University of Nebraska Medical Center

Department of Internal Medicine

Annual Report | Academic Year 2024-2025

IMPACT

WE ARE NEBRASKA MEDICINE AND UNMC

Our mission is to lead the world in transforming lives to create a healthy future for all individuals and communities through premier educational programs, innovative research and extraordinary patient care.

UNMC Nebraska Medicine

FROM THE INTERIM DEPARTMENT CHAIR

Department's impact is far-reaching

The cover and the theme for our 2024-2025 academic year annual report – "IMpact" – was well chosen, as the UNMC Department of Internal Medicine has a positive influence on nearly every facet of our complex academic medical center.

The "by the numbers" section on the next page truly documents the scope and breadth of the department and you'll see that the internal medicine department is by far the largest at UNMC/Nebraska Medicine. Our 345 faculty and 180 APPs have provided compassionate clinical care in more than 480,000 patient encounters. We excel at educating the next generation of healthcare providers and have long had the highest regarded clinical clerkship at UNMC. Nearly 600 peer-reviewed publications and over $30 million in extramural funding are the result of our research efforts this past year. Indeed, the UNMC Department of Internal Medicine has an IMpact!

This past year saw the death of our beloved chair, Dr. Debra Romberger, and I assumed the role of interim chair in January 2025. I have striven to maintain the department's forward momentum and honor the legacy established by Dr. Romberger in a department driven by the pursuit of excellence and dedicated to the principles of justice, equity, opportunity and service. The department has demonstrated true strength and resilience, as we have continued to achieve our goals despite the real challenges of budget cuts, government shutdown, and an assault on higher education, science and public health.

I could not be more pleased and proud of the faculty and staff of the department. It has truly been an honor and privilege for me to serve as the interim chair during this transition period. To all members of the department and our partners, a big thank you for your commitment, hard work and team spirit that have contributed to our success. The department's new permanent chair has been named and Dr. Hemant Roy will take the reins in March 2026. I am confident under Dr. Roy's steady hand that the UNMC Department of Internal Medicine will continue to excel and exert a far-reaching positive IMpact!

MARK E. RUPP, MD

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BY THE NUMBERS

12 DIVISIONS

345 IM FACULTY

268 UNMC-EMPLOYED STAFF

250 NM-EMPLOYED STAFF

A UNMC DEPARTMENT SINCE **1903**

99% IM BOARD PASS RATE
In the past five years

18 FELLOWSHIP PROGRAMS

102 FELLOWS

LARGEST GRADUATE MEDICAL EDUCATION PROGRAM ON UNMC CAMPUS

559 COMPLETED MEDICAL STUDENT CLERKSHIPS/ ROTATIONS

100 IM & MED-PEDS RESIDENTS

#1 HIGHEST REGARDED CLINICAL CLERKSHIP AT UNMC

581 PUBLICATIONS

$15.7M INDUSTRY-SPONSORED RESEARCH

$30,381,880 EXTRAMURAL RESEARCH FUNDING

136,842 INPATIENT VISITS

343,403 CLINIC VISITS

1,058,036 RVUs

25+ CLINIC LOCATIONS

SHANE TSAI, MD

Adapting to growth and new technology

Patient care in the Department of Internal Medicine continues to adapt to meet patient needs and organization expectations. The past academic year saw new clinic openings and strategies to utilize our advanced practice providers. We've also started to see the real possibilities of artificial intelligence and how it can be implemented.

DIVISION GROWTH

With the growth of the hospital, there has been growth across all divisions.

A key goal has been to reduce new patient referral time. With limited resources, including physicians and clinic space, all the specialties were creative in finding ways to see referrals in a timely fashion. Knowing that there are simply not enough doctors to manage all patient care, several divisions transitioned follow-up visits to advanced practice providers.

We have more than 170 APPs in the department and they perform a variety of roles on both the outpatient and inpatient side. Working in partnership with physicians and house staff, they are responsible for expediting care through the hospital system.

THE FUTURE WITH AI

Artificial intelligence is part of the future of health care. Our department explored new technologies and implemented AI in patient scheduling and note taking. We've only scratched the surface of what is possible with AI in patient care.

One of the biggest introductions was ambient AI which records conversations with patients and summarizes complex discussions, test results, physical exam findings and action plans. This summary is then incorporated into the electronic medical record progress note, lessening cognitive workload.

There are other AI applications in development that help address patient communications through the OneChart portal. Nurses and doctors can use Epic's augmented response technology to draft a reply to patient concerns. This has been implemented in primary care and continues to be developed for user preference and expansion into specialties.

Nebraska Medicine is working with Palantir Technologies to develop data driven platforms addressing expedited discharge, prior authorization approval, insurance claim denials and other reimbursement issues.

ActiumAI is another platform being used to triage phone calls and assist with patient scheduling.

Divisions are also implementing AI technology in patient care procedures. For example, the diabetes, endocrinology and metabolism division has adopted EyeArt for screening retinopathy. Cardiovascular medicine is evaluating the use of AI coronary artery calcium scoring to predict cardiovascular risk.

AI does have limitations so it must be used in conjunction with human intelligence. Working with AI, we can improve accuracy and efficiency while reducing burnout.

LOOKING TO THE FUTURE

In a large rural state like Nebraska, virtual healthcare is an important opportunity. Staffing clinics in less populated areas can be challenging. Virtual healthcare will shorten the distances between our rural communities and UNMC/Nebraska Medicine. Primary care and the DEM division have demonstrated that telehealth programs can be successful in providing effective care remotely.

As we continue to learn more about and use the technology available to us now, virtual healthcare and artificial intelligence will remain a focus in the future of specialty clinical care.

RESEARCH

Department researchers persevere in uncertain times

Conducting high-level research is never easy. In this past year, it was even more uncertain and challenging.

ROSLYN MANNON, MD

In early 2025, a communication freeze across federal health and human services agencies paused public-facing activities including grant announcements and study-section meetings, delayed new awards, and stalled peer-review processes. Widespread federal staffing turmoil interrupted continuity. The federal government's effort to cap indirect cost reimbursement at 15% for research grants threatened institutional infrastructures and provoked immediate litigation. Funding delays, cancellations, and rescissions further undermined researchers' financial planning and recruitment capabilities nationwide.

Despite these impediments, our researchers proved to be resilient, nimble and hopeful, and department-level investments made over decades helped fuel momentum. For instance, in 2016, Department Chair Debra J. Romberger, MD, instituted the Scientist Development Award, which annually funds an early-stage investigator's mentored research project. Amarnath Annapureddy, MBBS, was the 2025 awardee. The department continues to invest in the office of research and development, adding key staff and updating office space. As part of our commitment to helping all divisions achieve research success, we welcomed Purnima Guda, PhD, who codes queries to the electronic health record for quality improvement projects in conjunction with UNMC's Research, Education, Administration and Development of Biomedical Informatics Core.

Researchers continued to submit grant applications and manuscripts, attend scientific meetings, and recruit new scientists within this supportive environment. Many worked to diversify their funding portfolios and began to seek opportunities from private foundations and industry in addition to federal sources. Although the federal funding environment was mostly bleak, total funding to department investigators remained comparable to previous years. Notable funding successes throughout the year include a National Science Foundation grant to Bin Duan, PhD; a University of Nebraska Foundation grant to John Dickinson, MD, PhD; a K23 award from the National Institutes of Health to Tate Johnson, MD, PhD; and the UNMC College of Medicine's Physician-Scientist Training Program award to Austin Wheeler, MD.

The department again welcomed more than 20 undergraduate students for mentored research during the summer. The Summer Undergraduate Research Program and National Institute on Alcohol Abuse and Alcoholism-funded R25 Summer Undergraduate Alcohol Research Program (with Kristina Bailey, MD, as principal investigator) annually invites students from across the country to apply to these programs.

Faculty members, residents, students, and post-doctoral fellows were recognized in June with our departmental research awards.

James O'Dell, MD, received the department's Lifetime Achievement Research Award. This award, which recognizes extensive scientific contributions at UNMC and nationally, has been given only five times. The other 2025 research awardees are:

- Aaron Schwab, PhD, Medical Student Research Award
- Austin Barry, MD, Resident Research Award
- Evangeline Green, DO, Resident Research Award
- Mena Krishnan, PhD, cardiovascular medicine, Post-Doctoral Research Award
- Mansi Oberoi, MBBS, cardiovascular medicine, Fellowship Research Award
- Bin Duan, PhD, cardiovascular medicine, Faculty Basic Science Research Award
- Christopher DeAngelo, MD, oncology and hematology, Faculty Clinical Research Award
- Kusum K. Kharbanda, PhD, gastroenterology and hepatology, Faculty Career Excellence Research Award

The continued growth in research – even in such challenging times – reflects the resiliency of our faculty and the legacy efforts of past department chairs. It is also a reflection of the hard work and dedication of the Internal Medicine Research Council members, who continue to support and advance the department's research efforts.

EDUCATION

JAMES O'DELL, MD

Celebrated educators and successful programs foster culture of continuous learning

Our department is known for its commitment to education. From training medical students during their M3 and M4 clerkships to our respected internal medicine and med-peds residency programs and sought-after fellowship programs, our faculty members are actively engaged in training the next generation of physicians and academic medical educators.

DAVID O'DELL, MD, RECEIVES LIFETIME ACHIEVEMENT AWARD IN EDUCATION

The UNMC Department of Internal Medicine recognized David O'Dell, MD, with its Lifetime Achievement Award in Education at the end of this academic year.

Dr. O'Dell's educational resume includes multiple teaching awards, including the American College of Physicians' Mastership and Dr. Jane F. Desforges Distinguished Teaching awards. His teaching encompasses a broad scope, including the classroom, small group settings, the clinic exam room and the inpatient bedside, He also served as the clerkship director for internal medicine for 27 years and he started UNMC's primary care program in 1989. Led by Dr. O'Dell and Emily Hill Bowman, MD, that program is still giving selected applicants the unique opportunity to experience the breadth of training of both family medicine and internal medicine.

He was the first Educator Laureate Award winner at UNMC and one of the first faculty members to have an 'orchard,' which is more than seven Golden Apples (teaching awards given by third- and fourth-year medical students). He also was honored with the UNMC Outstanding Teacher Award, the Osler Award (given by internal medicine residents to the faculty member who has contributed the most their education), and more than 30 department top teacher awards.

"If you really look at it, all physicians are teachers," Dr. David O'Dell said. "That's important, to be able to explain to patients what's going on. Making the decision to teach medical students, that had a lot to do with finding where I could use the skills I was given. Being able to assess someone's kidneys, their heart, their lungs and integrate all – being competent in a wide range – is critically important for this generalist education that we're building in medical students."

RESIDENCY PROGRAM YEAR IN REVIEW

Our residency program has a lot to be proud of in the past year, including the 100% board pass rate by our graduates and 100% fellowship match. These successes illustrate the hard work of our learners and the success of our department's educational programs.

The success of our residents and fellows is due in no small part to our amazing faculty who are at the cutting edge of their fields. We have cultivated an environment that is very supportive and growth-oriented and our learners, with their natural curiosity and growth mindset, thrive here.

We started a new rotation in the Innovation Design Unit this past year and it's a good opportunity for residents to explore opportunities for incorporating technology into patient care. Also in terms of technology, we're using much more Open Evidence and teaching our learners how to assess the validity of what artificial intelligence is telling us.

We continue to recruit outstanding medical students with different educational backgrounds from great medical schools across the country. We want the best and the brightest medical students to come to UNMC for residency and fellowship to continue to grow into amazing physicians.

- Tammy Wichman, MD, Internal Medicine Residency Program Director

KRISTINA BAILEY, MD

Building strong foundations for career success

The department's faculty development team, led by Vice Chair Kristina Bailey, MD, and Associate Vice Chair Andrea Zimmer, MD, continues to play a central role in supporting faculty across all stages of their professional journey. Through structured programs and mentorship opportunities, we help faculty grow their careers, strengthen skills, and contribute meaningfully to the department's mission.

NEW FACULTY ONBOARDING AND MENTORSHIP

A key focus of the team is ensuring that new faculty are set up for success from the start. Each new faculty member is welcomed through a structured orientation process and paired with a mentor for their first year. These mentorship matches are thoughtfully selected to align with the new faculty member's interests and goals, providing a trusted resource for guidance, feedback, and support. Mentors help new colleagues navigate the system, adjust to their new roles and determine their career interests.

While the current orientation session provides a helpful introduction, the team recognizes that a one-hour meeting is not sufficient to fully prepare new faculty for the complexities of academic medicine. In response, the team is launching a New Faculty Bootcamp this year. This expanded onboarding experience will include a series of interactive sessions covering essential topics, such as how to get the most out of a mentoring relationship, structure of department leadership and administration, effective teaching strategies, research support services, regulatory requirements, the evaluation process, and billing and coding. The bootcamp is designed to be practical and engaging, offering new faculty the tools and confidence they need to thrive in their roles. It will provide new internal medicine faculty the opportunity to connect with one another.

PILOT MID-CAREER MENTORING PROGRAM

In addition to supporting early-career faculty, the team has made significant progress in addressing the needs of faculty at the mid-career stage. The mid-career mentoring pilot program in the division of geriatrics, gerontology and palliative medicine has been particularly successful. This initiative provides structured support for faculty who are navigating the challenges and opportunities that often arise in the middle of an academic career. Participants receive guidance on refining their professional goals, exploring leadership roles and re-engaging with scholarly activities. The program has received positive feedback and strong participation, and plans are underway to expand it to other divisions in the coming year.

SUPPORT FOR WOMEN FACULTY

The faculty development team also continues to support the professional growth of women faculty through monthly women's group meetings. These gatherings offer a consistent space for connection, peer support, and shared learning.

INTERNAL MEDICINE FACULTY CLINICAL AND EDUCATIONAL MENTORING AWARD

Jasmine Marcelin, MD, was the recipient of the 2024 award which was presented at Faculty Development Grand Rounds on September 20, 2024. This award recognizes mid-level or senior faculty (associate or professor level) for excellence in providing mentorship in clinical and/or educational activities to their faculty colleagues.

LOOKING AHEAD

As the department continues to grow, our team remains committed to evolving its programs to meet the changing needs of faculty. The upcoming launch of the New Faculty Bootcamp and the planned expansion of the mid-career mentoring program reflect a proactive approach to faculty support. By investing in structured mentorship, practical training and peer engagement, the team is helping to build a strong, collaborative academic community.

These efforts not only enhance individual faculty success but also contribute to the overall strength and stability of the department. Our team's work ensures that faculty members – whether just beginning their careers or seeking to grow in new directions – have the resources and support they need to succeed.

Advocacy and engagement initiatives make an impact

Our office recognizes the importance of belonging, justice and equity in health care education and our work has a positive impact for our department, UNMC and our community.

JASMINE MARCELIN, MD

In academic year 2024-2025, the UNMC Department of Internal Medicine and its Office of Belonging and Community Engagement continued to build on four pillars:

- People
- Culture
- Leadership and education
- Patient care and community engagement

We demonstrated our enduring commitment to these pillars through a series of impactful initiatives that reflect our core values of compassion, health equity and service.

COMMUNITY ENGAGEMENT

Faculty, APPs and staff provided health screenings to 87 attendees at AFROFest in summer 2024, supported recruitment efforts with the Latino Medical Student Association and inspired young learners through multiple STEAM (science, technology, arts, engineering and mathematics) events at Kennedy Elementary throughout the year. We participated in the Juneteenth parade, both in North Omaha and on campus, underscoring our dedication to cultural celebration and visibility.

The department led a seasonal giving drive benefiting food pantries across south, north and east Omaha. The items collected contributed to 250 Clair Cares Food Pantry boxes that helped feed 852 individuals. We also connected with more than 100 ninth-grade students at the Benson High School Health Fair.

In partnership with the Nebraska Medicine/UNMC Community Wellness Collaborative, we helped launch the first Mini Medical School for 21 elementary students, fostering early interest in healthcare careers.

CELEBRATING ADVOCACY

We proudly honored faculty, trainees and staff with our 2025 Excellence in Advocacy Awards, which recognize outstanding commitment and tireless efforts in advocating for patients, colleagues and the medical community, or for their dedication to improving healthcare policies and championing important causes.

Debra Wekesa, MD, Chydubem Nwaiwu, MD, and Samantha Jones, MSW, received awards. Nada Fadul, MD, was the inaugural recipient of the Debra J. Romberger Faculty Excellence in Advocacy Award, renamed to honor the former chair of the UNMC Department of Internal Medicine. The award celebrates extraordinary leadership and unwavering dedication to advocacy within our local community, across the nation and around the world.

The outstanding mentorship and community care contributions of our recipients exemplify the spirit of advocacy and reflect the mission of the department.

MAINTAINING MOMENTUM

Looking ahead in the 2025-2026 Academic year, our team continues its momentum with more engagement events strengthening our ties with community like the Kennedy Elementary's STEAM Night, Pink Lotus Project Health Fair and supporting healthy living through local organization collaborations. Addressing food insecurity has also been a goal for 2025, and this need was underscored with recent changes in federal funding of the Supplemental Nutrition Assistance Program (SNAP), causing hundreds of thousands of Nebraskans to experience food insecurity. Our department initiatives – the Meals for the Heartland 20,000 meal packing project, a 225-turkey holiday drive with Clair's Pantry organized by the UNMC Division of Hospital Medicine and continuing our annual holiday food drive – reinforce our mission to serve and uplift the communities we are privileged to care for.

OFFICE OF BELONGING AND COMMUNITY ENGAGEMENT

- Chelsea Navarrette, MD, Associate Vice Chair
- Natalie Crump, MBBS, Co-Chair, Council of Belonging
- Jennifer Davis, MD, Co-Chair, Council of Belonging
- Stacy Rafferty, Program Manager
- Maureen Seymour-Karpf, Administrative Associate

FINANCE & ADMINISTRATION

ANGIE PEPPERS, MBA

Strong organizations have a solid framework of support

As a department, we experienced many positives as we moved forward in pursuit of our common goals based on the strong values and commitment of our faculty, staff and learners.

A LEGACY OF LEADERSHIP

This year was marked by the passing of Debra Romberger, MD, our longtime department chair, mentor and friend. Under Dr. Romberger's leadership, the department more than doubled in size. She was a great leader, physician, teacher and researcher, but she was an even better person. Her commitment, vision and encouragement to realizing goals remains with our department; as Dr. Romberger would say "soon is not a time and hope is not a strategy."

Several other distinguished faculty members also passed away; Ken Cowan, MD, PhD, Daniel Schafer, MD, and Joseph Sisson, MD, left an indelible mark on the department and UNMC.

Turn to the "Honoring Our Legacies" section on pages 32-33 to read more about these incredible individuals.

A FRAMEWORK FOR SUCCESS

The department met its goals across our missions which is a testament to the framework we have created for internal medicine as a family-centered academic department.

Mark Rupp, MD, stepped up as interim department chair and we are grateful for his expert leadership as we help guide the department forward. Our vice chairs met important goals and started new initiatives. Faculty members continued to excel as physicians, researchers and educators. We welcomed new residents and fellows to the department and, as always, it's rewarding to see them thrive as they learn new skills with us. Last but not least, our talented staff continued their important behind-the-scenes work that keeps our department running smoothly.

Dr. Rupp moving into a new role left a critical vacancy in the division of infectious diseases. David K. Warren, MD, joined us as the new chief of that division and has been a welcome addition to our leadership team.

The department stayed within budget for this academic year while prioritizing patient care, advancing research and educating the next generation of excellent physicians.

LOOKING AHEAD

We look forward to welcoming Hemant Roy, MD, as the new chair of the UNMC Department of Internal Medicine in March 2026. Several of our faculty and staff were involved in the national search for our new permanent department chair and we thank them for the time and attention they brought to this important task.

Being the largest department at UNMC allows us many opportunities to make a true impact for our community and all those we interact with. The future is bright for our department.

Support the UNMC Department of Internal Medicine through our University of Nebraska Foundation fund. Your gift to this fund is made immediately for the benefit and support of our department.

ALLERGY & IMMUNOLOGY

Jill A. Poole, MD
Professor, Internal Medicine
Chief, Allergy and Immunology

GROWING DIVISION GROWS CLINICAL RESEARCH EFFORTS THANKS TO LEADERSHIP SUPPORT

Highly productive in her own research endeavors, Jill Poole, MD, founding chief of the UNMC Division of Allergy and Immunology, is well-known for her commitment to training the next generation of scientists. Dr. Poole received the department's Faculty Career Excellence Research Award in 2024, and her team credits her for the division's commitment to research.

"I think this is kind of a top-down situation with Dr. Poole's leadership and she's really a champion for research," said Andrew Rorie, MD, associate professor in the division. "As she has grown the division and hired more faculty, she's made it clear that research is something that's not only really important to her but very important to our growing division."

Jen Luedders, MD, assistant professor in the division agreed, saying Dr. Poole encouraged her to give research a try when she was a fellow.

"I realized you can help yourself be a better clinician by doing research," she said. "Also, being more experienced in research allows me to mentor residents and fellows better."

Some of the division's recent research studies include:

Inducible Laryngeal Obstruction and Chronic Cough

Jen Luedders, MD, and allergy fellow Sunghyub (Daniel) Kim, DO, are studying a disease called inducible laryngeal obstruction, previously known as vocal cord dysfunction, in hopes that they will find better ways to diagnose and treat it.

Symptoms of ILO can mimic allergic reactions and include rapid onset of throat tightness, shortness of breath, cough, sensation of choking and hoarseness. There's also a subset of patients who may have chronic cough as a feature of the disease.

The pilot study will look at the levels of 12 neuropeptides in 15 subjects with ILO and chronic cough and compare them to 15 healthy control patients. Samples will be collected through a nasal wash device called MicroWash.

There's currently no biomarker, lab tests or easy way to diagnose ILO. Dr. Luedders said patients are currently only able to get a definitive diagnosis by scoping the throat.

"I've had some patients with symptoms so severe they're afraid to leave their house because they're worried they'll encounter their trigger," she said. "When we can get them the actual diagnosis, they get their lives back."

Pollen Counts

Dr. Rorie started taking pollen counts in the summer of 2020. The air sampler runs on the rooftop of Durham Research Center II from late February until late November.

Pollen counts are posted Tuesday and Thursday mornings on the division's social media.

"Since we started doing this air sampling five years ago, we have made changes to some of the allergens that we're actually testing people for, because we found them to be more prevalent in the air sample than we anticipated," Dr. Rorie said. "We use it clinically to better treat patients."

An offshoot of the pollen count study, Dr. Rorie and allergy fellow Alex Penrice, MD, are also looking at the impact of emerald ash borer on ash tree pollen.

"Ash trees are prevalent in the area, and they actually make really allergenic pollen, but the emerald ash borer is essentially decimating those trees so it's becoming less and less of an issue," Dr. Rorie said. "While it's killing the ash trees, it's making pollen sufferers happy, essentially."

Dog Allergy Test Study

Dr. Rorie and Dr. Penrice have also explored a better dog allergy testing method, seeking relief for patients who tested negative for dog allergy but are symptomatic, nonetheless.

They skin tested 300 patients enrolled in the study to three products – dog epithelium, acetone precipitated dog and the newly FDA-approved ultrafiltered dog – to see which was superior in detecting dog sensitization.

Their study found that the ultrafiltered dog is superior to the other two. It picks up about 5% more dog allergy than the AP dog product and 11% more than dog epithelium, which were previously being used for dog allergy testing in clinics.

Because of this study, our clinics have now switched to ultrafiltered dog for skin prick testing.

"We're one of the first groups to do anything like this," Dr. Rorie said. "It's not only going to change the way that we test in clinic but I think it's going to be a huge change nationally and internationally how people test in clinic as well."

Effects of Meth Use on Asthma

Dr. Rorie and former internal medicine resident, Amal Musa, MD, studied severe asthma exacerbations as a result of methamphetamine use.

They did a chart review over about 10 years looking at all patients admitted to our medical center with an asthma exacerbation who also had a urine drug screen done on admission.

They also looked at all the other drugs that were positive on the drug screen. They found there weren't a lot of considerable negative outcomes associated with a meth screen only. However, when they looked at a group that had a co-positive meth and cannabis screen, those patients did have outcomes that were poor.

Patients who had a positive meth and positive cannabis screen were more likely to present with status asthmaticus and trends toward increased length of stay and need for ICU level of care.

"Ours was really the first publication out there, not only looking at methamphetamine use and asthma exacerbations, but methamphetamine and cannabis co-use and how that affects asthma outcomes and patients who are hospitalized," Dr. Rorie said.

More About Allergy Research

Other on-going divisional projects include a partnership with Johns Hopkins Medicine to aid in understanding allergen sensitization across the United States using novel multi-allergen blood testing technology.

In addition to investigator-initiated research, the division has worked to bring in clinical industry studies in severe asthma, chronic rhinosinusitis with nasal polyps, hereditary angioedema and chronic urticaria.

Rhonda Walenz, the division's clinical research coordinator, assists with investigator-initiated studies and manages industry studies.

The division receives support and data from the UNMC College of Public Health, Biostatistics Department.

ALLERGY & IMMUNOLOGY BY THE NUMBERS

- **6** faculty
- **3** fellows
- **39** residents on service or med student encounters
- **6,901** provider visits
- **11** publications in 2024
- **$1,483,205** funding total in 2024
- **6** clinic locations

CARDIOVASCULAR MEDICINE

Shane F. Tsai, MD
Associate Professor, Internal Medicine
Chief, Cardiovascular Medicine

NEW PROGRAM STRIVES TO "SEE THE INVISIBLE" AND HELP PATIENTS FIND ANSWERS

Amarnath Annapureddy, MBBS, assistant professor in the division, said stents, open heart surgery and other interventions have improved the lives of many patients with cardiovascular disease. However, his work focuses on an area of heart disease that is not visible.

"About one-third of patients who come in with chest pain and all the hallmarks of heart blockages don't actually have any obstructive disease," Dr. Annapureddy said. "It's frustrating both for the physician and the patient because they don't have a concrete diagnosis. They are largely ignored."

This often–undiagnosed condition, angina with nonobstructive coronary arteries (ANOCA), challenges traditional definitions of heart disease. He describes the diagnosis and management of ANOCA as "seeing the invisible" and says it requires persistence and willingness to look beyond what standard diagnostic imaging can reveal.

During his fellowship at Yale University, Dr. Annapureddy was mentored by Samit Shah, MD, PhD, who introduced him to the emerging science of microvascular and vasospastic disorders.

"He taught me to think differently," Dr. Annapureddy said. "Some patients have perfectly normal-looking arteries, but their vessels can suddenly spasm leading to blood supply to the heart being temporarily cut off. When that happens, the patient feels like they're having a heart attack but, by the time we test them, everything looks normal again."

He said it makes it hard to diagnose these patients, who are often women between the ages of 30 and 60, since the test results are normal.

"They are frequently dismissed or misdiagnosed," Dr. Annapureddy said. "Many endure years of uncertainty and repeating testing, searching for answers that conventional diagnostics cannot provide."

He also noted that some of the patients are high-functioning individuals who suddenly can't perform their normal, everyday activities because of their confusing symptoms.

"They're told, 'it's not your heart,' but they know something is wrong," Dr. Annapureddy said. "That uncertainty can be devastating."

Determined to change that, Dr. Annapureddy joined UNMC in 2024 with a vision to expand diagnostic capabilities and research in this overlooked area. Just months later,

UNMC became the first health system in Nebraska to acquire the Abbott Coroventis CoroFlow System, an advanced platform that measures coronary microvascular function in real time.

"UNMC and our division are pioneering in this space," Dr. Annapureddy said. "We're performing state-of-the-art diagnostics while keeping the patient's best interests at heart. If no one else is providing these patients with answers, we should be the ones who do."

For Dr. Annapureddy, the reward comes when patients finally receive clarity after years of uncertainty.

"UNMC AND OUR DIVISION ARE PIONEERING IN THIS SPACE. WE'RE PERFORMING STATE-OF-THE-ART DIAGNOSTICS WHILE KEEPING THE PATIENT'S BEST INTERESTS AT HEART. IF NO ONE ELSE IS PROVIDING THESE PATIENTS WITH ANSWERS, WE SHOULD BE THE ONES WHO DO."

Amarnath Annapureddy, MBBS, Assistant Professor, UNMC Division of Cardiovascular Medicine

"When they get a diagnosis, it's life-changing," he said. "They no longer go through endless testing or repeated emergency visits. They understand what's responsible for their symptoms."

After diagnosis, management becomes the next challenge. According to Dr. Annapureddy, there are no established national guidelines for ANOCA yet, meaning every patient's care must be personalized and closely monitored.

"It takes time and meticulous attention," he said. "But the goal is to help them regain control over their lives."

Beyond his clinical work, he is also actively involved in research to improve ischemic heart disease evaluation and to advance understanding of ANOCA.

"I take the research very seriously," said Dr. Annapureddy, the 2025 recipient of the department's Scientist Development Award, which supports promising junior faculty early in their career. "My goal is to bring together clinical care and research so we're not just treating patients but also generating data that will change the field."

UNMC is known for pushing the boundaries of cardiovascular innovation, he said, and he wants to continue in that direction.

"I want to contribute to the knowledge that shapes the future of cardiovascular care," he said. "True progress often begins where the eye can't see – by looking deeper, asking harder questions and refusing to overlook those who have long gone unseen."

CARDIOVASCULAR MEDICINE
BY THE NUMBERS

- **30** faculty and **24** APPs
- **26** fellows
- **76** residents and **12** outside elective rotators
- **217,572** work RVUs
- **66** publications in 2024
- **$1,924,555** funding total in 2024
- **3** clinic locations

DIABETES, ENDOCRINOLOGY &

Cyrus Desouza, MBBS
Professor, Internal Medicine
Chief, Diabetes, Endocrinology & Metabolism

NEW CENTER SEEKS TO ADDRESS DIABETES THROUGH MULTIDISCIPLINARY APPROACH

In June 2025, the University of Nebraska Board of Regents approved the creation of the Diabetes Center of Excellence in Diabetes Care, Research and Education (C-DIACARE) at the UNMC Omaha campus. The designation of this center unifies research and education efforts across the university system and bolsters statewide diabetes prevention and care.

Andjela Drincic, MD, professor of diabetes, endocrinology and metabolism at UNMC, has been named Wahl Presidential Endowed Chair and inaugural director of the C-DIACARE center. The Wahl Presidential Endowed Chair is funded by the Diabetes Care Foundation of Nebraska.

Nearly 12% of the U.S. population had diabetes as of 2021, according to the American Diabetes Association, and their health care expenses are more than double those without diabetes. Diabetes is annually among the top 10 leading causes of death in the U.S.

"It's a huge public health problem," Dr. Drincic said. "Diabetes is very prevalent. There aren't enough endocrinologists in Nebraska to treat all these people, so we need to create systems to help primary care physicians provide good care."

Dr. Drincic said she will draw upon the hard work and expertise of faculty throughout the university system, including but not limited to exciting work being done at UNMC, the University of Nebraska at Omaha, University of Nebraska at Kearney and University of Nebraska-Lincoln in the areas of nutrition, obesity, psychology, diabetes prevention and outcomes research. Moreover, C-DIACARE is a multi-college initiative at UNMC, with faculty from colleges of medicine, public health, nursing, allied health, pharmacy and the Eppley Institute all making meaningful strides in research, education and clinical care, and bringing these advances to the Nebraska community through outreach efforts.

C-DIACARE builds upon UNMC's clinical partnership with Nebraska Medicine for diabetes care, which has been nationally recognized through major honors, certification and accreditation for decades. UNMC and Nebraska Medicine now lead the nation in hospital glycemic outcomes, and Nebraska innovations are being adapted nationally.

"I've seen the excellence with our physicians and the care we provide," Dr. Drincic said. "I'm excited about the opportunity to collaborate with

METABOLISM

phenomenally talented colleagues from various disciplines and to bring the intelligence and talent across our campuses together."

As diabetes researchers learn more, the importance of a collaborative approach becomes evident.

"I'M EXCITED ABOUT THE OPPORTUNITY TO COLLABORATE WITH PHENOMENALLY TALENTED COLLEAGUES FROM VARIOUS DISCIPLINES AND TO BRING THE INTELLIGENCE AND TALENT ACROSS OUR CAMPUSES TOGETHER."

Andjela Drincic, MD, Professor, Division of Diabetes, Endocrinology & Metabolism

"Diabetes impacts a multitude of organ systems," Dr. Drincic said. "You're not just treating diabetes – meaning you're not treating just blood sugar – you are preventing comorbidities that lead to loss of life or loss of capacity."

One of the challenges is translating new knowledge into models of care useful to physicians and other health professionals for their patients to better detect, manage and prevent diabetes.

"The center has been strategically developed to address the remaining metropolitan-rural health disparities, which are in part related to resource limitations in some of our smaller communities," said Jennifer Larsen, MD, former UNMC vice chancellor for research and professor emerita of diabetes, endocrinology and metabolism. Dr. Larsen cited examples such as access to dieticians, exercise programs and pharmacists with specialized disease-management expertise.

"People with diabetes live long lives," Dr. Drincic said. "We have to think about how to improve access."

Since our state's endocrinologists are mostly located in big cities, she said another challenge is to make sure all Nebraskans receive the care they need.

"Globally, the percentage of diabetes in rural communities is twice that of urban," Dr. Drincic said. "Our moral, ethical and professional calling is to create systems to help people get the best care possible no matter whether they live in a small community or in Omaha."

Dr. Drincic said the telehealth program, under the leadership of Leslie Eiland, MD, associate professor in the division, has been successful in reaching people across the state for about 10 years.

"We've tried to bridge the gap with a robust telehealth program but even that can't bridge the gap given the enormous burden of the disease," Dr. Drincic said.

She said the answer is not to hire more endocrinologists but to empower primary care providers.

"So much of this is about implementation sciences," Dr. Drincic said. "How do you collaborate with physicians? How are you available to them when needed for what's needed? And how do you educate people around primary care?"

C-DIACARE will build upon the success of "Diabetes On Track," a UNMC-led, innovative, community-based research and clinical care pilot program, supported by the Diabetes Care Foundation of Nebraska, focused on making changes in diabetes care in Hastings and Wayne, Nebraska.

"They have set the fundamentals for creating an implementation program that is nimble and adjustable to the needs of communities because one size doesn't fit all," Dr. Drincic said.

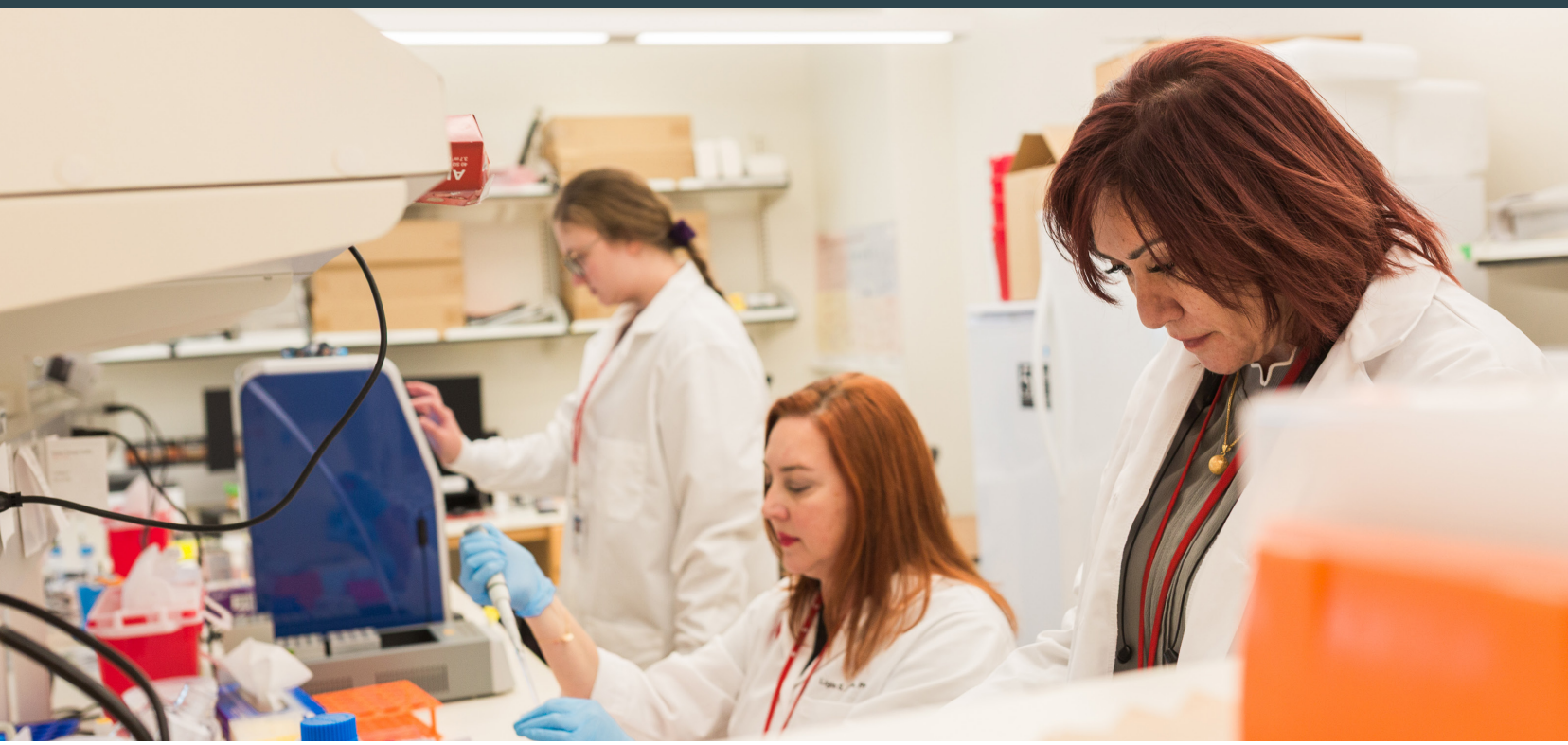
The new center aims to take this success statewide while connecting and coordinating the university system's various diabetes research, education and outreach efforts into a focused, impactful force that reaches all Nebraskans, particularly those in rural areas.

"That's what excites me is the opportunity to translate this knowledge about the best practices in clinical care," Dr. Drincic said. "We'll translate that into real-time, real-life possibilities that will impact all Nebraskans."

DIABETES, ENDOCRINOLOGY & METABOLISM BY THE NUMBERS

- **19** faculty
- **6** APPs
- **15** staff
- **7** fellows
- **4-8** monthly resident rotations
- **79,421** RVUs
- **8** clinic locations
- **34** publications in 2024
- **$4,397,792** funding total in 2024

GASTROENTEROLOGY & HEPAT



FEDJA ROCHLING, MD, BCH, MBA
Professor, Internal Medicine
Chief, Gastroenterology & Hepatology

GI RESEARCHERS COLLABORATE TO INCREASE UNDERSTANDING OF THE GUT MICROBIOME

To help patients with inflammatory bowel disease, three researchers in the UNMC Division of Gastroenterology and Hepatology are studying the gut microbiome, which is a mixture of bacteria and other microbes unique to each individual.

Peter Mannon, MD, director of the Frederick F. Paustian Inflammatory Bowel Disease Center, has a clinical translational approach to the immunology of the gut. Rana Al-Sadi, PhD, assistant professor in the division, does her research in the lab and looks at the specific components of the inflammatory response that regulates gut permeability. And Jacques Izard, PhD, associate professor in the division, is an expert in gut microbiology.

"We use complementary approaches to inflammatory bowel disease and the gut microbiome to synergize our research insights and outcomes," said Dr. Mannon, a professor in the division. "We are very collaborative."

Peter Mannon, MD

Dr. Mannon's research is about developing novel approaches to treating inflammatory bowel disease, which includes primarily Crohn's disease and ulcerative colitis, but also microscopic colitis among others.

Even though there's a broad range of diseases and many people are affected, Dr. Mannon said there's much work still to be done when it comes to treatment options.

"Every single medication we have, except for one, was never developed specifically for inflammatory bowel disease," he said. "They were developed for rheumatoid arthritis or psoriasis, so we really don't have IBD-specific medications. We have medications that address other types of inflammation."

However, Dr. Mannon said IBD is more than inflammation; it's degradation of the barrier function and the body's aberrant immune response to microbial components.

"Inflammation is an end result but it may not be the initial trigger," he said. "We're trying to understand how we can shift the gut microbiome in a way that it becomes anti-inflammatory, pro-barrier and help improve the natural history of inflammatory bowel disease in terms of reducing the need for surgery in the future, reducing complications and making the anti-inflammatory medications we have work better longer."

OLOGY

Dr. Mannon said he is currently studying prebiotics, specifically arabinoxylans, to generate data that supports the use of a single prebiotic in reducing inflammation and supporting barrier function in IBD patients.

"That's going to be sort of the next frontier," he said. "Food as medicine."

Rana Al-Sadi, PhD

Dr. Al-Sadi researches defects of the intestinal barrier, looking at the breach of the intestinal barrier function in different disease states, especially Crohn's disease and ulcerative colitis.

"The reason why intestinal barrier function is very important is because it's the hallmark of the inflammation in IBD patients," she said. "Restoration of the intestinal barrier has been demonstrated to be very effective in treating these patients."

Patients with Crohn's and ulcerative colitis have similar symptoms, including ulcers, inflammation in the lining of the GI tract, bleeding and diarrhea. Dr. Al-Sadi said her research seeks to find ways to inhibit the defect in the intestinal barrier.

"What we're trying to do is restore and re-tighten this barrier to prevent these symptoms, including the immune response in their body when all of these bad bacteria, bad antigens come into the bloodstream," she said. "If we re-tighten this first line defense of the body – this barrier – we will at least minimize the inflammation and decrease the bleeding and the diarrhea."

Her research also looks at the role probiotics play in helping to repair an intestinal barrier breach.

"Probiotics are live organisms, good bacteria to try to make their microbiome better," Dr. Al-Sadi said. "We've found that these bacteria actually re-tightened the barrier in our animal models so we are looking to see that the quality of life for patients may be enhanced."

She said when these diverse bacteria are abundant in the gut, it activates a lot of positive responses throughout the body.

"It suppresses a lot of immune responses, it improves the intestinal barrier, it affects the brain, it affects the liver," Dr. Al-Sadi said. "Multiple bi-directional signaling axes exist between the gastrointestinal tract and the rest of the body. Probiotics are a very necessary defense mechanism from acquiring more diseeases or advancing into a disease state that is not necessary."

Jacques Izard, PhD

Dr. Jacques Izard is focused on the difference in the gut microbiome between patients who have ostomies and those who don't.

"The project that is driving me right now is working with a population missing part of the colon or the full colon," he said. "Those individuals have what's called an ostomy or stoma, which is a redirecting of the digestive tract to an external pouch. My interest is to try to understand how we can improve quality of life and decrease comorbidities using nutrition to stimulate the microbiome."

Dr. Izard said after ileostomy surgery, patients are given limited dietary instructions even though their full colon has been removed.

"I think it's terrifying for the patients," he said. "It's not that the clinicians are unwilling to help. We are missing the basic data to help this population know the most efficient type of nutrients to stimulate the microbiome, which is another part of the digestive process and creates the transformation of our food into something that the human body can use."

Dr. Izard said his ultimate goal is to develop nutritional guidance based on biology and not on patients' trial and error.

"There is a pleasure in food that we don't want to remove from someone's life," he said. "But there is also a functional component where we hope to be able to optimize their diet, improve nutrient intake and give them a better long-term outcome."

GASTROENTEROLOGY & HEPATOLOGY BY THE NUMBERS

- **22** faculty and **9** APPs
- **18** fellows
- **40** residents on service or med student encounters
- **12,022** unique patients or hospital encounters
- **61** publications in 2024
- **$2,196,444** research funding total in 2024
- **8** clinic locations

GENERAL INTERNAL MEDICINE

Jennifer Parker, MD
Associate Professor, Internal Medicine
Chief, General Internal Medicine

FACULTY HELP SHAPE MEDICAL EDUCATION AT UNMC

"General internal medicine faculty educate medical students and residents every day in our classrooms, clinics, procedural spaces and through role modeling and mentorship," said Jennifer Parker, MD, division chief. "They do so with dedication and innovation. Their passion for teaching is reflected in learner evaluations and in our ability to continue to inspire young faculty to pursue academic careers."

Phase 2 Clerkship

Phase 2 of our medical school training is the more clinical part of their training where students spend time rotating through several core disciplines.

Nathan Anderson, MD, associate professor and internal medicine clerkship director, said the internal medicine clerkship is the longest of the six that UNMC medical students rotate through.

"We have a 12-week clerkship, that's pretty unique," he said. "Less than 5% of clerkships across the country have a clerkship as long as we do."

Dr. Anderson said one of the reasons for the length of the clerkship is about 60% of the USMLE Step 2 Exam is internal medicine-based concepts.

"Internal medicine has the most depth and breadth of subject matter of all the other clerkships," he said. "The students get a very broad knowledge base of medical training to help them get a good foundation."

That knowledge base, which includes "bread and butter" cases like hypertension, diabetes, obesity management, heart failure, chronic kidney disease and other common conditions, helps make UNMC medical students competitive.

"In general, the longer the training, the smarter the students get," he said. "It also helps them prepare for their training exams. Historically, our UNMC students do much better on Step 2 than nationwide averages which helps them with their residency selections."

Dr. Anderson said the ultimate goal is to ensure our students feel as prepared as possible.

"The whole point is to be able to train our medical students so, when they graduate, they are as knowledgeable as they can be entering residency so they can take better care of our patients."

Primary Care Residency Track

Rae Witt, MD, internal medicine residency associate program director, started a primary care track in 2020 to supplement UNMC's 30-year old primary care program, which is only

open to UNMC medical students. Dr. Witt's track has availability for two trainees per year and they interview and match as part of the residency match.

"It's one more way we can capture folks who are interested in primary care at the time of the application and the interview," she said. "That will help us to develop that interest and that skillset over the course of residency."

Dr. Witt said the primary care residents have more time in the primary care clinic and a bigger patient panel.

"The beauty of that setup is they get to learn how to work more optimally in a clinic," she said. "They have a designated nurse and medical assistant and they learn to work with their patient-centered medical home interdisciplinary team. That prepares them for real-world operations and efficiency in practice."

Dr. Witt said the primary care program and her track help address the shortage of primary care physicians while connecting patients to specialists within the system and reserving the ER for patients who truly need it.

"We are lucky that our department values and celebrates primary care with many strong mentors and built-in role models," she said. "This environment has allowed our primary care program and track to thrive, and we've seen an increased resident interest in primary care as a result."

HEAL

What is the best way to train clinician educators? That's the question driving Assistant Professor Cory Rohlfsen, MD.

"Just like being a doctor is different now than it was 10 to 20 years ago, being an educator is way different now," he said. "It's becoming harder to manage all of that and have a sense of confidence without formal training."

Dr. Rohlfsen helped develop Health Educators and Academic Leaders to provide that training.

"It's a two-year extracurricular track for aspiring clinician educators," he said. "These are residents and fellows who know from day one that they want to be teachers and educators in academic settings."

HEAL, which graduated its third cohort in May and has expanded across 19 disciplines, is also a hub of innovation. Participants try new simulations, use AI feedback, and benefit from mentorship, coaching and interdisciplinary peer support.

"After the transition to attending physician, you're not getting regular feedback as an educator and it's really hard to improve without structured support and feedback," Dr. Rohlfsen said. "That's something we've intentionally embedded in HEAL – opportunities to try something new, get feedback on it, iterate, reflect, improve."

The HEAL curriculum now includes annual Objective Structured Teaching Encounters, which gives participants a 360 evaluation of their performance. Dr. Rohlfsen said HEAL is the first clinician educator track to have outcomes based on objective video-recorded encounters.

"We have the OSTEs in the sim lab where the student gives feedback and a peer gives feedback," he said. "The exercise is recorded so they can watch themselves, they can take the recording to a video-based coaching night, and they can also apply an AI insight for artificial intelligence feedback. It's very unique that, in two hours, you can have five different perspectives of your teaching."

Ambulatory POCUS

After completing the UNMC Advanced Emergency Medicine Ultrasonography fellowship training in June 2024, Rachel Johnson, MD, started teaching residents how to utilize point-of-care ultrasound in the ambulatory setting.

She said it helps with clinical decision-making and patients appreciate that they're getting more definitive answers.

"I love the idea of being able to make a diagnosis in clinic rather than send people for tests," said Dr. Johnson, assistant professor and associate program director of the med-peds residency. "It reduces frustration and reassures patients."

Residents are taught via hands-on application, conducting ultrasounds like cardiac, thoracic, gallbladder, sinus, musculoskeletal and renal ultrasounds on clinic patients. They learn more in didactics, online courses and through scholarly activity.

Dr. Johnson said this training has made her a better clinician and she wants to pass along her knowledge.

"I think in about 10 years, most clinics will have ultrasound so making sure that residents have that exposure is good for their career," she said.

GENERAL INTERNAL MEDICINE
BY THE NUMBERS

- **44** faculty, **4** staff and **9** APPs
- **125** M3s rotated through the division
- **123,730** work RVUs
- **16** publications in 2024
- **$176,016** funding total in 2024
- **6** clinic locations, including the resident-led Midtown Clinic staffed by GIM faculty

GERIATRICS, GERONTOLOGY &

Alfred Fisher, MD, PhD
Professor, Internal Medicine
Chief, Geriatrics, Gerontology & Palliative Medicine

UNMC FACILITY FOCUSES ON MEDICAL FITNESS AND WHOLE-PERSON WELLNESS

UNMC's Engage Wellness is not your typical gym.

It is Omaha's only medical fitness and whole-person adult wellness program that is affiliated with a leading academic health sciences center. Most of its members come from physician referrals; physicians can refer any patient over age 19 to the facility.

Lesley Wadhams, Engage Wellness operations assistant, said the reasons their members join are varied.

"A lot of people have arthritis or prediabetes or diabetes," she said. "At any given time, there are members here who have survived cancer or are currently being treated for cancer, or they have Alzheimer's or heart failure."

Engage Wellness specializes in developing programs for people with these chronic conditions. Each participant receives a fitness and balance assessment and an individualized fitness program designed by an exercise science professional.

Wadhams also said people are referred to Engage Wellness after they've finished physical therapy or cardiac rehabilitation.

"We also have a lot of people who come here looking to transition to working out independently," she said. "This is a good place to come as opposed to a typical gym."

Libby Guenther, wellness specialist at the Home Instead Center for Successful Aging, said more members are being referred to Engage Wellness due to physical deconditioning or a decrease in muscle mass.

"I've seen more people who could use assistance with building up their muscular strength and cardiovascular endurance," she said. "Their doctors are not necessarily pinpointing one thing but just realizing that exercise can benefit many different things."

Guenther said exercise and the programs offered at Engage Wellness may help its members, who have an average age of 74, remain independent and active.

"Has there ever been a patient who went to see their doctor and they didn't say you should exercise more?" Guenther said. "Given the state of health today, who couldn't benefit from either some accountability with exercise or a little more guidance in an exercise program."

"GIVEN THE STATE OF HEALTH TODAY, WHO COULDN'T BENEFIT FROM EITHER SOME ACCOUNTABILITY WITH EXERCISE OR A LITTLE MORE GUIDANCE IN AN EXERCISE PROGRAM."

Libby Guenther, MS, Wellness Specialist, Engage Wellness

They also put a great deal of emphasis on the preventative side of things. For example, a physician might refer a patient to Engage Wellness in preparation for a necessary procedure like a hip replacement.

"I think the physicians hope that being proactive with exercise before those procedures can result in better outcomes," Guenther said. "They need to have the procedure just, hopefully, the recovery time is a lot shorter."

However, Guenther said the benefits of Engage Wellness go beyond exercise.

"How is your life socially? Are you going out and doing things? Are you interacting? Do you have a good social group?" she said. "We have that here. We try to hit all portions of wellness – the physical, social, mental, emotional – and there's really something for everyone."

Guenther said the staff and the members get to know each other well.

"Because we are a small group, you get personal attention, and we know each member on a personal level," she said.

One of those members is Nancy McCormick who was a competitive runner until a double knee replacement in her 70s forced her to find a new outlet. Rowing became her exercise of choice.

In February, McCormick set both a national and world record in the age 90-94 category at the Creighton University rowing team's 10th annual rowing challenge. She rowed the equivalent of 1,000 meters in five minutes and one second.

McCormick exercises daily on her home rowing machine and also goes to Engage Wellness two to three days a week where she participates in the fitness center's group classes, uses the cardio and strength training equipment, and spends time with the community she has built.

"It's an absolutely wonderful facility," she said. "I'm pretty healthy and I think it's because of 50 years of exercise. It pays off."

ENGAGE WELLNESS ALSO OFFERS:

- Evidence-based programs like National Diabetes Prevention program and FallProof™ Balance and Mobility Training
- A site for exercise-based research, notably Promoting Physical Activity to Return to Life Activities (PROACTIVE) by Thuy Koll, MD, assistant professor in the division, and Heart Failure Exercise and Resistance Training (HEART) Camp Connect by Windy Alonso, PhD, RN, UNMC College of Nursing assistant professor

GERIATRICS, GERONTOLOGY & PALLIATIVE MEDICINE BY THE NUMBERS

- **27** faculty and **9** APPs
- **6** fellows
- Trained **94** residents and medical students
- **13,556** patient encounters
- **6** publications in 2024
- **$380,060** research funding total in 2024
- **4** clinic locations

Learn more about Engage Wellness and refer your patients

With the potential to treat dozens of diseases, exercise is a powerful tool in maintaining and improving health. Scan the QR code to learn more and refer patients to Engage Wellness.

HOSPITAL MEDICINE

Chad Vokoun, MD
Professor, Internal Medicine
Chief, Hospital Medicine

LOOKING BACK ON THE INNOVATION DESIGN UNIT'S FIRST YEAR

The Innovation Design Unit opened to patients on Jan. 9, 2025, and is living up to its potential as an active patient care environment to help UNMC and Nebraska Medicine leaders design, test and validate new models of care as well as innovative technology.

The IDU is the first phase of Project Health, a new $2.19 billion health care facility that will serve as a clinical learning center to train the next generation of health care providers, conduct research and be the primary bed tower for Nebraska Medicine.

Chad Vokoun, MD, the physician executive for Project Health, said the IDU team is thinking ahead to 2031 when Project Health opens.

"The whole concept of the IDU is to see if there are new, better, more efficient ways of taking care of inpatients," said Dr. Vokoun, professor and chief of the UNMC Division of Hospital Medicine. "We're trying to define what we need to put in Project Health and what that future looks like. What should inpatient care look like then? Should all the rooms look the same? How do we utilize technology in the rooms?"

Dr. Vokoun said that technology includes providing education to patients through smart screens in rooms and allowing patients to order food via the TV. They also have implemented virtual nursing, which can take on some of the more mundane tasks thus expanding the reach of the bedside nurse.

"IT'S AN INCREDIBLE OPPORTUNITY TO BE ABLE TO ROUND WITH NEW INNOVATIVE WAYS, BUT ALSO TO BE A KEY COG IN PLANNING OUR NEXT BED TOWER IS REALLY EXCITING."

Chad Vokoun, MD, Professor and Chief, Division of Hospital Medicine

Hospital medicine is currently the only physician team attending in the IDU, which is located on level six of University Tower, although

there are future opportunities for the pulmonary and critical care medicine team. Dr. Vokoun said patients, providers and trainees are benefiting from the forward-thinking model.

"Our physicians, residents and APPs have enjoyed the togetherness," he said. "We've never been able to round together like this. It's a big win from a communication and patient efficiency standpoint."

Four residents rotated through the IDU in its first six months. Colin Gilmore, MD, was one of those residents.

"The technology utilized in the IDU gives a glimpse of what's possible – and what may be one day widely implemented – for inpatient care," said Dr. Gilmore, now an assistant professor in the UNMC Division of Hospital Medicine. "The IDU is different from other care spaces because there are many different ways to evaluate and care for our patients here simply not found in other areas of the hospital."

He said the IDU's design promotes a culture of collaboration noting that medical students have also shadowed residents and faculty in the space, demonstrating that multiple levels of learners can benefit.

In addition to practicing and educating staff more efficiently, a main goal of the IDU is data collection and quality improvement. Dr. Vokoun said they are already utilizing lessons learned.

"What we are learning now will help set us up for Project Health when that information is needed," he said. "Our opportunities lie in better use of technology for education and research so that we can find those better ways to teach and safer ways to care for patients."

Learnings from the unit will be used to transform care at the med center's existing facilities, as well as health care systems across the country and the world.

"Many places we talked to wished they had the opportunity for an IDU-type setup prior to building," Dr. Vokoun said, noting that it's not a common practice for a test unit to be in place before building a new bed tower and it's the first time this has been done at UNMC/Nebraska Medicine.

"It's an incredible opportunity to be able to round with new innovative ways," he said. "But also to be a key cog in planning our next bed tower is really exciting."

IDU FAST FACTS

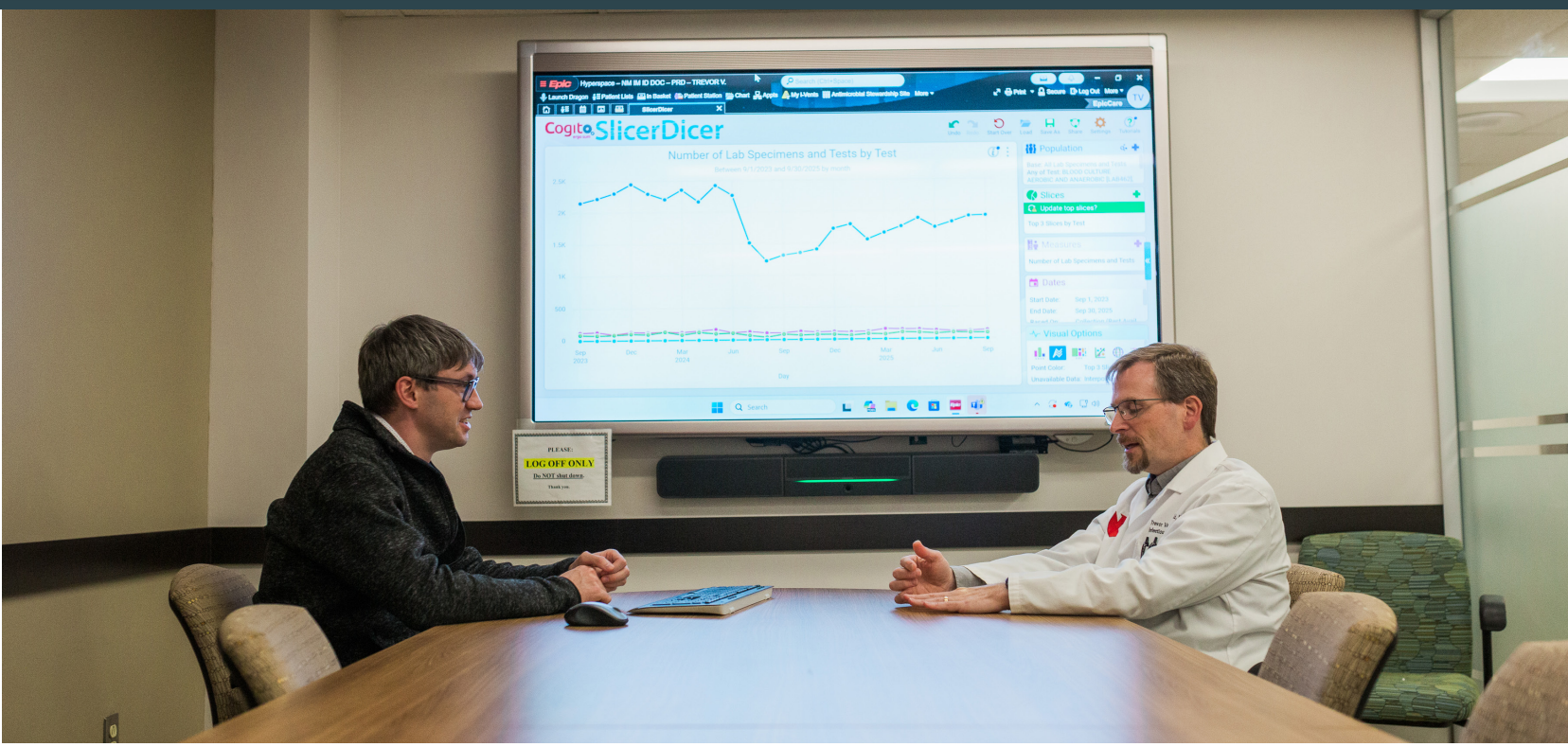
- 20,000 sq. ft. for patient care
- 4,500 sq. ft. for Bridge Innovation Program
- 17-room unit
- 40 inpatient care providers
- 8 to 10 Bridge Innovation Program staff

The Bridge Innovation Program is adjacent to the IDU and will be a design/testing area. As new pilots or projects arise, this zone will prioritize, develop, test and evaluate these innovations. Teams consisting of scientists, researchers, clinicians and industry partners will collaborate in the "bridge space," ensuring rapid implementation and evaluation to ensure the most effective and efficient changes are shared across the organization.

HOSPITAL MEDICINE BY THE NUMBERS

- **78** hospitalists including full-time hospitalists and hybrid physicians (GIM hybrid, geriatrics and pediatrics)
- **31** APPs
- **13,238** unique patients and more than **18,580** hospital encounters
- Approximately **88** M3 & **48** M4 student interactions/year
- **15** residents/month on Meyer resident service and **6** to **7** residents/month on hospitalist service
- **26** published articles by HM faculty members
- **35** trainees, including medical students, residents and fellows, actively involved in QI and research projects

INFECTIOUS DISEASES



David K. Warren, MD, MPH
Professor, Internal Medicine
Chief, Infectious Diseases

ASP CELEBRATES 20 YEARS OF PROVIDING ANTIMICROBIAL STEWARDSHIP RESOURCES

The UNMC/Nebraska Medicine Antimicrobial Stewardship Program started 20 years ago. Trevor VanSchooneveld, MD, medical director for the ASP, said the program remains relevant and vitally important today.

"There was – and still is – large amounts of data saying providers don't do the most fabulous job of using antibiotics," he said. "The goal of stewardship is to help physicians use their antimicrobials in more efficient and effective ways to improve the outcomes of patients and reduce antimicrobial resistance."

Dr. VanSchooneveld said the goal of antimicrobial stewardship is not to just decrease antimicrobial use.

"It's to make sure the right patient gets the right drug at the right time for the right duration," he said. "That's really what stewardship is all about, improving care. And there's numerous studies that have shown stewardship improves patient outcomes."

Dr. VanSchooneveld, who is also a professor in the UNMC Division of Infectious Diseases, said improving patient care and preventing antimicrobial resistance were the main reasons that Mark Rupp, MD, former division chief, championed the program's creation.

"He was looking ahead to what would be important for improving patient care," Dr. VanSchooneveld said. "He convinced the hospital that this was in the best interest of their patients, which it absolutely is."

The program has grown from a single infectious disease pharmacist and physician to five full-time pharmacists and seven physicians. In addition to the main UNMC campus, the program now supports the Bellevue Medical Center. It also includes an Outpatient Parenteral Antimicrobial Therapy program led by Nicolas Cortes-Penfield, MD, as well as a remote program which supports similar efforts at other facilities.

"Those hospitals have found that really valuable," Dr. VanSchooneveld said. "We developed our outreach program because there's a lack of access to experts in our state. There's a lack of experts in antimicrobial stewardship and a lack of infectious disease physicians, particularly in rural areas."

This past year, they also implemented an ambulatory stewardship program led by Mackenzie Keintz, MD, which provides feedback reports to outpatient clinicians telling them how

they're doing prescribing antibiotics for respiratory and urinary tract infections.

"We're working to build quality improvement infrastructure focused on antibiotic use into our ambulatory settings," Dr. VanSchooneveld said.

The ASP's work is broad and multidisciplinary. Dr. VanSchooneveld said their work starts with pharmacy and infectious diseases physicians and then spans out to surgery, the microbiology lab, and specialties like oncology and transplant.

"There's so many areas that we work with, anywhere antimicrobials are being utilized," Dr. VanSchooneveld said. "We feel like there's a role for stewardship to have input and to just help. We don't want to tell people what to do but we want to help guide people to what we think is the most efficient and effective way to manage their patients."

He said stewardship is highly focused on how patient care is delivered throughout the hospital. To that end, the ASP writes guidelines on how to manage common clinical infectious problems and makes them accessible to the public online.

"Those are the guidelines that our clinicians use in the emergency department, in the inpatient setting, in the outpatient setting," Dr. VanSchooneveld said.

He said they also want those resources to be available to all.

"Our job as the academic medical center for Nebraska is to provide tools others in our state can use," Dr. VanSchooneveld said. "We want the hospitals and physicians in Nebraska to have access to useful tools to manage infections wherever they're at."

THE ASP NETWORK

The ASP is associated with two collaborations between the Centers for Disease Control and Prevention and the Nebraska Department of Health and Human Services that work together to improve infection control and prevention in hospitals, outpatient settings, ambulatory surgical centers and dental clinics:

- The Antimicrobial Stewardship Assessment and Promotion program, which provides resources for acute care and critical-access hospitals as well as long-term care facilities and ambulatory practices.
- The Infection Control Assessment and Promotion program, which offers no-cost, peer-to-peer infection control assistance to all types of medical facilities in the state as well as extensive, free education.

Use the QR code to learn more about the ASP

ASP RESEARCH

"Whether it's looking at how we use novel diagnostic tools to improve patient care or how we can do our stewardship work more efficiently and effectively, we try to integrate research with what we're doing clinically," Dr. VanSchooneveld said. "And we try to do novel and interesting things clinically that can help our patients and help us to better understand how to do stewardship more effectively and in a more impactful way."

One recent example of ASP research, led by Jonathan Ryder, MD, is "Every Crisis is an Opportunity: Advancing Blood Culture Stewardship During a Blood Culture Bottle Shortage."

Use the QR code to read the article

INFECTIOUS DISEASES BY THE NUMBERS

- **28** faculty and **12** APPs
- **6** fellows
- **6** residents or med students on service
- **64,984** RVUs
- **105** publications in 2024
- **$1,590,728** funding total in 2024
- **5** clinic locations

DIVISION CHIEF UPDATE

David K. Warren, MD, joined UNMC as the chief of the division of infectious diseases in January 2025.

Dr. Warren was a professor in the division of infectious diseases at Washington University School of Medicine in St. Louis, where he also served as the director of the Clinical Research Training Center at Washington University and as director of the university's Master of Science in Clinical Investigation Program.

Dr. Warren succeeded Mark Rupp, MD, who has been the interim chair of the UNMC Department of Internal Medicine since Jan. 1, 2025.

Dr. Rupp called it an honor and privilege to serve as the chief of the division.

"I am immensely proud of the faculty and staff and their nationally recognized accomplishments and reputation for excellence," he said. "In recent years, the division has greatly expanded in size, with a commensurate increase in clinical research and educational offerings. It is a great time for me to step aside to enable the next leader to continue the upward trajectory."

NEPHROLOGY

Troy J. Plumb, MD
Professor, Internal Medicine
Dr. Dennis Ross Chair and Chief, Nephrology

DIVISION'S GROWTH IS IMPETUS FOR NEW FELLOWSHIP PROGRAM

The UNMC Division of Nephrology started a transplant nephrology fellowship program in July 2024, driven by the division's growth and the rising number of transplants done at the medical center.

"It became a point where we were a big enough program, it made sense to make it available," said Eric Langewisch, MD, an associate professor in the division and the fellowship program director.

"The number of transplants we've done has increased in the past 10 years or so," he said. "We were doing maybe 100 to 150 per year and we did more than 180 kidney transplants last year."

According to the National Institutes of Health, about two in 1,000 Americans are living with end-stage kidney disease, also known as kidney failure, that requires dialysis or a kidney transplant.

"Dialysis is going to a hemodialysis center three times a week or getting peritoneal dialysis," Dr. Langewisch said. "It does provide some clearance, it does do some of the things the kidney would do but, in general, it doesn't do nearly as good a job as a functioning kidney."

However, a transplant isn't always an option.

"There is a long waiting list with many more patients than available kidneys," he said. "Or some people just aren't healthy enough to get a transplant. That's why there's an evaluation process."

For those who do receive a kidney, he said a successful transplant can significantly improve their lives.

"In general, they live longer and their quality of life is better," Dr. Langewisch said. "You get to see life-changing things happen for patients. You're involved in an incredible process that helps improve people's lives."

He said their general nephrology fellows had interest in being part of that process and wanted to expand their training and learn from the experience and expertise within the division and at UNMC/Nebraska Medicine. Those fellows were Brian Benes, DO, who was the transplant program's inaugural fellow, and Nate Leonardi, DO, its fellow for the 2025-26 academic year.

"The fact that we had fellows interested in transplant nephrology really pushed us," Dr. Langewisch

said. "When they expressed interest, we took it upon ourselves to actually do the legwork to get accredited as a transplant nephrology fellowship program."

Dr. Leonardi said he fell in love with transplant during his general nephrology fellowship, especially as he witnessed the journey that patients take.

"YOU GET TO SEE LIFE-CHANGING THINGS HAPPEN FOR PATIENTS. YOU'RE INVOLVED IN AN INCREDIBLE PROCESS THAT HELPS IMPROVE PEOPLE'S LIVES."

Eric Langewisch, MD, Associate Professor, Division of Nephrology

"You get to see such a wide variety of people, of cases and then you get to see people prior to transplant when they're on dialysis," he said. "You need to evaluate them for transplantation and after, bridging them through the transplant progress to long-term follow-up. You're seeing how they're happy to no longer be on dialysis."

The one-year program, designed and accredited by the American Society of Transplantation, guides fellows through six months of inpatient service and experiences in transplant, including observing transplants, taking care of transplant patients, evaluating potential candidates and donors, and doing biopsies. At the end of the one-year program, the fellows are certified as a trained transplant nephrologist.

Dr. Benes, who is now an assistant professor in the division, said the fellowship prepared him for the start of his career.

"Dr. Langewisch designed the curriculum to have a great deal of well-supported autonomy that facilitates learning while maintaining excellent patient care," he said. "The fellowship also prioritizes clinical research, allowing me to participate in various research studies."

The transplant program's fellows are learning from Dr. Langewisch, Dr. Benes, Clifford Miles, MD, Scott Westphal, MD, and Roslyn Mannon, MD, who comprise the division's transplant nephrology faculty. A multidisciplinary team, including transplant surgeons, pathologists and laboratory staff, advanced practice providers, pharmacists, social workers, dieticians, psychologists and nurse coordinators also provide education and patient care.

"The staff here are deeply passionate about education and mentorship, and they are genuinely invested in ushering you into the world of transplant medicine," Dr. Benes said. "They provide both the guidance and the opportunities necessary to help you develop and achieve your career goals. Plainly put, the mentorship here is unparalleled."

NEPHROLOGY BY THE NUMBERS

- **15** faculty and **10** APPs
- **6** general nephrology fellows and **1** transplant nephrology fellow
- **111** learners on service:
  - **23** medical students
  - **13** physician assistant students
  - **47** internal medicine residents
  - **18** family medicine residents
  - **10** anesthesiology residents
- **67,741** work RVUs
- **34** publications in 2024
- **$913,507** funding total in 2024
- **8** clinic locations
- **14** dialysis locations

ONCOLOGY & HEMATOLOGY

Julie Vose, MD, MBA
Professor, Internal Medicine
Chief, Oncology & Hematology
Neumann M. and Mildred E. Harris Professor

NEW CENTER IN KEARNEY BRINGS SUPERIOR CANCER CARE CLOSE TO HOME

In its first year of operation, the Fred & Pamela Buffett Cancer Center - Kearney, is making an impact in bringing comprehensive cancer care to central Nebraska.

Since opening in December 2024, the cancer center has recorded more than 24,000 patient visits across its cancer clinic, infusion center, radiation oncology and lab. The patients came from 210 cities and towns in 76 counties.

The Fred & Pamela Buffett Cancer Center - Kearney builds upon the years of expertise and trust that Heartland Hematology and Oncology in Kearney built with its patients and community. Led by Cynthia Lewis, MD, and Nick Hartl, MD, the new center opened three years after Nebraska Medicine joined forces with Heartland Hematology and Oncology.

Dr. Hartl says the 53,000-square-foot facility helps them provide excellent patient care and to expand on the work he and Dr. Lewis began at Heartland Hematology and Oncology.

"For providers, it's a great work environment," he said. "We've got a wonderful staff, that's probably the cornerstone. We've got plenty of room and equipment to do everything we need to do. For patients, it's just a very warm environment for them to come and get the therapy that they need."

Construction on the new $52 million center began in 2023. It offers a range of cancer services, including medical oncology, hematology, radiation oncology and infusion therapy.

The state-of-the-art facility features additional clinic space, a lab, pharmacy, community rooms and a healing garden.

Dr. Hartl said the design team was open to input from the physicians during the building process.

"We had meetings with them routinely," he said. "We brought ideas and they were receptive to those changes and it was actually quite amazing to see them work with us. They built it the way we wanted."

Supportive services include survivorship programs, genetic counseling and nutrition classes. Located on the west edge of the University of Nebraska at Kearney campus, it combines educational, residential, recreational and commercial opportunities in a pedestrian-friendly neighborhood.

"This new state-of-the-art facility brings the nationally recognized cancer care Nebraska Medicine is known for to Kearney," says Michael Ash, MD, Nebraska Medicine CEO. "Patients in central Nebraska now have added convenience and seamless access to that extraordinary care, right in their own community."

"FOR PROVIDERS, IT'S A GREAT WORK ENVIRONMENT. FOR PATIENTS, IT'S JUST A VERY WARM ENVIRONMENT FOR THEM TO COME AND GET THE THERAPY THAT THEY NEED."

Nick Hartl, MD, Assistant Professor, Division of Oncology & Hematology

ONCOLOGY & HEMATOLOGY BY THE NUMBERS

- **34** faculty
- **35** APPs
- **11** fellows
- **123,275** physician work RVUs
- **36,180** APP work RVUs
- **138** publications in 2024
- **$11,534,792** funding total in 2024
- **4** clinic locations + **14** outreach locations

Division Chief Julie Vose, MD, says the expansion reflects the commitment to the needs of patients and their families in central Nebraska.

"The added space and services allow us to support all aspects of cancer care, even after treatment has concluded," Dr. Vose said.

As part of the Fred & Pamela Buffett Cancer Center network, the center delivers cutting-edge cancer care with the specialized expertise of the state's largest academic medical center. The Fred & Pamela Buffett Cancer Center is Nebraska's only NCI-designated center and one of only 73 in the nation. This recognition, held since 1984, reflects the center's commitment to cutting-edge research in preventing, diagnosing and treating cancer. For patients, this designation means access to advanced treatments, clinical trials and comprehensive care. More than 110 researchers work tirelessly to ensure patients benefit from the latest innovations in cancer care.

"I am so excited not only to continue the personalized care we have been delivering for 20 years, but we now will be able to offer specialized care and clinical trials, often out of reach to central and western Nebraska and northern Kansas," said Dr. Lewis, the center's medical director.

Patients can continue to expect high-quality, disease-specific cancer care in an innovative facility, and Dr. Hartl said their patients appreciate the amenities and proximity of the new center.

PULMONARY, CRITICAL CARE &

Ruxana T. Sadikot, MD, MRCP (UK)
Professor, Internal Medicine
Chief, Pulmonary, Critical Care & Sleep Medicine
Margaret R. Larson Chair of Pulmonary Medicine

MULTIDISCIPLINARY PROGRAMS ADDRESS SPECIALTY DISEASES, CREATE RESEARCH AND EDUCATION OPPORTUNITIES

To meet the needs of patients with complex diseases, pulmonary, critical care and sleep medicine has developed specialty programs with several other UNMC colleges, departments and divisions.

"The lungs are involved in a lot of different diseases," said Ruxana Sadikot, MD, division chief. These programs, she said, show the division's dedication to patient care and promote education and research.

"These collaborations lead to the growth of clinical programs and teaching opportunities while also leading to innovative research," she said. "They are really important."

One of these multidisciplinary programs, the Autoimmune Lung Disease Clinic, opened in 2018. A collaboration with the UNMC Division of Rheumatology and Immunology, the clinic's co-directors are Daniel Hershberger, MD, and Bryant England, MD, PhD.

Dr. Hershberger, associate professor in the division of pulmonary, critical care and sleep medicine, said they started the clinic so that patients could go to both a lung doctor and a rheumatology doctor at the same time.

"We're one of only a handful of clinics in the country that run the way we do, which is seeing a rheumatologist and pulmonologist in the same room at the same time," he said. "That makes a big difference when we do plan development. Having that real-time conversation with the patient gives them the best understanding of their disease. Then, they seem to understand the plan as opposed to 'this person told me this, this person told me this, I don't know what to do' which is what we heard before we started this clinic."

The clinic sees patients with a variety of diseases, including interstitial lung disease and pulmonary hypertension related to rheumatoid arthritis, scleroderma, lupus, Sjogren's syndrome, myositis, and idiopathic pneumonia with autoimmune features.

"When you're trying to take care of those diseases in isolation, you often feel like you're guessing what's happening with the other component," Dr. Hershberger said. "Our collaboration takes away a lot of the guesswork. We want to make sure we are treating not only their lungs but their joints and

SLEEP MEDICINE

other symptoms they might have associated with these systemic diseases."

Dr. England, associate professor of rheumatology and immunology, said the collaboration is also necessary because there isn't a one-size-fits-all treatment plan.

"These are super complicated diseases that have a very poor prognosis," he said. "There's not a lot of good evidence out there for how to treat these diseases so you can't just pick up a recipe and follow it. You need to individualize everything, do really thorough assessments and interpret them appropriately. Patients come here since we're providing that high-level, academic, multi-specialty care."

Dr. Hershberger said this clinic is meeting a need that is largely unmet both locally and nationally.

"We're lucky to have this because we talk to colleagues around the country and they can't get similar initiatives off the ground," he said. "In the last year, we increased our capacity for the clinic by 50% because we want to make sure that as many people as possible have access."

The clinic has seen hundreds of patients in the eight years since it opened and Dr. England said it takes a large team to keep it running. Marcus Snow, MD, Michael Feely, MD, Tina Mahajan, MD, and Tammy Wichman, MD, staff the clinic with Dr. England and Dr. Hershberger. There also is a pharmacist, respiratory therapist, and, of course, rheumatology and pulmonary nursing staff.

"They do a tremendous amount because we also try and schedule all the testing that a patient needs for the same day as their appointment," Dr. England said. "That can be really difficult to coordinate a CT scan, pulmonary function test, echocardiogram, a six-minute walk, all to be done on the same day. Our nurses are absolutely incredible."

Research coordinators also are part of the clinic's team. Dr. Hershberger said they have done an industry-sponsored drug trial and are starting their first clinical trial. The clinic's team also built the Registry of Autoimmune Lung disEaseS (RALES) to collect clinical data, patient-reported outcome measures and lab data.

Dr. Sadikot said this database is an important tool for faculty and trainees.

"Because we have these very specialized patients, it provides an excellent research opportunity and a good learning experience," she said. "Residents and fellows learn about the clinical care of these patients and then, through the database, they can ask questions, mine the data and do more work to present research, create abstracts and write papers."

Medical students, internal medicine residents and rheumatology fellows rotate through the clinic and Dr. Hershberger said they see rare cases usually only read about in textbooks.

"This clinic serves as a touchpoint for rare diseases and it gives learners an opportunity to see them and interact with the patient and understand that disease process," he said. "I think that meeting these patients and hearing their stories, motivates people to learn more."

Dr. Hershberger said their clinic is a great example for others to follow.

"We provide education to the patients and learners and ourselves, we do research, and we take care of patients," he said. "It hits all the highlights for what we want to do as an academic medical center. We want this model of multidisciplinary clinics to grow because it's really, really good for the patient."

SPECIALTY, MULTIDISCIPLINARY PROGRAMS DEVELOPED BY PCCSM:

- Autoimmune Lung Disease Clinic with rheumatology and immunology
- Lung cancer diagnosis and screening with interventional pulmonology and oncology
- Graft vs. host disease with hematology
- Pulmonary hypertension with cardiovascular medicine
- Non-tuberculous mycobacteria and bronchiectasis with infectious diseases
- Long COVID Clinic with hospital medicine
- Ear, Nose and Throat Clinic with the department of otolaryngology

PULMONARY, CRITICAL CARE & SLEEP MEDICINE BY THE NUMBERS

- **23** faculty and **35** APPs
- **6** MD/PhDs
- **13,238** unique patients and more than **18,580** hospital encounters
- **16** fellows
- **62,279** work RVUs
- **37** publications in 2024
- **$3,260,694** funding total in 2024
- **4** clinic locations

RHEUMATOLOGY & IMMUNOLO

James R. O'Dell, MD
Professor, Internal Medicine
Chief, Rheumatology & Immunology
Robert L. Grissom Professor of Internal Medicine

DRS. MIKULS, CANELLA HONORED BY THE AMERICAN COLLEGE OF RHEUMATOLOGY

Ted Mikuls, MD, and Amy Cannella, MD, of the UNMC Division of Rheumatology and Immunology were recognized by the American College of Rheumatology during ACR Convergence 2024. The awards reflect their outstanding contributions to the advancement of rheumatology.

"We are thrilled that the American College of Rheumatology honored two of our outstanding faculty at this year's national meeting," said James O'Dell, MD, chief of the division. "Dr. Mikuls continues to be responsible for much of our research success through his spectacular mentoring of students, residents, fellows and faculty. Dr. Cannella designed our fellowship (2005), which is regarded as one of the best in the country and has set the bar high as its only program director. Both have been pivotal for our success as an academic division of rheumatology."

Dr. Mikuls, the Stokes-Shackleford Professor of Rheumatology, was awarded the Excellence in Investigative Mentoring Award, which recognizes the importance of the mentor/mentee relationship and the influence it has on career development.

He credits his mentors – Dr. O'Dell, Lynell Klassen, MD, and Gerald Moore, MD – for helping him achieve his goals, and he continues the positive mentoring experiences the division is known for by nurturing the next generation of providers. Bryant England, MD, PhD, associate professor in the division, is one of Dr. Mikuls' mentees.

"To be recognized by the college and my rheumatology colleagues in this way is both humbling and gratifying," Dr. Mikuls said. "It is especially gratifying to know that the nomination came from both mentees and mentors whose opinions I greatly value. I've been fortunate to have spent my entire career in a division that places a premium on education and to have amazingly talented trainees. Simply put, research mentoring has been my way to support our shared educational mission."

Dr. Cannella, the Gerald F. Moore Professor of Rheumatology, was recognized with the Distinguished Fellowship Program Director Award, signifying that her efforts as the UNMC rheumatology fellowship program director have made outstanding contributions in the mentoring and training of future rheumatologists.

"I'VE BEEN FORTUNATE TO HAVE SPENT MY ENTIRE CAREER IN A DIVISION THAT PLACES A PREMIUM ON EDUCATION AND TO HAVE AMAZINGLY TALENTED TRAINEES. SIMPLY PUT, RESEARCH MENTORING HAS BEEN MY WAY TO SUPPORT OUR SHARED EDUCATIONAL MISSION."

Ted Mikuls, MD, MSPH
Stokes-Shackleford Professor of Rheumatology, UNMC Division of Rheumatology

UNMC's nationally renowned rheumatology fellowship program matriculates three fellows each year into the two-year clinical program. She also is involved in medical school and resident education, co-directing the pre-clinical M1 and M2 Musculoskeletal Integument and Multi-Organ System Blocks and the clinical rheumatology curriculum for medical and physician assistant students and residents. She has led the development of several novel educational tools for rheumatology, including a video game on gout and an inter-professional pharmacology e-learning module.

Dr. Cannella credits her mentors – Drs. O'Dell and Moore – for their unwavering support. She was given the opportunity, encouragement and resources to build curricula that best fit the vision. She is proud of her fellows and feels immense gratitude for the rheumatology faculty and support staff that play a pivotal role in the success of the rheumatology division's educational footprint.

"I am honored beyond measure to receive the Distinguished Fellowship Program Director Award," Dr. Cannella said. "This career achievement award validates the effort, dedication and enthusiasm that drive my passion for education. I am humbled to be included among the former recipients of this award, who have inspired many program directors, including myself. I accept this award on behalf of the UNMC Division of Rheumatology faculty, who share a commitment and vision for educating the next generation of physicians."

RHEUMATOLOGY & IMMUNOLOGY BY THE NUMBERS

- **21** faculty
- **4** APPs
- **6** fellows
- **62** residents or med students on service
- **14,504** outpatient appointments
- **47** publications in 2024
- **$2,523,977** funding total in 2024
- **4** clinic locations

DIVISION CHIEF UPDATE

James O'Dell, MD, who has served as chief of the UNMC Division of Rheumatology for 35 years, plans to step aside from his leadership post. He will continue to serve as professor of internal medicine and is not entering full retirement.

During Dr. O'Dell's tenure, the division ascended to a position of national prominence in education and produced the kind of translational research that has had an enormous impact on patient care.

"It's been an incredible ride for me," Dr. O'Dell said. "I'm proud of what we've built and all of the amazingly talented individuals who make up our division."

Under his leadership, the division grew from a total of three faculty members, including himself, to now more than 20 – many of whom are recognized as national leaders in the field.

"My goal with all of my faculty members is to hire people who are better and brighter than I am, and I have succeeded," Dr. O'Dell said. "I can go right down the list and name something unique and special about every single faculty member, some program where each has taken ownership."

The success of the division?

"It's there because of them."

He can step aside now, he said, because the people he has trained can do this.

Bryant England, MD, PhD, associate professor of rheumatology, will serve as interim chief.

Use the QR code to learn more

Honoring Our LEGACIES

Debra Romberger, MD

Colleagues across the medical center remembered the impact of longtime faculty member and leader Debra Romberger, MD, who died May 20, 2025, at the age of 70.

Dr. Romberger, who retired in 2024 as chair of the UNMC Department of Internal Medicine, had been part of the fabric of UNMC since 1988, when she arrived as a post-doctoral fellow. She joined the faculty as part of the division of pulmonary and critical care medicine only two years later.

After serving as interim chair of internal medicine both in 2004-05 and 2014-15, she was appointed Henry J. Lehnhoff Professor and Chair of the department in 2015, becoming the first woman to hold this role at UNMC. She retired from the position in 2024.

"Dr. Romberger was a hardworking, fair, thoughtful and distinguished leader, researcher and educator," said UNMC Interim Chancellor H. Dele Davies, MD. "As the first female chair of internal medicine at UNMC, she built a strong department and served as a trusted and respected mentor to multiple female physicians and other health care professionals. Dr. Romberger was a model of consistency, showing up even during challenging years of her life when she was dealing with illness and served UNMC and Nebraska Medicine with dignity."

Dr. Romberger was a fellow of the American College of Physicians, elected to Alpha Omega Alpha and served in leadership roles of the American Federation for Clinical Research, Omaha Women's Medical Association and Central Society for Clinical and Translational Research.

She also served as co-director of UNMC's MD/PhD Graduate Training program for 15 years. Dr. Romberger was named a UNMC Distinguished Scientist in 2012.

Bradley Britigan, MD, dean of the UNMC College of Medicine, called Dr. Romberger a consummate clinician, scientist and leader.

"Debra Romberger was a pillar of the college of medicine," he said. "The impact of her work is incalculable, in terms of the patients she served, the faculty, students and staff she mentored, and, as chair of internal medicine, the effects of her department's work to improve the lives of the people of Nebraska and beyond. Her colleagues will miss her; the college will miss her; the university will miss her; and the community will miss her."

Use the QR code to learn more

Daniel Schafer, MD

Daniel Schafer, MD, an emeritus professor and renowned hepatologist who helped build UNMC's hepatology program into one of the country's best, died Nov. 13, 2024, at age 76.

Dr. Schafer joined UNMC in July 1981 and retired from UNMC's Division of Gastroenterology and Hepatology in 2018, after 37 years of helping patients with cirrhosis, hepatitis and liver disease and transplantation. Dr. Schafer and his faculty colleagues supported the world-renowned liver and intestinal transplant program through UNMC's primary clinical partner, Nebraska Medicine.

Dr. Schafer graduated from the UNMC College of Medicine in 1976 and did his internal medicine residency at UNMC. He did a fellowship in gastroenterology and hepatology at the National Institutes of Health in Washington, D.C., and joined UNMC in 1981 as an assistant professor in the department of internal medicine.

"He was a passionate advocate for his patients and a rigorous educator," said Mark Mailliard, MD, retired professor and former division chief. "He had a remarkable one-in-a-million personality and was beloved by so many people."

Dr. Schafer's colleagues say he was a strong advocate for the University of Nebraska System; was passionate about his family; and enjoyed traveling and photography. Some of Dr. Schafer's photos hang in the halls of UNMC's Home Instead Center for Successful Aging.

Dr. Schafer is survived by his wife, Jane Potter, MD, professor of geriatrics, gerontology and palliative medicine at UNMC.

Use the QR code to learn more

Joe Sisson, MD

UNMC pulmonologist Joe Sisson, MD, a clinician-scientist remembered for his mentoring, innovation and honesty, died Jan. 5, 2025. He was 71.

The Waterloo, Iowa, native joined UNMC in 1987 and led the UNMC Division of Pulmonary, Critical Care and Sleep Medicine from 1997 to 2021. Notably, when he stepped down, he was the longest-serving pulmonary chief in the United States. He also served as interim chair for the UNMC Department of Internal Medicine from 1999 to 2001. He retired as emeritus faculty in 2021.

UNMC College of Medicine Dean Bradley Britigan, MD, called Dr. Sisson one of the pillars of the college.

"Over his decades at UNMC, he epitomized the best of what it means to be a physician-scientist," Dr. Britigan said. "He was an outstanding clinician who also continued to ask the question why – a characteristic that also made him an exceptional investigator. He selflessly devoted numerous hours of his time to mentoring the faculty of the pulmonary division he led to assure their success. We are all better for having known and worked with Joe."

Dr. Sisson received continuous funding from the National Institutes of Health from 1991-2018, including a prestigious MERIT (Method to Extend Research in Time) Award reserved for only the most outstanding research projects.

Always curious, Dr. Sisson was the inventor of the patented software (Sisson-Ammons Video Analysis: SAVA) now used by laboratories around the world to analyze cilia motion. His passion for developing databases led him to create the database, now called ADIS, to manage his division that was adopted by the department of internal medicine, then expanded to the entire UNMC College of Medicine.

In 2008, Dr. Sisson received UNMC's Distinguished Scientist Award and, in 2015, he received UNMC's Research Leadership Award.

Under his leadership, the PCCSM division thrived, more than doubling in size. Colleagues say he expanded critical care medicine to make the medical center the place for families to go in the worst moments of their lives.

Use the QR code to learn more

Ken Cowan, MD, PhD

Ken Cowan, MD, PhD, who led the NCI-designated cancer center at UNMC through tremendous growth for more than two decades, died on Dec. 15, 2024.

"Ken Cowan was an exceptional colleague and friend," said Interim UNMC Chancellor H. Dele Davies, MD. "During more than two decades as director of the Fred & Pamela Buffett Cancer Center, Ken was instrumental in leading the cancer center to sustained research growth, advanced clinical care, and unprecedented national and international recognition. He also was the visionary behind the Fred & Pamela Buffett Cancer Center facility. All the while, Ken never lost his personal touch with his patients, with whom he was always kind, patient and understanding."

Dr. Cowan joined UNMC in 1999 as the director of what was then called the Eppley Cancer Center and the Eppley Institute for Cancer Research. Even after stepping down in 2023 as director of the cancer center and institute, he remained a full-time faculty member and clinician. The NCI-designated cancer center changed its name in 2017 to closely align with the new facility that shared the same name: the Fred & Pamela Buffett Cancer Center.

Dr. Cowan had a distinguished medical and scientific pedigree. After receiving his MD and PhD at Case Western Reserve University School of Medicine, he completed his residency in internal medicine at Parkland Memorial Hospital in Dallas in 1978 and decided to sub-specialize in oncology. He finished his oncology fellowship at the National Cancer Institute in Bethesda, Maryland, in 1981. Dr. Cowan spent 21 years in the Public Health Service at the National Cancer Institute, serving as chief of the Medical Breast Cancer Section, Medicine Branch beginning in 1988. In his NCI position, he was responsible for overseeing laboratory researchers and clinical staff involved in basic and clinical research in breast cancer.

A New York City native, Dr. Cowan earned his undergraduate degree at the University of Rochester in Rochester, NY, and his medical and doctorate degrees from Case Western Reserve University in Cleveland. He has authored more than 240 papers for scientific journals and has been an invited guest lecturer at numerous scientific conferences.

Dr. Cowan is survived by his wife, Alison Freifeld, MD, professor emerita of the UNMC Division of Infectious Diseases.

Use the QR code to learn more

Recognizing Our CHIEF RESIDENTS & GRADUATES

CHIEF RESIDENTS 2024-2025

RemyGrace Sass, MD
Hospitalist/Primary Care Physician – UNMC/Nebraska Medicine, Omaha, NE

Brett Begley, MD
Traditionalist – Methodist Physicians Clinic Indian Hills, Omaha, NE

Nicholas Yeutter, MD
Primary Care – Nebraska-Western Iowa Veterans Affairs, Omaha NE

Debra Wekesa, MD
Nephrology Fellowship – UNMC, Omaha, NE

CLASS OF 2025 GRADUATES

Jason Barbaretta, MD
Ambulatory Chief Resident – UNMC, Omaha, NE

Austin Barry, MD
Rheumatology Fellowship – UNMC, Omaha, NE

Kevin Brittan, MD
Gastroenterology Fellowship – UNMC, Omaha, NE

Jacey Buss, MD
Outpatient Internal Medicine – CenterPointe Physicians, Manhattan, KS

Margaret Craig, MD
Hospitalist – UNMC/Nebraska Medicine, Omaha, NE

Taylor Doescher, MD
Primary Care Physician, Georgia

Nosakhare Edogun, MD
Hospitalist, Omaha, NE

Alexandra Fiedler, MD
Gastroenterology Fellowship – UNMC, Omaha, NE

Gabriel Garbin, MD
VA Chief Resident – UNMC, Omaha, NE

Collin Gilmore, MD
Hospitalist, Informatics – UNMC/Nebraska Medicine, Omaha, NE

Evangeline Green, DO
Scholarship & Patient Safety Chief Resident – UNMC, Omaha, NE

Eric Hilker, MD
Primary Care Physician – Methodist HealthWest, Omaha, NE

Matthew Kretschmar, MD
Pulmonary & Critical Care Fellowship – UNMC, Omaha, NE

MED-PEDS

Joshua Lallman, MD
Outpatient Med-Peds - Nebraska Medicine, Omaha, NE

Audrey Lane, MD
Neonatology Fellow - UNMC, Omaha, NE

Tyler Larson, MD
Hospitalist – UnityPoint Health, Des Moines, IA

AJ Lowe, MD
Hospitalist – UNMC/Nebraska Medicine, Omaha, NE

Olivia Makos, DO
Hematology & Oncology Fellowship – UNMC, Omaha, NE

Morgan Newlun, DO
Cardiology Fellowship – UNMC, Omaha, NE

Jonathan Nilles, DO
Hematology & Oncology Fellowship – UNMC, Omaha, NE

Caleb Parry, DO
Primary Care Physician – Intermountain Health, Ogden, UT

Andrew Regoli, MD
Primary Care Physician – Billings Clinic, Billings, MT

Mitchell Sand, MD
Cardiology Fellowship – UNMC, Omaha, NE

Kyle Scholten, DO
Gastroenterology Fellowship – UNMC, Omaha, NE

Amanda Sooter, MD
Hospitalist – Hill County Memorial, Fredericksburg, TX

Grant Starkey, MD
Traditionalist – Methodist Physicians Clinic Indian Hills, Omaha, NE

Jonathan Trinh, MD
Hematology & Oncology Fellowship – University of Illinois Chicago, IL

Landon Withrow, MD
UNMC Chief Resident – UNMC, Omaha, NE

Lindsey Pohren, MD
Developmental Medicine Fellow - Baylor College of Medicine, Houston, TX

Cristian Valquier, MD
Primary Care Physician, Methodist Hospital, Omaha, NE

Recognizing Our PARTNERS

NEBRASKA MEDICINE

The UNMC 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.

As a major tertiary and quaternary health care center, Nebraska Medical Center 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 is home to the only state-designated Comprehensive Trauma Center serving both pediatric and adult patients 24/7. It 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.

Uniquely, Nebraska Medical Center operates the 10-bed Nebraska Biocontainment Unit that is one of 10 regional treatment centers in the U.S. 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.

VA NEBRASKA-WESTERN IOWA HEALTH CARE SYSTEM

Affiliation with the VA Nebraska-Western Iowa 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 Iowa 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. 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.

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