (NIAID). It eventually showed hospitalized patients with advanced COVID-19 and lung involvement who received remdesivir recovered faster than similar patients who received a placebo. At a time when the world was looking for treatments for what was then a new disease, the work was especially impactful.

The grant was worth \$1.4 million, and findings were published in the *New England Journal of Medicine*.

Dr. Kalil, professor of infectious diseases, continued to study treatments for the disease, became a trusted voice nationally on the role of clinical trials, and is one of the most cited scholars of the pandemic.

The UNMC Division of Rheumatology and Immunology notably wasted no time, as Kaleb Michaud, PhD, served as first





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DEBRA ROMBERGER, MD, LEHNHOFF PROFESSOR AND CHAIR OF THE UNMC DEPARTMENT OF INTERNAL MEDICINE

author on a paper, Experiences of Patients With Rheumatic Diseases in the United States During Early Days of the COVID-19 Pandemic, that went from project to online publication within 28 days. Bryant England, MD, PhD, also was a key collaborator on the study that was one of the first looks at how the pandemic was affecting this population. Notably, that these patients were at higher risk of infection and were living with chronic pre-existing conditions; and, that the pandemic affected their ability to attend "nonessential" health care visits. How should these patients balance their risk of infection vs. managing their disease?

The study found that there was change to their rheumatology care — especially with a newfound shortage of hydroxychloroquine, which is used for the treatment of rheumatic diseases, but also rumored (but later disproven) as a treatment for COVID-19. This research brought to light changes to these patients' care, including that many were self-managing their medication and appointments.

Diana Florescu, MD, professor and infectious diseases specialist, was site leader of a Phase 3 clinical trial to test the safety and effectiveness of an investigational COVID-19 vaccine for adults. Working with the COVID-19 Prevention Network (CoVPN), formed by NIAID, the trial tested a vaccine candidate developed by Novavax, Inc.

Dr. Florescu currently is leading another UNMC clinical trial, to evaluate if Molnupiravir, an oral antiviral, can prevent COVID-19. The Phase 2 and 3 study looks at the safety and efficacy of the investigative drug, which is hoped to prevent hospitalization or death in adults residing with a person who has COVID-19.

Meanwhile, Jill Poole, MD, chief of the UNMC Division of Allergy and Immunology, was senior author on a study to determine whether Interleukin-33 (IL-33) was in the lungs of patients who did not survive COVID-19 and compare it to IL-33 expression in other inflammatory lung diseases. IL-33 plays an integral role in optimal functioning of the lungs in wound repair, fibrosis and remodeling processes. The researchers found that IL-33 was profoundly depleted — essentially absent in the lungs of all eight COVID-19 patients who did not survive COVID-19. "Our study strengthens the relationship and importance of IL-33 in COVID-19, as well as its role in chronic inflammatory lung diseases." Dr. Poole said.

The multi-disciplinary effort involved several UNMC internal medicine divisions in addition to the departments of pathology and microbiology and the College of Public Health.

Mark Rupp, MD, chief of infectious diseases, has been a prolific SARS-CoV-2 and COVID-19 researcher, while also contributing scholarship on a handful of non-COVID-19 publications during the time of the pandemic. James Lawler, MD, who wears many hats at the medical center in relation to biopreparedness and health security, including associate professor of infectious diseases, is credited on a slew of pandemic-related papers.

The UNMC College of Medicine in March 2020 also sponsored a collection of

COVID-19 Rapid Response Grants, allowing investigators to begin their research immediately, rather than waiting for a lengthy extramural grant-approval process. "These grants are typified by their focus on critical gaps in our knowledge to help patients as well as providers," said Howard Fox, MD, PhD, senior associate dean for research and development. Dr. Fox noted that though the process was indeed rapid, proposals underwent a "rigorous review."

COVID Rapid Response Grant projects from the UNMC Division of Internal Medicine included:

- + "Determine mechanisms of COVID-19 attributable arrhythmias," Daniel Anderson, MD, PhD, chief of cardiovascular medicine;
- + "Risk and Outcomes of COVID-19 in Rheumatoid Arthritis: Insights into the Effects of Immunomodulatory Therapies by Leveraging Big Data," Bryant England, MD, PhD, assistant professor of rheumatology;
- + "Evaluating for gaps in dialysis decontamination protocol and the resulting potential for rapid COVID-19 spread amongst patients receiving dialysis in the hospital and the community," Douglas Franz, MD, assistant professor of nephrology.



ENHANCED MEDICAL EDUCATION TRACKS YIELD LIFELONG BENEFITS

It's not uncommon, during residency interviews, for UNMC's fourth-year medical students to be asked: "What's this EMET?"

Students go on to explain how UNMC's **Enhanced Medical Education Track** (EMET) enables them to study a field of medicine in-depth while also completing their required medical school curriculum.

"Each track brings something unique," said faculty member Geoff Thiele, PhD, professor of rheumatology, who leads the auto-immune disease track, one of the first five tracks UNMC offered.

Today, students select from more than a dozen tracks, often tying it to an area of interest or passion. The

tracks challenge students and address specific topics in greater depth than is available through the required curriculum. Upcoming additions: cardiology, oncology and wilderness medicine/prehospital medicine.

UNMC launched the course in 2009 after then senior associate dean for academic affairs Gerald Moore, MD, returned from a national conference where Stanford introduced the idea. "He came back and said 'we need to try this," Dr. Thiele said.

Since then, nearly 500 students have graduated from the program and, from day one, faculty within the UNMC Department of Internal Medicine have led or co-led tracks.

"Joining an EMET program is a tremendously valuable experience," said fourth-year medical student Rohan Khazanchi, who participates in the HIV medicine track. "EMETs are unparalleled opportunities for structured and longitudinal engagement with some of the best faculty mentors at

EMETs: The nuts and bolts

Interested students apply to a track during the second semester of their M1 year. Accepted participants then complete the designated track

activities, such as seminars, preceptorships or research, throughout their M1, M2 and M3 years. During the M4 year students, with guidance from their mentors, produce a capstone project such as a poster or conference presentation. Recognition for students who complete EMET includes documentation of performance in their medical student performance evaluation, acknowledgment of

completion on their transcript, and recognition at the UNMC College of Medicine's hooding ceremony.

UNMC. My experience in the HIV EMET truly shaped my professional opportunities and career interests."

Khazanchi, who has a

master's in public health and plans a career as a clinician-investigator who cares for marginalized patient populations, has collaborated with clinic faculty and staff on several research projects and said the UNMC Specialty Care Clinic became "a home base," where he returned "to build upon my growing skillset."

It is the mentors and friends at the clinic, however, that are his "most treasured takeaway."

"As I developed a niche in researching health inequities and structural determinants of HIV outcomes, it was wonderful to become part of the clinic 'family' in a longitudinal way. I developed close relationships with our clinic's physicians, fellows, nurses, pharmacists, social workers, and case managers alike — not just through learning from the care they provided, but also because they were genuinely invested in my personal and professional growth as an individual."

Faculty member Elizabeth Harlow, MD, associate professor of gerontology, shares her passion for geriatric medicine with EMET students through the aging and integrative medicine track. "The joy of this track, and what I'm really proud of, is how it combines both clinical and scholarly activities," she said. "The students actively engage in clinical care activities allowing for a better understanding of the older adult population regardless of the field they go into."

Students may or may not pursue the focus of their track, but all are stronger clinicians because of their EMET experience, said Sara Bares, MD, assistant professor, who leads the HIV track. The skills the students learn in the EMETs are broadly applicable, she said. "It does help them prepare for the next step, whatever they specialize in."

Faculty also agree that while each track is unique in its scope of clinical and/or scholarly work, they all provide invaluable mentoring and networking opportunities for the students who are selected to participate.

"That's a huge benefit for them," Dr. Bares said.

And, she said, it creates a unique discussion point, and likely advantage, during residency interviews.

UNMC's Enhanced Medical Education Tracks

- → Aging and integrative medicine*
 - Elizabeth Harlow, MD, Travis Weyant
- → Auto-immune diseases*

 Geoffrey Thiele, PhD
- → Cardiovascular medicine*

 Dahn Clemens, PhD
- → Climate change and health
- → Clinical educator*

 Brian Boerner, MD
- → Comprehensive HIV medicine*

Sara Bares, MD, Nada Fadul, MD, Deanna Hansen

- **→** Health care policy
- → Hospice and palliative medicine
- → Innovations in clinical care (UNeMed)
- → LGBTQ health advocacy
- → Medical humanities and arts*

Derek Eichele, MD, Mary Gallagher-Jansen, MD, Stephanie Hartman, MD

- → New American health care
- → Preventive medicine
- **→** Underserved health care
- → Wilderness medicine/ prehospital medicine

*LED OR CO-LED BY INTERNAL MEDICINE FACULTY/STAFF

Diversity Feature

Diversity drives excellence.

Jasmine Marcelin, MD, associate program director for the UNMC Internal Medicine Residency, has made that expression a personal mission statement and invited colleagues to join her in further elevating and diversifying UNMC's residency program.

Dr. Marcelin is founder and

chair of the DIVERSE (Developing an Inclusive and Varied Environment for Residents. Students and Educators) Taskforce, created in January 2020 to transform UNMC's residency program into one that both reflects the diversity of its patient population and provides an inclusive and supportive environment for residents to succeed.

"There are things we can do today that can be impactful for trainees and patients," Dr. Marcelin said. "There is a sense of urgency."

Debra Romberger, MD, chair of the UNMC Department of Internal Medicine, agreed. "Dr. Marcelin and the team she has developed are leading the department to a higher level of awareness and action to help us create more robust diversity within our ranks. This is essential to our ability to achieve all our missions."

The UNMC Department of Internal Medicine, she said, is committed to ensuring an environment for all residents. fellows, faculty and staff that is inclusive

and imbues a sense of belonging for historically excluded people including racial, ethnic and religious minorities, LGBTQ+ individuals, and people with disabilities. The DIVERSE Taskforce is intentionally focused on creating a residency environment where processes, policies and practices promote access, inclusion and equity and differences are embraced, valued and respected.

"Dr. Marcelin's leadership has been instrumental in guiding much-needed change in our residency to expand diversity and inclusion," said Tammy Wichman, MD, internal medicine program director. "Establishment of the diverse task force has been a giant leap forward for our residency."

Published data supports the group's mission, Dr. Marcelin said. Studies, she said, have found that teams comprised of individuals with varying perspectives, ideas and backgrounds outperform groups of like-minded experts. In addition, data shows that patients report high levels of trust and satisfaction when their physician is of their same race and underrepresented minorities and lesbian, gay, bisexual and transgender (LGBT) physicians are more likely to be involved in practice, research, education, scholarship, service and mentorship activities aligned with their identity.

Said taskforce member Chelsea Navarrette, MD: "Talent, intellect, humanism and empathy cross all racial, ethnic, gender and socioeconomic boundaries, but sometimes that is less apparent because of the barriers we face. I am committed to seeking out, recruiting

things we can do today that can be impactful for trainees and patients.

There are

Jasmine Marcelin, MD



RECRUITS, SUPPORTS RESIDENTS IN INCLUSIVE ENVIRONMENT

and supporting the most talented and diverse students in medicine to Nebraska."

Willie Talbert, MD, a recent IM residency graduate and one of the founding members of the task force, agreed. "Patients are often excited when I walk into a room because they have never had an African-American physician before," he said. "I'm hopeful that one day soon, having a minority physician is no longer a rare occurrence."

Since its inception, the DIVERSE taskforce, which includes students, residents and faculty, has worked to accomplish its many goals focused on recruitment, residency selection, outreach and community engagement. The group actively increased UNMC's Internal Medicine residency presence at such regional and national conferences as the Student National Medical Association, National Hispanic Medical Association and the Latino Medical Student Association. The group convenes monthly "JEDI (Justice, Equity, Diversity and Inclusion) with Jasmine" events, which enable residents to discuss situations, share stories and deconstruct information. "We create a safe space to have uncomfortable conversations and learn," Dr. Marcelin said.

In addition, the taskforce developed an antiracism lapel pin and resource card, Dr. Marcelin said, as a "symbolic measure of solidarity." That was paired with a 21-week racial equity challenge, designed to promote a deeper understanding of race, power privilege, supremacy and oppression, which was co-sponsored by the UNMC Office of Inclusion and open to all at UNMC. The group continues to curate and distribute DEI resources and plans to assess inclusion/

belongingness of current and former residents and develop structural changes to address themes that are discovered.

The work and deliberate focus already is paying off. Internal medicine landed its most diverse residency class ever in 2020, Dr. Marcelin said, then added that there is still "tremendous opportunity" for continued growth. "The downstream impact for patients when they meet teams with doctors who share their identities is immeasurable, as is the influence of a diverse learning environment on the trainees themselves," she said.

In 2020, 15% of UNMC's residency applicants were from underrepresented minorities, Dr. Marcelin said, up from 9.9% of applicants in 2019. The increase in applicants, along with changes to create a more equitable and holistic residency selection process, led to increased invitations for interviews and more rankings in the match process.

"The impact goes beyond the residency program in internal medicine," Dr. Marcelin said. "It's important for the institution and influences the care our patients receive."

Residents say their DIVERSE conversations have helped them understand and be more compassionate toward their patients and colleagues. "It changes who we are as an individual," Dr. Marcelin said. "Diversity drives excellence, and we have to be committed to developing a diverse workforce that is humble and culturally aware to care for our patients and then take concrete action to create the environment that values inclusion, diversity, access and equity."

DIVERSE Taskforce Guiding Principles

The taskforce is committed to Developing an Inclusive and Varied Environment for Residents, Students and Educators (DIVERSE).

To achieve this, the taskforce will:

- Create an inclusive and welcoming environment where differences are embraced, valued and respected,
- Ensure that processes, policies, and practices promote access, inclusion and equity,
- Guarantee transparency to promote fair treatment and equitable opportunities for all physicians, residents, students and applicants of UNMC's Internal Medicine residency program.

Wellness Feature

HEALTH EDUCATORS & - HEALITILD LANGE ACADEMIC LEADERS - Auditorating the next generation of The two-

A novel, extracurricular house officer track is expanding in 2022-2023 to become one of the first interdisciplinary health educator tracks in the nation.

HEAL was a grass roots initiative that gained traction in 2019 due to increasing interest from residents and fellows to have formalized training in medical education. John Hall, a fourth-year medical student at the time inquired with then IM residency program director, James O'Dell, MD, if a clinical educator track would be available to him if he applied to UNMC. Dr. O'Dell's response was "Cory (Rohlfsen, MD) will build that for you." As UNMC chief at the time, Dr. Rohlfsen realized HEAL's potential after reading more about clinical educator tracks.

Work started with a global needs assessment that informally surveyed multiple trainees, program directors and esteemed clinical educators across campus. Conversations revealed other colleges were craving this type of training as well and support was eventually gained from the Interprofessional Academy of Educators, Dean of the College of Medicine and Assistant Vice Chancellor. Then COVID hit.

As pandemic restrictions fundamentally changed the way we teach, learn, and interact, HEAL was (in many ways) offering an antidote to such isolation — a community of practice. By building this support network for future medical educators in a way that aligns

learner goals, the first HEAL cohort was launched in 2021 with overwhelming excitement. More than 20 faculty mentors signed up to support the first cohort of 14 trainees, not including a growing list of HEAL coaches. Residents and fellows from UNMC's Internal Medicine, Anesthesia, and Emergency Medicine now have the opportunity to learn and develop best educational practices while pursuing Masters' level credits from the College of Graduate Studies at UNMC. With tuition paid in full, the HEAL track is designed to prepare young professionals who aspire to be innovative leaders in health care education. More specifically, the goal of HEAL is to foster the development of its participants into skilled educators, leaders and scholars through the dissemination and application of best educational practices, research methods, effective communication skills, creative problem-solving and innovative design.

Through self-reflective scaffolding and robust mentorship support, HEAL great medical educators. The twoyear curriculum offers various types of mentorship, coaching video review, interactive workshops, asynchronous on-line coursework and scholarship opportunities as trainees develop a formalized teaching portfolio in parallel with their medical training. It also boasts two different tiers, requiring varying time requirements, to meet the individual needs of its participants. Those who complete the two-year program will have earned a professional certificate in medical education. The inaugural HEAL cohort is now approximately halfway through the first two years of the curriculum. The next cohort of applicants will be finalized in April 2022 and HEAL orientation will occur later this summer.

Reach out to cory. rohlfsen@unmc.edu for more information.



NUMBERS



EDUCATION

193 HOUSE OFFICERS & FELLOWS

471 MEDICAL STUDENT CLERKSHIPS/ROTATIONS COMPLETED

100% INTERNAL MEDICINE BOARD PASS RATE

INT MED THE HIGHEST
REGARDED CLINICAL
CLERKSHIP AT UNMC



28 CLINICAL LOCATIONS

130,649 INPATIENT VISITS

736,210 WORK RVUs

\$111,084,345

PROFESSIONAL FEE CHARGES



RESEARCH

FUNDED PRINCIPAL INVESTIGATORS

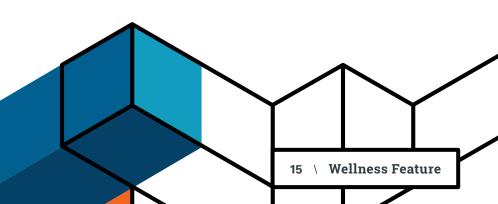
\$33,157,275EXTRAMURAL RESEARCH FUNDING

541 PUBLICATIONS



ADMINISTRATION

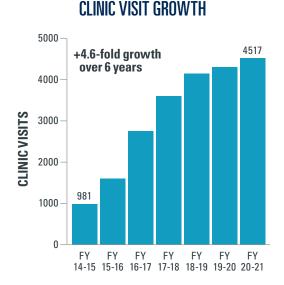
317 INTERNAL MEDICINE FACULTY



Division of ERGY & IMMUNOLOGY



JILL A. POOLE, MD PROFESSOR, INTERNAL MEDICINE CHIEF, ALLERGY AND IMMUNOLOGY



CLINICAL

Services span metropolitan area

From the first allergy and immunology clinic opening in 2005 on the main campus in the Durham Outpatient Center, clinical visits and faculty expanded in 2015 with the opening of the first satellite clinic at Village Pointe in west Omaha, followed by another location at the Bellevue Medical Center in 2016.

The UNMC Division of Allergy and Immunology also added locations at the Omaha VA Hospital and Children's Hospital & Medical Center.

Within the Nebraska Medical Center location, physicians logged over 4,400 patient visits in 2020 with an age range of 0 to 100 years.

With the growth in faculty, services also have expanded to include expertise in drug allergy, difficult to control asthma, vocal cord dysfunction and complex immune deficiencies, among others.

Andrew Rorie, MD, assistant professor in the division, said a unique need that rapidly arose due to the COVID-19 pandemic was the concern for COVID vaccine allergy reactions.

"The division rapidly mobilized to be responsive to immediate needs of the employees and students within to safely monitor and administer the vaccine to those in need." Dr. Rorie said. "The service subsequently expanded and is available to anyone in the community with dedicated clinics every week to meet the need. It has been highly rewarding to give this life-saving prevention vaccine to allergy patients."

EDUCATION

Division launches new fellowship program

A new fellowship program in allergy and immunology will help fill a big gap in allergists in Nebraska.

The two-year program, which will begin July 1, 2022, is focused on training to master proficiency in evaluation, diagnosis and management of pediatric and adult patients with allergic and immunologic diseases. Trainees will be prepared to work in the academic or private sector when training is completed, said Sara May, MD, associate professor in the UNMC Department of Internal Medicine's Allergy and Immunology Division and fellowship program director.

The two-year fellowship is open to residents and physicians nationwide who have graduated from an Accreditation Council for Graduate Medical Educationaccredited residency program in internal medicine, pediatrics or medicinepediatrics. Fellows will be trained in conditions including allergies, asthma, drug, food and environmental allergies, allergic skin diseases such as contact dermatitis, hives and eczema and immune system diseases, primarily immunodeficiencies.

Fellows will have eight hours a week dedicated to didactics divided into two. four-hour blocks.

"Allergic diseases are quite common and are increasing," Dr. May said. "Demand for the specialty is high and the fellowship will help alleviate a shortage of physicians trained in this specialty. We're excited and thankful for the support of leaders at Nebraska Medicine, Children's Hospital & Medical Center and the Omaha VA, where fellows will see patients."

Two fellows will be recruited the first year. The fellowship also will expand educational capacity for additional learning including medical students, resident physicians and fellows.

Physicians and resident physicians interested in applying must go through the Electronic Residency Application Service® and can contact Whitney Dailey (whitney. dailey@unmc.edu or 402-559-4088) for information.

RESEARCH

Grants totaling nearly \$5 million to evaluate airborne hazards

Inhalation of airborne inflammatory agents is known to cause lung diseases. For the past two decades, members of the UNMC Divisions of Allergy and Immunology and Pulmonary, Critical Care and Sleep Medicine, have focused efforts on understanding the mechanisms underlying how agriculture dust exposures elicit lung inflammation.

A four-year U.S. Department of Defense grant will assess the impact of airborne biohazards in the development of lung disease and associated autoimmunity in military personnel, first responders and veterans. A major goal is to develop biomarkers to identify those at risk for rheumatoid arthritis-lung disease and explore targets for new therapeutic approaches.

The grant capitalizes on UNMC's collective expertise in lung immunology and rheumatologic disease/arthritis. The team includes Jill Poole, MD, and Ted Mikuls, MD, co-principal investigators and co-investigators Bryant England, MD, PhD, Geoffrey Thiele, PhD, and Debra Romberger, MD, who also conduct research at the Omaha VA Hospital.

A \$1.7 million grant from the National Institute for Occupational Safety & Health (NIOSH) will evaluate ways to repair lung disease caused by exposure to biohazards, particularly agricultural dust, said Dr. Poole, principal investigator of the grant. The study aims to define lung repair, recovery and remodeling processes following acute and repetitive exposure to biohazards — such as endotoxins — particularly in agriculture and food processing settings.

The funding is a continuation of work supported by the Central States Center for Agricultural Safety and Health at the UNMC College of Public Health.

The team has been studying the impact of complex dust exposure in agricultural workers for more than a decade and will continue its NIOSH-funded work using mouse models.



Division of CARDIOVASCULAR MEDICINE



DANIEL R. ANDERSON, MD, PHD ASSOCIATE PROFESSOR, INTERNAL MEDICINE CHIEF, CARDIOVASCULAR MEDICINE

CLINICAL

Genetic cardiology clinic looks to the future

As heart disease threatens generation after generation within families, UNMC's cardiology division is leading patients through the genetic connections.

Statistics suggest one out of every 200 people have an inherited cardiovascular disease. Among young people, inherited cardiovascular diseases are the No. 1 reason they die a sudden death.

Cases can present when a young patient survives a heart attack, when people start looking at their family history because of a relative's heart troubles or when heart conditions or cardiovascular syndromes suddenly become someone's pressing health issue. That makes genetic cardiology a critical field - and one that is rapidly evolving with incredible medical advances.

For the past five years, UNMC has operated a dedicated genetic cardiology clinic to give patients specialized care in the field. Douglas Stoller, MD, PhD, an assistant professor of internal medicine who joined UNMC in 2017, serves as medical director of the cardiovascular genetics program.

The clinic offers genetic testing for some patients sent on a referral or after a major cardiac event, Dr. Stoller said. Other patients with a genetic cardiac disease receive direct care from the clinic's specialists. In some cases, the clinic connects people with transplant care.

Now thanks to major research advances, dramatic change is coming to geneticrelated medical care, Dr. Stoller said. The world of medicine is starting to see

clinical applications for gene editing therapies, he said.

Dr. Stoller said the university's experts are discussing how to position UNMC for that level of care in the future.

Said Dr. Stoller, "It's not that far out to think that some patients that have been born or lived with particular diseases for their entire lifetime could be cured or at least dramatically treated in the next five to 10 years in ways that we would have thought were pure science fiction."

But even now, Dr. Stoller said he sees UNMC continuing to get better at identifying people facing genetic cardiovascular risks.

EDUCATION

Cardiology launches Enhanced Medical Education Track

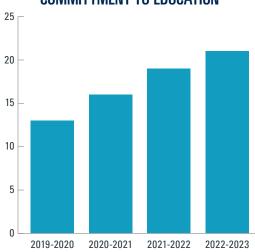
UNMC's cardiovascular medicine division is starting a program to offer top medical students a deeper education and research experience in cardiology.

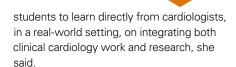
The Enhanced Medical Education Track in cardiovascular medicine gives select students experience in both the clinical and research aspects of cardiology, said Niyada Naksuk, MD, an assistant professor in internal medicine with

The new track is starting with its first student in the program this summer, Dr. Naksuk said. Next year, the organizers hope to expand to two or three medical students

The program follows other enhanced education tracks in such areas as gastroenterology and rheumatology, Dr. Naksuk said. The goal is to allow

COMMITTMENT TO EDUCATION





Experiences could include shadowing cardiologists, observing in the cardiac catheterization lab or the electrophysiology lab, or pairing one-to-one with a cardiologist to coach the student step-by-step on how to conduct research.

While the program gives students deeper studies into the field of cardiology, Dr. Naksuk said the students accepted into the program don't have to commit to becoming a cardiologist. Dr. Naksuk said she understands medical students have many years of study ahead of them and could gain exposure in other fields.

RESEARCH

Cardiovascular research efforts expand

UNMC's Heart and Vascular Clinical Research Office (HVCRO) is helping step up the medical center's cardiovascular clinical research efforts.

Formed as a separate division in late 2017, the HVCRO was designed to give support, structure and administrative backing to UNMC's individual research efforts in the field of cardiovascular disease. Modeled after UNMC's clinical trials office in hematology and oncology, the heart and vascular research division works across the divisions of cardiovascular medicine, vascular surgery and cardiothoracic surgery.

Today, the HVCRO works with some 90 different research efforts - half of which represent sponsored trials and grants and the other half of which are investigator-initiated research inquiries, said Barbara Hoover-Schultz, the office's operations administrator.

The dedicated structure already has proven more effective at capturing research funds and clinical trial payments, Hoover-Schultz said.

Last year, the HVCRO collected more than \$1 million in clinical trial payments for the first time — a big milestone for the office, she said. The research staff has grown to 14 and is recruiting additional staff to continue the expansion and bring in additional funding.

Hoover-Schultz said the faculty and staff are doing important work in a critical research field.

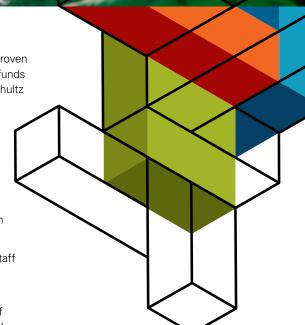
"Cardiovascular disease affects a lot of people and a lot of families, and there's still so much that's not known," she said. "All of these research efforts are helping contribute to that body of knowledge."

The research staff work with an array of faculty, fellows and students who are engaging in research or planning a clinical research effort around cardiovascular disease or related issues.

The staff joins with researchers at different levels of support depending on the researchers' needs — perhaps handling Institutional Review Board applications, financial accounting or providing funding for a research coordinator.

Through the existing efforts, UNMC's cardiovascular researchers already participate in National Institutes of Health clinical trials as a sub-site for the research.

As the HVCRO keeps growing, Hoover-Schultz said, one big goal is to successfully submit and be funded a multi-site National Institutes of Health trial with UNMC being the main site.



Division of DIABETES, ENDOCRINOLOGY & METABOLISM



CYRUS DESOUZA, MBBS PROFESSOR, INTERNAL MEDICINE CHIEF, DIABETES, ENDOCRINE AND METABOLISM

CLINICAL

Multidisciplinary team expands to meet need

Because of an increased local and regional need for specialists who treat cancers of the endocrine system, the UNMC Division of Diabetes, Endocrinology and Metabolism has further expanded its thyroid and endocrine tumor multidisciplinary team.

Thyroid nodules are common and affect about 50% of those older than 50. Roughly 5-15% of thyroid nodules turn out to be thyroid cancer — a cancer that has tripled over the past three decades.

The multidisciplinary team is composed of endocrinologists, endocrine surgeons, head and neck surgeons, medical oncologists, radiologists, pathologists and geneticists.

Clinics in the Fred & Pamela Buffett

Cancer Center, Village Pointe Cancer Center and Bellevue Cancer Center are dedicated to the evaluation and treatment of thyroid and endocrine tumors and cancers, as well as dedicated survivorship clinics for long-term surveillance.

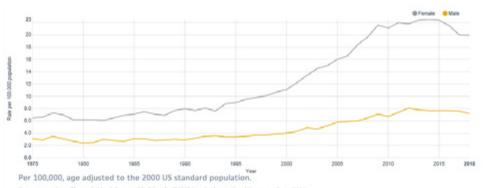
"We have been building this program for many years," said Whitney Goldner, MD, medical director of the multidisciplinary thyroid and endocrine tumor program. "It is important to have a multidisciplinary approach to evaluation and treatment of a variety of disorders, including thyroid and endocrine tumors. Every provider is a valuable member of the multidisciplinary team and approaches each case from a slightly different perspective.

"The team provides input to the best approach to each patient's care. We can see patients on the same day if they need to see multiple providers, and we also discuss complicated cases at our weekly multidisciplinary conference. Many patients tell us they like the fact that their cases are discussed at a multidisciplinary conference, so they know all treatment options have been considered."

The group also has a multitude of ongoing clinical and translational research projects and evaluates and treats endocrine disorders that occur as a result of other types of cancer treatment.

INCIDENCE AND DEATH RATES

Trends in Incidence Rates, 1975 – 2018 (Thyroid, by sex)



American Cancer Society. Cancer Statistics Center. http://cancerstatisticscenter.cancer.org.



EDUCATION

Endocrinology course changes benefit students

Endocrinology course changes, made as a result of the College of Medicine's curriculum redesign, have benefitted students and faculty.

Med students take the three-week endocrine course with daily lectures and five hours of clinically based small groups during their second year of medical school.

Physicians and scientists teaching the endocrinology block reduced duplication and created a more logical order of content presentation. The changes also placed emphasis on preparing students for board exams and created greater efficiency with a smaller core group of faculty members.

Amy Neumeister, MD, assistant professor in the division of diabetes, endocrine and metabolism, and Shyamal Roy, PhD, professor in the department of obstetrics and gynecology, were part of the team involved in redesigning the course.

"With the redesign, there's streamlined communication between the basic scientists and physicians teaching the students," Dr. Neumeister said. "By limiting the number of clinical faculty, the students receive information in a more consistent manner with each lecture or activity building on the content of the previous one. If students feel they are getting conflicting information we can clarify it right away. The right hand knows what the left hand is doing."

Lynn Mack, MD, associate professor in the division, said topics presented were organized from pharmacology, physiology, pathology and endocrinology. These were previously fragmented, she said, during different months of the year to be in the same core.

"Students now have the foundation they need to progress," Dr. Mack said. "The redesign created a logical flow of information. It's been excellent."

RESEARCH

Gift to launch statewide diabetes care, education program

The Diabetes Care Foundation of Nebraska has made a \$5 million gift commitment to the University of Nebraska Foundation to support the launch of a statewide diabetes care and education program led by UNMC and Nebraska Medicine.

Named the On Track: Transforming Rural Diabetes Care and Education, the program aims to lower the state's rate of uncontrolled diabetes cases and to reduce the rate of diabetes progression among those who are prediabetic. Cyrus Desouza, MBBS, and David Dzewaltowski, PhD, are principal investigators of the new program.

"This bold, innovative approach may transform diabetes care and education in Nebraska," said Dr. Desouza, chief of the UNMC Division of Diabetes, Endocrine and Metabolism.

"By bringing together expertise in community system health promotion with expertise in health system diabetes care, we will be able to create a novel, integrated model," said Dr. Dzewaltowski, community chair and professor, UNMC College of Public Health Department of Health Promotion.

Division of GASTROENTEROLOGY & HEPATOLOGY



PETER MANNON, MD, MPH PROFESSOR, INTERNAL MEDICINE CHIEF, GASTROENTEROLOGY AND HEPATOLOGY **RUTH & BILL SCOTT ENDOWED PRESIDENTIAL** CHAIR OF INTERNAL MEDICINE

CLINICAL

New IBD center supports patients

Derrick Eichele, MD, hears the same question from almost every patient he has helped in his career as a gastroenterologist specializing in inflammatory bowel diseases (IBD).

"What can I eat that will make this better?"

And while there isn't one thing that makes the condition better, Dr. Eichele, assistant professor in the division of gastroenterology and hepatology at UNMC, said he is thankful for the interdisciplinary team of specialists he works with in the new multidisciplinary inflammatory bowel disease clinic who come together to seamlessly support patients with IBD.

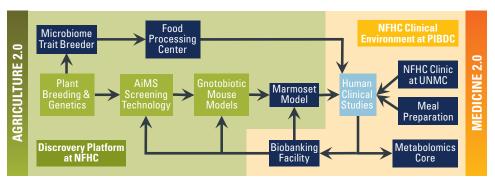
Named the Frederick F. Paustian, MD. Inflammatory Bowel Disease Center, the IBD clinic opened in August 2021 on the second floor of the Lied Transplant Center. The center is named after the late UNMC gastroenterologist and received funding from local philanthropists Ruth and Bill Scott.

Along with the GI physicians, an interdisciplinary team of surgeons, pharmacists, dietitians and psychiatrists work together to help patients understand the complexities of their illness, learn how to manage their diet to help reduce inflammation and study coping strategies when they feel emotionally overwhelmed, Dr. Eichele said

"With any chronic disease, there are a lot of health care visits, and IBD patients often have concerns related to their nutrition, or the medications they are on can be overwhelming," he said. "Sometimes they need a mental health professional to help them cope with any anxiety or depression they may be feeling related to their chronic health condition. Having the team of professionals embedded in the clinic is extremely important and helpful to provide meaningful continuity of care for the whole person.

"The impetus behind IBD centers across the country is to provide coordinated patient-centered care that improves patient experiences and enhanced outcomes of care, and we hope that by providing this level of coordinated care we are doing just that."

THE NFHC UNMC AG-BIOMED CORRIDOR



EDUCATION

GI fellowship highly competitive

UNMC's Gastroenterology (GI) & Hepatology (liver) fellowship is one of the most competitive fellowships in the

"More than 400 individuals applied for the five available positions in the fellowship," said Katie Hutchins, MD, assistant



professor and the associate program director for the GI Fellowship.

The strengths of the three-year fellowship lie not only in the volume of procedures performed but also in the clinical and research aspects of the program.

Examples include clinical skills training with mannikins in the Davis Global Center at UNMC, direct procedural experience fellows receive while working alongside professors and other highly skilled faculty in both GI and liver and daily clinical care of complex patients.

"By the time a fellow is done they will have completed anywhere between 1,500 to 2,000 procedures under the guidance of skilled faculty," Dr. Hutchins said.

New to the program this year is a fourth-year advanced endoscopy fellowship with training in endoscopic ultrasound and endoscopic retrograde cholangiopancreatography. In addition, fellows will receive advanced training in Barrett's esophagus management, endoscopic mucosal resection and other advanced endoscopic procedures.

The fellowship also emphasizes mentoring and research as evidenced by both clinical and laboratory-based research at UNMC/Nebraska Medicine and the Omaha VA hospital.

The growth in the fellowship program is mirrored by the growth in clinical and research faculty, Dr. Hutchins said.

"Our division has added several faculty including three gastroenterologists and two transplant hepatologists within the past 18 months. This is highly beneficial to our fellowship program," she said.

Since the GI fellowship started in 1966 more than 110 trainees have graduated from the program and more are expected to take part as the fellowship expands to include other aspects of gastroenterology, such as inflammatory bowel disease (IBD) and motility disorders.

RESEARCH

Enhancing the gut microbiome to improve human health

The human body is fueled by trillions of microbes that live in a delicate balance in the gut.

When there is a disruption in this microbiome the impact can be widely felt throughout the rest of the body and has been found to be a factor in many diseases.

"Everyone has their own gut microbiome community, and those microbes help to regulate organs, develop our immune system, fight disease and metabolize the food we eat," said Peter Mannon, MD, chief of the division of gastroenterology and hepatology at UNMC.

But what if the gut microbiome could be enhanced in a way that would improve overall human health?

It's a query that drew Dr. Mannon to Nebraska where he could match his research in the gut microbiome with that of researchers at the Nebraska Food for Health Center at the University of Nebraska-Lincoln.

Dr. Mannon said together they have begun studies on diet and food component supplements and their effects on the gut microbiome to see if there are beneficial effects on inflammatory bowel diseases.

Researchers at Nebraska Food for Health have a vast library of compounds that have been tested and characterized and are now ready for clinical trials, he said.

"What we are doing now is developing protocols using these compounds that we can test to look for beneficial change in the human gut microbiome," Dr. Mannon said.

The overall hope is that this will lead to new treatments through diet that will change the gut microbes toward beneficial effects to improve outcomes across many chronic diseases.

Division of GENERAL INTERNAL MEDICINE



JENNIFER PARKER, MD, FAAP, FACP ASSOCIATE PROFESSOR, INTERNAL MEDICINE ACTING CHIEF, GENERAL INTERNAL MEDICINE

CLINICAL Clinic focuses on long haul symptoms of COVID-19

In response to the growing number of individuals suffering from long haul symptoms brought on by COVID-19 infection, Nebraska Medicine opened a post-acute COVID clinic in 2021 to help patients.

Since then, more than 200 people have been seen by a team of internists to try and help them deal with their symptoms. Patients are then referred to the appropriate specialist if they need specialized care.

"Our goal is to understand the impact of long-term symptoms of COVID-19 infections in people who have recovered from the initial illness, including how often symptoms occur and how severe they are," said Andrew Vasey, MD, assistant professor and physician leader for the primary care clinical program.

Dr. Vasey said because of the wide variety of lingering symptoms, the decision about whether a patient needs to see a specialist is individualized. Common referrals have been to pulmonology, cardiology, behavioral medicine, physiatry and allergy, he said.

"Some people come in with one or two issues, while others come in with a dozen issues; we work with each to treat their individual symptoms," he said.

A lot of the issues clinicians are seeing are related to autonomic nervous system dysfunction, Dr. Vasey said, and while some people experience symptoms for three months, others are a year out from their acute illness and still experiencing symptoms.

Those symptoms can include shortness of breath with activity and at rest, a fast heart rate, chest pressure and tightness, nausea, vomiting and diarrhea, brain fog, fatigue, anxiety and depression.

Dr. Vasev said the team works closely with the patients' primary care provider to ensure continuity of care. "Everyone is seeing this to some degree and the dialogue between providers is critical to helping these patients as they continue to recover," he said.

EDUCATION

Clerkships include **POCUS training**

It's being called the 21st century stethoscope.

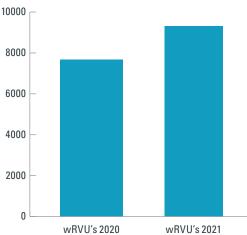
Point of Care Ultrasound is now used by more physicians to help diagnose and clarify symptoms affecting patients and is one more tool in their tool belt, said Nate Anderson, MD, assistant professor and Internal Medicine Clerkship Director in the UNMC Department of Internal Medicine.

In 2020, the UNMC College of Medicine Department of Internal Medicine integrated Point of Care Ultrasound (POCUS) training into student clerkships and since then more than 200 students have gone through the course.

Seventy percent of medical schools are now incorporating POCUS training into their curriculum. Dr. Anderson said and at UNMC, POCUS training is currently part of the obstetrics, surgical and internal medicine clerkships.

At a recent POCUS training, 10 thirdyear medical students learned the best techniques and tried their hand at taking an ultrasound of one another's hearts and lunas.

wRVU GROWTH



Jake Fowler listened closely to the instructions of Ryan Mullane, DO, assistant professor in the UNMC Division of Nephrology, as he described how to do the examination.

"Place the probe on the left peri sternum and point the probe to the right shoulder then move it clockwise around the heart," Dr. Mullane told the students.

One by one, each of the 10 third-year medical students took turns doing the examination.

"We give them the training so they become more familiar with the technology, which allows them to utilize and understand it more before they join our inpatient Internal Medicine wards teams and start evaluating new patients," Dr. Anderson said.

RESEARCH

Studying health equity and COVID-19 disparities

If issues of health equity and equality weren't already evident, the COVID-19 pandemic aimed a spotlight on the inequalities across the nation and across the state of Nebraska.

Achieving health equity, addressing COVID-19 disparities, and improving the health of all Nebraskans using a quality improvement approach are the goals for the newly launched Health Equity Project ECHO, an educational initiative aimed at bringing resources to local health care professionals across the state to empower them to better engage with those living in their communities.

"This educational project aims to assist health care workers in identifying COVID-19 health disparities, develop targeted strategies to mitigate those disparities, and implement quality improvement projects to promote health equity and cultural sensitivity within their practice setting," said Gale Etherton, MD, associate professor in UNMC's Internal Medicine Division of General Medicine.

Dr. Etherton is part of a multidisciplinary team that includes subject matter experts in infectious diseases, infection control, cultural sensitivity, health equity and equality. She provides expertise in quality improvement in health care.

The first session of the \$1.6 million Centers for Disease Control and Prevention-funded initiative kicked off Nov. 3, 2021, via a webbased platform and includes learners from more than 200 sites across the state.

A wide range of COVID-19 related topics will be discussed during the one-and-a-half-year long course and includes sessions on source control, testing, vaccination, quarantine/isolation, general infection control procedures, and management of active cases, as well as management of post-COVID conditions.

"The hope would be that if we can improve how we interact with people from marginalized populations and engage with them in a way that meets them where they are, then we can make an impact in how they receive and engage in their own health care, including how they perceive COVID-19 vaccinations," Dr. Etherton said.

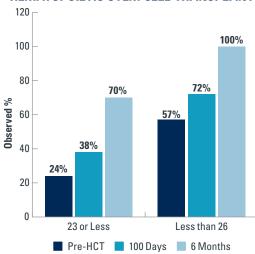


Division of GERIATRICS, GERONTOLOGY & PALLIATIVE MEDICINE



ALFRED L. FISHER, MD, PHD ASSOCIATE PROFESSOR, INTERNAL MEDICINE CHIEF, GERIATRICS, GERONTOLOGY, AND PALLIATIVE MEDICINE NEUMANN M. AND MILDRED E. HARRIS PROFESSOR OF GERIATRICS

PREVALENCE OF IMPAIRED COGNITIVE **FUNCTION BEFORE AND AFTER** HEMATOPOIETIC STEM CELL TRANSPLANT



Impaired cognitive function as measured by the Montreal Cognitive Assessment score

CLINICAL

Consult service boosts quality of life

When aging adults are admitted to the hospital, they face a high-risk time.

Many older patients are living with chronic health and cognitive issues, in addition to the acute illness that brought them into the hospital.

Hospitalization is a time of care transitions, sometimes from independent community living to an institutional setting. Research shows such patients are at high risk of poor outcomes, said Jessie Jenkins, MD, assistant professor in UNMC's geriatrics and hospital medicine divisions.

The situation calls for increased support for those patients - and the med center has a program to rally that care.

Through the UNMC Division of Geriatrics, Gerontology and Palliative Medicine, the med center offers inpatient consults by board certified geriatricians. Formed 11/2 years ago, the consult service helps address the shortage of geriatricians in relation to the aging population.

Through the program, five physicians rotate on the service Mondays through Fridays year-round. Dr. Jenkins is on the team.

Presented with a case, the consulting physicians are faced with understanding the context of what brought the patients to the hospital. Then their task: how to improve the patient's situation.

Dr. Jenkins said the service applies a philosophy around the four M's of

geriatrics: Mind, medication, mobility and "matters most."

The consulting physicians will try to make sense of the complex interplay among such difficult issues as dementia, pill burden and falls. The concept behind "matters most" puts the patient's highest priority front and center in considering how to respond to the other three areas.

The syndromes facing geriatric patients are frequently influenced by multiple factors, Dr. Jenkins said, so the physicians' recommendations are always multi-faceted and specific to the individual.

Said Dr. Jenkins, "I don't think I've ever gotten a consult where I don't think that I've made a significant improvement in the patient's quality of life when all is said and done."

EDUCATION

Division supports hospice and palliative care training

Melissa Teply, MD, knows many practitioners go into health care wanting to keep people healthy and to save lives.

But once in practice, new doctors frequently care for patients with serious illnesses that will eventually take their life in spite of the best medical efforts. Death and dying, Dr. Teply said, are realities that young physicians soon face.

Yet in their medical training, doctors often don't gain the skills for handling some of the most delicate and difficult situations they will experience with patients and their families.



The Hospice and Palliative Medicine
Fellowship Program is structured to give
participants clinical experience with patients
facing a serious illness and death, and a
better understanding of the transitions
around the end of life. It gives the fellows a
background working through the systems
standing before those patients, including
hospice care.

Critical among the skills taught, Dr. Teply said, is communication - deliberate lessons in having those difficult conversations.

The one-year fellowship accepts residency graduates from such areas as family medicine, internal medicine, pediatrics, emergency medicine, psychiatry, anesthesiology, neurology, physical medicine and rehab, surgery and recently added obstetrics and gynecology.

Dr. Teply, assistant professor in the division and director of the fellowship, is familiar with two almost opposite reactions people have to palliative medicine. When people hear Dr. Teply's area of practice, they'll sometimes tell her: That must be so hard. But people in the practice often see it as a calling.

Said Dr. Teply, "it is an extreme honor and privilege to be able to walk into those most private and most vulnerable spaces and help however we can."

RESEARCH

Researchers work to understand chemo brain

In the flurry around cancer treatment, patients often find themselves feeling a fog.

Cancer already can come with chemotherapy, radiation and a series of tests and procedures. Side effects such as nausea are readily anticipated and often treatable.

But "chemo brain" is different.

Patients might find their thinking is off, their memory not quite the same, their conversations out of tune as they search for words, their focus wandering.

The disconnect is stressful for cancer patients, said Thuy Koll, MD, an assistant professor of internal medicine and geriatric medicine researcher whose interests include oncology and hematologic diseases. Dr. Koll works with older adults with cancer, including patients with blood cancers who have undergone a stem cell transplant.

Yet brain fog, or cancer-related cognitive impairment, is often not discussed - from two different perspectives, Dr. Koll said. Patients may shy away from talking about the issue, and health care providers may not always ask about it.

But providers can do a lot to help patients understand that what they're feeling is a normal side effect, Dr. Koll said. Providers also can put interventions in place to help make it better.

The answer to what causes cancer-related fog is a complicated one that researchers still are trying to understand. But Dr. Koll said the mechanisms can relate significantly to inflammation, stress and hormonal changes associated with cancer treatment. Older patients, she said, might face cognitive decline already as they age or other memory disorders.

Those issues can intersect with cancerrelated fatigue, depression or sleep disruption - all of which providers can help address

Dr. Koll is researching deeper into the issue. Among her research questions: What part of a cancer patient's thinking is affected and how? Her next phase of research will look at potential interventions to help cognitive function for patients going through the intense stem cell transplant.

For now, she advises providers to address the issue with their patients. "This is a common problem, and we can talk through this and figure out what we can do to help your brain think as well as it can."



Division of HOSPITAL MEDICINE



CHAD W. VOKOUN, MD ASSOCIATE PROFESSOR, INTERNAL MEDICINE CHIEF, HOSPITAL MEDICINE ASSOCIATE PROGRAM DIRECTOR. INTERNAL MEDICINE RESIDENCY PROGRAM

CLINICAL **Clinic serves** discharged hospital patients

Being discharged from a hospital stay or an emergency room visit can be a busy and overwhelming time for many patients. There are prescriptions to fill; orders to follow; and follow-up appointments to schedule, in addition to trying to rest and recover. Especially for patients without a primary care provider, the chances of something falling through the cracks — and the potential for re-admittance to the hospital — is a real concern.

To help provide a resource and a onepoint contact for these patients, the **UNMC** Division of Hospital Medicine has begun a Post Acute Care Clinic at Nebraska Medicine.

Nicholas Weiland, DO, assistant professor and medical director of the clinic, said the reasons for starting

the clinic are straightforward: Reduce preventable admissions/re-admissions to the hospital, increase early safe discharges from the hospital, and increase bed availability in the hospital.

"This clinic not only fills a void in patient care after discharge, but we think it's the tip of the iceberg as far as rethinking the continuum of care when a patient is discharged, whether that be to their home, to a rehabilitation facility, to skilled nursing or to another location," Dr. Weiland said.

Currently, the clinic has capacity to see about 15 patients remotely each day, seven days per week. The clinic is physician-run; its staff also includes a dedicated nurse and non-medical staff to help with virtual appointment set-ups.

Having a dedicated clinic available for an appointment within 24 hours of discharge from the hospital or emergency room with a hospitalist — can make a critical difference in ensuring the patient won't need to return to the hospital, said Tabatha Matthias, DO, assistant professor and associate chief of the division of hospital medicine.

Ultimately, she said, the clinic is another step in helping to deliver care in the most appropriate place for the optimal health of patients.

DIVISION OF HOSPITAL MEDICINE: RESEARCH

The UNMC Division of Hospital Medicine has a broad research portfolio not focused on one disease or process. Our approach affords opportunities for hospitals to participate in a broad range of research studies.

Increased participation in research-related activities has developed exponentially and is indicative of Hospital Medicine's intent to become leaders in research.

STUDY HIGHLIGHTS THIS YEAR INCLUDE:

CLINICAL

- **Diabetes**
- » DKA Protocol » Insulin Discharge Order Sets
- Gastrointestinal
- » COVID and GI Bleeds » Ulcer Rebleeding
- > Infectious Disease
- > Pediatric
- > Peri-Operative Care
- > POCUS
- > Vancomycin Use in Hospitals

EDUCATION

- Health Educator and Academic Leaders (HEAL) Track
- E-Learning Module (Resident Team)
- Mystery Patient
- Virtual Reality Social
 Determinants of Health Modules

HOSPITAL-WIDE

- > NECTAR Trial
- > AHFIRM
- > E-Nose

OTHER

- > Provider Experience
- > Readmissions Examined and Covered

EDUCATION

Residents learn complexity of triage and health systems

Admitting patients to a large health care system is complex. Thanks to an innovative approach to admission triaging, however, UNMC/Nebraska Medicine is completing this task more efficiently than



ever, and internal medicine residents are getting firsthand experience in the process.

"Often, residents aren't exposed to this process because it's often managed by hospital administrators or attending physicians in large health care systems," said Trek Langenhan, MD, an assistant professor of hospital medicine. "Triaging patients in a large health care system isn't easy. It requires complex analysis of available resources and their utilization, and our residents are able to see that pretty quickly."

In their three-year residency, UNMC's Internal Medicine residents typically spend two to three, one-month rotations with hospital medicine, and one week of each rotation is commonly spent with the admittriage service. While there, they work with a couple of attending physicians and one or two mid-level providers. An attending physician manages the service 24/7.

While assigned to the admit-triage service, the residents — under the supervision of the attending physician — manage the triage of not only new patients from the Emergency Department and transfers from ICU, but also receive consults from other hospital teams, and parse requests from outpatient clinics and regional hospitals. Residents also observe the Patient Placement Unit (Beds Desk) and review hospital admission criteria and determine appropriate team/level of care within the hospital.

Post-rotation reviews from the residents show they gain an appreciation for the complexity of triaging in a large hospital.

"This experience certainly makes them more appreciative for all of the work going on behind the scenes, and how important all of these small pieces within the hospital are to making this huge enterprise function efficiently," said Chad Vokoun, MD, chief of hospital medicine.

RESEARCH

Hospital Medicine grows its research portfolio

The conundrum of treating all illnesses, Chad Vokoun, MD, says, is that there's no one specific disease on which the UNMC Division of Hospital Medicine can focus its research efforts.

That hasn't stopped the division from vigorously pursuing several studies, both in education and clinical areas.

"We have an amazing breadth of interest, not a lot of depth," said Dr. Vokoun, chief of the division of hospital medicine. "We treat virtually everything in the hospital, and that sometimes can make it difficult to develop a research interest. But we are really focused on growing our research portfolio."

Jana Wardian, PhD, an assistant professor in the division, is tasked with assisting clinical and education faculty in recognizing research opportunities and providing support for those faculty to engage in more scholarly activity. A "research catalyst," Dr. Wardian has experience in study design, working with the Institutional Review Board, writing, statistics and other research fundamentals. Most recently, she served as the research director for the Air Force

Diabetes Center of Excellence at Lackland Air Force Base in San Antonio.

Since July 2020, Dr. Wardian has collaborated with about half of the faculty and several residents to increase the division's research and quality improvement projects.

In education, faculty members are working with e-Learning modules and virtual reality to study various pedagogy issues. On the clinical front, research areas include diabetes, gastroenterology, infectious disease, peri-operative care, and many others.

"Dr. Wardian has a good sense of research opportunities, and we want to be involved in leading — and collaborating on — research studies that are going to improve the lives of patients," Dr. Vokoun said. "We will push the envelope on this, and we want our research expertise soon to match the terrific things we're doing clinically and in education."

Division of INFECTIOUS DISEASES



MARK E. RUPP, MD PROFESSOR, INTERNAL MEDICINE CHIEF, INFECTIOUS DISEASES MEDICAL DIRECTOR, INFECTION CONTROL AND EPIDEMIOLOGY

CLINICAL

Education, support helped nursing homes fight COVID-19

Long before COVID-19, Muhammad Salman Ashraf, MBBS, and colleagues. had been providing infection control education to various health care settings including long-term care facilities.

The established relationships, dating back to 2015, promoted trust and made a big difference when the pandemic hit.

"Before COVID hit Nebraska nursing homes, we hosted a weekly webinar to prepare facilities to minimize the impact of COVID-19 and then provided support with infection control protocols, guidance and one-on-one mentorship if an outbreak occurred," said Dr. Ashraf, UNMC associate professor of infectious diseases. "We knew long-term care facilities would need the most help and we knew it would spread easily."

He said nursing homes had no expertise with COVID-19 infections.

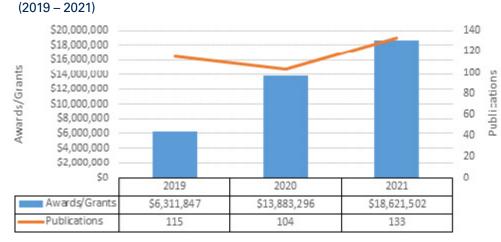
Dr. Ashraf is medical director of the Nebraska Infection Control Assessment and Promotion Program and co-medical director of the Nebraska Antimicrobial Stewardship Assessment and Promotion Program.

He said statewide collaborative efforts contributed to Nebraska long-term care facilities having the best COVID vaccination rates (top 10) of residents in the country, as well as one of the best organized long-term care facilities monoclonal antibodies (COVID treatment) programs.

In late 2021, Nebraska also was within the 10 best performing states with lowest nursing home COVID-19 case rates (10th) and deaths (seventh), according to the Centers for Medicare and Medicaid Services. This even with staff shortages, he said.

"Even though it's been a tough time, the nursing homes worked really hard and followed the guidance to pull this off in a way that our state fared better even though we have had higher case rates of COVID-19 in the country," Dr. Ashraf said.

INFECTIOUS DISEASES AWARDS/GRANTS AND PUBLICATIONS

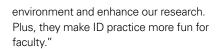


EDUCATION

Division expands fellowship, launches pathogen game

The COVID-19 pandemic has shown an even greater need for infectious diseases physicians.

"Fellows are essential to the success of our division," said Trevor Van Schooneveld, MD, fellowship program director for the UNMC Division of Infectious Diseases. "Fellows expand our clinical reach, encourage our educational



The program has been growing steadily since its creation nine years ago. Initially, it accepted one fellow per year, but as the division grew so did the fellowship. In 2021, for the first time, six ID fellows (three each year) were enrolled in the two-year program.

The division recently received a gift to support a third year of fellowship which will help build the fellow's portfolio of clinical and research experiences and prepare them to work in an academic- and researchfocused environment.

Faculty in the UNMC Division of Infectious Diseases also have worked hard to revamp the Phase 1 microbiology and infectious diseases curriculum, in which students learn about pathogens, their origins, agents (antibiotics) used to treat them, as well as how they affect the organ systems.

Assistant professors Andrea Zimmer, MD, and Sara Bares, MD, worked with other faculty to develop the microbiology and infectious diseases curriculum and incorporated patient and provider panels, case-based learning sessions, interactive skits, and a novel game called Infection Connection that helps students solidify their pathogen and antibiotic knowledge in an engaging way.

RESEARCH

Clinical trials propel **COVID-19 vaccines.** treatments

The COVID-19 pandemic has shown the world what even some in the research community didn't think possible - how fast clinical research has pivoted in this unprecedented time.

UNMC by Dr. Florescu showed that Novavax vaccine was well tolerated and demonstrated greater than 90% 100% in preventing moderate-to-severe disease. The vaccine offered protection against COVID-19 amid ongoing genetic evolution of the virus. The company is seeking approval to market the vaccine.

Dr. Kalil was principal investigator of a National Institute of Allergy and Infectious Diseases (NIAID) trial and first author of a paper published in the New England Journal of Medicine that showed for the first time in medical history that the combination of an agent that acts in the immune system with an anti-viral medication together shows clinical benefits in acute viral pneumonia. The findings, Dr. Kalil said, will pave the way for the discovery of new treatments for other lifethreatening infectious diseases.

Results showed the drugs remdesivir and baricitinib together sped up clinical improvement, shortened the time in the hospital, and reduced the progression to mechanical ventilation or death in hospitalized patients with COVID-19 pneumonia.

The NIAID-funded ACTT-2 trial was conducted in 67 hospitals and eight different countries with 1,033 volunteer study participants, including at UNMC, which was among the sites with the largest number of participants.

"These trials showed significant clinical benefit for our patients, but also for patients all over the planet," Dr. Kalil said.





Division of NEPHROLOGY



TROY J. PLUMB, MD PROFESSOR, INTERNAL MEDICINE DR. DENNIS ROSS CHAIR AND CHIEF, NEPHROLOGY MEDICAL DIRECTOR, ACUTE DIALYSIS FELLOWSHIP PROGRAM DIRECTOR

CLINICAL

New clinic to help glomerulonephritis patients

Nebraska Medicine has opened a dedicated glomerulonephritis (GN) clinic under the direction of Prasanth Ravipati, MD, who specializes in the diagnosis and management of glomerular diseases.

Located on the med center's Omaha campus, the half-day clinic will provide weekly slots for patients with such rare and complex diseases that can lead to end-stage kidney disease, other serious morbidity or death.

"The goal is to let other providers and patients know there is a place in Nebraska for additional GN resources," said Dr. Ravipati, assistant professor in the UNMC Department of Internal Medicine's Division of Nephrology. "We can help manage these patients and provide access to clinical trials for cuttingedge treatments."

A complex syndrome encompassing a variety of individual disorders, GN is an inflammation of the glomeruli - small

blood vessels in the kidney that help filter your blood and remove excess fluids. If damaged, the kidneys stop working properly, resulting in kidney failure.

Following residency at UNMC, Dr. Ravipati did his fellowship training in nephrology and then glomerular disease and vasculitis at the University of Minnesota before returning to the med center in 2021.

Dr. Ravipati said UNMC will collaborate with the University of Minnesota in building a GN registry that will give patients increased access to clinical trials for new drugs. The registry also will assist researchers in investigating GN's underlying conditions, as well as the course of the disease.

"It's very heterogeneous in the way people are impacted," Dr. Ravipati said. "We're fortunate to have seen an increase in research and potential new treatments in the past several years that has greatly benefited GN patients."

EDUCATION

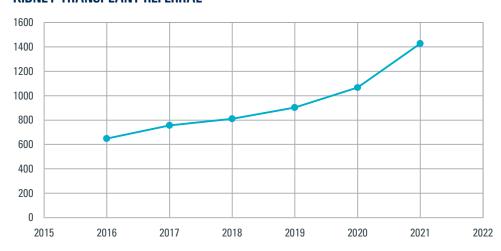
Fellowship expansion increases clinical experience

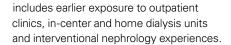
When UNMC expanded its fellowship program it also broadened clinical opportunities for fellows.

"The expansion has allowed our curriculum to be more flexible," said Scott Westphal, MD, associate fellowship program director. "It's also allowed for a better educational and clinical workload balance and created additional outpatient opportunities, especially for first-year fellows."

Historically, first-year fellows did predominantly inpatient work, Dr. Westphal said. Now, their training

KIDNEY TRANSPLANT REFERRAL





Troy Plumb, MD, fellowship program director, said the time was right — with heavy clinical workloads, high patient volumes and strong educational opportunities - to officially expand the division's two-year fellowship program from four fellows to six.

Despite a decreasing interest in nephrology at the national level, UNMC has been successful in recruiting high quality nephrology fellows. "We have a phenomenal group of fellows," Dr. Plumb said. "As a division, we are dedicated to education and have outstanding educators that routinely win division, departmental and institutional teaching awards."

Both physicians said the UNMC nephrology team will continue to highlight the allure of nephrology to medical students and residents, both at UNMC and elsewhere.

Together, the team promotes work/life balance, Dr. Plumb said, and uniquely provides broad exposure to general and consultative nephrology including ICU nephrology, expanded kidney transplant and interventional nephrology, with in-center dialysis and a robust home dialysis population, including one of the top 10 largest home hemodialysis programs in the country.

RESEARCH

UNMC among few studying combined kidney and stem cell transplant

UNMC is one of 15 centers nationwide evaluating a treatment that could eliminate the need for anti-rejection drugs among living donor kidney transplant recipients.

FREEDOM-1 is a clinical research study of an investigational cell therapy, called FCR001, which compares the efficacy and safety of FCR001 treatment to standard anti-rejection treatment.

"A lot of the toxicity and risks of going through any organ transplant are directly traceable to the immunosuppression medications. Finding ways to keep the organ functioning without rejection in the absence of medication has been of interest for decades," said Clifford Miles, MD, associate professor of internal medicine division of nephrology and UNMC's principal investigator for the FREEDOM-1 study. "So far, no one has been able to reliably do this... If this works, it will immediately change the field and could apply to a lot of patients."

Results for the Phase 3 study won't be known for some time; research clinicians first must enroll 120 pairs of participants in the study and expect to enroll through 2023. UNMC was the second center to enroll participants.

Study participants and their living donors who enroll in FREEDOM-1 are randomly assigned as a pair to either the control group or the FCR001 study group, which involves getting a modified stem cell transplant from the same living donor at the time of the kidney transplant.

One year post transplant, researchers will have a better understanding of whether the treatment could eliminate the need for antirejection drugs among living donor kidney transplant recipients, Dr. Miles said.

UNMC is an ideal site for the FREEDOM-1 trial, having strong programs in both kidney transplant and stem cell transplant. "It's a trial heavily dependent on participation from both disciplines," Dr. Miles said. "It's a goal of the medical center and the university system to pursue research that is cross discipline. This trial is bringing people together who haven't historically done research together."

The FREEDOM trial is part of the division's rapidly expanding clinical research presence in the area of kidney transplantation. Other trials in kidney transplant enrolling at UNMC include:

- + NIH sponsored CTOT-24, which explores the use of a novel combination of immunosuppressive medications to prevent rejection. UNMC is one of six sites participating.
- + The multicenter IMAGINE CSL300_3001 trial, which is investigating a new therapy for a difficult-to-treat form of chronic rejection.



Division of ONCOLOGY & HEMATOLOGY



JULIE VOSE, MD, MBA PROFESSOR, INTERNAL MEDICINE CHIEF, ONCOLOGY AND HEMATOLOGY NEUMANN M. AND MILDRED E. HARRIS **PROFESSOR**

CLINICAL

Clinic specializes in hereditary cancer **syndromes**

Faculty from the UNMC Division of Oncology and Hematology are working to take the latest in academic medicine to patients through Nebraska Medicine's Cancer Risk and Prevention Clinic.

Geared toward patients with hereditary cancer syndromes, it's the first such clinic in Nebraska, and a leader in the Midwest region, said Kelsey Klute, MD, assistant professor of internal medicine.

"If you look at health care across the board, this is a huge gap in health care delivery," Dr. Klute said. "No specialty of medicine really takes ownership of this problem."

Primary care physicians may feel ill-equipped to develop individualized surveillance plans, as guidelines may change year to year, and recommendations are not always black and white.

But this clinic takes an interdisciplinary approach to cancer risk and prevention management with an emphasis on genetic testing, high-risk surveillance, and risk-reducing treatment recommendations.

Genetic counselors determine whether a patient may benefit from germline testing, selecting the appropriate genetic tests and counseling patients on the risks and benefits of testing. They share the results and implications with patients and families, possibly recommending cascade testing for at-risk family members.

Ideally, new patients come to the clinic after genetic testing has been performed, so that the multidisciplinary team can develop an individualized plan for each patient. The team meets regularly to review patient cases and plans. The patient then meets with an advanced practitioner, who goes over the recommendations and coordinates cancer surveillance.

It's not uncommon that the team also recommends updating the family history to determine whether additional surveillance or genetic testing is needed. The clinic also can help recognize and triage another commonly overlooked issue in this population — fertility and reproductive concerns.

The clinic can work with a patient's primary care physician or serve as the patient's cancer-prevention touchpoint.

EDUCATION

New minicourse to enhance research experience

The UNMC Division of Hematology and Oncology's research curriculum continues to expand, highlighted by a clinical trials minicourse for hematology/ oncology fellows. The curriculum includes a structured research rotation, and a four-week research elective for all fellows.

The curriculum will include a renewed emphasis on career development and the mentor-mentee relationship. Mentors will be identified prior to the research rotation. Mentors will help with the introduction to the disease-focused teams, including research nurses.

Fellows will be exposed to a holistic view of career development — not just setting goals and getting published, but the importance of work-life balance and time management.

CLINICAL TRIALS MINICOURSE: FOCUS ON THE LONG-TERM CAREER





Fellows also will be immersed in bringing research to life patients through clinical trials.

"This is a new initiative, so there will be a learning curve. But, eventually, we hope this trial mini-course will enhance the research experience of our hematology-oncology fellows, said Vijaya Bhatt, MBBS, associate professor and medical director of the leukemia program.

for

"We want hematology/oncology fellows to start thinking of their long-term career, not just the research project in hand. This would require identifying and collaborating with one or more mentors, developing publication portfolios in specific areas, enhancing research skills and applying for research training and grants."

The minicourse will tackle several aspects of conducting a clinical trial. Week one will touch upon what it takes to open trials, including finding trials; working with research networks on and off campus; processes and timelines; meeting requirements, including FDA and IRB; and budgets.

Week two deals with IRB applications, processes of acquiring informed consent, reporting adverse events and responsible conduct in research.

The third week is about how to develop an effective National Institutes of Health (NIH) biosketch, develop a clinical trial protocol, and grant proposal.

The fourth week exposes fellows to proposing trials to both industry and other funding societies, i.e., the NIH or National Cancer Institute, finding funding sources, and roles and responsibilities for principal investigators. Fellows also will be oriented on working with researchers to translate basic science into advances for patients.

RESEARCH

Trials expands division's cellular therapy research

Rooted in delivering cellular therapy for blood cancers, the UNMC Division of Hematology and Oncology is growing its research into solid-tumor malignancy spaces with two new trials.

"We've grown our research infrastructure to support cellular therapies and it is an appropriate time to broaden our cellular therapy portfolio," said Matthew Lunning, DO, medical director of cellular therapy, and associate professor of hematology/oncology.

"Because of our expertise in conducting clinical research in cellular therapies we continue to be contacted," he said. UNMC was one of the first centers in the Midwest involved in clinical trials with chimeric antigen receptor (CAR) T-cell therapy targeting blood cancers.

"As we've gained experience it was only a natural progression to expand our expertise with these next trials outside of blood cancers," Dr. Lunning said.

Apar Kishor Ganti, MD, professor and a head/neck and lung cancer expert, leads a clinical trial for metastatic non-small cell lung cancer. The phase 2 multicenter clinical trial involves experiment therapy using tumor infiltrating lymphocytes (TILs). Cancer-fighting cells are harvested from the participants' own tumors, then expanded and delivered back to the participant.

Kerry Rodabaugh, MD, professor and director of gynecologic oncology, leads a phase 1 multicenter study. The study seeks to test a different cellular therapy technology targeting human papillomavirus (HPV) strain 16 (HPV16+) expressing solid tumors, with Dr. Ganti serving as a collaborator.

"Cellular therapy research is a perfect example of how a therapeutic target can cross over many cancers, which lends an opportunity for unique collaborations," Dr. Lunning said.

"Without support from leadership at the Fred & Pamela Buffett Cancer Center, UNMC and Nebraska Medicine, we would not have been able to grow from our initially small, but successful, research team. Cellular therapies can cross many diseases and having a cellular therapy research team that complements our multiple disease-focused research teams is important to our continued growth," he said.

Division of PULMONARY, CRITICAL CARE & SLEEP MEDICINE



RUXANA T. SADIKOT, MD, MRCP (UK) PROFESSOR, INTERNAL MEDICINE CHIEF, PULMONARY, CRITICAL CARE AND SLEEP MEDICINE MARGARET R. LARSON PROFESSOR CHAIR OF **PULMONARY MEDICINE**

CLINICAL

New subspecialty treats lung, airway diseases

A relatively new subspecialty of medicine — interventional pulmonology — is helping physicians at UNMC care for and treat patients with complex diseases of the lungs and airway.

The Interventional Pulmonology Program helps to address:

- + How to effectively biopsy patients with suspected lung nodules and accurately diagnose them;
- + How to evaluate patients with known lung cancer to determine how far along the cancer has progressed; and
- + How to help alleviate symptoms of pleural effusion in patients who have obstructed airways.

The program is overseen by Brian Boer, MD, PhD, and Keenan Taylor, MD, who are both associate professors in the UNMC Division of Pulmonary, Critical Care and Sleep Medicine and interventional pulmonologists.

Dr. Boer started the program five years ago and was joined by Dr. Taylor last year. Together they help assess patients who have suspect lung nodules incidentally found but who do not present with other symptoms.

"We help the patient and their clinician determine if they need a lung biopsy and are able to do so as minimally invasive as possible using robotic bronchoscopy," Dr. Taylor said.

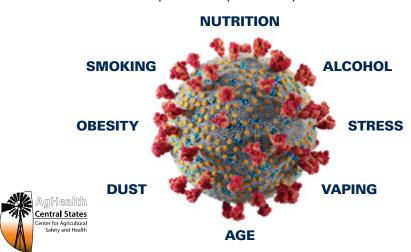
Lung cancer, when detected at an early stage, is much more treatable, he said, so it is important to educate patients about the risks, and if they are over the age of 50 and smoke, they are eligible for screening, which is highly recommended.

Dr. Taylor said that along with evaluating lung cancer, they also help alleviate symptoms in patients who have pleural effusions by performing a bronchoscopy lung volume reduction procedure.

"The IPP program is also beneficial to our current pulmonary fellows who rotate with us and are able to observe and learn more about these issues and treatments," he said.

THE COVID-19 EXPOSOME:

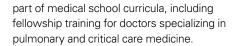
How do environmental exposures impact airway infection to SARS-CoV-2?



EDUCATION

Fellows train on ultrasound technology

More and more the use of bedside ultrasound technology is becoming



To meet the demand, UNMC's Division of Pulmonary, Critical Care and Sleep Medicine has partnered with the UNMC College of Allied Health Professions to incorporate the use of ultrasound technology into its standard curriculum.

"We collaborated with the internal medicine department to hire Jessica Roettger, a diagnostic medical sonographer in the CAHP, to teach our fellows the imaging techniques they need to know in order to care for critically ill patients," said Derek Kruse, MD, assistant professor in the division of pulmonary and critical care medicine.

This training is required by the Accreditation Council for Graduate Medical Education, Dr. Kruse said. The training not only focuses on the heart, but fellows also are trained to image the lungs, abdomen, and how to use this technology for vascular access and the placement of arterial catheters.

The advanced training started in 2019. Since then, 12 fellows have participated in the collaboration with the CAHP. Each fellow spends two days a week with Roettger at the bedside working on image acquisition while on their ultrasound elective.

"It's just as important for them to know how to get good quality images as it is in knowing how to interpret them," Dr. Kruse said.

Having Roettger's level of expertise and instruction is critical to the fellow's training, he said.

After the images are collected, Dr. Kruse reviews them with each fellow and talks

about quality and interpretation.

"Any millimeter of change in the angle of the ultrasound wand can make a huge difference," Dr. Kruse said, adding that, "our critically ill patients have multiple problems that arise throughout the day and need rapid bedside assessment. Ultrasound allows fellows to address them quickly and get answers at the bedside."

RESEARCH

Alcohol use, cigarettes and COVID-19

When it became evident that SARS-CoV-2 was quickly becoming a worldwide pandemic, Todd Wyatt, PhD, wondered what it would mean for people who smoke and drink heavily.

Based on the research he's done for more than 25 years in this area, Dr. Wyatt, a professor in the UNMC Departments of Internal Medicine and Environmental, Agricultural & Occupational Health Sciences, knew that smoking and drinking can over time compromise the lung's ability to fight off infection.

"Our bodies have evolved to create all sorts of protective mechanisms that can remove or destroy pathogens that can lead to disease but when a person smokes and

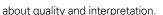
drinks too much they modify an important antimicrobial protein in their lungs that ward off disease, making them that much more vulnerable to infectious diseases," Dr. Wyatt said.

During the SARS outbreak in the early 2000s, Dr. Wyatt said it was discovered that the antimicrobial protein the lungs make is the only one that binds to the spike protein in SARS-CoV-1.

Unfortunately, Dr. Wyatt's recent research has proven that heavy alcohol and cigarette use does cause the body to lose the ability to recognize the SARS spike protein.

"There is value in trying to understand these mechanisms," he said. "It can help lead to therapeutic agents that can help treat these illnesses in people who are more vulnerable."

More importantly, he said, preventing alcohol misuse and nicotine addiction, particularly among young people, would significantly improve public health during future respiratory pandemics.



Division of RHEUMATOLOGY & IMMUNOLOGY



JAMES R. O'DELL, MD PROFESSOR, INTERNAL MEDICINE CHIEF, RHEUMATOLOGY AND IMMUNOLOGY ROBERT L. GRISSOM PROFESSOR OF INTERNAL MEDICINE VICE CHAIR — EDUCATION, INTERNAL MEDICINE

CLINIC VISITS 15000 12000 9000 6000 3000 2019 2020 2021 ■ Brentwood ■ UNMC ■ Village Pointe

CLINICAL **Clinical footprint** expands with acquisition

In 2022, Nebraska Medicine will increase its rheumatology footprint when it formally acquires Westroads Rheumatology Associates.

The practice was sold following the August 2021 death of William Palmer, MD, a beloved physician and the first board certified rheumatologist in Omaha in 1978.

"Dr. Palmer was a pillar in rheumatology," said James O'Dell, MD, chief of the UNMC Division of Rheumatology. "His death is a big loss to the rheumatological community in Omaha and the patients he cared for for many years."

Dr. Palmer practiced rheumatology in private practice, most recently at Westroads Rheumatology Associates, for more than 43 years.

After his death, Nebraska Medicine purchased the practice. In early 2022, it will become Nebraska Medicine's third offsite rheumatology clinic, in addition to its Brentwood and Village Pointe locations.

Prior to and during the transition, Carolyn Coyle, MD, and retired UNMC rheumatologist Lynell Klassen, MD, have been serving patients at the Westroads location; they will continue to do so through the transition and as long-term plans are finalized. Dr. Klassen joined UNMC in 1982 and served as founder and chief of the UNMC Division of Rheumatology and Immunology. With the acquisition, Dr. Coyle will join UNMC, where she earned her medical degree in 1994 with honors.

"We're greatly indebted to Dr. Klassen for his selfless service and pleased with the opportunity to increase the percentage of rheumatology patients we care for in the area," Dr. O'Dell said. "This expansion will continue to increase our ability to provide training for the next generation of physician and health care professionals as well as expand our research to improve rheumatic disease outcomes for Nebraskans and patients around the world."

EDUCATION

Expanded fellowship, intake clinics result in success

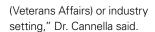
One of the county's largest and best fellowship programs just got bigger.

UNMC has expanded its two-year clinical rheumatology fellowship program from four positions annually to six (three each year of training).

"We're excited to grow the program to help address our current and future rheumatology workforce shortage both locally and nationally," said Amy Cannella, MD, professor of internal medicine and fellowship program director.

The expanded footprint enables UNMC to further enhance its fellowship experience with a variety of clinical and research opportunities to ensure fellows have all the tools needed to be successful. "We're proud to provide an education over service-oriented fellowship," she said.

Accredited in 2005, the program boasts a 100 percent first-time board pass rate. "We are flexible, in order to provide individual training to best fit each fellow's needs, whether they plan to practice in a rural, urban, private, academic, VA



The program will continue to develop training tracks for different clinical and research experiences, she said, noting "we try to find opportunities to promote each individual fellow."

As part of the fellowship expansion, Dr. Cannella said three new intake clinics were created after fellows wanted more experience in evaluating new patients. The clinics, run by fellows with faculty supervision, now exist at the Brentwood, Village Point and VA locations, and provide dedicated spots for urgent patients to be

The team also is proud of its state-of-the-art training in ultrasound and strong mentoring and productivity in fellow research and scholarly activity. This is evidenced by UNMC rheumatology fellows winning two of the past five Marshall Schiff Awards (fellow of the year) from the American College of Rheumatology.

RESEARCH

Increased emphasis on gout research

Known for groundbreaking work in rheumatoid arthritis, the division now is laying the foundation for a stronger emphasis on gout research.

Gout is the most common form of inflammatory arthritis in adults. It also is associated with significant morbidity and mortality in older men and magnified in patients with chronic kidney disease.

"Most of our research has focused on rheumatoid arthritis," said James O'Dell, MD, chief of the division of rheumatology since 1990. "Dr. (Ted) Mikuls has had a long-term interest in gout. Recently, with the depth of our involvement at the VA

and the frequency of gout in veterans, multiple opportunities came together that allow us to make important international contributions in gout."

The division's research on gout is gaining momentum. At the 2021 American College of Rheumatology (ACR) conference, Dr. O'Dell presented findings of a 72-week trial that enrolled 940 patients with gout through UNMC and the Department of Veterans Affairs (VA). The main finding? Allopurinol is noninferior to febuxostat for gout, if used appropriately. Both drugs, were successful in getting 99% of patients to a target low uric acid level. The findings also extended to patients with chronic kidney disease, he said.

The 2021 hire of Lindsay Helget, MD, further strengthens the division's research on gout, Dr. O'Dell said. An assistant professor of internal medicine, Dr. Helget is positioned to build a career around clinical and epidemiologic research in gout. She already has opened gout clinics at UNMC and the VA.

And, at the 2021 ACR conference, Dr. Helget presented research findings on the increased mortality of gout patients in the VA National Database Research. That work, done in collaboration with rheumatologists Ted Mikuls, MD, and Bryant England, MD, involved 500,000 vets with gout.

Further, a number of UNMC students and residents also presented abstracts at the ACR meeting including one showing that gout patients are at significant increased risk of amputations. With the above foundation and wealth of data, the division expects publications on gout for years to come.



VICE CHAIRS

Roslyn Bernstein Mannon, MD,

serves as vice chair for academic development and research mentoring and associate chief of research in nephrology and is a professor of medicine with a joint appointment in pathology and microbiology. Dr. Mannon is a Fellow of the American Society of Nephrology and American Society of Transplantation. She received her medical degree from Duke Medical School and completed her internal medicine and nephrology training also at Duke, where she served as chief resident. Dr. Mannon is a past-president of the AST and is a deputy editor of the American Journal of Transplantation. Dr. Mannon's laboratory research focuses on mechanisms of chronic graft injury using in vitro and in vivo models of drug toxicity and kidney transplantation. She is co-chair of the SRTR review committee, chair of ASN public policy committee, Chair of Women in Transplantation, and the steering committee for the Transplant Therapeutics Consortium, which is dedicated to accelerating new transplant therapies into practice. She has published over 200 peer-reviewed publications on chronic allograft failure and post-transplant complications and therapeutics.

Ted Mikuls, MD, MSPH, is

the Stokes-Shackleford Professor in the division of rheumatology and immunology and serves as vice chair for research for the department of internal medicine. He received his medical degree from UNMC in 1995. Dr. Mikuls completed his internal medicine residency at UNMC where he served as chief medical resident. He completed his rheumatology fellowship training at the University of Alabama at Birmingham (UAB), where he also received his master's of science in public health. Dr. Mikuls joined the UNMC rheumatology division in 2002, where he remains active in clinical-translational research, research

mentoring, education and patient care. He has directed the VA Nebraska-Western Iowa Health Care System Rheumatoid Arthritis Clinic for the past 19 years. Dr. Mikuls' research focuses on the etiopathogenesis and health outcomes in rheumatoid arthritis and gout. He initiated and has led the multicenter VA Rheumatoid arthritis Registry since its inception in 2002. He has received research funding from the VA, NIH, Arthritis Foundation, the U.S. Department of Defense, industry and the Rheumatology Research Foundation.

James O'Dell, MD, serves as Robert Grissom Professor, chief of the division of rheumatology and vice chair for education in the department of internal medicine. Dr. O'Dell earned his medical degree and completed his internal medicine residency at UNMC. He completed a clinical and research fellowship in rheumatology at the University of Colorado Health Sciences Center, Denver, and is board certified in both internal medicine and rheumatology. He is founder and director of the nationally recognized Rheumatoid Arthritis Investigational Network, a collaboration of rheumatologists from eight states that conducts investigatorinitiated trials seeking improved treatments for rheumatoid arthritis (RA). His research centers on the development of multicentered, non-industrial clinical trials that are designed to answer clinically relevant therapeutic questions. Through 1996 and 2013 New England Journal of Medicine publications, he popularized combination therapy for RA. He recently completed a major VA study on treatment of gout which was published in NEJM Evidence. Active with the American College of Rheumatology (ACR), Dr. O'Dell is past president of the Research and Education Foundation and served as president in 2011-2012. He is a master of both the ACP and ACR and was awarded the UNMC Varner Educator Laureate Award in 2019.

Angela Peppers, MBA, serves as vice chair for administration and finance in the UNMC Department of Internal Medicine, where she has served as department administrator since 2014. Peppers earned her master's degree in business administration from Creighton University and her bachelor's of science in business administration, finance, at the University of Nebraska at Omaha. She previously held the position of financial executive at Children's Specialty Physicians and Children's Physicians in Omaha, Nebraska. At Creighton University, she held the positions of associate dean for finance and administration and financial officer at the School of Law, director of financial affairs at the School of Medicine and administrator of the department of pediatrics.

Shane Tsai, MD, MBA, inaugural vice chair for specialty clinical care in the UNMC Department of Internal Medicine. He received his medical degree from the University of Michigan Medical School and completed an internal medicine-pediatrics residency at Indiana University School of Medicine, where he also served as chief resident. He then completed a rare combined adult and pediatric cardiovascular fellowship at The Ohio State University Medical Center and Nationwide Children's Hospital, and continued with an advanced fellowship in clinical cardiac electrophysiology at OSUMC. He gained recognition as the first cardiologist in the country to become board certified in six specialties

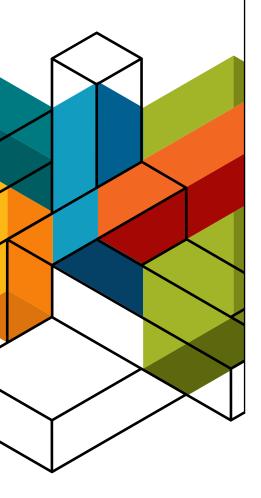
(internal medicine, pediatrics,



ASSOCIATE VICE CHAIRS

adult cardiology, pediatric cardiology, electrophysiology and adult congenital heart disease). An associate professor with a joint appointment between UNMC and Children's Hospital, he helped to establish the Adult Congenital Cardiology Program, one of the first nationally accredited comprehensive care programs in the country. He serves as section chief of electrophysiology in the division of cardiovascular medicine, as well as medical director of both the electrophysiology laboratory and cardiac implantable electronic device/remote monitoring service. He earned his master's degree in business administration from the University of Nebraska at Omaha. He completed the UNMC iLEAD program and the Health Management Academy's

Physician Leadership Program.



Kristina Bailey, MD, ATSF, is

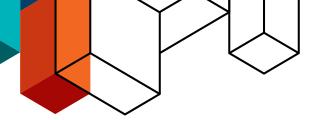
an associate professor in the division of pulmonary, critical care, sleep and allergy, joining the faculty in 2008. She serves as the associate vice chair of research, focusing on basic science research within the department. A physician/scientist, Dr. Bailey completed her medical training, internal medicine residency and pulmonary critical care fellowship at UNMC. She completed an extra year of basic science research training during her fellowship and was funded by a competitive F32 National Research Service Award from the National Institute on Alcohol Abuse and Alcoholism. As part of her clinical duties, she serves the veteran population as a staff physician/ pulmonologist at the Omaha VA Medical Center. Dr. Bailey's research focuses on how exposures such as heavy alcohol intake, smoking, organic dust exposures, cannabis use and aging affect pulmonary innate immunity and increase the risks of pneumonia. Since her fellowship, Dr. Bailey's work has been funded by a K award, and, more recently, an R01, both through the National Institutes of Health. With departmental support, she initiated and coordinates a lung transplant tissue and cell biorepository.

Renée Hill, JD, MBA, CRA, CRCR, CSBI, serves as associate vice chair for research administration and development for the UNMC Department of Internal Medicine. Hill joined the department in 2018 and has worked in academic medicine administration and research development for more than 16 years. She has served as director of the Research Services Center for the University of Texas at San Antonio's College of Sciences, as program manager for the San Antonio Claude D. Pepper Older Americans Independence Center at the University of Texas Health Science Center at San

Antonio, and as division administrator for the Renal-Electrolyte Division at the University of Pittsburgh School of Medicine's Department of Medicine. Hill received a JD degree from Fordham University School of Law, an MBA degree in finance from New York University's Stern School of Business and an AB cum laude in Russian from Harvard and Radcliffe Colleges. She previously practiced law as a trial attorney and has worked in the financial services and economic development sectors.

Matthew Lunning, DO, FACP,

is an associate professor in the UNMC Division of Hematology/Oncology. He serves the department of internal medicine as the associate vice chair of research. He recently was appointed as an assistant vice chancellor of clinical research and elected to serve on the Nebraska Medicine Medical Executive Committee as an at large member. He received his medical degree from Des Moines University in 2006. Dr. Lunning completed his internal medicine residency at UNMC, where he served as chief medical resident. He completed his hematology/oncology fellowship and served as the hematology chief fellow at Memorial Sloan-Kettering Cancer Center. Dr. Lunning returned to UNMC in 2013 and has been active in clinical research. research mentoring, education and patient care. Dr. Lunning was the recipient of the Distinguish Scientist Award in 2019. He has served on several National Comprehensive Cancer Network guidelines committees including the immunotherapy toxicity and T-cell lymphoma panels. He has served as an invited member of ASCO's Cancer Education Committee on the Non-Hodgkin Lymphoma. He is the co-organizer of the Pan Pacific Lymphoma Conference.



CHIEF RESIDENTS & GRADUATES

GRADUATES, CLASS OF 2021

Dua'a Abdallah, MBBS

Hospitalist, NEbraska Medicine/UNMC, Omaha, Neb.

Timothy Kenneth Ackerman, MD

Hospitalist, Medicine & Pediatrics, Ochsner LSU Health, Shreveport, La.

Benjamin Karl Arbeiter, MD

Hospitalist, Nebraska Medicine/UNMC, Omaha, Neb.

Brian J. Benes, DO

Nephrology Fellow, UNMC, Omaha, Neb.

Elaine Buckholtz, DO

Hospitalist, Methodist Hospital, Omaha, Neb.

Luke William Desilet, DO

Rheumatology Fellow, UNMC, Omaha, Neb.

Morgan Ann Dornbos, MD

Hospitalist, Inpatient Physician Associates, Bryan Medical Center, Lincoln, Neb.

Joseph W. Dougherty, MD

VA Chief Resident, Omaha VA/UNMC, Omaha, Neb.

Steven Douglas Ebers, MD

Internal Medicine/Pediatrics Hospitalist, Nebraska Medicine/UNMC & Children's Hospital and Medical Center, Omaha, Neb.

Kali Zoe Gagnon, DO

Cardiology Fellow, UNMC, Omaha, Neb.

Tyler Lee Gallo, DO

Traditionalist, Ivinson Memorial Hospital, Laramie, Wyo.

Nikki Gruner, MD

Hospitalist, University of New Mexico Hospital, Albuquerque, N.M.

Anne Elizabeth Heenan, MD, MBA

Outpatient, Medicine & Pediatrics, Kaiser Permanente, Parker, Colo.

Mackenzie Rae Keintz, MD

Infectious Diseases Fellow, UNMC, Omaha, Neb.

Nora Marguerite Kovar, MD, MPH Geriatrics Fellow, UNMC, Omaha, Neb.

Joel Thomas Kruse, MD

Hospitalist, CHI Health, St. Elizabeth Medical Center, Lincoln, NEB.

Bernadette Leah Clement Lamb, MD UNMC Chief Resident, UNMC, Omaha, Neb.

Brent Luedders, MD

Rheumatology Fellow, UNMC, Omaha, Neb.

Jen Luedders, MD

Ambulatory Chief Resident, UNMC, Omaha, Neb.

Radha Kanneganti Perue, MBBS

Cardiology Fellow, UNMC, Omaha, Neb.

Jessica Rydberg, DO

Quality & Patient Safety Chief Resident, UNMC, Omaha, Neb.

Anum Samdani, MD

Hospitalist, Nebraska Medicine/UNMC, Omaha, Neb.

Stephen B. Sexauer, MD

Pulmonary & Critical Care Medicine Fellow, Medical University of South, CaroliNA, CHARLESTON, S.C.

David Taeho Shin, DO

Cardiology Fellow, UNMC, Omaha, Neb.

Alan James Spanel, MD

Primary Care, Yankton Medical Center, Fountain Point Medical Center. Norfolk, Neb.

Willie Talbert, MD

Traditionalist, Schneck Medical Center, Seymour, Ind.

Daniel Kelly Van Kalsbeek, DO

Pulmonary & Critical Care Medicine Fellow, UNMC, Omaha, Neb.

Joseph S. Wang, DO

Hospitalist, University of Texas Health, San Antonio, Texas

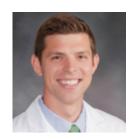
Kyle Lawrence Wilson, MD

 $\label{lem:condition} \textbf{Health Disparities Chief Resident}, \textbf{UNMC}, \textbf{Omaha}, \textbf{Neb}.$

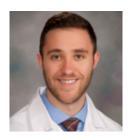
CHIEF RESIDENTS 2020-2021



Brian J. Benes, DO Ambulatory Chief Resident UNMC/Omaha VA, Omaha, Neb.



Steven Ebers, MD VA Chief Resident, UNMC/Omaha VA, Omaha, Neb.



Brent Luedders, MD QI & Patient Safety Chief Resident UNMC, Omaha, Neb.



Stephen Sexauer, MD UNMC Chief Resident UNMC, Omaha, Neb.



GRADUATES, CLASS OF 2022

Muhannad Aboud Abbasi, MBBCh Cardiovascular Disease Fellow, Mayo Clinic Hospital, Rochester, Minn.

Joshua Allwardt, MD Hospitalist, Methodist Hospital, Omaha, Neb.

Hannah Kay Artz, MD Hybrid, UNMC/Nebraska Medicine, Omaha, Neb.

Christopher John Buckley, MD Hospitalist, Columbus Community Hospital, Columbus, Neb.

Maureen Therese Choman, MD Geriatrics Fellow, UNMC, Omaha, Neb.

Amy Claire Dreessen, MD
UNMC Chief Resident, UNMC, Omaha, Neb.

Karl Oscar Enroth, MD Internal Medicine, Pediatrics Hospitalist, Regions Hospital and Children's Hospital, Minneapolis and St. Paul, Minn.

Jonathan H. Hall, MD Quality Improvement and Patient Safety Chief Resident, UNMC, Omaha, Neb.

Tyson T. Holm, MD Internal Medicine Hybrid, Altru Health System, Grand Forks, N.D. Maria I. Hopson, MD Hybrid Internist, Nebraska Medicine/UNMC, Omaha, Neb.

Jake Johnson, MD Endocrine Fellow, UNMC, Omaha, Neb.

Adam Karevoll, MBBCh Geriatrics Fellow/Hospitalist, UNMC, Omaha, Neb.

Lauren Keim, MDGastroenterology Fellow, UNMC, Omaha, Neb.

Peter Maloley, MD Hospitalist, UNMC, Omaha, Neb.

Clayton Kane Oakley, DO Ambulatory Chief Resident, UNMC, Omaha, Neb.

Gulsen Ozen, MD Rheumatology Fellow, UNMC, Omaha, Neb.

Joe Pachunka, MD MedPeds Hybrid, UNMC, Omaha, Neb.

Kishan Patel, MD Gastroenterology Fellow, Loyola University Medical Center, Chicago, III.

Alexander William Praus, MD Gastroenterology Fellow, UNMC, Omaha, Neb. Abby Kay Riese, MD

Internal Medicine-Pediatric Hospitalist, Providence St. Vincent Medical Center, Portland, Ore.

Stephen Roberts, DO Cardiology Fellow, UNMC, Omaha, Neb.

Quint Soto, MD Hospitalist, CHI Health Mercy, Council Bluffs, Iowa

Evan Byron Symons, DO Internal Medicine, VA Chief, UNMC/VAMC, Omaha, Neb.

Natalya Tesdahl, MD, MS Hospitalist, Monument Health, Rapid City, S.D.

Kaleb Thomas, MD Nephrology Fellow, Stanford Medical Center, Palo Alto, Calif.

Austin M Wheeler, MD Rheumatology Fellow, UNMC, Omaha, Neb.

CHIEF RESIDENTS 2021-2022



Bernadette Lamb, MD UNMC Chief Resident UNMC, Omaha, Neb.



Jessica Fletcher, DO QI & Patient Safety Chief Resident, UNMC, Omaha, Neb.



Jennilee Luedders, MD Ambulatory Chief Resident UNMC/Omaha VA, Omaha, Neb.



Joseph Dougherty, MD VA Chief Resident, UNMC/Omaha VA, Omaha, Neb.



Kyle Wilson, MD Global Health Track Chief Resident, UNMC/Omaha VA, Omaha, Neb.

DEVELOPMENT



ANDREA ZIMMER, MD ASSISTANT PROFESSOR, INTERNAL MEDICINE CO-DIRECTOR, GRADUATE MEDICAL EDUCATION CURRICULUM, MICROBIOLOGY & INFECTIOUS DISEASES BLOCK



ROSLYN MANNON, MD PROFESSOR, INTERNAL MEDICINE VICE CHAIR, RESEARCH MENTORING AND ACADEMIC DEVELOPMENT ASSOCIATE CHIEF, RESEARCH, DIVISION OF NEPHROLOGY

Mentoring is an important step in the development path for UNMC Department of Internal Medicine faculty members.

Andrea Zimmer, MD, the inaugural associate vice chair of faculty development, works in partnership with Roslyn "Roz" Mannon, MD, vice chair for research mentoring and academic development, to help faculty navigate toward a more fulfilling career.

Faculty development exists in a longitudinal relationship with onboarding for clinicians, scientists and leadership across all levels in the department.

Onboarding in the first year includes the creation of mentorships, which can lead to relationships and strong connections with peers. Mentorships are nonmandatory, but highly encouraged and are usually mentee directed. Since 2018, 55 faculty have been paired with mentors upon joining UNMC faculty with 31 pairings just in 2021.

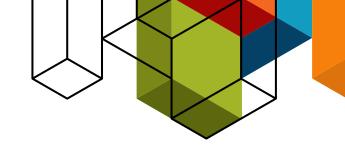
New faculty are paired within their division to help acclimate them to specific processes within that division. Mentors also may be from different divisions to provide different aspects of the chosen academic role.

Recognizing the complexity of people's careers is critical to the planning process. Planning is the job of the Faculty Development Committee, comprised of one faculty member from every division. The committee is tasked with programming and educating colleagues on how processes work.

The Faculty Development Committee works to:

- + Acclimate new faculty to the institution and work with divisions to identify potential early mentors
- + Promote career development and mentorship opportunities for faculty at all career stages
- + Engage faculty with intradepartmental networking and collaboration
- + Foster an inclusive and supportive culture for all faculty
- + Be a catalyst to create a culture for mentoring activity and relationships across the department

Promotion and tenure is an important part of faculty development. For the academic year of 2020-2021, the committee included members from each division and included for the first time, associate professors, to develop their skills in this area. Gerald Moore, MD, is co-chair of the promotion and tenure committee and works with Dr. Mannon. They met each potential rising faculty member to review their documentation, giving valuable feedback on potential improvements to their promotion packets prior to their submission to the department chair. The committee then provides another line of review providing input to guide the process to a successful outcome. In 2020, there were seven faculty promoted to associate professor, six promoted to professor and one approval for tenure.



KEY INTERESTS

Allergy & Immunology

JILL POOLE, MD

Professor

Division Chief

- + Allergy and asthmatic diseases
- + Urticarial (hive) syndromes and eosinophilic esophagitis
- + Environmental and agriculture organic dustrelated respiratory disorders

SARA MAY, MD

Associate Professor

Program Director, Allergy & Immunology Fellowship

- Drug allergy including aspirin exacerbated respiratory disease (AERD)
- + Urticaria (hives) and angioedema (swelling)
- Allergic diseases in pediatric patients
- + Education of future providers

ANDREW RORIE, MD

Assistant Professor, Allergy, Asthma and Immunology

- + Aerobiology
- + Allergen immunology
- + Severe asthma

JOEL VAN DE GRAAFF, MD

Assistant Professor, Allergy, Asthma and Immunology

- + Food allergy
- + Drug allergy
- + Pediatric allergy and immunology

Cardiology

ANDREW M. GOLDSWEIG, MD

Assistant Professor

Associate Director, Structural Heart Disease

- + Structural heart interventions
- Database outcomes research
- Structural heart clinical trials

POONAM VELAGAPUDI, MD, MS, FACC

Assistant Professor

Associate Program Director, Cardiology Fellowship

- + High risk PCI in complex CAD
- Transcatheter therapies including TAVR, TMVR and mitral clip

BIN DUAN, PHD

Assistant Professor

- + Biomaterials and biotechnology development
- Tissue regeneration
- + Stem cell engineering

BRIAN D. LOWES, MD, PHD

William D. Angle Professor of Medicine Medical Director, Advanced Heart Failure and Transplantation

- Cardiac transplant
- Mechanical circulatory support
- + Molecular targets for heart failure therapies

DOUGLAS STOLLER, MD

Assistant Professor

- + Cardiac genetics
- + Heart transplant
- Advanced heart failure
- Transplant coronary artery disease

YIANNIS S. CHATZIZISIS, MD, PHD Associate Professor

Acting Section Chief, Interventional Cardiology

- High-risk PCI
- Intracoronary imaging
- Advanced cardiac imaging (CT, MRI)
- Atherosclerosis
- Vascular biology and biomechanics

Diabetes, Endocrinology & **Metabolism**

CYRUS DESOUZA, MBBS

Professor

Division Chief

- Cardiovascular disease in diabetes
- Clinical trials in diabetes management
- Improving diabetes outcomes in rural areas

PADMAJA AKKIREDDY, MBBS

Assistant Professor

- Diabetes technology
- Medical weight loss
- Thyroid disorders

ROBERT BENNETT, PHD

Professor

- Relaxin functions in liver disease and regeneration
- Adipose tissue dysfunction and fibrosis
- Development of new treatments for fibrotic

BRIAN P. BOERNER, MD

Assistant Professor

- Post-transplant diabetes & transplant endocrinology
- Pancreatogenic diabetes
- Medical education

ANDJELA DRINCIC, MD

Professor

- Pituitary disorders & tumors
- Neuroendocrinology
- Adrenal dysfunction

LESLIE A. EILAND, MD

Assistant Professor

- Telemedicine & rural health
- Diabetes technology
- Patient experience
- Type 1 diabetes

WHITNEY GOLDNER, MD

Professor

- Thyroid nodules & cancer
- Neuroendocrine and adrenal tumors
- Thyroid and parathyroid disorders

LAURA A. GRAEFF-ARMAS, MD

Associate Professor

- Osteoporosis
- Bone disease in chronic kidney disease
- Bone disease in diabetes

FREDERICK HAMEL, PHD

- Function of insulin-degrading enzyme
- Signal transduction in insulin action
- Etiology of type 2 diabetes mellitus

ANUPAM KOTWAL, MBBS Assistant Professor

- Characterize endocrine dysfunction from cancer immunotherapies
- Identify immune and genomic biomarkers for thyroid cancer prognosis
- + Identify disparities in thyroid cancer

JENNIFER LARSEN, MD

UNMC Vice Chancellor for Research

- + Nontraditional risk factors for vascular disease after kidney transplant
- Primary prevention of diabetes and its complications
- Improving outcomes after solid organ transplant

LYNN R. MACK, MD

Associate Professor

- Osteoporosis evaluation & management
- Diabetes care in pregnancy & cystic fibrosis
- Women's health with thyroid disease & PCOS

AMY S. NEUMEISTER, MD

Assistant Professor

- Type 1 and Type 2 diabetes
- Thyroid, pituitary adrenal disease
- Clinical medical education

ANERY PATEL, MD

- Assistant Professor
- Thyroid nodules and thyroid cancer
- Parathyroid, adrenal disorders Neuroendocrine tumors

RITIKA PURI, MBBS

- Assistant Professor
- + Inpatient endocrinology
- Cardiovascular disease & diabetes
- Management of lipid disorders

VIJAY SHIVASWAMY, MBBS

- Associate Professor Immunosuppressants & insulin resistance
- Post-transplant diabetes & endocrine care
- Reproductive function after transplantation

SARASWATHI VISWANATHAN, PHD

Associate Professor

- Obesity-linked insulin resistance
- Alcohol-associated liver disease Altered metabolism in pancreatic cancer

Gastroenterology & Hepatology

PETER MANNON, MD

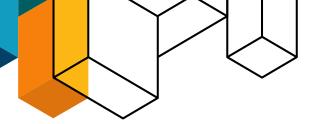
Division Chief Ruth & Bill Scott Endowed Presidential Chair of Internal Medicine

Professor

+ Inflammatory bowel disease + Gut microbiome research

ISHFAQ BHAT, MD Associate Professor

- Biliary and pancreatic endoscopy Interventional EUS
- Luminal resection
- Endoscopic therapy Fellowship education



CAROL CASEY, PHD

Professor

- Alcoholic liver injury
- Cell biology and function

TERRENCE DONOHUE JR, PHD

Professor

- + Alcoholic liver injury
- + Hepatocyte proliferation and repair

DERRICK EICHELE, MD

Assistant Professor

- + Colon cancer screening
- + Endoscopy
- + Inflammatory bowel disease

CHIJIOKE ENWELUZO, MBBS

Assistant Professor

- + Education
- + Quality improvement

MURALI GANESAN, PHD

Assistant Professor

- + Effect of alcohol in HBV infection pathogenesis
- Mechanisms of HIV-induced liver injury; role of
- Mechanisms of alcohol and HCV induced liver

ALEXANDER HEWLETT, DO

Associate Professor

- + Esophageal motility disorders
- Eosinophilic esophagitis
- Gastrointestinal reflux

KATHRYN HUTCHINS, MD

Assistant Professor

- Inflammatory bowel disease
- Women's health
- + Medical education

KUSUM KHARBANDA, PHD

Professor

- + Alcoholic liver disease
- Bioprotection in hepatitis

NATHALIE KHOURY, MD

Assistant Professor

- + Alcohol-related liver disease
- + Liver transplant evaluation and post-transplant
- + Medical education

MARK MAILLIARD, MD

Professor

- + Hepatitis C infection
- Alcoholic liver disease

SARAH MALIK, MBBS

Assistant Professor

- Gastrointestinal Care
- Colon Cancer screening and prevention
- Women's Health

WUTTIPORN (SHANE) MANATSATHIT, MD

Assistant Professor

- + Non-alcoholic fatty liver disease (NAFLD)
- Non-invasive liver fibrosis measurements
- + Meta-analysis of diagnostic test accuracy

TIMOTHY MCCASHLAND, MD

Professor

Medical Director, Liver Transplantation

- + Liver transplantation
- Cholestatic liver disease

BENITA MCVICKER, PHD

Associate Professor

- Alcoholic liver disease
- + Hepatocyte apoptosis

MARCO OLIVERA-MARTINEZ, MD

Associate Program Director, Liver Transplant and Hepatology Fellowship Program

- Liver transplantation
- Chronic viral hepatitis
- Novel pharmacologic therapies

NATALIA OSNA, PHD

Professor

- + Hepatitis C
- + Hepatic inflammation

MICHEL OUELLETTE, PHD

Professor

- + Hepatitis C
- + Hepatic inflammation

THOETCHAI (BEE) PEERAPHATDIT, MD

Assistant Professor

- Transplant hepatology
- + Epidemiology and outcomes research

KARUNA RASINENI, PHD

Assistant Professor

- Alcoholic and non-alcoholic liver disease
- Role of gherlin hormone in development of fatty

FEDJA ROCHLING, MBBCH

Professor

- Transplant hepatology
- Hepatocellular carcinoma
- Short bowel syndrome
- Intestinal rehabilitation

SHAILENDER SINGH, MD

Associate Professor

- + Biliary and pancreatic endoscopy
- Interventional EUS
- Luminal resection
- Endoscopic therapy

ANITA SIVARAMAN, MD

Assistant Professor

- + Women's health
- Weight management Colon cancer prevention

PAUL THOMES, PHD

Assistant Professor

+ Alcohol-induced organ dysfunction

GARY VOLENTINE, MD

Associate Professor

- Colon cancer screening
- Gastrointestinal care
- + Endoscopy

General Internal Medicine

JENNIFER R. PARKER, MD, FAAP, FACP

Acting Chief, Division of General Internal Medicine Associate Professor

- Outpatient primary care
- Resident training and education
- Transition care

NATHAN M. ANDERSON, MD

Assistant Professor

- Junior Clerkship Director Student and resident education
- Outpatient primary care
- Hospital medicine

JOEL D. ARMITAGE, MD, FACP

Assistant Professor

Medical Director, Village Pointe Health Center

- + Outpatient primary care
- Disease prevention and health promotion
- + Delegate academic advisory board, ACP

MICHAEL A. ASH, MD, RPH

Assistant Professor

Chief Transformation Officer, Nebraska Medicine Vice Chancellor, Information Technology, UNMC

+ Medical informatics

JAMES CAMPBELL, MD FACP

Professor

- Computerized patient medical records
- Clinical decision support systems
- Primary outcomes research
- Health systems sciences
- Physician advocacy

BRENT A. CROUSE, MD

Assistant Professor

- + Outpatient primary care
- + Cardiology and diabetes care

ERIK T. EHLERS, MD

Instructor

- + Outpatient primary care
- Resident education and training

GALE M. ETHERTON, MD, FACP

Associate Professor

VA NWI Associate Chief of Staff for Patient Safety

- + Hospital delivery systems
- + Physician quality improvement
- + Patient safety

STEPHANIE J. HARTMAN, MD

Assistant Professor

+ Women's health

+ Outpatient primary care

EMILY K. HILL BOWMAN, MD

- Assistant Professor
- + Outpatient primary care + Resident training and education

MARY GALLAGHER JANSEN, MD, FACP

- Assistant Professor
- + Psychiatric illness in primary care + Medical education

DANIEL J. JEFFREY, MD

Assistant Professor Medical Director, Fontenelle Health Center

- + Med Peds
- Transitional care
- Patient centered medical home

RACHEL JOHNSON, MD + Outpatient primary care

Assistant Professor

- LYDIA Y. KANG, MD, FACP
- Assistant Professor + Palliative care
- Doctor patient communication

Medical humanities

EAMON P. MALONEY, MD Assistant Professor

+ Outpatient primary care + Med peds

MERLE T. MCALEVY, MD Assistant Professor

+ Student education + Physical diagnosis teaching

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SCOTT MENOLASCINO, MD

Assistant Professor

- Resident training and education
- + Emergency medicine

CHRISTINE A. MITCHELL, MD, FACP Instructor

- Outpatient primary care
- + Resident training and education

STEPHEN M. MOHRING, MD

Assistant Professor

Medical Director, Midtown Health Center Medical Director, PCMH and Population Health, Nebraska Medicine

- Outpatient primary care
- + Resident and student training and education

URMILA MUKHERJEE, MD

Assistant Professor

- + Hospital medicine
- + Surgical co-management
- + Quality improvement and patient safety

CHELSEA R. NAVARRETTE, MD

Assistant Professor

- + Hospital medicine
- Outpatient primary care
- Management of the hospitalized patient

J. SCOTT NEUMEISTER, MD, FACP

Associate Professor

- + Procedural training
- + Undergraduate and graduate medical education

DEVIN R. NICKOL, MD, FACP

Associate Professor

Assistant Dean for Interprofessional Education

- + M1 Integrated Clinical Experience Core Director
- M2 Physical Diagnosis Course Director
- Teaching evidence-based medicine
- Computers in medical education
- Interprofessional education

DAVID O'DELL, MD, FACP

LeeRoy Meyer Professor

Director, Primary Care Residency

- + Medical student procedural training
- + Undergraduate and graduate medical education

COREY ROHLFSEN, MD

Assistant Professor

- + Outpatient primary care
- + Hospital medicine

ROBERT SCHWAB, MD

Assistant Professor

+ Resident education

SUSAN R. SCHWERDTFEGER, MD

Assistant Professor

Medical Director, Brentwood Health Center

- Outpatient primary care
- + Women's health

SARAH E. SMITH, MD

Assistant Professor

- + Med Peds
- + Outpatient primary care

REGAN M. TAYLOR, MD, FACP

Assistant Professor

Medical Director, Internal Medicine, Olson Center for Women's Health

- + Women's health
- Resident and medical student education
- + Outpatient primary care

MELISSA L. TEPLY, MD

Assistant Professor

- Outpatient primary care
- Palliative medicine

ANDREW J. VASEY, MD, FACP

Assistant Professor

Physician Leader, Primary Care Clinical Program, Nebraska Medicine

- Hospital medicine
- + Outpatient primary care

ROBERT WIGTON, MD, FACP

Professor

Assistant Dean Special Projects

- History of the College of Medicine
- Research in medical education
- Research in physician judgement and decision

TESIA S. WINTER, DO

Assistant Professor

- Outpatient Primary care
- Hospital medicine
- Resident and medical student education

RAE A WITT, MD

Assistant Professor

Associate Program Director, Internal Medicine Residency Program

- Hospital medicine
- Resident education

Geriatrics, Gerontology & Palliative Medicine

ALFRED L. FISHER, MD. PHD

Division Chief

Neumann M. and Mildred E. Harris Professor of

Associate Professor

- Biology of aging research
- Consultative and primary care for older adults
 Application of biology of aging concepts to develop novel diagnostic and therapeutic approaches

KARINA I. BISHOP, MD, CMD

Assistant Professor

Medical Director, Douglas County Health Center

- Latin geriatric primary care
- Nursing home care and medical direction
- Home visits

STEPHEN J BONASERA, MD, PHD

Associate Professor

- + Neurobiology of normal aging and its interaction with neurodegenerative diseases
- Assessing functional status of community-dwelling
- Developing and deploying clinical systems to help families manage neurodegenerative diseases at

CATHERINE EBERLE, MD, CMD

Associate Professor

Chief of Geriatrics, Extended Care and Rehabilitation-Hospice and Palliative Care Team, Nebraska-Western lowa

- + Palliative Care-Care of complex patients with serious
- Goals of care discussions and advance planning
- Learner and provider education of the above topics

MANDY BYERS MD

Assistant Professor

Medical Director, St. Joseph Villa Skilled Nursing & Rehabilitation

- Outpatient management of the frail elderly
- Hospice and palliative care
- Post-acute care and rehabilitation

ELIZABETH HARLOW, MD

Assistant Professor

Director, Geriatric Medicine Curriculum

- Medical student mentoring and education in geriatric
- Direction of and mentorship of residents in the medicine-geriatrics residency track
- Comprehensive primary care of older adults

JOSEPH HEJKAL, MD

Assistant Professor

- Assessment and prevention of delirium in hospitalized older adults
- Assessment of complex older patients
- Dementia care

JESSIE JENKINS, MD

Assistant Professor

- Hospital care of older adults
- Comprehensive assessment of medically complex older adults
- Hospital associated disability

THUY KOLL, MD

- Assistant Professor Multimorbidity and optimization of care in older
- patients with cancer Function and quality of life in older patients
- Decision making in older patients with advanced illnesses

LOU LUKAS, MD

Associate Professor Medical Director, Palliative Medicine, Nebraska-Western

- Iowa Health Care System (VA)
- Complex communication and decision making Use of psychedelic agents to treat psychological
- distress in serious illness + Trauma informed care

WILLIAM L. LYONS, MD

Professor

- Director, Geriatrics Fellowship Program
 Directing training program for geriatrics fellows
 Interprofessional evaluation of older patients with cognitive and functional problems in consultation
- Approach to the complex, multimorbid older patient, including elicitation and negotiation of goals and

priorities

NATALIE MANLEY, MD, MPH

Assistant Professor Medical Director, Azria Health Gretna, Hillcrest Hospice

- & Nebraska City Prestige Care Center
- Nursing home and hospice care Caregiver support
- + Dementia care

KATHERINE L. MALISZEWSKI, MD, PHD

- Assistant Professor
- Primary care for older adults Comprehensive, multidisciplinary assessment of older adults with cognitive and functional problems
- Management of problems affecting hospitalized older patients



JANE F. POTTER, MD

Medical Director, Geriatrics Outpatient & Engage Wellness

- Interprofessional education in geriatrics
- Geriatric primary care
- Geriatrics education for surgical and medical specialists

MELISSA TEPLY, MD

Assistant Professor

Director, Hospice & Palliative Medicine Fellowship Program

- Medical education on primary palliative care skills
- Concurrent palliative care in oncology
- + Coping with serious illness

Hospital Medicine

CHAD W. VOKOUN, MD

Associate Professor

Chief, Section of Hospital Medicine, Division of General Internal Medicine

Associate Program Director, Department of Internal Medicine Residency Program

- Resident training and education
- + Perioperative and consultative medicine

DUA'A ABDALLAH, MBBS

Assistant Professor

+ Medical management of the hospitalized patient

NURLAN ALIYEV, MD

Assistant Professor

+ Medical management of the hospitalized patient

SULEIMAN AL ASHI, MD

Assistant Professor

+ Medical management of the hospitalized patient

NATHAN M. ANDERSON, MD

Assistant Professor

Junior Clerkship Director

- + Student and resident education
- + Outpatient primary care

ALLISON K. ASHFORD, MD, FACP, FAAP, FHM

Assistant Professor

Pediatrics Residency Program Director, Internal Medicine

- Med Peds
- Resident and medical student education

BENJAMIN ARBEITER, MD

Assistant Professor

+ Medical management of the hospitalized patient

CRAIG BAUMGART, MD

Assistant Professor

+ Medical management of the hospitalized patient

MICAH W. BEACHY, DO, FACP, SFHM

Associate Professor

Medical Director, Clinical Effectiveness, Nebraska Medicine

- Medical management of the hospitalized patient
- Incorporation of high value care into clinical decision making
- Quality improvement and patient safety

ROMANA A. BHAT, MD

Assistant Professor

+ Medical management of the hospitalized patient

JUSTIN R. BIRGE, MD, MS, FHM

Assistant Professor

- Medical Director of Provider Informatics
- + Medical management of the hospitalized patient

ANDREW S. BROUWER, MD

Assistant Professor

+ Medical management of the hospitalized patient

BRADY P. BULIAN, DO

Assistant Professor

- + Documentation quality
- Workflow efficiency
- Informatics

ANDREW CAMAMO, DO

Assistant Professor

+ Medical management of the hospitalized patient

SARAH L. CAMERON, MD

Assistant Professor

+ Medical management of the hospitalized patient

JODI L. CANTRELL, MD

Assistant Professor

+ Medical management of the hospitalized patient

KELLY J. CAVERZAGIE, MD, FACP, FHM

Professor Vice President for Education, Nebraska Medicine

- + Education redesign
- Health systems sciences
- Physician advocacy

AMY L. COFFEY, MD

Assistant Professor

+ Medical management of the hospitalized patient

JENNIFER E. COLELLA, MD

Assistant Professor

+ Medical management of the hospitalized patient

IAN CORMIER, DO

Assistant Professor

+ Medical management of the hospitalized patient

NATALIE S. CRUMP, MBBS

Assistant Professor

- + Post-discharge hospital medicine clinic
- Safe and efficient hospital medication reconciliation

STEVEN EBERS, MD

Assistant Professor

+ Medical management of the hospitalized patient

KARISA L. HAJEK, MD

Assistant Professor

+ Medical management of the hospitalized patient

SEHR HAROON, MD

Assistant Professor

+ Medical management of the hospitalized patient

EMILY E. HOWARD, DO

Assistant Professor

+ Medical management of the hospitalized patient

DANIEL J. JEFFREY, MD

Assistant Professor

Medical Director, Fontenelle Health Center

- Med Peds
- Transitional care
- + Patient centered medical home

JESSIES. JENKINS, MD

Assistant Professor

+ Medical management of the hospitalized patient

VASTHALA JUVVIGUNTA, MBBS

Assistant Professor

+ Medical management of the hospitalized patient

ARTHUR F. KORNITSKY, DO

+ Medical management of the hospitalized patient

TREK C LANGENHAN, MD

Assistant Professor

Assistant Program Director, Department of Internal Medicine Residency Program

- Student and resident education
- + Medical management of the hospitalized patient

JOSHUA M. LAURILA, DO

Assistant Professor

+ Medical management of the hospitalized patient

HUY LE, MD

Assistant Professor

+ Medical management of the hospitalized patient

CHETAJ A. MAHABIR, MD

+ Medical management of the hospitalized patient

TABATHA HOLTZ MATTHIAS, DO, MBA, FACP

- Assistant Professor Hospital medicine clinical operations
- Triage and external transfer processes
- Point-of-care ultrasound

CHELSEA MCELROY, DO

Assistant Professor

+ Medical management of the hospitalized patient

ELIZABETH M. MILES, MD

Assistant Professor

+ Medical management of the hospitalized patient

BRANDON MILLER, MD

Assistant Professor

+ Medical management of the hospitalized patient

CHELSEA R. NAVARRETTE, MD

Assistant Professor

Outpatient primary care Management of the hospitalized patient

THUYTIEN NGUYEN, MD

Assistant Professor

+ Medical management of the hospitalized patient

ATCHUYTA PACHIGOLLA, MBBS

Assistant Professor + Medical management of the hospitalized patient

ELIZABETH PETER, DO

Assistant Professor

+ Medical management of the hospitalized patient

NICOLLE L. PETERSON, DO

Assistant Professor

+ Medical management of the hospitalized patient

MAHLIQHA QASIMYAR, MD

Assistant Professor

+ Medical management of the hospitalized patient

+ Medical management of the hospitalized patient

SARAH E. RICHARDS, MD

Assistant Professor

ERIN RAMELB, MD

Assistant Professor Medical Director, Patient and Provider Experience,

- Nebraska Medicine
- + Patient experience Provider wellbeing

CORY ROHLFSEN, MD

AHMED SAAD, MBBS

Assistant Professor

Assistant Professor + Medical management of the hospitalized patient

+ Medical management of the hospitalized patient



KHALID M. SAHAK, MD

Assistant Professor

- Point-of-care ultrasound
- Surgical co-management

ANUM SAMDANI, MD

Assistant Professor

+ Medical management of the hospitalized patient

SMRITI I. SHARMA, MD

Assistant Professor

- + Medical management of the hospitalized patient
- + Oncology co-management

TUSHAR SHARMA, MBBS

Assistant Professor

+ Medical management of the hospitalized patient

JASON F. SHIFFERMILLER, MD, MPH

Assistant Professor

- Perioperative medicine
- + Inpatient outcomes and database research

CHRISTOPHER J. SMITH, MD

Assistant Professor

- + Point-of-care ultrasound
- + Medical education
- + Transitions of care

MICHAEL P. SMITH, MD

Assistant Professor

+ Medical management of the hospitalized patient

CHRISTOPHER SNYDER, MD, MBA

Assistant Professor

+ Medical management of the hospitalized patient

SHUBRA SRINIVAS, MD

Assistant Professor

+ Medical management of the hospitalized patient

ASHIMA SRIVASTAVA, MD

Assistant Professor

+ Medical management of the hospitalized patient

MANISH M. TIWARI, MD, PHD, MPH

Assistant Professor

+ Medical management of the hospitalized patient

DIANE N. TOPOLSKI, MD

Assistant Professor

+ Medical management of the hospitalized patient

CARRIE VALENTA, MD

Associate Professor

+ Medical management of the hospitalized patient

ANDREW J. VASEY, MD, FACP

Assistant Professor

Physician Leader, Primary Care Clinical Program, Nebraska Medicine

- Outpatient primary care
- Medical student and resident education
- Perioperative, consultative and hospital medicine

SRINIVAS R. VUNNAM, MBBS

Assistant Professor

+ Medical management of the hospitalized patient

NICHOLAS A. WEILAND, DO

Assistant Professor

+ Medical management of the hospitalized patient

NOAH A. WIEDEL, MD

- Assistant Professor
 + Treatment of C difficile, including FMT
- Reducing length of admission
- + Cost conscious health care

TESIA S. WINTER, DO

Assistant Professor

- + Outpatient Primary care
- + Resident and medical student education

RAE A WITT, MD

Assistant Professor

Associate Program Director, Internal Medicine Residency Program

Resident education

JILL M. ZABIH, MD

Assistant Professor

- Preparing students for residency
- Simulation in medical education
- Understanding social determinants of health

Infectious Diseases

MARK E. RUPP, MD

Chief, Division, Infectious Diseases

Professor

Medical Director, Infection Control & Epidemiology
+ Healthcare Associated Infections

- Antimicrobial Resistance and Stewardship
- Staphylococcal Disease

M. SALMAN ASHRAF, MBBS

Associate Professor

Medical Director, Nebraska Infection Control Assessment and Promotion Program (ICAP) Co-Medical Director, Nebraska Antimicrobial Stewardship Assessment and Promotion Program (ASAPI

- Infection prevention & healthcare associated infections
- Antimicrobial stewardship
- Infections in the elderly

SARA BARES, MD

Associate Professor

Director, Research and Education for the UNMC HIV

Co-Director, Undergraduate Medical Education Curriculum, Microbiology & Infectious Diseases Blocks Clinical Director, Nebraska/Kansas AIDS Education and Training Center, Omaha Site

- + HIV testing and prevention
- Obesity and cardiometabolic complications in HIV
- HIV and aging
- Medical education

BRADLEY BRITIGAN, MD

Professor

Dean, College of Medicine

Stokes-Shackleford Professor, Infectious Diseases

- Free radical biology and iron metabolism
- Pseudomonas pathogenesis
- Pathogenesis of tuberculosis

KELLY CAWCUTT, MD, MS

Associate Professor

Associate Medical Director, Infection Control &

Co-Director, Digital Innovation and Social Media Strategy

- Central-Line associated bloodstream infections and vascular access
- Ventilator-associated events/pneumonia
- + Use of social media in medicine

NICOLAS CORTES-PENFIELD, MD

Assistant Professor

Medical Director, Outpatient Parental Antibiotic Therapy Associate Medical Director, Antimicrobial Stewardship

- Complicated bone and joint infections
- Clinical ethics
- Medical education

NADA FADUL, MD

Associate Professor

Assistant Dean, Diversity, Equity and Inclusion Education Programs

Medical Director, Specialty Care Center

- HIV care and prevention
- Implementation science of new treatment modalities
- + Health disparities

ANGELA HEWLETT, MD, MS

Associate Professor

George W. Orr MD and Linda Orr Chair in Health

Director, Section of Orthopedic Infectious Diseases Medical Director, Nebraska Biocontainment Unit
+ Orthopedic infectious diseases

- Biocontainment and emerging infectious diseases
- Complicated bone and joint infections
- Biopreparedness

JAMES LAWLER, MD, MPH

Associate Professor

Director, International Programs and Innovation, Global

Center for Health Security Director, Clinical and Biodefense Research, National Strategic Research Institute

- Emerging infectious diseases
- Public health emergency preparedness
- Sepsis
- Viral hemorrhagic fevers

JASMINE R. MARCELIN, MD

Assistant Professor

Associate Medical Director, Antimicrobial Stewardship Associate Program Director, Internal Medicine

Residency Co-Director, Digital Innovation and Social Media Strategy

- Antimicrobial stewardship Diversity, inclusion & equity in medicine
- Medical education
- Healthcare social media

ELIZABETH SCHNAUBELT, MD

Clinical Assistant Professor

- Global health
- Trauma related infections Tropical medicine

RICHARD STARLIN, MD

Assistant Professor

Medical Director, Employee Health Co-Medical Director, Internal Medicine Subspecialty

Clinic

- Director, Community/Telehealth Infectious Diseases
- Non-Tuberculous mycobacteria Occupational health
- Infectious disease in the community

SUSAN SWINDELLS, MBBS

Professor

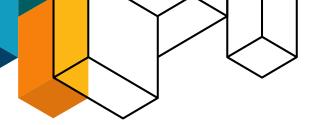
Management of HIV infection + HIV/TB coinfection

TREVOR VAN SCHOONEVELD, MD

Associate Professor Fellowship Director, Infectious Diseases Medical Director, Antimicrobial Stewardship Associate Medical Director, Infection Control &

- Epidemiology
- Antimicrobial stewardship Multi-drug resistant gram-negative pathogens
- Clostridium difficile infections
- Mycobacterial infections

Medical Director, C-Stars Omaha Biopreparedness



ALISON FREIFELD, MD

Professor

Director, Section of Oncology Infectious Diseases Fred & Pamela Buffett Cancer Center

- Infections in febrile neutropenia
- Epidemiology of bloodstream infections in cancer patients
- + Antibiotic resistance

ANDREA GREEN HINES, MD

Associate Professor, Department of Pediatrics Clinical Associate Professor, Department of Internal

Medical Director, Children's Hospital & Medical Center Antimicrobial Stewardship Program Program Director, UNMC Pediatric Infectious Diseases Fellowship Program

- Antimicrobial and diagnostic stewardship
- Quality improvement
- Medical education

KARI NEEMANN, MD

Associate Professor

- + Adult and pediatric infectious diseases
- Infections in cancer patients

ANDREA ZIMMER, MD

Assistant Professor

Associate Program Director, Infectious Diseases Co-Director, Graduate Medical Education Curriculum Director, Oncology Infectious Diseases Section Associate Director, Infectious Diseases Fellowship

- Microbiology & Infectious Diseases Block
- Opportunistic infections in cancer patients
- Infections in hematopoietic stem cell transplant
- Medical student education

ANDRE KALIL, MD, MPH

Professor

Director, Transplant Infectious Diseases

- Transplant infectious diseases
- CMV infections
- + Severe sepsis and pneumonia

DIANA FLORESCU, MD

Professor

Director, Transplant Infectious Diseases Research Associate Director, Transplant Infectious Diseases Program

- Viral infections in solid organ transplant recipients
- + Infections in small bowel transplant recipients

ERICA STOHS, MD, MPH

Assistant Professor

Associate Medical Director, Antimicrobial Stewardship Program

- + Antimicrobial stewardship in immunocompromised hosts
- Antibiotic allergies in transplant recipients
- Infections in solid organ and stem cell transplant recipients

RICHARD HANKINS, MD

Assistant Professor

Associate Medical Director, Infection Control & **Epidemiology**

Associate Medical Director, Antimicrobial Stewardship Program

- Catheter related infections
- Infection control
- Antimicrobial stewardship

NATALIA E. CASTILLO ALMEIDA, MD

Assistant Professor

- Fungal infections in solid organ transplant recipients
- Cardiovascular infections, including left ventricular assist devices

ANUM ABBAS, MD

Assistant Professor

- Infections in immunocompromised hosts
- Infections in hemopoietic stem cell transplant
- + Infections in solid organ transplant recipients

DANIEL BRAILITA, MD

Assistant Professor

Associate Medical Director, Nebraska ICAP Program

- Tuberculosis
- Telehealth infectious diseases
- Infectious diseases in community practice
- Infection prevention in community hospitals

DAVID KLINE, MD

Clinical Assistant Professor

- Physician Program Manager, C-STARS Omaha
- General infectious disease in adults
- Biocontainment and emerging infectious diseases

Nephrology

TROY J. PLUMB, MD

Professor of Medicine

Dr. Dennis Ross Chair and Chief, Division of Nephrology

Medical Director, Acute Dialysis Fellowship Program Director

- + Home hemodialysis
- Peritoneal dialysis
- + Transitional care dialysis models

MARIUS C. FLORESCU, MD

Professor

- Interventional nephrology
- Hepatorenal syndrome
- + Novel hemodialysis vascular access devices

DOUGLAS D. FRANZ, MD, MPH

Assistant Professor

- + Advanced heart failure in chronic kidney disease
- Left ventricular assist device (LVAD) induced kidney dysfunction
- Bioinformatics applied to clinical research systems

JAY L. HAWKINS, MD

Assistant Professor

- Chronic kidney disease
- Diabetic nephropathy
- In-center hemodialysis

ERIC D. LANGEWISCH, MD

Associate Professor

- Solid organ transplant histocompatibility
- Kidney transplant rejection
- Transplant organ allocation

ROSLYN B. MANNON, MD

Professor and Associate Chief for Research, Division of Nephrology

Vice Chair, Research Mentoring and Academic Development, Department of Internal Medicine

- Management of late allograft failure
- Translational studies in acute rejection and calcineurin inhibitor nephrotoxicity
- Monitoring assays for transplant rejection and immune quiescence
- Clinical trial design and endpoints for transplant therapeutics

CLIFFORD D. MILES, MD, MS

Associate Professor

Medical Director, Kidney and Pancreas Transplant Program

- Organ allocation policy
- Clinical tolerance in kidney transplantation
- Optimizing performance of the transplant ecosystem

RYAN P. MULLANE, DO

Assistant Professor

- Acute kidney injury
- Transition to end-stage kidney disease
- Undergraduate and graduate medical education

FELIPE NARANJO, MD

Assistant Professor

- + Clinical education in acute kidney disease and chronic kidney disease
- Kidney disease in Latin-Americans
- Health disparities

PRASANTH RAVIPATI, MD

Assistant Professor

- + Glomerular Diseases
- Acute kidney injury Hypertension

KETKI TENDULKAR, MBBS

Associate Professor

- + Chronic kidney disease and pulmonary hypertension
- CKD and cancer
- + Kidney donors

SCOTT G. WESTPHAL, MD

Assistant Professor

Fellowship Associate Program Director

- Kidney transplant allocation policy and ethics
- Multi-organ transplantation Non-Invasive diagnostics for transplant rejection

Oncology & Hematology

ZAID AL-KADHIMI, MD

Director, Bone Marrow Transplant and Cellular

Therapy

- Associate Professor
- Acute Leukemias
- Bone Marrow Transplant
- Aplastic Anemia Myelodysplastic Syndrome
- Benign Hematology

JAMES ARMITAGE, MD The Joe Shapiro Professor of Medicine

- + Non- Hodgkin's Lymphoma
- Hodgkin Disease Chronic Lymphocytic Leukemia

VIJAYA R. BHATT, MBBS, MS

- Medical Director Leukemia Program
- Associate Professor Acute Leukemia
- Myelodysplastic Syndrome
- Bone Marrow Transplant Benign Hematology

ROBERT G. BOCIEK, MD

Professor

Non-Hodgkin Lymphoma

Hodgkin Disease Chronic Lymphocytic Leukemia

LAXMI N. BUDDHARAJU, MBBS + Non-malignant Hematology

Assistant Professor



CHRISTOPHER R D'ANGELO, MD

Assistant Professor

- Benign Hematology
- Bone Marrow Transplant
- Lymphoma
- + Chronic Lymphocytic Leukemia

APAR K. GANTI, MD

Professor

- Lung Cancer
- + Mesothelioma
- Thymoma
- + Head and Neck Cancers
- + Thyroid Cancers

JEAN L. GREM, MD

Professor

- + Gastrointestinal Cancers
- Neuroendocrine (Carcinoid Tumors)
- + Hepatocellular Carcinomas

KRISHNA GUNDABOLU, MBBS

Assistant Professor

- + Myeloproliferative Neoplasms
- Leukemia
- + Thrombosis

SARAH A. HOLSTEIN, MD PHD

Associate Professor

+ Multiple Myeloma

AVYAKTA KALLAM, MD

Assistant Professor

- + Hodgkin Lymphoma
- + Non-Hodgkin Lymphoma

KELSEY KLUTE, MD

Medical Director for the Cancer Risk and Prevention Clinic

Assistant Professor

- Gastrointestinal Cancers
- + Pancreatic Cancer

JAIRAM KRISHNAMURTHY, MBBS

Associate Professor

+ Breast cancer

MRIDULA KRISHNAN, MBBS

Assistant Professor

+ Gastrointestinal Cancer

MATTHEW A. LUNNING, MD

Assistant Vice Chancellor of Clinical Research

Assistant Vice-Chair, Research, Department of Internal Medicine

Associate Professor

- + Non-Hodgkin Lymphoma
- Hodgkin Disease
- + Multiple Myeloma
- CAR-T/ Cellular Therapy
- + Benign Hematology

LORI J. MANESS-HARRIS, MD

Associate Professor

- + Leukemia
- Myeloid Malignancies
- BMT Aplastic Anemia
- Myelodysplastic Syndrome

ALISSA S. MARR

Assistant Professor

Medical Director for the Cancer Center at the Bellevue Medical Center

- + Lung Cancer
- Skin Cancer
- Neuroendocrine malignancies

ALEX NESTER, MD

Assistant Professor

- + Benign hematology
- Sickle Cell Disease Bleeding Disorders

ELIZABETH REED, MD

Medical Director, Cancer Center at Village Pointe Health

Professor

Breast cancer

BHAVINA SHARMA, MD

Assistant Professor

- + Lung Cancer
- Skin Cancer
- Melanoma

NICOLE A. SHONKA, MD

Medical Director, Fred & Pamela Buffett Cancer Center Associate Professor

- + Neuro-oncology
- Sarcoma

PAVANKUMAR TANDRA, MBBS

Assistant Professor

+ Breast Cancer

LAURA TENNER, MD, MPH

Associate Professor

+ Gastrointestinal Cancer

BENJAMIN TEPLY, MD

Assistant Professor

+ Genitourinary Malignancies

JULIE VOSE, MD

Chief, Division of Hematology/ Oncology Neumann M. and Mildred E. Harris Professor

- + Non-Hodgkin Lymphoma
- Hodgkin Lymphoma
- + Chronic Lymphocytic Leukemia

Pulmonary, Critical Care & Sleep Medicine

RUXANA SADIKOT, MD, MRCP (UK)

Margaret R. Larson Professor Chair of Pulmonary Medicine and Chief, Pulmonary, Critical Care & Sleep Medicine Division

- + Innate immunity/multi-organ failure
- Mycobacterial disease
- + Bronchiectasis

KRISTINA BAILEY, MD, ATSF

Associate Professor

- The role aging plays in the innate immunity of the
- How exposures such as heavy alcohol use, cigarette smoking, cannabis and CBD use affects the lung
- How airway inflammation is modulated in the lung

SABIN BISTA, MBBS, FAASM

Associate Professor

- + Sleep disorders
- Intersection of sleep in pulmonary disorders
- Critical care

BRIAN BOER, MD, PHD

Associate Professor

Medical Director, Medical Intensive Care Unit

- Interventional pulmonology
- Emerging procedural modalities Point-of-care ultrasound

JOHN DICKINSON, MD, PHD

Assistant Professor

- Cystic fibrosis
- Airway disease: asthma, COPD, bronchitis
- Factors that regulate airway mucous in mucoobstructive lung disease

KARIM EL-KERSH, MD

Associate Professor

- PAH risk stratification using echocardiography and invasive hemodynamics
- Palliative care in PAH
- Social determinants of health in PAH

DAVID GANNON, MD, FACP, FACCP

Associate Professor

Medical Director, Critical Care

- Critical care medicine
- Quality improvement and performance improvement

JOHN HARRINGTON, MD, MPH

Associate Professor

Director, Sleep Fellowship Program

- CPAP adherence
- Obstructive sleep apnea
- REM sleep behavior disorder

DANIEL HERSHBERGER, MD

Assistant Professor

- Interstitial lung disease
- Connective tissue related lung diseases
- Student, resident, fellow and patient education

CANDACE HUEBERT, MD

Associate Professor

- + Clinical service ICU and pulmonary
- Fellowship education and curriculum development
- Graft v host disease and multidisciplinary care

DEREK KRUSE, MD

Assistant Professor Medical Director, Pulmonary Function Laboratory

- Associate Medical Director, APCU
- POCUS education and its clinical application
- Fellow education in the outpatient clinic Pulmonary & critical care medicine

DUSTIN KRUTSINGER, MD, MSCE

- Assistant Professor
- + Clinical trials
- Behavioral economics Critical care medicine

JOHN MCCLAIN, MD

- Assistant Professor + Medical education in POC ultrasound and difficult
- airways
- Biocontainment care
- Critical Care/infectious disease air transport

Austere medicine

PETER (JIM) MURPHY, MD

Associate Professor Director, Adult Cystic Fibrosis Program

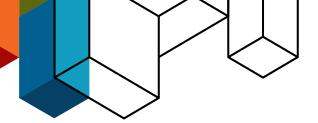
- Medical Director, Respiratory Therapy + Adults with cystic fibrosis
- Respiratory care services

Adults with bronchiectasis

AMOL PATIL, MBBS, FCCP Associate Professor

- Medical Director, Pulmonary Rehabilitation + Interstitial lung disease
- Resident education
- Neurocritical care and interventional pulmonary

51 \ Plus



CRAIG PIQUETTE, MD, FACP, FCCP

Chair, COM Curriculum Committee

Medical Director, Pulmonary Function Lab, Omaha VA Medical Center

Director, Pulmonary, Critical Care Medicine Fellowship Program

- Critical care medicine
- Undergraduate and graduate medical education
- Obstructive lung disease including asthma &

STEPHEN I. RENNARD, MD

Professor

- Translational medicine: early clinical trials
- COPD: innovative clinical trials
- + Biomarkers for stratification of clinical response

DEBRA J. ROMBERGER, MD

Henry J. Lehnhoff Professor and Chair, Department of Medicine

- Mechanisms of organic-dust associated airway inflammation and disease
- Environmental lung disease
- + COPD, including pulmonary rehabilitation

DERRICK SAMUELSON, PHD

Assistant Professor

- Bacterial pneumonia
- Microbiota
- + Gut-lung axis

BRONWYN SMALL, MD

Assistant Professor

- + Clinical care in lung transplant, pulmonary and critical care
- Research in lung transplant and microbiome
- Education of medical students, residents and

HEATHER STRAH, MD

Assistant Professor

Medical Director, Lung Transplant Program

- Lung transplant
- Organ allocation
- + Multi-organ donor management

MICHAEL SUMMERS, MD, MBA

Associate Professor

Medical Director, The Nebraska Medical Center Sleep Center

- Sleep disordered breathing
- Disorders of hypersomnolence
- Application of machine learning/artificial intelligence in medicine

KEENAN TAYLOR, MD

Assistant Professor

- Interventional pulmonology
- Disorders of the pleura
- Bronchoscopic lung volume reduction

TAMMY WICHMAN, MD

Associate Professor

Program Director, Internal Medicine Residency

- Rheumatologic diseases and pulmonary hypertension
- Congenital heart disease and pulmonary hypertension
- + Oxidative stress and pulmonary hypertension

TODD A. WYATT, PHD

Professor and Chair, Department of Environmental, Agricultural & Occupational Health

Deputy Director Central States Center for Agricultural Safety and Health

- The exposome in lung disease
- eCigarettes and vaping related airways injury
- Agricultural occupational dusts in chronic lung inflammation

Rheumatology

JAMES R. O'DELL, MD

Robert L. Grissom Professor of Internal Medicine Vice Chair - Education, Internal Medicine Chief, Division of Rheumatology

- Investigator-initiated clinical trials in Rheumatoid Arthritis (RA)
- Clinical trial and treatment of gout
- Clinical trial design
- Predicting response to therapy in RA
- Value-based care of RA

KAITLYN BRITTAN, MD

Assistant Professor

- Musculoskeletal ultrasound
- Medical education
- Quality improvement and patient safety
- Advocacy

AMY CANNELLA, MD

Professor

Director, Rheumatology Fellowship Program

- Medical education
- Musculoskeletal ultrasound
- Rheumatoid arthritis

BRYANT ENGLAND, MD

Assistant Professor

- Clinical and epidemiologic research in rheumatoid arthritis
- Rheumatoid arthritis-associated lung disease
- Epidemiology and pharmacoepidemiology of rheumatic diseases
- Comorbidities and multimorbidity in rheumatoid

ALAN R. ERICKSON, MD

Associate Professor

Assistant Dean for Student Affairs, College of Medicine

- Clinical rheumatology
- Radiographic assessments
- Medical education

MICHAEL G. FEELY, MD

Assistant Professor

- Inflammatory myopathies
- Interstitial lung disease
- Radiographic evaluation of rheumatic disorders
- Rheumatoid arthritis

MICHELENE HEARTH-HOLMES, MD

Assistant Professor

- Systemic lupus erythematosus
- Medical education
- Osteoporosis
- Musculoskeletal ultrasound

LINDSAY HELGET, MD

Assistant Professor

- + Clinical and epidemiologic research in gout
- Musculoskeletal ultrasound
- Rheumatoid arthritis

LYNELL W. KLASSEN, MD

Professor Emeritus of Internal Medicine

Pathogenesis of autoimmunity and immunodeficiency

TINA D. MAHAJAN, MD

Assistant Professor

- Rheumatoid arthritis
- Autoimmune lung disease

JENNIFER L. MEDLIN, MD

Assistant Professor

Systemic lupus erythematosus Autoimmune skin disease Musculoskeletal ultrasound

KALEB D. MICHAUD, PHD

Professor

- + Patient registries
- Outcomes research in RMDs with specialization in rheumatoid arthritis
- Pharmacovigilance
- + Healthcare cost effective analyses

TED R. MIKULS, MD

Stokes-Shackleford Professor of Rheumatology Vice Chair - Research, Internal Medicine

- Outcomes, epidemiology and pathogenesis of rheumatoid arthritis
- + Health outcomes and quality of care in gout

GERALD F. MOORE, MD

Professor Emeritus of Rheumatology

+ Educational research related to student performance and assessment

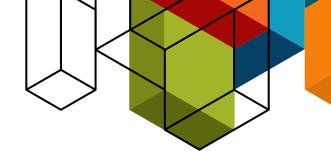
MARCUS H. SNOW, MD

Assistant Professor + Scleroderma and Raynaud's phenomenon

GEOFFREY THIELE, MD

Umbach Professor of Rheumatology

- Post-translational modification of self-proteins to result in autoimmune diseases
- Pathophysiology of inflammatory diseases
 - Generation and abrogation of immunological self-tolerance
- Evaluation of immune responses and biomarkers in inflammatory diseases



NATIONAL HONORS

Dr. Amy Cannella

is one of only 25-members on the National Society of Clinical Rheumatology.

Dr. Derrick Eichele

is on the training committee of the American College of Gastroenterology.

Dr. Karim El-Kersh

is on the pulmonary hypertension care center review committee for the Pulmonary Hypertension Association.

Dr. Angela Hewlett

is president of the Musculoskeletal Infection Society, a member of the Infectious Diseases Advisory Group for the U.S. Olympic and Paralympic Committee and an infectious diseases advisor for the USA Gymnastics Team.

Dr. Peter Mannon

is a gastrointestinal drugs advisory committee member with the U.S. Food and Drug Administration. Within the National Institutes of Diabetes and Digestive and Kidney, his roles include serving on several review panels and as a member of the Digestive System Host Defense, Microbial Interactions and Immune and Inflammatory Diseases study section. He also is a member of the autoimmune data and safety monitoring board with the National Institute of Allergy and Infectious Diseases.

Dr. Roslyn Mannon

was named chair of the public policy and advocacy committee for the American Society of Nephrology, chair of the ASN policy and advocacy committee, chair of Women in Transplantation and co-chair of the Scientific Registry of Transplant Recipients Review Committee.

Dr. Jasmine Marcelin

is on the board of directors for the Infectious Diseases Society of America.

Dr. Ted Mikuls

is chair of the scientific advisory council at the Rheumatology Research Foundation.

Dr. Cliff Miles

was named a public policy committee member for the American Society of Transplantation and is on the membership and professional standards committee, as well as a board of directors' member for the Organ Procurement and Transplantation Network/United Network for Organ Sharing.

Dr. Ryan Mullane

is a member of the research committee for the American Society of Diagnostic and Interventional Nephrology and the American College of Osteopathic Internists. He also serves on the In-Service Training Exam Writing Committee of the American Society of Nephrology.

Dr. Craig Piquette

is on the UME-GME transition task force of the Alliance for Academic Internal Medicine.

Dr. Andrew Rorie

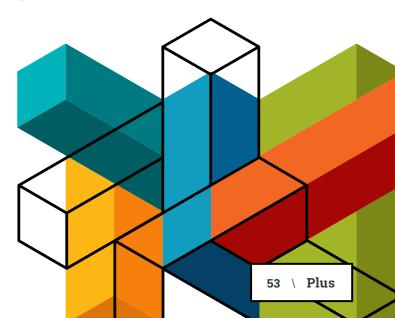
is vice chair and on the leadership committee of the American Academy of Allergy, Asthma & Immunology-National Allergy Bureau Joint Aerobiology Committee.

Dr. Marcus Snow

is chair of the committee on rheumatologic care for the American College of Rheumatology.

Dr. Susan Swindells

is on the scientific advisory board of the U.S. President's Emergency Plan for AIDS Relief and is a member of the U.S. Department of Health & Human Services panel on HIV guidelines.



OUR LEGACIES

REMEMBERING Thomas Gallagher, MD

Longtime faculty member Thomas Gallagher, MD, affectionately remembered by his colleagues at the UNMC Division of Diabetes, Endocrinology and Metabolism (DEM) and by the UNMC College of Allied Health Professions, died Aug. 13, 2021. He was 89.

One of his four daughters, Mary Gallagher-Jansen, MD, herself a faculty member at UNMC, said the fond memories were mutual.

- "My father loved UNMC," she said.
- "He was fond of his patients and remembered everyone by name even until the end.
- "He could remember what year people graduated from residency even if he ran into them at the Hy-Vee."

Whitney Goldner, MD, professor of DEM, concurred that Dr. Gallagher kept his connections to medicine and to the med center.

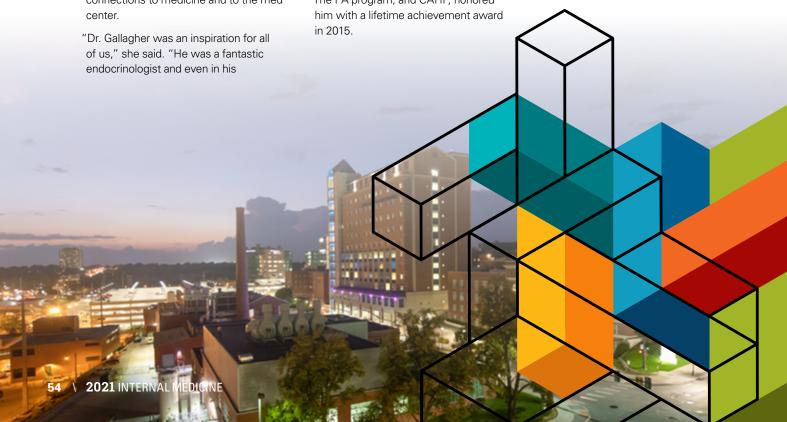
retirement was committed to teaching and mentoring and being a part of the 'endocrine community.' I really appreciate his sage advice and words of wisdom over the years."

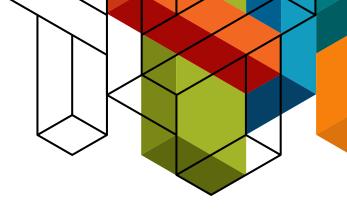
"He was a consummate clinician-educator, with a focus on bedside teaching, clinic and in the hospital," said Jennifer Larsen, MD, vice chancellor for research and professor of DEM. "He lived through and taught others during early days of diabetes treatments, including the conversion from urine to glucose testing and the first insulin pumps, yet believed strongly that glucose control mattered long before there was a study that proved it."

Dr. Gallagher played a key role in the founding of the physician assistant education program at UNMC. He also served as program director and medical director of the PA program from 1974-89. The PA program, and CAHP, honored him with a lifetime achievement award in 2015.

Dr. Gallagher was an inspiration for all of us. He was a fantastic endocrinologist and even in his retirement was committed to teaching and mentoring and being a part of the 'endocrine community.'

Whitney Goldner, MD





RETIRED Susanna Von Essen, MD



Susanna Von Essen, MD, was raised on a Nebraska farm and brought her passion for supporting agriculture to her work with organic dusts and lung disease. She completed her residency at

UNMC, served as chief resident, became the first pulmonary fellow at UNMC and then joined the faculty as the first female pulmonologist in Nebraska.

Dr. Von Essen started laboratory-based research with organic dust during her

pulmonary fellowship in 1985-88. She initiated doing lung function tests at Husker Harvest days and was a natural in engaging farmers to participate. If you see her garden and yard, you know she is a fine farmer herself, said Debra Romberger, MD, chair of the department of internal medicine.

"She strove for excellence in all she did and held those around her to the same high standards that guided her own work," Dr. Romberger said.

Early in her career, she conducted a successful series of studies exploring the biology of grain dust induced lung disease. Work derivative from this has helped guide the careers of several UNMC scientists who continue to pursue studies along these lines. She also was active in developing the agricultural health initiatives at UNMC, which has blossomed into a major project within the

College of Public Health. She has always maintained an active clinical presence helping to guide early efforts at UNMC in sleep medicine.

Said Dr. Romberger: "Throughout her career at UNMC, Dr. Von Essen has been a productive faculty member whose personal commitment and integrity serve as a role model and whose efforts have contributed in major ways to the growth of the institution over the past three decades."

Dr. Von Essen retired June 30, 2020.

EMERITUS Tom Tape, MD



Over the past 35 years, Tom Tape, MD, has been instrumental in building the general internal medicine division into a powerhouse. He's also created a program for hospitalists, an

area that has exploded over the past two decades.

By the fall of 2020 when hospital medicine was split off as a separate division, the general internal medicine division included more than 100 faculty members — 10 times the number of faculty as when Dr. Tape began. The

general internal medicine division celebrated its 50th anniversary in 2021.

Although he retired in September 2021, Dr. Tape has assumed a professor emeritus appointment and will continue to periodically teach medical classes in how to interview patients and in health care policy.

Meanwhile, the accolades roll in for Dr. Tape. They include: "selfless servant"... "a gift to the internal medicine department"... "an amazing mentor"... "an extraordinary leader"... "someone who always puts UNMC first."

One of the leading experts at UNMC on health care policies, such as the Affordable Care Act (ACA), Dr. Tape gained his expertise primarily through his longtime association with the American College of Physicians (ACP). With 161,000 members, the ACP is the largest

medical-specialty organization in the United States.

"Everything I learned about health care policy, I learned from ACP," Dr. Tape said. "It created a career within a career."

Dr. Tape served as governor of the Nebraska chapter (2008-2012) and then was elected chair of the ACP Board of Governors (2012-13) and chair of the ACP Board of Regents (2016-2017).

"Health care should be non-partisan — what's best for the public," Dr. Tape said. "We're the only industrialized nation that doesn't treat health care as a right. Most people don't know what's in the ACA — it has become a political hot potato. But, they love some of the elements in the ACA, such as coverage for preexisting conditions and children being able to stay on their parents' policy until age 26."

EMERITUS Joe Sisson, MD



Quietly, without fanfare. Joe Sisson, MD, has gone about his business for the past 34 years, leaving a mark on everyone who encountered him

After 24 years as

chief of the UNMC Division of Pulmonary, Critical Care and Sleep Medicine, Dr. Sisson stepped down on May 1, 2021, to make way for Ruxana Sadikot, MD. At the end of the year, he retired while maintaining emeritus status.

"It's been a wonderful rocket ride," he

The plaudits abound for the Eagle Scout who grew up in Waterloo, Iowa. He's

the epitome of the triple threat, with excellence in clinical care, research and education. He's also a strong mentor and technical whiz beloved by his division colleagues, who thrived on his innovation and honesty.

"It's all about recruiting good people and crafting a culture that we take care of each other," Dr. Sisson said. "The culture is genuine. If someone goes down with a health issue, all it takes is one phone call and others step up."

While Dr. Sisson takes great pride in what others in his division accomplish, here are a few of his accomplishments:

- + One of only three faculty to receive the Top Teacher Award for 25+ years for the Department of Internal Medicine residency program.
- + Received continuous funding from the National Institutes of Health for 26 years, including a prestigious MERIT

- (Method to Extend Research in Time) Award reserved for only the most outstanding research projects.
- + Built the medical center's Academic Department Information System (ADIS) from scratch.
- + Co-developer with Bruce Ammons, PhD, of the Sisson-Ammons Video Analysis (SAVA) system that measures the beat frequency of ciliated cells in the lung. The system is now used by more than 40 companies in 26 countries, and Dr. Sisson is recognized as an international expert on cilia, the tiny, hair-like fibers that sweep mucus out of the lungs.
- + Under his leadership, the division more than doubled in size and always turned a profit - something that wasn't the case when he started.

EMERITUS Austin Thompson, MD



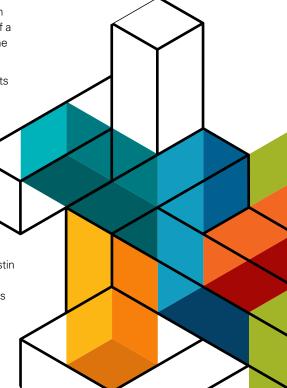
Congratulations to Austin Thompson, MD, **UNMC Division** of Pulmonary, Critical Care & Sleep Medicine (PCCM), who retired June 30, 2021.

"Dr. Thompson has been so

valuable to the development of the PCCM division," said Debra Romberger, MD, chair of the department of internal medicine. "He was instrumental in his early years in developing bronchoalveolar lavage (BAL) techniques and utilizing BAL to help in the understanding of early pulmonary issues for bone marrow transplant patients. He was central to

UNMC's initial lung transplant program and then to the initiation and growth of a pulmonary hypertension program in the division.

"He is well-known among past residents and fellows for his efficient rounding style and his enormous fund of knowledge. We are going to miss him as the "go to" pulmonologist when there is a perplexing pulmonary function test or clinical situation for which we had all sought guidance from him through these many years. The division faculty and fellows had a wonderful time with Austin and his wife, Dorothy, celebrating his retirement. We wish him all the best as they relocate to the Seattle area."





EMERITUS Michael Sorrell, MD



When it's all said and done, Michael Sorrell, MD, could well go down as the most transformative figure in the history of UNMC.

As chair of the internal

medicine department during the 1980s, Dr. Sorrell was in the middle of the biggest changes ever at the medical center — the recruitment of full-time faculty members and the start of the bone marrow and liver transplant programs.

Never one to blow his own horn, Dr. Sorrell quietly went about his business. An iconic figure in the study of liver disease, he saw patients from all walks of life, but he also became established as the physician of choice for the rich and famous in Omaha and elsewhere.

The world-renowned gastroenterologist embodied the three-legged stool of academic medicine — research, education and patient care.

"Mike Sorrell was probably the key person in changing UNMC from a quiet little medical school that did very little research into an internationally known research institution that attracts people from all over the world," said James Armitage, MD, who started the bone marrow transplant program at UNMC and Nebraska Medicine.

A Nebraska native, Dr. Sorrell joined UNMC in 1971 as an assistant professor of internal medicine and director of the liver study unit for UNMC and the VA Medical Center, a post he held until 2008. He went on to serve in a variety of roles including chief of the section of gastroenterology-liver disease at the

VA, chair of internal medicine at UNMC, medical director of the liver transplant program at UNMC, chief of the section of gastroenterology/hepatology at UNMC, president of the American Association for the Study of Liver Diseases and president of the International Liver Transplant Society. In 1980, he received the University of Nebraska Award for Outstanding Research and Creative Activity and in 2004, the Nebraskans for Research Award.

Dr. Sorrell's impact on UNMC — his alma mater - will continue for generations in the building that philanthropists Ruth and Bill Scott named after him: the Michael F. Sorrell Center for Health Science Education.

Dr. Sorrell stopped seeing patients in 2016, continued writing, reading and consulting three or four days a week and retired in January 2022 as emeritus professor.

EMERITUS Renee Young, MD



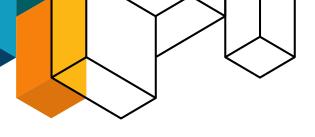
Renee Young, MD, has been a faculty member in Internal Medicine for 40 years and during this time has repeatedly demonstrated an exceptional role in the education of medical students, post-

graduates and practitioners.

She is a master clinician with a focus in the care of patients with the idiopathic inflammatory bowel diseases, Crohn's Disease and Ulcerative Colitis (IBD). Dr. Young is a recognized IBD thoughtleader and her dedication to patient care has led to remarkable outcomes for patients in Nebraska and a multi-state region. She was promoted to professor of medicine in 2015. She was either the director or co-director of the fellowship training program from 1991 to 2009. During these 18 years, she established an educational culture that built UNMC's reputation as a strong clinical GI fellowship training program. Mark Mailliard, MD, a faculty peer, shared that her leadership stressed professionalism and integrity.

Her clinical expertise led to recognition by the Nebraska Crohn's and Colitis Foundation (CCFA) as Physician of the Year in 2018. She has served on the supervisory Nebraska CCFA board and is a cheerleader for its fundraising activities. She has been a top teacher in the UNMC Department of Internal Medicine multiple times. She has received the top teacher award in the UNMC Division of Gastroenterology and Hepatology as well.

Her special expertise in the care of pregnant women with inflammatory bowel disease has been recognized nationally through the American College of Gastroenterology (ACG). She is a frequent lecturer on this subject at regional and national meetings of the ACG. She also was chair of the ACG Fellowship Training Committee between 2010 and 2013 and recieved the Leadership Award of the ACG in 2011. Dr. Mailliard commented "a superb clinician educator and faculty partner, she shall be missed, and we wish her the best in her retirement."



EMERITUS Robert Wigton, MD



Robert Wigton, MD, is more than the unofficial campus historian.

He's also, according to College of Medicine Dean Bradley Britigan, MD, "one of the

pillars upon which the history of UNMC rests."

Dr. Wigton retired in January 2022 as an emeritus professor in the College of Medicine, capping a remarkable 50-plus year career at his alma mater.

A 1969 alumnus of the College of Medicine, Dr. Wigton served as professor in internal medicine at UNMC and in several key administrative areas in the college, including associate dean for graduate medical education (1976 to 2013), associate dean for academic affairs and chief of the section of general internal medicine. Most recently, he

served as assistant dean of special projects.

As author of more than 150 research publications and book chapters, Dr. Wigton is internationally recognized for his research in medical education and how physicians make clinical decisions in their practice. He pioneered methods in computer-based teaching and was one of the first to show that computer-based training could improve diagnosis in actual practice.

He developed clinical decision rules to help physicians make more accurate diagnoses in conditions such as pulmonary embolism, urinary tract infection and respiratory tract infections.

Nationally, he served as vice president of the Society for Medical Decision Making and won the society's Eugene Saenger Award in 1996. He served on the board of the Society for General Internal Medicine and won the society's Elnora Rhodes Award in 2005.

A Fellow of the American College of Physicians, Dr. Wigton won the ACP Nebraska Chapter Laureate Award in

2006, worked with the American Board of Internal Medicine on procedural skills and was elected to fellowship in the American College of Medical Informatics.

A member of Alpha Omega Alpha medical honorary society, he served as counselor and past president of the Nebraska chapter. In 2007, he was awarded the Irving Cutter Award for his lifetime contributions to medicine from the national organization of the Phi Rho Sigma medical fraternity.

The Wigton legacy, which spans three generations with several physicians within the family serving UNMC, will live on in the Wigton Heritage Center, which opened in 2021 to memorialize UNMC's unique history and serve as a campus welcome center.

The center brings to life the work Dr. Wigton did for decades.

Said Dr. Britigan: "There are some individuals whose names are synonymous with and will forever remain linked with UNMC and the College of Medicine. Bob Wigton is one of those individuals."



Our Partners in Success

NEBRASKA MEDICINE

The Department of Internal Medicine's major clinical and educational affiliation is with Nebraska Medicine. With a history dating back to 1869, Nebraska Medicine was originally formed by the merger of University Hospital and Bishop Clarkson Memorial Hospital in 1997. Nebraska Medicine includes Nebraska Medical Center, Bellevue Medical Center, Village Pointe Health Center and more than 70 primary and specialty care clinics.

The relationship between UNMC and Nebraska Medicine has attracted patients from across the region and around the world. Currently, the health care system has more than 800 licensed beds in Omaha and Bellevue. As a major tertiary and quaternary health care center, Nebraska Medical Center cares for patients from all 50 states, the District of Columbia and 43 foreign countries. It is known internationally for its infectious disease, oncology, solid organ and bone

marrow transplantation services and is recognized nationally and regionally for its neurosciences and cardiovascular programs.

It's home to the only state-designated Comprehensive Trauma Center serving both pediatric and adult patients 24/7. It currently holds the Joint Commission's gold seal of approval for clinical programs in stroke management, heart failure and acute myocardial infarction. In addition, it is designated as a level-four facility by the National Association of Epilepsy Centers. Nebraska Medical Center continues to grow with an addition of a \$32 million cardiac catheterization and electrophysiology (EP) lab, Adult Psychiatric Emergency Services, the Fred & Pamela Buffett Cancer Center, the Behavioral Health Intensive Outpatient Program and the Dr. Edwin G. & Dorothy Balbach Davis Global Center, which houses the iEXCEL initiative and Global

Center for Health Security.

Every year, Nebraska Medical Center provides expert care that results in nearly 40,000 discharges, approximately 1 million outpatient visits (primary and specialty) and over 90,000 emergency visits.

Uniquely, Nebraska Medical Center operates a the 10-bed Nebraska Biocontainment Unit that is currently one of 10 regional treatment centers in the United States that is equipped to safely care for those exposed to highly-contagious, dangerous diseases. The hospital also has the only federally-funded quarantine unit in the country that contains 20 units. These units were essential in 2020 when the COVID-19 virus began to spread from Wuhan, China, and some of the first patients in the world came to Nebraska Medical Center for observation and treatment

VHA NEBRASKA-WESTERN IOWA HEALTH CARE SYSTEM

Affiliation with the VA Nebraska-Western lowa Health Care System (NWIHCS) is critical to the Department of Internal Medicine's tripartite mission of clinical care, research and education. NWIHCS provides integrated inpatient and outpatient care to veterans in Nebraska, western lowa and portions of Kansas and Missouri. The Omaha VA Medical Center (OVAMC) is an acute care, highly-affiliated facility that operates approximately 100 inpatient beds and provides full-service medical care to thousands of veterans. Inpatient and outpatient health care is provided in

this integrated system through a strong system of primary care supported by tertiary specialty activity in medicine, surgery, and psychiatry. More than 685,000 veteran outpatient visits were conducted in Fiscal Year 2021. The OVAMC provides an irreplaceable venue for the department's teaching activities involving medical students, residents and fellows. In addition, the VA has a major research service that provides infrastructure to support basic science, translational and clinical research. Several of the Omaha VAMC's basic research programs are based in the VA

Research and Development Service.
Areas of research focus at the VA include rheumatoid arthritis and gout clinical outcomes, mechanisms of alcohol related organ disease, diabetes clinical and basic research, and occupational related lung disease. The Omaha VAMC's research team is particularly proud to be recently named a VA Cooperative Studies Program Network of Dedicated Enrollment Sites (NODES), one of just 23 VA facility-based research departments nationally to achieve the VA's highest designation for research.

