



WE ARE NEBRASKA MEDICINE & 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.



DEPARTMENT CHAIR



DEBRA J. ROMBERGER, MD

Since our last biennial report when we were focused on adaptations driven by the pandemic, it is exciting to see how the department has moved forward to impact our community and world.

We have a new NIAAA-funded P50 grant, Alcohol Center of Research-Nebraska, that represents a great collaboration between our gastroenterology and hepatology division and our pulmonary, critical care and sleep medicine division. We also are pleased that department faculty are making it possible for more patients to participate in genetic research with the Genetics Insight Project and the National Institute of Health's All of Us program. It is equally exciting to partner with the Diabetes Care Foundation of Nebraska through a \$5 million grant to develop diabetes care strategies for rural communities.

In terms of clinical care, we are pleased to have had the country's first novel chimeric antigen receptor (CAR)-T cell therapy for a lupus clinical trial patient cared for by our rheumatology and oncology and hematology team.

Our diabetes, endocrinology and metabolism division has helped propel our health care system to be a top performer in inpatient glycemic control metrics measured by the Society of Hospital Medicine (leading to Nebraska Medicine's selection by the CDC as a model site for developing national healthcare safety glycemic control modules). Our rheumatology division expanded to a new, state-of-the-art clinic area to help deliver care in Omaha and the oncology and hematology division has a new site in Kearney, Nebraska, impacting cancer care for our state. In the fall of 2026, our medical school will open a new branch in Kearney, further promoting the future of health care education in this region. In Omaha, our faculty are centrally involved with the Innovation Design Unit that will open in 2025 and allow novel strategies for the care of patients to be tested in real time.

Our commitment to educational excellence for all our learners is unwavering. Our fellowship programs continue to expand and two divisions — infectious diseases and oncology and hematology — have created new enhanced medical tracks (EMETs) for medical students. Internal Medicine's residency program is vibrant, and our Health Educators and Academic Leaders (HEAL) program offers specialized training in education for interested residents.

As our department has grown in number of faculty and staff, we have also grown our faculty development efforts through such entities as our EmpowHER program for women and our newly formed Office of Equity and Inclusive Excellence.

New faces have joined in leadership roles. We have welcomed Dr. Shane Tsai into the role of chief of cardiovascular medicine and Dr. Fedja Rochling as chief of gastroenterology and hepatology. We are grateful for the prior leadership of Dr. Dan Anderson and Dr. Peter Mannon in these roles, respectively.

Unfortunately, we have lost transformative faculty members in recent years: the late Dr. Diana Florescu of the infectious diseases division; Dr. Robert Wigton, a former division chief of general medicine with expertise in medical decision-making and a passion for clinical education; and former department chair Dr. Michael Sorrell. We deeply miss these incredible individuals. Learn more about them in the "Honoring Our Legacies" section on page 34.

The 2023-24 academic year marked 120 years of Internal Medicine at UNMC. When it began, the department was a program staffed by community physicians for the purpose of meeting the educational needs of the local medical school. Now, it's a thriving academic department continuing to educate future physicians while providing novel therapies for patients and expanding biomedical research.

We strive to impact our community, state and world as we move forward. I am blessed to work with tremendous faculty, trainees and staff who are committed to making a difference.

Debra g Rombugu

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BY THE NUMBERS



340

FACULTY

280

-EMPLOYED NEBRASKA M

YED NEBRASKA MEDICINE-EMPLOYED STAFF

LARGEST

GRADUATE MEDICAL EDUCATION PROGRAM

ON UNMC CAMPUS

99 R

RESIDENTS IN
INTERNAL MEDICIN
& MED-PEDS

→ 93 FELLOWS

→ 16 FELLOWSHIP PROGRAMS

ENHANCED MEDICAL EDUCATION TRACKS (EMETs)

536 MEDICAL STUDENT CLERKSHIPS/ ROTATIONS COMPLETED

INTERNAL MEDICINE
THE HIGHEST REGARDED CLINICAL
CLERKSHIP AT UNMC



25+ INTERNAL MEDICINE CLINIC LOCATIONS



168,201
INPATIENT VISITS

193,903

802,635 WORK RELATIVE VALUE UNITS (RVUs)

\$151,953,118 PROFESSIONAL FEE CHARGES

\$29,779,734 EXTRAMURAL RESEARCH FUNDING

465
PUBLICATIONS



NEW ROLE DRAWS ON VICE CHAIR'S **BUSINESS EXPERTISE**

Shane Tsai, MD, vice chair for specialty clinic care for the UNMC Department of Internal Medicine, stepped into a brand-new position in 2021 with a goal of supporting the various clinical specialties within the department.



SHANE TSAI, MD

"I've spent a lot of time getting to know the specialties to advise the department chair on the accomplishments and needs of the divisions themselves."

As the chief of the UNMC Division of Cardiovascular Medicine, as well as a practicing cardiologist, Dr. Tsai was well-versed in the

opportunities and challenges of his own area. But since he took on the vice chair role, he has worked with other divisions to provide support for their efforts.

The business acquisitions and westward clinical expansion of the rheumatology division, for example, or the growth of the endoscopy practice within the gastroenterology and hepatology division, involve more than simply expanding care in the region, although that is the goal.

"Rheumatology had to integrate a whole private practice, including a brickand-mortar practice," he said. "They absorbed a couple of physician assistants and a physician that were in private practice. In GI, not only are they looking for increasing volumes but increasing space. They are continuing to expand their operations at Village Pointe and are looking for other opportunities on campus, as well."

Expansion of services is predicated on increased investment and resources anesthesia support space for procedures, equipment and other needs.

"My role is to help our divisions develop business models for these interventional practices, which are both high volume and high cost as well as high revenue generating," Dr. Tsai said. "How productive are these lines? How do we invest in them and make them stronger? That's a big part of what I've been doing."

Dr. Tsai talks about nurturing "the business intelligence" for the department of internal medicine.

"When it comes to clinical care, the physicians are great. The faculty are excellent at their jobs, and they have good leaders in their chiefs. When it comes to the clinical operations, those specialties will do very well."

But, he points out, in what are financially challenging times right now, clinics are dealing with narrow operating margins.

"There are health care systems out there that are continuing to lose money. People are struggling to provide care in the face of declining receipts. And physicians are trained to take care of patients, not necessarily to run a business, so to speak.

"I hope to be able to help those business operations within the divisions," said Dr. Tsai, who earned his MBA with the support of department chair Debra Romberger, MD. "Understanding opportunities, reducing costs, expansion, marketing opportunities. The idea is not just to cut costs everywhere. To understand how we create better business models, we need more data. That is an area I am hoping to improve over the next year or two."

Dr. Tsai became interested in business concepts while he was director of the electrophysiology laboratory, part of the interventional cath lab suite.

"Making the organization itself more efficient requires data and the understanding of how to utilize that information to make practices better," he said. "For example, maybe a new procedure comes along that not a lot of people do. And maybe it's an opportunity for us.

"So that's one of my top goals, data collection. The first year was about collecting data and understanding not just how processes work, but how the subspecialties themselves operate as a business. Looking ahead, how can we strategize to use this data to make the organization and physicians more efficient and productive?"

Another point of emphasis will be marketing opportunities.

"We want to highlight the things that people do within their specialties, whether it's unique to the department or some of the broader, excellent care. One of the remarkable things about our specialties in the department is that they handle a heavy workload that represents both the region and the state. Our specialties have the responsibility of improving health throughout the state. That can be a heavy lift and a heavy load. But one of the things we'd like to do is highlight that and bring attention to the importance of the work of our physicians."

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Research

VICE CHAIR HIGHLIGHTS PAST, FUTURE RESEARCH

Roslyn "Roz" Mannon, MD, vice chair of research in the UNMC Department of Internal Medicine, pointed to exciting research growth in the department over the past two years, highlighted by a center grant, an R37 and multiple other achievements.



ROSLYN MANNON, MD

"I am really optimistic," said Dr. Mannon, who works to expand the department's research efforts alongside associate vice chair Matt Lunning, DO. "When we went into the COVID pandemic, our research dollars increased substantially, and that was related to COVID research, no doubt. But post-

COVID, we are seeing many success stories in other research areas."

Among the highlights, she said, is a multidisciplinary group from the divisions of gastroenterology and hepatology and pulmonary, critical care and sleep medicine with multiple projects studying alcohol injury. The group, led by co-primary investigators Todd Wyatt, PhD, and Carol Casey, PhD, were awarded an \$8.8 million P50 grant by the National Institute on Alcohol Abuse and Alcoholism, creating the Alcohol Center of Research Nebraska (ACORN). This research award is a milestone in the department, she said, and the first center grant the department has received.

Drs. Wyatt and Casey's project will facilitate interdisciplinary research, one of the strengths of the department, Dr. Mannon said.

"This is a large grant that will increase the focus on alcohol research, which has been a strength of this institution," she said, noting that Kristina Bailey, MD, in pulmonary, critical care and sleep medicine also has a T25 grant to engage undergraduate students in alcohol research, also funded through NIAAA. "We have all these opportunities to study alcohol injury, so the grant has interest in prevention. It is also an opportunity to leverage our clinically successful hepatol-

ogy and liver transplant services."

Dr. Mannon also pointed to recent NIH grants, including an NCI R37 grant received by Vijaya Bhatt, MBBS, for his investigative work with elderly patients and how they respond in terms of their cerebral function to chemotherapy and their ability to maintain mental strength and physiologic strength. This is another cross-division grant, as Dr. Bhatt is working with the division of geriatrics, gerontology and palliative medicine, Dr. Mannon said.

Dr. Mannon also praised Nicole Shonka, MD (who was recognized at the 2023 UNMC Research Awards as a New Investigator) for her work in glioblastoma multiforme.

"There's been nothing that's really affected that cancer, it's a devastating disease. But she's been looking at some novel therapies, collaborating with Dr. Surinder Batra. This is her first major NIH independently funded research, so we're very proud."

Not to be overlooked, she said, UNMC

faculty also have a lengthy and robust success rate of Veterans Affairs funded awards over the past decade. She cited primary investigators at the VA in the divisions of rheumatology, nephrology, gastroenterology, pulmonary and critical care, and DEM.

When asked what research group is on the rise in the department, she pointed to the Frederick F. Paustian Inflammatory Bowel Disease Center.

"That's a group where I see a lot of synergy on the microbiome across campuses. I see a lot of positives."

In terms of publications, the department's output is up this year as well, following a lull after the pandemic, she said, although the faculty numbers have not expanded greatly in terms of research.

"Still, there's been a sense of advancement of projects and continued productivity. And we are seeing relatively junior and mid-level faculty getting funded for various research."

Dr. Mannon said her challenge moving forward is adding more mentors and research support, which can happen because of the department's latest successes.

"People like Dr. Shonka, who are getting funded, now have some bandwidth and can bring new trainees or faculty along and create these larger consortia and collaboratives. It's an optimistic time for the department."

Visit unmc.edu/intmed/research for more on our commitment to research.

BUILDING ON EDUCATION PROGRAM SUCCESS AND INNOVATION

Success doesn't just happen. And, Vice Chair for Education James O'Dell, MD, reminds himself and others of that whenever he talks about the accomplishments of the UNMC Department of Internal Medicine.



JAMES O'DELL, MD

"When you've done things as well as we have," he said, 'you tend to take that area for granted a little bit, but it continues to be remarkable."

The department's success is evident in its stellar AAMC survey results, successful fellowship matches, Golden Apple Awards

and record interest in internal medicine-based residency programs.

"It's important to not take it for granted, appreciate it for what it is and continue to lift up and validate the efforts that all our faculty make," he said. "How faculty spend their time teaching medical students when they're on their junior clerkship and senior electives is absolutely critical, and critical for the department and the health of our

residency program. The success we continue to have is both remarkable and not on autopilot."

Recent educational highlights include:

- + Validation of the department's cultural commitment to education as shown by student responses on the Medical School Graduation Questionnaire, a national questionnaire administered by the Association of American Medical Colleges. When Class of 2023 graduates were asked about their clerkship education, UNMC students rated the quality of the educational experience as good or excellent 99.1% of the time, which translates into a top one percentile ranking.
- A record number of fourth-year College of Medicine students - 43 total pursuing internal medicine-based residency programs - reportedly more than at any point in the past four

- + Internal medicine fellowships are consistently filled, enabling our best and brightest UNMC grads to stay home.
- + Golden Apple Awards given to Amy Cannella, MD, rheumatology and immunology, and Daniel Hershberger, MD, pulmonary, critical care and sleep medicine.
- + A 100% match of residents who applied into fellowship.

With the success of its educational programs — for medical students, residents and fellows — the department continues to be the predominant leader in providing physicians, internists and subspecialists statewide who provide excellent care to patients, he said.

"The role we play - be it in general medicine or subspecialties - in turning out people who practice in Omaha, Lincoln and, importantly, in many of our smaller communities is dominated by UNMC and our trainees. It's critical for the state."

The department's primary care program, which has existed since the early 1990s, continues to be a treasure and should not be taken for granted, Dr. O'Dell said.

"It keeps churning forward attracting excellent people and spinning off mostly primary care physicians — both family practice and medicine. The track record of that program in populating the state with excellent physicians is unrivaled."

Residency programs prioritize ongoing education

The UNMC Department of Internal Medicine's two residency programs — Internal Medicine (led by Program Director Tammy Wichman, MD) and Medicine-Pediata commitment to lifelong learning.

egorical program, both of which have a 100% match rate. Within the categorical program, there is a primary care track and a medicine-geriatric track.

Academic Leaders curriculum, the first competency-based interprofessional health educator track in the nation. With involvement from many UNMC colleges and

Visit unmc.edu/intmed/ education for more on our commitment to education.

RESOURCES HELP INTERNAL MEDICINE **FACULTY THRIVE PROFESSIONALLY**

In her role as vice chair of faculty development in the UNMC Department of Internal Medicine, Kristina Bailey, MD, supports faculty of all backgrounds in their educational, research, administrative and clinical efforts. Her office helps with onboarding and mentoring faculty, provides resources to enhance knowledge, skills and well-being, and shares a wide array of professional development opportunities.



KRISTINA BAILEY, MD

"Faculty development is a broad category that includes enhancing a faculty member's knowledge and skills in our education, patient care and research missions," Dr. Bailey said. "Working as an academic internal medicine physician or subspecialist is becoming more difficult as the system we work in becomes more complex."

Dr. Bailey, who took on the vice chair role in July 2022, considers the department's mentorship program vital in overcoming those complexities, remembering the personal impact a mentor had on her early career as a fellow and junior faculty member.

"I have been fortunate to have strong mentorship throughout my career at UNMC," she said. "I find it rewarding to help faculty members work through problems I have encountered in the past and to build programming that helps support their future career development."

Andrea Zimmer, MD, associate vice chair of faculty development, also emphasizes the importance of mentoring in academic medicine, saying it's crucial for career development and professional growth.

"Mentors offer valuable insights, helping mentees navigate challenges, build networks and achieve their goals," Dr. Zimmer said. "These relationships benefit both mentors and mentees by expanding networks, encouraging collaboration and innovation, and enhancing job satisfaction. Mentoring promotes a supportive culture and contributes to diversity and inclusion. Ultimately, it strengthens the academic and clinical community and mission."

Dr. Zimmer cites the Internal Medicine faculty's dedication to mentoring as a contributing factor to the department's growth and success.

"The guidance, support and wisdom imparted have been invaluable in shaping the future of our academic community," she said. "We deeply appreciate our faculty's ongoing commitment and the positive impact it has on both individuals and the institution as a whole."

To keep the momentum going, they plan to expand the mentoring program to mid-career faculty members.

"Mentoring during mid-career is crucial for continued professional development, helping individuals refine their skills, navigate complex career transitions and achieve long-term goals," Dr. Zimmer said. "It also fosters a supportive network that can provide valuable insights, encouragement and opportunities for advancement "

The duo has launched new faculty development initiatives, and the department now offers both in-person learning to foster belonging and hybrid presentations to accommodate busy faculty. Some new programming is a direct result of faculty input, Dr. Zimmer said. Upcoming topics include updates in billing and coding requirements, building and maintaining a curriculum vitae, and regulatory requirements for maintaining licensure and certification.

Dr. Bailey said she also is proud of a new group for women called EmpowHER, which was formed in response to the pandemic and disparities in well-being between male and female faculty.

"The group meets monthly for didactic sessions, such as panel discussions on confronting burnout or work-life integration, or for informal networking sessions," she said. "My hope is EmpowHER will help build community within the department, because we know it's essential to well-being in the workplace."

Dr. Bailey is optimistic about the future of the department and embraces her vice chair role, saying it improves teaching, research, patient care, individual well-being and overall excellence.

"Faculty development is integral to our success," she said. "The success of the department and the institution depends on the engagement and vitality of its

Visit unmc.edu/intmed/facultydevelopment for more on our commitment to our faculty.

VICE CHAIR EQUATES EXCELLENCE WITH INCLUSION

Jasmine Marcelin, MD, values inclusion, diversity, access and equity in health care education.



JASMINE MARCELIN, MD

Not only is each important — she also says they are necessary for success.

In fact, each value is woven into her personal mission statement: "To create and support a health care and graduate medical education environment that strives for excellence and values

inclusion, diversity, access and equity as not only important, but necessary, for excellence (success)."

As department vice chair for equity and inclusive excellence, Dr. Marcelin develops strategic initiatives and spaces that enable such values to thrive. "There is a wealth of data in business, health care, research and education that shows how diversity drives excellence," she said. "Everyone benefits when equity and inclusive excellence serve as the department's North Star."

Dr. Marcelin applauds the leadership of department chair Debra Romberger, MD, for her support to ensure the office's collective activities embody UNMC's institutional ITEACH values (innovation, teamwork, excellence, accountability, courage and healing).

As vice chair, Dr. Marcelin said her vision is to build an office that involves institutional, regional and national leadership and recognition amongst four pillars:

+ People — Consistent recruitment/ retention of faculty, staff and trainees from diverse backgrounds.

- + Culture Fostering a culture of inclusion and belonging where faculty, staff and trainees of all backgrounds can be successful when they bring their authentic selves to work.
- + Leadership and Education Providing reliable leadership training and education on justice, equity, diversity and inclusion (JEDI) principles.
- + Patient Care and Community Engagement — Ensuring patients receive equitable care and strengthening ties with the Omaha community through intentional bidirectional volunteering opportunities.

"This longitudinal vision will take time, person-power and departmental support to achieve," she said.

She's also working to transform the residency program to reflect the diverse nature of the patient population, while also creating an inclusive environment for residents to succeed. To that end, she said she is proud of the multifaceted engagement by the residency program in committing to the JEDI values including the Developing an Inclusive and Varied Environment for Residents, Students, and Educators (DIVERSE) Council and the JEDI with Jasmine curriculum.

"The goal was to provide a safe space for exploration and discussion of experiences that residents may have had or witnessed, where applying JEDI principles would have made a difference in the experience," she said.

The residency program recruited its most diverse class in 2024. Early curriculum

assessments suggest that residents value the JEDI curriculum and that it has had a positive impact on residents' knowledge, skills and attitudes toward inclusive excellence. The JEDI curriculum team (including several residents and faculty) has presented these results at several regional, national and international conferences and is working on a manu-

Dr. Marcelin said she welcomes the involvement of Chelsea Navarrette, MD. associate vice chair, and Natalie Crump, MBBS, and Jennifer Davis, MD, co-chairs of the inaugural Equity and Inclusion Council, and looks forward to building the council with representation from all divisions and professional identities. Rounding out the office for Equity and Inclusive Excellence are program manager Stacy Rafferty, who brings extensive community engagement expertise, and administrative associate Maureen Seymour-Karpf, who effectively communicates activities in the department.

"Each of these leaders bring experience, innovation and empathy to the work we are doing," she said.

Now that the office is fully assembled, Dr. Marcelin is excited about the coming year as the team develops the departmental inclusive excellence strategic plan and launches new initiatives to support faculty, staff and trainees.

• Visit unmc.edu/intmed/equity for more on our commitment to equity and inclusion.



Administration and Finance

GROWING TEAM PROVIDES BEHIND-THE-SCENES SUPPORT

Strong organizations have a solid framework of support.



ANGIE PEPPERS

In the UNMC Department of Internal Medicine, Angie Peppers heads up its support system.

As vice chair for administration and finance, Peppers works closely with Department Chair Debra Romberger, MD, and the two have been guiding the department since 2014.

"We want to provide a quality culture for staff and faculty, where everyone feels they belong and are respected," she said. "It's gratifying to create an environment of appreciation and to support one another in reaching our goals."

A resource for all in internal medicine, Peppers is accountable for financial services, human resources for faculty and staff, administration of department clinical activities in partnership with Nebraska Medicine, as well as supporting the well-being of faculty and staff.

She has witnessed significant progress during her tenure.

"The growth has been incredible," she said, noting the department has grown from 165 faculty members to 340 in the past decade. "It confirms the importance of our missions. The number of patients we can care for, the trainees we can educate and the research we can pursue has grown exponentially."

With the department's growth, they have bolstered research, hired additional administrative staff, and increased the number of departmental vice chairs with the addition of Vice Chairs of Faculty Development, Specialty Clinical Care, and Equity and Inclusive Excellence. All are designed to help overall operations.

"We're the behind-the-scenes personnel assisting faculty in order for them to focus on patient care and academic pursuits." she said.

Part of this assistance is administration of the department's budget, which is a challenge Peppers readily takes on each year.

"My team serves as financial stewards of the funds we've been allocated, and the annual budgeting process is a large part of our financial strategic plan," she said. "Our primary focus is to be resourceful in our use of available funds in order to meet the goals of the department." Peppers never loses sight of the overall goal: the department's success. And what does she consider the key to its success?

"The people," she said. "The team we've built and the relationships formed over the years which make the department feel like family."



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different medications" said Jill Poole, MD, chief of the division of allergy and immunology.

Part of an allergist's job is to determine if reactions are an allergy or are related to known side effects of a drug.

"If it's an allergy, the risk of life-threatening anaphylaxis exists," Dr. Poole said.

pandemic. Allergists used split dosing, a vaccinations to patients who had adverse

antihistamines or Tylenol, Dr. Poole said. Team published the safety and efficacy of

"There are some people who cannot tolerate certain vaccines," Dr. Poole said. "But for the vast majority of people, the vaccines are safe, and they can tolerate it well. There are cautious approaches that

The UNMC study found that "split dosing" the COVID vaccine is as effective as



conventional dosing in providing antibody responsiveness.

• Read more about the study in the Annals of Allergy, Asthma & Immunology.

RESEARCH STUDIES SHOW CHANGING POLLEN SEASONS

Allergy sufferers may notice itchy, watery eyes and runny noses sooner than they typically might.

That's because pollen seasons are changing, in part due to climate change, said Andrew Rorie, MD, associate professor in the division of allergy and immunology. Dr. Rorie serves on the National Allergy Bureau and is a national educator on aerobiology.

Pollen seasons start earlier and last longer, with more pollen and allergenic pollen, Dr. Rorie said.

Three years of data collected at UNMC has yet to show significant change but reports from across the globe indicate how climate change is impacting aerobiology, Dr. Rorie said. As he continues collecting data from UNMC's pollen station, it will be easier to start seeing trends.

Some trends can take several years, if not decades, to appear. A pollen counting station in Bellevue, Nebraska, has seen pollen season increase by nearly two weeks over a 15-year period, Dr. Rorie said.

Pollen season is lengthening primarily because of an increase in prolonged frost-free periods. Other studies have shown pollution as a factor, too. Higher carbon dioxide environments promote ragweed growth, Dr. Rorie said.

Some studies have shown an increase in health care visits as well as an increase in medication usage.

"It's useful to pay attention to pollen counts," Dr. Rorie said. "The seasons are changing."

EDUCATION FELLOWSHIP SUPPORTS WORKFORCE NEEDS

As the number of people impacted by asthma, eczema, food allergies and other ailments continues to grow, so does the need for more physicians trained in the specialty of allergy and immunology.

"Even though our specialty is small, the diseases we treat are very common," said Sara May, MD, associate professor in the division of asthma and immunology. "The patient demand is there."

In the summer of 2024, the division will graduate its first fellows from a program designed to help support the need across the state.

Indeed, the first fellow graduates are committed to staying in Nebraska, working at UNMC.

our specialty is small, the diseases we treat are very common. The patient demand is there.

SARA MAY, MD, ASSOCIATE PROFESSOR, DIVISION OF ALLERGY AND IMMUNOLOGY

Fellows in the two-year program get comprehensive training at three clinical sites (main campus, Village Pointe and Bellevue) within the Nebraska Medicine system as well as at clinics at the VA and Children's Nebraska.

The fellows are also actively engaged in research and academic pursuits with presentations at national meetings and published papers.

Fellows have designated time for faculty-directed didactic education as well as time for fellow-led learning.

"I'm not sure too many places can say 100% of their faculty love to teach. That sets us apart," Dr. May said.





SHANE F. TSAI, MD ASSOCIATE PROFESSOR, INTERNAL **MEDICINE** CHIEF, CARDIOVASCULAR MEDICINE

Dr. Tsai was appointed chief of the Division of Cardiovascular Medicine July 1, 2023. Daniel Anderson, MD, the previous division chief, is a UNMC clinician-investigator and associate professor of cardiovascular medicine.

CLINICAL **CLINIC BENEFITS HEART FAILURE PATIENTS**

For years, most heart failure patients were seen by non-heart failure providers.

But the Heart Failure Optimization Clinic has become a way to bridge that divide, said Adam Burdorf, DO, associate professor in the division.

Patients with heart failure can be referred to the clinic, located on the Nebraska Medical Center campus, and are seen regularly over three months to treat their conditions.

"It's kind of like this mini bootcamp where they learn about their disease," Dr. Burdorf said. "We try to get them on the best medical therapies we can so that hopefully they feel better, and their hearts get stronger."

Within the clinic, patients can receive specialty care as well as be treated based on genetic predispositions.

Some technology is used to treat patients, too. In addition to left ventricular assist devices, the clinics also use CardioMEMS to monitor patients from home. Cardiac Contractility Modulation therapy also can be used to improve heart function and decrease symptoms of heart failure.

Because of these technologies and the specialized care, only a small portion of patients with heart failure will go on to be listed for a transplant or receive advanced heart failure therapies, Dr. Burdorf said.

"Our heart failure clinic is successful because we have a lot of really good people that make up the clinic," Dr. Burdorf said. "They take pride in the work they do and it's a really well-oiled machine."



on to be listed for a transplant or receive advanced heart failure therapies.

ADAM BURDORF, DO, ASSOCIATE PROFESSOR, DIVISION OF CARDIOVASCULAR MEDICINE

EDUCATION FELLOWSHIP EVOLVES, EXPANDS

The division's fellowship program has seen significant growth as well as a recent redesign making its curriculum more comprehensive.

As the division — and the number of patients treated - grew, it was time to grow the fellowship program, said Adam Burdorf, DO, fellowship program director. The competitive program went from having four fellows per year to seven.

"We had a good opportunity to expand the fellowship in order to reach the future cardiologists in the region," Dr. Burdorf said. "We pride ourselves on training the future of cardiology."

Fellows accepted into the cardiovascular medicine fellowship program can acquire special skills in areas such as electrophysiology, interventional cardiology, failure.

In addition to making the curriculum more comprehensive, fellows are encouraged to pursue additional scholarly activities, including research opportunities.

Fellows drove the changes, asking for guidance in practicing medicine, teaching others and preparing for a career in cardiology, Dr. Burdorf said.

"There was an ask from the fellows to get a more diverse and well-rounded education beyond what they have to do technically or from a cardiac standpoint," Dr. Burdorf said. "We sat down and really said, 'What do we need to do to teach them to be not just cardiologists but good physicians in the

"They strive to make their fellows confident and help build and mold them into good leaders," said second-year general cardiology fellow Kali Gagnon, DO.

Stephen Roberts, DO, a first-year general cardiology fellow, agrees: 'They really want to invest in you, invest in your education and prioritize that."

RESEARCH **CLINIC. PROJECTS FURTHER GENETICS KNOWLEDGE**

The genetics clinic within the UNMC Division of Cardiovascular Medicine is designed to help patients — and their families — identify and manage disease.

with a dedicated genetics counselor and more patients being referred to the space, said Doug Stoller, MD, PhD, associate professor in the division of cardiovascular medicine and medical director of the cardiovascular genetics program.

Right now, work in the clinic focuses on genetic testing for specific disorders, Dr. Stoller said. But the future of genetics could see gene-specific medications as well as gene editing, he said.

Dr. Stoller and other university officials are part of two projects to help further genetics work on campus.

The first project, the Dilated Cardiomyopathy Consortium, is sponsored by the National Institutes of Health. It's made up of more than 20 universities that have patients with dilated cardiomyopathy and their families enrolled to undergo genetic testing and clinical screening.

The second is the Genetic Insights Project, a partnership between UNMC, Nebraska Medicine and Helix that will offer no-cost DNA sequencing of a handful of high impact cancer genes and cholesterol genes as part of a research consortium.



INITIATIVE TO HELP PATIENTS **BETTER MANAGE DIABETES**

With trends in diabetes across rural areas going the wrong direction, a multidisciplinary team from the UNMC Department of Internal Medicine is applying their expertise to help get the situation on track.

The challenge is significant. Despite new medications and new technologies that make it easier for patients to manage their diabetes, diabetes outcomes are getting worse in rural areas, said Leslie Eiland, MD, associate professor in the division of diabetes, endocrinology and metabolism.

To make the situation worse, Dr. Eiland said, health care systems face a projected shortage of endocrinologists - especially in rural areas - leaving the roster of specialists too short to reach all patients with Type 2 diabetes.

Now, thanks to a \$5 million grant from the Diabetes Care Foundation of cine have a goal to improve diabetes and diabetes-related outcomes throughout Nebraska. Applying many of the strategies UNMC and Nebraska Medicine have found successful in the urban health care center of Omaha, the internal medicine team is piloting dual outreach efforts in Hastings and Wayne, Nebraska.

The idea is to build a community of support that can fully address the health care challenge presented by diabetes. Beyond physicians, clinical staff, diabetes educators, public health workers, health coaches, social workers and pharmacists all play a role in helping patients, people at risk or those who are undiagnosed.

One of the unique approaches of the "Diabetes on Track" initiative is that instead of bringing a set plan to the community sites, the team spent time getting to know each clinic, its people and the communities, Dr. Eiland said. With those relationships established, the team offered options for assistance, ideas, roles and projects around diabetes care. The local clinics then selected areas

OLISM

of focus that were the most feasible and offered the biggest impact for patients.

"I hope that we empowered them and were able to remind them that no one knows their community and clinic population better than they do," Dr. Eiland said. "And when they are the ones making the decisions, our team believes that this will lead to better outcomes and more sustainable change."

Importantly, the effort also has involved helping the local health care systems establish value-based contracts with health insurers that offer funding when certain metrics are met to improve diabetes in the communities, said Stephen Mohring, MD, associate professor in the division of general internal medicine.

Under normal health insurance arrangements, a clinic could expect to see fewer visits – and thus less insurance revenue — if diabetic patients are getting healthier. But the value-based contracts offer a way to help fund positions such as health coaches, Dr. Mohring said.

If the pilots are successful – and the metrics are starting to show improvement – the hope is to replicate the models for diabetes care in other communities.

"When we started, it felt like a monumental task to try and really improve diabetes care in rural Nebraska," Dr. Mohring said. "I think there's still a lot of work to do but I do feel like we are on track in improving diabetes care, and I couldn't be happier about the partnership between internal medicine, primary care and endocrinology."

CLINICAL

TEAM LEADS WAY IN GLUCOSE CONTROL

Med center providers are making a difference in controlling inpatients' blood glucose readings — and the U.S. Centers for Disease Control and Prevention is taking note.

In recognizing that glucose control is a critical health issue for patients — even if it's not the reason that led to their hospitalization — UNMC and Nebraska Medicine have established a systematic process to

We are a role model nationally, no question. UNMC and Nebraska Medicine are doing something

ANDJELA DRINCIC, MD, PROFESSOR, DIVISION OF DIABETES, ENDOCRINOLOGY AND METABOLISM

measure, track and address blood sugar levels during hospital stays.

really extraordinary.

If blood sugar is better controlled, that single issue helps improve outcomes for a range of diseases and surgical cases, said Andjela Drincic, MD, professor in the UNMC Division of Diabetes, Endocrinology and Metabolism and medical director of the Diabetes and Endocrinology Center.

With that issue better managed, patients and their infections will heal better, and they will leave the hospital sooner.

"Its impact is huge," Dr. Drincic said.

When benchmarked against some 120 other hospitals nationally, Nebraska Medicine consistently shows as a top performer in inpatient glycemic metrics measured by the Society of Hospital Medicine.

As a result of those efforts, the CDC has selected Nebraska Medicine as a model site to help in developing a national health care safety glycemic control and hypoglycemia module. Dr. Drincic has been chosen as a national advisory expert on the issue and increasingly has been called upon for her expertise.

She credits the team of providers at the med center, who are taking on a complex, multifaceted health issue for hundreds of patients who present with already complicated cases. By one measure, as many as half of hospital inpatients have diabetes or elevated blood glucose that need to be addressed.

"We are a role model nationally, no question," Dr. Drincic said. "UNMC and Nebraska Medicine are doing something really extraordinary."

EDUCATION FELLOWSHIP PROGRAM GROWS TO HELP MEET DEMAND

With a continuing shortage of endocrinologists, the division is growing its fellowship to help meet the demand.

Currently, the fellowship — a two-year program that follows three years of residency in internal medicine — has six fellows.

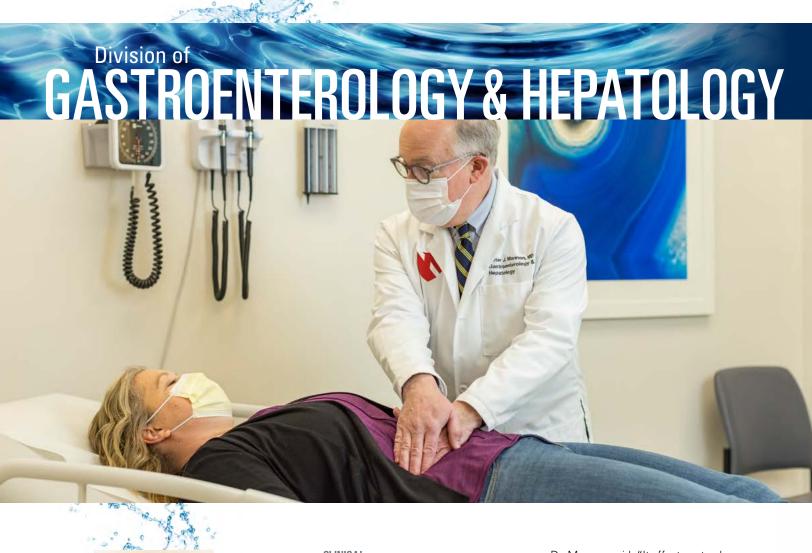
In 2024, the program plans to match four fellows to start in July, said Amy Neumeister, assistant professor in the division and fellowship program director. Then, the division has approval to add an additional fellow the year after. By July 2025, the plan is to be at eight endocrinology fellows.

Dr. Neumeister has witnessed the growth in endocrinology at UNMC. She did her fellowship in endocrinology in 2003-05 when the program grew to two fellows a year.

Since then, the division's faculty has tripled in size, and Nebraska Medicine's inpatient census has increased greatly.

"We have the patient numbers, and we have available faculty to train more fellows," Dr. Neumeister said.

Not only that, she said the med center has "the capacity to provide a really excellent education to our fellows" — with a nationally known inpatient diabetes care program, a great thyroid cancer and endocrine tumor subdivision and a strong program for advanced diabetes and general endocrine care.



CLINICAL IBD CENTER EXCEEDS GOALS IN PATIENT SATISFACTION

The Frederick F. Paustian Inflammatory Bowel Disease (IBD) Center at UNMC has been busy since it opened in August 2022.

"We've exceeded all of our goals in patient satisfaction, and we've gone beyond our 'stretch' goals," said Peter Mannon, MD, director of the center. "It's a tribute to not just what we have built, but the staff and providers who work here, too."

Those people are soon to include two newly recruited faculty, Jacques Izard, PhD, a frequent collaborator when he was at the University of Nebraska-Lincoln, and Rana Al-Sadi, PhD, formerly of Penn State University. The center's staff also has expanded to include a full-time IBD dietician and a clinical psychologist who specializes in psycho-gastro mental health.

"There is a high prevalence of anxiety and depression that occurs often with IBD,"

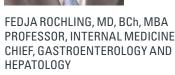
Dr. Mannon said. "It affects not only a patient's quality of life, but it can affect the success of our medical therapy if it goes unaddressed."

The center, created with the goal of becoming of one of the top centers in the country for treatment and research of inflammatory bowel disease, also boasts a specialty pharmacist and insurance specialist.

"We've never had something as comprehensive in one place," Dr. Mannon said. "It takes a lot of stress off patients to have a team of professionals that can handle these issues, so the patients don't have to navigate this on their own."

Colorectal surgeons now have their own dedicated surgical exam room in the center. And the center's and surgeon's hours are simultaneous to enhance opportunities for conferences and consultations.

Dr. Mannon said the center had its genesis in a 2015 gift from Omaha philanthropists Ruth and Bill Scott. Their funds help the center recruit and set up



Dr. Rochling was appointed chief of the Division of Gastroenterology and Hepatology Feb. 1, 2024. Peter Mannon, MD, the previous division chief, is director of the Frederick F. Paustian

Inflammatory Bowel Disease Center and a professor of gastroenterology and hepatology.



PETER MANNON, MD, PROFESSOR, DIVISION OF GASTROENTEROLOGY AND HEPATOLOGY

independent investigators, he said. In addition to investigator-initiated research, the center also engages in sponsored studies on new drugs. More than 300 patients have volunteered to take part in a biorepository and patient data base, which also fuels basic science.

The center is named for Frederick Paustian, MD, the first specialty-trained gastroenterologist in Nebraska, who helped build the medical center's transplant program.

Progress has been swift in the center's first year. But it must be, Dr. Mannon said: "While working for patients with IBD, stricken in the prime of their lives, we don't have time to waste."

EDUCATION FELLOWSHIP RECEIVES RAVE REVIEWS

UNMC's gastroenterology fellowship continues to grow in popularity.

In the fall of 2023, the program's recruitment committee reviewed 450 applications with a goal of bringing 50 in for interviews. Those 50 are then winnowed down through a holistic review to five who matriculate to UNMC as fellows. Interest in the UNMC program exceeds the national trend, which saw 1,039 applicants vie for 657 fellowship positions across the U.S. in 2022.

"GI is a popular subspecialty because of the variety it offers," said Kathryn Hutchins, MD, fellowship program director. "This is a



procedure-based field. UNMC is a desired training program for several reasons. It is well known that UNMC-Nebraska Medicine has a strong liver transplant program, that fellows perform a high volume of procedures during training and there is broad GI/hepatology clinical exposure at UNMC."

Dr. Hutchins noted fellows also gain experience with inflammatory bowel disease (IBD), motility, hepatology, pancreaticobiliary, transplant and general GI.

Second-year fellow Alex Praus, MD, is enjoying his fellowship. "My experience has been nothing short of incredible in many ways," he said. "The staff that help guide our training are welcoming, humble and approachable. They are all eager to pass along their wisdom, knowledge and technique to mold us into the next generation of GI physicians."

The holistic admissions process, led by a committee of eight faculty members who review and interview from July through November, has resulted in a strong class, Dr. Praus said.

"We each bring unique backgrounds and cultures into this program to help keep it vibrant," he said. "We pick each other up when days are hard and support each other as a cohesive family."

RESEARCH NIH GRANT FURTHER ELEVATES CENTER

Alcohol researchers have been working at UNMC for at least 50 years, earning national and international recognition for their work in alcohol and end-organ injury. But an \$8.8 million National Institutes of Health P50 grant for the Alcohol Center of Research-Nebraska (ACORN) brings new national recognition, expansion of resources and momentum. ACORN was established in 2023. The NIH grant was awarded through the National Institute on Alcohol Abuse and Alcoholism.

Work from four ACORN projects and the Biospecimen Core already has been presented at national and international meetings. More than 15 invited talks, posters and symposia organization acknowledge NIAAA support through the center's six months of funding.

The ACORN grant will fund research projects related to alcohol tissue injury, with the goal of creating a collective environment for emerging and established alcohol researchers to collaborate. Carol Casey, PhD, professor of gastroenterology and hepatology, is director and principal investigator. Todd Wyatt, PhD, professor of pulmonary, critical care and sleep medicine, is co-director.

"The overarching hypothesis of the center is that alcohol misuse negatively impacts our responses to the exposome and does so through alcohol interaction on a multi-organ level," Dr. Casey said. "Successful research from this group will work toward making relevant discoveries that impact peoples' lives through advancing public health."





CHIEF, GENERAL INTERNAL MEDICINE

CLINICAL PRIMARY CARE PROVIDER RELATIONSHIP CRITICAL TO **BETTER HEALTH**

Stephen Mohring, MD, knows that a solid relationship with your primary care provider leads to better health.

That's why the division is focused on improving patient care through population health, or value-based care, which is measured by quality (largely focused on preventive care and chronic disease control), cost and patient experience.

"Primary care is a large driver of our success in value-base care arrangements at the Accountable Care Organization level, which is the Nebraska Health Network," said Dr. Mohring, associate professor of general internal medicine.

Having a close primary care-provider relationship, he said, and a preventive relationship when well, is critically important for comprehensive health care.

In terms of quality care measures, Nebraska Medicine's primary care clinics focus on delivering annual wellness visits to all Medicare Part B beneficiaries. For fiscal year 2023, Nebraska Medicine led the Nebraska Health Network on two quality measures, reporting:

- + 79.3% of Medicare Part B beneficiaries who see a Nebraska Medicine general internal medicine provider had an annual wellness visit in the past year.
- + 81.7% recapture rate for chronic conditions, also known as medical risk adjustment.

"In both cases, we exceeded our stretch goals," Dr. Mohring said. "Patients who receive wellness visits — across the board - have better quality outcomes in terms of cancer screenings, fall risk screening. chronic disease care and more. Further, while medical risk adjustment may not seem like a measure of quality, it sets an appropriate cost target for the complex patients we serve."

The medical center's primary care physicians also lead the way in breast and

colorectal cancer screenings and diabetes control. Cancer screenings, lab work, immunizations, annual wellness visits and medical risk adjustment are tools to ensure all-around success – for both the patient and the health system.

"We try and keep the number of quality measures reasonable to not overwhelm our physicians but strive to provide high-quality, cost-efficient care," he said.

The clinical work is reflective of a national shift in how health care is delivered and paid for — a move from fee-for-service or volume-based care, where the more you do the more you get paid, to value-based care, where physicians are rewarded for providing high-quality efficient care.

"We still have a foot in both canoes," Dr. Mohring said. "But to be successful with value-based contracts is to have a solid population health strategy that really begins with primary care. Primary care tries to do the majority of that work to deliver higher quality care at a lower cost."

EDUCATION CULTURE BOOSTS INTEREST IN INTERNAL MEDICINE CAREERS

Student interest in general internal medicine and medicine/pediatrics is at an all-time high. The UNMC College of Medicine Class of 2024 has a record number of fourth-year medical students — 43 total — pursuing internal medicine-based residency programs. More than at any point in the past four decades.

"Interest is way above average," said Nathan Anderson, MD, assistant professor and clerkship director. "It speaks to the quality of education we provide during the clerkship and on wards with residents and faculty, and the commitment and passion students see in faculty when they rotate through our subspecialities."

An internal medicine career is appealing, he said, because students can pursue a procedural specialty such as GI, critical care or cardiology, or more cognitive specialties

Our students see how much of an impact our department has on our patients' lives and that's made it appealing for them to pursue similar career paths.

NATHAN ANDERSON, MD, ASSISTANT PROFESSOR, DIVISION OF GENERAL INTERNAL MEDICINE

such as infectious diseases, geriatrics and general internal medicine. Students who are interested in both can explore areas such as nephrology or rheumatology. The breadth of choices and options is appealing.

"Our students see how much of an impact our department has on our patients' lives and that's made it appealing for them to pursue similar career paths," said Dr. Anderson

Student responses on the Medical School Graduation Questionnaire, a national questionnaire administered by the Association of American Medical Colleges validate the program's success. When Class of 2023 graduates were asked about their clerkship education, UNMC students rated the quality of the educational experience as good or excellent 99.1% of the time, with a 90th percentile national average of 97.7%.

"There is a cultural commitment to education here," Dr. Anderson said. "And, that culture has a top-down effect. When our faculty are invested in fellow education, then our fellows are invested in resident education and residents are invested in student education."

Their responses to 'being prepared for residency' also topped the charts.

"We can't do much better than this," Dr.
Anderson said. "It's a team effort and testament to the dedication of all our faculty."

RESEARCHER STUDIES DISEASE RISK FACTORS

An assistant professor in the division, Amber Brown Keebler, MD, is the first GIM recipient to receive the UNMC Internal Medicine Scientist Development Award. The annual award supports promising faculty making the transition from fellowship/post-doctoral training or as early faculty into a career as an independent researcher.

"I hope we can help pave the way for more independent research," she said.

Dr. Brown Keebler's research is focused on a population with psoriatic disease. "I'm interested in this group because they have a lot of cardiometabolic risk factors," she said, notably depression and obesity.

Dr. Brown Keebler is looking at the association between obesity and depression with patient-reported severity outcomes. She is also looking at an association between obesity and depression with FACIT-COST, a patient-reported outcome measure that describes the financial toxicity and psychological distress of health care costs.

"That's never been looked at in this population," she said. "It's primarily used in oncology for patients undergoing cancer treatments but we're learning we can apply it to other groups of people that have high health care costs of chronic disease."

She hopes the study provides answers that enable primary care physicians, such as herself, to better assess when to intervene early and prevent poor patient outcomes.

"There's an idea that for some groups of people depression might be a cardiovascular risk factor, just like diabetes might be," she said. "We're not just going to approach their psoriatic disease but also address their obesity, their prediabetes and depression. If we don't address all of those, we're not going to make as big of an impact on their life."

GERIATRICS, GERONTOLOGY & PALLIATI **EDUCATION** woven into their training. After that, they serve as a geriatric fellow for one MED-GERI RESIDENCY LEADS year, with time allotted to pursue their TO REWARDING CAREERS interests. Internal Medicine's integrated medicine Two doctors have grown through the and geriatrics residency is growing phyresidency program and joined the division sicians interested in practicing geriatrics as faculty: - and keeping some of them right here at + Nora Kovar, MD, was the first. She's

UNMC.

When the integrated medicine and geriatrics residency track first started in 2018, it was one of three in the field across the entire country, said Elizabeth Harlow, MD, program director for the combined track and the geriatrics fellowship and associate professor in the division.

Without a specific residency program, some students who might have an interest in geriatric medicine found other fields within internal medicine, Dr. Harlow said. But with the program in place those students have a place to go to develop their interest.

The combined track program allows students to serve as internal medicine residents for three years with geriatrics

- a former med-geri resident who is an assistant professor in the division. She graduated from the UNMC College of Medicine in 2018 before joining the residency program.
- + Maureen Choman, MD, also is a former med-geri resident and current assistant professor in the division. She joined the residency program in 2019 and is now on faculty.

Dr. Harlow said the program benefits its residents by being flexible and focused on the resident's specific interests. For Dr. Kovar, that involved working with OneWorld Community Health Centers and its underserved population of older patients. Because she had allotted time during her training to develop

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In caring for older people, geriatricians have a huge impact on improving their patients' lives. It's an incredibly rewarding choice. Our patient population is delightful.

ELIZABETH HARLOW, MD, ASSOCIATE PROFESSOR, DIVISION OF GERIATRICS, GERONTOLOGY AND PALLIATIVE MEDICINE

relationships, Dr. Kovar was able to obtain a Geriatric Academic Career Award — a competitive four-year grant — as a first-year faculty, allowing her to pursue her passion.

Geriatrics is a field that attracts a special type of doctor, Dr. Harlow said, one who practices the kind of personal care of complex patients that medical students often envision in their careers. In caring for older people, geriatricians have a huge impact on improving their patients' lives.

"It's an incredibly rewarding choice," Dr. Harlow said. "Our patient population is delightful."

CLINICAL PALLIATIVE CARE SERVICES EXPANDING

The division is expanding its palliative care providers, allowing greater access to the services that support patients with serious or chronic illnesses.

"Our division has historically focused on providing palliative services in the hospital, but this only focused on the later stages of a patient's illness," said Al Fisher, MD, PhD, professor and chief of the division. "Our next step is to introduce these services earlier by building up our outpatient team."

Three new providers have joined the outpatient palliative care team, including two at the Fred & Pamela Buffett Cancer Center. The new providers are:

- + Yamna Channa, MBBS, assistant professor of psychiatry. With a background primarily in psychiatry, Dr. Channa brings a unique skillset that helps bridge the specialties in palliative care and psychiatry services, said Melissa Teply, MD, part of the palliative care team and an associate professor in the division.
- + Ariana Bauer, MD, assistant professor of geriatrics, gerontology and palliative medicine. With her background in primary care, she brings a wealth of experience caring for people with complex medical conditions into the work of seeing people with cancer, Dr. Teply said.
- Becca Jones, a certified physician assistant and advanced practice provider in the division. Jones has a background working in palliative care at Nebraska Medicine, Dr. Teply said.

The new providers offer greater access for Nebraska Medicine's cancer services at Village Pointe, said Dr. Teply, noting the division has a goal of opening a palliative care clinic presence at Nebraska Medicine's Brentwood location.

Palliative care is an additional layer of support as patients face the physical and mental distress that comes with having a serious illness, Dr. Teply said, highlighting two palliative care mantras: We want to help people live as long as possible and feel as well as possible and we try to get patients the right care at the right time.

"Palliative care teams are part of the broader health care team when patients are undergoing treatment with a high certainty of benefit," Dr. Teply said. "The team will support patients and families as their symptoms change over the course of the illness and, when the care is indicated, we also can help with the transition to hospice or comfort-focused measures."

RESEARCH

ON-CAMPUS CENTER ELEVATES EXERCISE-FOCUSED RESEARCH

Engage Wellness is one of the few fitness centers on a medical school campus that helps bring access to exercise closer to the clinic. Engage also developed virtual exercise programming during the COVID-19 pandemic to allow members to stay active when getting to the gym was difficult.

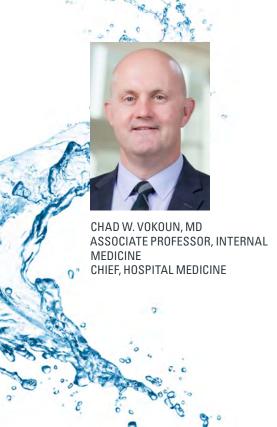
"Engage Wellness is a great asset for researchers at UNMC who want to study the role of exercise to help individuals with a wide range of chronic diseases," said Al Fisher, MD, PhD, division chief. "It would be hard for an individual scientist to get access to the space and range of equipment available."

Windy Alonso, PhD, is one UNMC researcher taking advantage of the fitness center and its virtual exercise programming. She has a new five-year, \$3.85 million grant from the National Heart, Lung and Blood Institute of the National Institutes of Health to study an intervention designed to promote exercise as a way for individuals with heart failure with a preserved ejection fraction to be healthier and have a better quality of life.

The Heart Failure Exercise and Resistance Training Camp Connect research team crosses the UNMC Colleges of Nursing, Allied Health Professions, Public Health and College of Medicine. In addition to Dr. Alonso, Dr. Fisher and Libby Guenther, a wellness coach and exercise specialist with Engage, are among those on the research team.

"Exercise can be a very powerful therapy for adults with heart failure," said Dr.
Alonso, assistant professor of nursing. "Our intervention helps adults with heart failure overcome their initial fears of exercise with their illness and helps them develop strategies to maintain exercise over time. Our tools are especially important for adults with heart failure with preserved ejection fraction, as they are mostly excluded from traditional cardiac rehabilitation programs."





CLINICAL REIMAGINING THE FUTURE **OF HEALTH CARE**

At UNMC and Nebraska Medicine, leaders are creating an active patient care environment for designing, testing and validating new models of care.

The Innovation Design Unit, which will begin seeing patients in 2025, also will help test and validate innovative technology and facility design.

Located on level six of University Tower at Nebraska Medical Center (previous 6 West UT), the unit is likely to include 18 beds. 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.

"Our reputation mounted on top of a facility that's intentionally built for education and patient care is exciting," said Chad Vokoun, MD, division chief of hospital

medicine for UNMC. "The Innovation Design Unit incorporates our best thinking around technology, flexibility, innovation and patient care."

Quiet and calm are a focus too, he said.

"The word 'Zen' came out of some of our design work," Dr. Vokoun said. "It got kind of a chuckle at first, but it's a heck of a goal if you think about it, for our patients, their families and our providers."

To date, more than 850 med center participants - clinicians, leaders, researchers and faculty - have been involved in the planning phase to outline the impact of the unit; what the experience might be like for patients, loved ones, care teams and learners; and how technology and innovation would be incorporated and explored.

Since then, progress has been made in the physical design phase, as the med center partners with architects, designers and experts from across the community. In the end, Dr. Vokoun said, patients, pro-

Together we are building, testing and reimagining the future of health care.

CHAD VOKOUN, MD, ASSOCIATE PROFESSOR, INTERNAL MEDICINE

viders and student learners will benefit from the forward-thinking model.

"Together we are building, testing and reimagining the future of health care," he said.

EDUCATION M4 PREP COURSE SERVES AS BRIDGE TO RESIDENCY

Medical students master many facts, undergo endless tests and even snag sought-after residencies.

They graduate in May. In July, they are doctors. It's an intimidating transition for even the most impressive of students.

"Nothing prepares you for everyone calling you 'doctor' all of a sudden," said Jill Zabih, MD, assistant professor and residency preparatory course co-director.

Or when you make those first few decisions that affect real patients' real lives.

To ease the move, in 2020, the UNMC College of Medicine launched its Residency Preparatory Course, which is the last class graduating medical students take before becoming resident physicians.

"The residency prep course is our shining crown," said Rae Witt, MD, assistant professor and career specialty track co-director for internal medicine.

The course caps 13 months of the College of Medicine's career preparation phase, which provides students individualized training in their career specialty choice.

"Students are intrinsically motivated to practice and learn," Dr. Zabih said.

Drs. Zabih and Witt meet frequently and individually with students who choose to go into internal medicine to get to know the students personally and professionally, help them plan their schedule and residency application strategy, and oversee their early education and professional development within the field of internal medicine.

"Mentoring is a unique and important part of our preparation," Dr. Witt said.

Then, during the residency prep course, students spend the first two weeks as a class doing content relevant to all residency specialties such as procedure simulation, professional development, delivering difficult news, rapid response team training and organizational skills. This content is a mix of simulation with manikins, standardized patients and interactive didactics.

The second two weeks are weighted heavily on the specialties they are going into, with a focus on the urgency of the moment and gravity of caring for actual patients.

"It's one thing to see it on rotations," Dr. Zabih said. "It's another thing to do it. It's a lot harder when you are in charge."

RESEARCH

ADVANCING DIABETES RESEARCH TO IMPROVE PATIENT CARE

Jana Wardian, PhD, has a passion for diabetes research.

So much so, that she brought together two divisions to collaborate on projects that will improve patients' lives.

In October 2022, and with Dr. Wardian's encouragement, the UNMC Division of Hospital Medicine created a partnership

with the UNMC Division of Diabetes, Endocrinology and Metabolism to collaborate on hospital projects that will advance diabetes research and, ultimately, patient care.

"There's no shortage of project ideas," Dr. Wardian said.

Already, the divisions have collaborated on three projects with plans for 20 more. "As far as I'm aware, this is the first time two different divisions within internal medicine have come together to pursue a shared research agenda," said Jason Shiffermiller, MD, associate professor in the division of hospital medicine and co-leader of the collaboration along with Andjela Drincic, MD, professor in DEM. "We can use the strengths of both divisions to address what we think is a gap in knowledge in the inpatient hyperglycemia and diabetes management realm."

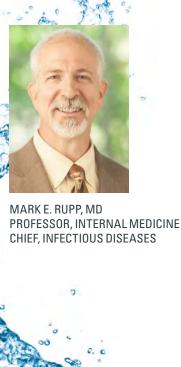
"At home, patients often use continuous glucose monitors and have minute-to-minute knowledge of what their blood sugar is doing and then, with subcutaneous insulin pumps, continually make adjustments," Dr. Shiffermiller said. "Compared to how we do it in the hospital, it's not nearly that sophisticated. We're not operating at the forefront of what's possible in managing glucose."

As a result, one of the projects is to bring inpatient glucose management practices into the 21st century. Earlier this year, the team launched a plan to improve the discharge process for patients with diabetes. They also are working to improve diabetic ketoacidosis treatment.

The goal, Dr. Wardian said, is improved patient care. "That's the marker as to whether this collaboration is successful."

Dr. Shiffermiller agreed: "We can improve the care of patients at Nebraska Medicine and set new standards for what is considered good care nationally."





CLINICAL SPECIALTY CARE CENTER RECOGNIZED FOR INNOVATION

Nada Fadul, MD, became medical director of the Specialty Care Center for HIV patients in the summer of 2019. Then, a few months later, the COVID-19 pandemic hit.

On that day in March 2020 when it seemed everything in the world changed all at once, patients were scared. Appointments were canceled.

To say the clinic and the team behind it innovated quickly is no understatement.

"We had to switch literally overnight to telehealth," Dr. Fadul said.

They did this to protect the health of their patients, and the collective health of the community. The clinic developed algorithms to determine which patients needed to physically come in — while undergoing strict safety protocols — and which could be served through telehealth. The team's initial abstract summation of its findings earned the Program Committee Choice Award at the 2020 IDWeek, the annual national gathering of several infectious diseases medical societies.

At IDWeek 2022, the Specialty Care Center team's efforts were a contributing factor to Dr. Fadul being honored with the Clinical Practice Innovation Award from the Infectious Diseases Society of America. Sara Bares, MD, associate professor of infectious diseases, who conducts research through the center, received the HIV Medicine Association Research Award at the event.

The Specialty Care Center, which serves about 1,200 patients (more than half the people living with HIV in the state of Nebraska), also innovated in vaccination.

The clinic achieved a higher rate of COVID-19 vaccination for its patients than the state by identifying its most at-risk patients, then following up through focused outreach. Appointments were made specifically for vaccinations. The

Specialty Care Center) has been a tremendous asset to us.

NADA FADUL, MD, MEDICAL DIRECTOR, SPECIALTY CARE CENTER, PROFESSOR, INFECTIOUS DISEASE

center later did the same to vaccinate for Mpox.

The pivot to telehealth also paid dividends in mental health. The clinic's success in delivering services through telehealth led to a grant from AIDS United, which led to the hiring of a dedicated behavioral health therapist. Patients now can access mental health services in-person or through telehealth.

"This has been a tremendous asset to us," said Dr. Fadul, who also serves as professor of infectious diseases and assistant dean of diversity, equity and inclusion education.

The Specialty Care Center serves a large geographic area of Nebraska, thanks in part to collaborative partnerships with Mary Lanning Healthcare, in Hastings, Nebraska, and soon, the Nebraska Medicine clinic in Grand Island, Nebraska.

Patients can come in for in-person services, while also accessing experts in Omaha through telehealth.

The center also participated in a landmark study on the role of statin therapy in the prevention of cardiovascular disease. Dr. Bares, who led the study at UNMC, said the center was part of "the largest-ever randomized trial on HIV," with nearly 8,000 participants.

Other recent clinical innovations in the division include expansion of telehealth offerings, development of a specialized clinic for patients with infections due to non-tuberculous mycobacteria, providing clinical services at the Village Pointe location, opti-

mization of the Travel Medicine Clinic, and expansion of services offered in Antimicrobial Stewardship to hospitals in rural areas of lowa and Nebraska.

EDUCATION NEW TRACK ALLOWS FOR IN-DEPTH STUDY

The Division of Infectious Diseases recently launched a new Enhanced Medical Education Track in biopreparedness and biocontainment. EMETs offer medical students an opportunity to perform an in-depth study of an interdisciplinary field of medicine that enhances the required curriculum without extending the time needed to graduate from medical school.

The new EMET allows up to two students per year to take advantage of UNMC and Nebraska Medicine's world-renowned expertise and infrastructure in these respective areas.

"Our medical center has very unique assets in both biopreparedness, through the Global Center for Health Security, and biocontainment, with the Nebraska Biocontainment Unit and National Quarantine Unit, as well as a dedicated group of internationally recognized experts in the field," said the EMET's director, Angela Hewlett, MD, professor of infectious diseases and the Nebraska Biocontainment Unit's medical director

In addition to access to groundbreaking expertise and hands-on opportunities, the students also will receive one-on-one mentoring and career advising from some of the world's experts in biopreparedness and biocontainment.

David Brett-Major, MD, James Lawler, MD, and Lt. Col. Elizabeth Schnaubelt, MD, who hold numerous appointments at the med center, assist Dr. Hewlett as co-directors.

Interested students apply to an enhanced track during the first semester of their M1 year. Accepted participants then complete the designated track activities, such as

seminars, preceptorships or research, throughout their M1, M2 and M3 years. During their M4 year, students produce a capstone project.

In addition, the infectious diseases division has long offered a successful and popular EMET in HIV Medicine. In more recent years, the ID Fellowship Program has greatly expanded and, thanks to philanthropic support, now includes specialized training in a third year fellowship track.

RESEARCH DIVISION CONTINUES RESEARCHER'S LEGACY, WORK

The research and legacy of the late Diana Florescu, MD, lives on in the UNMC Division of Infectious Diseases.

Named UNMC's 2022 Scientist Laureate, Dr. Florescu died in January 2023 after an illness

A professor in the division of infectious diseases, Dr. Florescu developed and led an internationally recognized clinical research program, becoming one of UNMC's leading COVID-19 researchers.

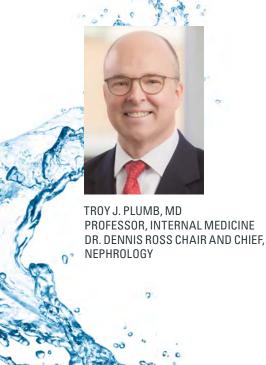
"Dr. Florescu was a stellar example of a dedicated and selfless clinical investigator," said Mark Rupp, MD, professor and chief of infectious diseases. "During the COVID-19 pandemic, while battling her own illness, Dr. Florescu and her team performed breakthrough research and assisted in the development of vaccines and therapeutics."

She also was a well-respected and internationally recognized leader in research in the area of infectious diseases associated with solid organ transplantation.

"She contributed to our ability to recognize, treat, and prevent these complications," Dr. Rupp said, adding that her work contributed to national and international guidelines on organ transplantation.

Continued in "Honoring Our Legacies" on p. 34





CLINICAL **GROWING THE INTERVENTIONAL NEPHROLOGY FIELD**

Chronic kidney disease is a complex issue affecting more than one in seven U.S. adults. Of those, more than 550,000 people receive dialysis, according to the National Kidney Foundation.

This lifesaving method, created by a Dutch physician in 1943, is the only way to cleanse the body of toxins and extra fluid that builds up when the kidneys quit working properly. Otherwise, those patients are at risk of high blood pressure, heart disease, stroke and death.

"The harsh reality is that when the kidneys have failed, you need dialysis, otherwise you are going to die," said Marius Florescu, MD, professor in the division of nephrology.

Dr. Florescu is one of two physicians at UNMC and Nebraska Medicine, who provide interventional nephrology, a complex subspecialty of nephrology that focuses on everything from ultrasound-guided kidney biopsy to the insertion of peritoneal dialysis catheters to tunneled dialysis catheters as vascular access points for patients undergoing hemodialysis.

"Interventional nephrology was established in the early 1980s and came out of the necessity of creating and maintaining that access," he said.

Since 2009, Dr. Florescu has provided this service and trained others. Now training three fellows per year, he said "interventional nephrology is not for everyone; there is a different level of stress and skill required."

In 2022, he was joined by assistant professor Jacob Hettenbaugh, MD, whose interest in procedural skills heightened when he had the opportunity to train with Dr. Florescu during his fellowship. With Dr. Hettenbaugh, the division is now able to perform insertion of peritoneal dialysis catheters.

The demand for dialysis is growing, Dr. Florescu said, as the patient population is growing older and sicker. "There aren't enough kidneys, but we can provide dialvsis."

EDUCATION

NEPHROLOGY AWARDED TOP TEACHING AWARDS BY IM RESIDENTS

Internal medicine resident Debra Wekesa, MD, started her nephrology rotation like it was just another rotation to tackle.

"I didn't come into it wanting to do nephrology, but I fell in love with it," she said.

Dr. Wekesa credits the faculty for making her experiences meaningful. "The rotation is structured so well," she said. Other trainers agreed and voted the nephrology division the best teaching division for 2023.

In addition, IM residents voted to award Felipe Naranjo, MD, with the 2023 Sir William Osler Teaching Award and Kathleen Borghoff, MD, with the Best Fellow Educator Award.

"It's gratifying to see the division provide strong education and valuable experiences," said Division Chief Troy Plumb, MD, noting it's the fifth time in six years that a nephrology fellow received the best fellow educator award.

"It's a big honor to be recognized like this," said Dr. Borghoff, assistant professor in the division of nephrology. "While part of my job is to take care of patients, I also want to make sure residents have a good experience and don't get overloaded, so they can really learn from their experience."

That means squeezing in down time while rounding with residents and fellows to talk with them, provide tips and take questions. After all, she said, rotations only last three weeks at a time so every moment counts.

Dr. Naranjo agrees, saying: "I make sure I include them in every discussion that we have and that their ideas and comments are part of the decisions we make."

As for the teaching award, Dr. Naranjo said he was humbled when he found out he was selected to receive it. "I was very surprised; I did not expect this at all."

Since coming to UNMC in 2020, Dr. Naranjo has worked with three classes of internal medicine residents, as well as with physician assistant students, family medicine residents and anesthesia residents.

"These learners are at different stages in their careers and their level of understanding varies so I try to explain things clearly, so everyone understands," he said.

Dr. Wekesa appreciates the enthusiasm the faculty bring to their teaching roles. "Even if it's their 50 millionth lecture, they are just as excited to help you," she said.

And, nephrology is complicated, she said, recalling a tricky clinical experience she had before her first rotation, in which she reached out to five nephrology faculty with a question. "Every single person responded. I'll never forget that."

RESEARCH

STUDY TO DETERMINE DRUG'S EFFICACY FOR TRANSPLANT PATIENTS

We've all seen the commercials on TV. Actors singing and dancing to catchy tunes about lowering their A1C (a key indicator of Type 2 diabetes) with medications like Jardiance or Farxiga.

After all, she said, rotations only last three weeks at a time so every moment counts.

Jardiance or Farxiga.

While part of my job is to take care of patients,
I also want to make sure residents have a good
experience and don't get overloaded, so they can

KATHLEEN BORGHOFF, MD, ASSISTANT PROFESSOR, DIVISION OF NEPHROLOGY

really learn from their experience.

Along with the desired improved glucose control, these Empaglifozins also are proven to reduce the risk of cardiovascular disease and deter kidney failure in these patients.

Which led Roslyn Mannon, MD, professor in the division of nephrology, to wonder how effective these medications would be in people who have had kidney transplants and Type 2 diabetes. So, she applied for a \$2.5 million merit award from the Veterans Administration to study the effects of Empaglifozin in transplant recipients with Type 2 diabetes.

"These patients are challenging to manage, as they have a lot of comorbidities and are at particular risk for cardiovascular disease," Dr. Mannon said.

Patients must deal with the immediate risk of rejection, infections, high blood pressure, chronic kidney disease and cardiovascular complications, as well as long-term concerns. Plus, about 30 percent of kidney transplant patients may develop new cases of diabetes after transplant, she said.

The SEKTR research project will study the Safety and Efficacy of Empagliflozin in Kidney Transplant Recipients. Cyrus Desouza, MBBS, chief of the division of diabetes, endocrinology and metabolism, is co-investigator on the study.

"No one has studied this class of drug in kidney transplant recipients rigorously and the leading cause of death in this population is cardiovascular mortality," Dr. Mannon said, noting there is a fair degree of concern using the "'flozins," as they have a side effect profile that is complicated in the management of someone on immunosuppressions and prone to infections.

Dr. Mannon will monitor patients enrolled in her study for two years to see how well the drugs lower blood pressure and control diabetes, in the hopes the medications also provide kidney function and cardiovascular protection. By establishing safety and efficacy of use of this kind of drug therapy for transplant patients with Type 2 diabetes, Dr. Mannon hopes it will help build confidence among patients who might be afraid to take them.



In the past 10 years, that method of throwing darts at a dartboard and hoping for a bull's-eye has changed.

Today, targeted, individualized therapy for specific hematologic blood cancers has evolved with the introduction of chimeric antigen receptor (CAR)-T cell therapies and led to an explosion of other immune effector cellular therapies. CAR-T uses an individual's own T-cells and reengineers those cells to target the cancer.

"Where other therapies have failed, these cells can eradicate those cancers," said Matt Lunning, DO, associate professor in the division of oncology and hematology.

"More and more therapies are coming out using immune effector cell technology, including targeting solid tumor cancers," said Sarah Snook, a resource nurse with Cellular Therapy Support Services (CTSS).

The CTSS was created in 2023 to assist oncology and non-oncology research teams unfamiliar with immune effector cell therapies and the logistics of the process. That's where Snook comes in. Her expertise in standing up cellular therapy trials and teams with a unique understanding of the process is critical in helping move this therapy into other areas that would benefit from it, such as solid tumor, infectious diseases and, most recently, autoimmune diseases.

JULIE VOSE, MD, MBA

PROFESSOR

PROFESSOR, INTERNAL MEDICINE

CHIEF, ONCOLOGY AND HEMATOLOGY NEUMANN M. AND MILDRED E. HARRIS Snook helps to align the process, from the first contact with researchers and research sponsors offering novel clinical trials with an emerging therapy to connecting investigators, research staff and patients with those opportunities.

The CTSS was created to help researchers and physicians navigate the complexity of the process and provide the best possible outcomes for their patients, Snook said.

"The CTSS is, to my knowledge, the first in the country to raise up this unique service for our research enterprise," Dr. Lunning said. "We learned the resources necessary to support these technologies from 10 years of bringing cellular therapies to our patients, whether it is first in human studies to curative CAR-T with an FDA approved product. This allows UNMC and Nebraska Medicine to continue to be on the national stage for this kind of therapy and the CTSS has been integral in this expansion."

CLINICAL ONCOLOGY PARTNERSHIP BENEFITS PATIENTS

As director of the Nebraska Medicine Heartland Hematology Oncology Clinic, Cynthia Lewis, MD, spends every minute between 8 a.m. and 4:30 p.m. seeing patients in the clinic before embarking on rounds at two local hospitals well into the evening.

"I see everything here," said Dr. Lewis, who graduated from UNMC in 1997.

Her clinic has been a single standing oncology practice for the past 24 years in Kearney, Nebraska. That all changed in the summer of 2020 when Dr. Lewis and several other practitioners in the area, along with several local hospital officials, started a conversation with Nebraska Medicine about becoming part of the oncology family at UNMC.

"It came at just the right time for my practice, as I was considering building a new facility so we could offer more ancillary services."

Now, she said, they have access to those

Where other therapies have failed, these (CAR-T) cells can eradicate those cancers.

MATT LUNNING, DO, ASSOCIATE PROFESSOR, DIVISION OF ONCOLOGY AND HEMATOLOGY

services, along with remote access to electronic medical records, and the continuity of care is much smoother for patients and providers.

If a patient needs a complex procedure, they go to Omaha but then come closer to home for their chemotherapy or radiation treatments. "It really saves two to three hours of travel time for patients who live in surrounding communities like Cozad, North Platte or Gothenburg," she said.

Eventually, Dr. Lewis said she hopes the partnership with UNMC and Nebraska Medicine leads to a regional oncology hub so patients can receive all their care in central Nebraska without ever having to travel.

Right now, her goal is to bring a third oncologist on board, as well as offer more opportunities for oncology and hematology fellows and residents to rotate through her practice. "UNMC gave me my career and I want to give back to not just the university but the people who live in central Nebraska."

EDUCATION PROGRAMS GROW TO MATCH INTEREST

In the fall of 2023, the division introduced a new combined Enhanced Medical Education Track for students interested in oncology and hematology.

"We hope to inspire more medical students with this four-year track," said Bhavina Sharma, MD, assistant professor in the division of oncology and hematology.

Dr. Sharma said the new oncology-hematology EMET will have the usual clinical and research components, as well as e-learning modules in their first year. The online modules, she said, will give students an introduction to the vernacular, technology

and therapies they will encounter.

"Cancer care is complex and varied," Dr. Sharma said. "We want students to be familiar with the basics, so they won't feel intimidated and will have an understanding of what the medical oncologist is talking about when they first step into the clinic."

At the start of their second year, students will have the opportunity to rotate with medical oncology and hematology physicians in outpatient and inpatient settings to learn in varied clinical environments. The students will also be invited to all the didactics the program has to offer, including lectures, research conferences and journal clubs

"This will allow them to be exposed to the inner workings of the oncology world, the kind of discussions we have, as well as hear about the latest research, or the latest topic being debated," she said.

The fellowship program also is expanding, said Alissa Marr, MD, program director and associate professor in the division. "We have nine fellows currently but will increase to 12 over the next few years in our three-year combined fellowship which provides dual certifications in medical oncology and hematology."

Dr. Marr also credited faculty with making the fellowship an outstanding program, saying, "our fellows spend a lot of time in clinic working alongside our faculty who make sure each fellow gets the educational experiences they need."





CLINICAL **ADVANCEMENTS IN** INTERVENTIONAL PULMONOLOGY

The number of interventional pulmonology procedures at Nebraska Medicine has nearly doubled over the past couple of years, in part because of a procedural suite dedicated to IP. In addition to the dedicated space, Brian Boer, MD, PhD, and Keenan Taylor, MD, have added several new procedures to assist patients.

"As the volume grew, it was evident that we needed dedicated space, especially when we recruited Dr. Taylor as the first UNMC physician with formal IP fellowship training and board certification," said Dr. Boer, associate professor in the division. "The space and equipment have worked out well, ultimately allowing us to serve more patients with complex pulmonary disease."

IP is a relatively new field that uses endoscopy and other tools to diagnose and treat conditions of the lung and chest. This means performing various procedures to diagnose, treat and manage lung nodules, cancer, airway disorders, pleural disease, COPD, emphysema, asthma and other chest maladies. The techniques used by IP providers are evolving and include rigid and flexible bronchoscopy, stenting, balloon dilation, tumor debulking, cryotherapy, tracheostomy placement, endobronchial valve placement and other interventions.

These techniques combined with technological advances and procedural skill have improved patient outcomes and mitigated risks. For instance, Dr. Boer said, historically standard lung nodule biopsy usually meant CT-guided transthoracic biopsy resulting in high rates of collapsed lung and unplanned hospital admissions. Using current technology, physicians now can use the patient's CT scan as a virtual roadmap and precisely "drive" a catheter to the periphery of the lung with robotic assistance to acquire diagnostic tissue samples.

MEDICINE

Our field is on the cusp of some terrific advancements that will be of great benefit to our patients.

BRIAN BOER, MD, PHD, ASSOCIATE PROFESSOR, DIVISION OF PULMONARY, CRITICAL CARE AND SLEEP MEDICINE

They also can perform "staging" or sampling of lymph nodes to assess the extent of potential cancer spread all in the same procedure. Previously, this required two separate procedures.

"This has a very low complication rate for patients, and it allows us to get to places in the lung where we weren't able to before, to get better samples," Dr. Boer said. "It's really a win-win for patients."

Another win for some advanced emphysema patients is the bronchoscopic lung volume reduction procedure, in which a valve is precisely placed into target regions so that air cannot flow into the lung's most damaged areas. This allows the good areas of the lung to function better, and the diaphragm to function more normally.

On the horizon, Dr. Boer said, are non-operative treatments for early-stage lung cancer. Not yet FDA approved, the treatment would involve precise, localized radiofrequency or thermal ablation.

"Our field is on the cusp of some terrific advancements that will be of great benefit to our patients," Dr. Boer said.

Designation elevates med center program

The Pulmonary Fibrosis Foundation provided its PFF Care Center designation to the Nebraska Medicine interstitial lung disease program.

To earn the designation, the program must have a full range of facilities and a multidisciplinary team that work collaboratively to diagnose and manage the care of people living with pulmonary fibrosis. Physicians and nurses at the center participate in educational events for patients, caregivers and the health care community, in addition to donating their time to regular patient support groups.

The PFF Care Center Network currently includes 81 centers across the country. The program at UNMC/Nebraska Medicine is one of two designated sites in Nebraska.

RESEARCH

ALCOHOL RESEARCH CENTER EARNS DEPARTMENT'S FIRST P50 GRANT

Professors Carol Casey, PhD, and Todd Wyatt, PhD, have been awarded an \$8.8 million P50 grant for the Alcohol Center of Research-Nebraska. The National Institutes of Health (NIH) awards P50 grants to support integrated, multidisciplinary research teams, and this is the first such award bestowed to the UNMC Department of Internal Medicine.

The ACORN grant will fund research projects related to alcohol tissue injury, with the goal of creating a collective environment for emerging and established alcohol researchers to collaborate. Dr. Casey will serve as director of this five-year grant. Dr. Wyatt is co-director and a principal investigator on one of the R01 grants that are part of ACORN. The other principal investigators are Saras Viswanathan, PhD, Kusum Kharbanda, PhD, and Natalia Osna, MD, PhD.

"While alcohol researchers have been at UNMC for the past 50 years, this P50 award brings not only new expansion resources to our campus, but also national recognition of our program," Dr. Wyatt said.

The central scientific theme for ACORN is the alcohol exposome, which encompasses the effect of alcohol on all the collective environmental exposures across a person's lifetime. "The overarching hypothesis of the center is that alcohol misuse negatively impacts our responses to the exposome and does so through alcohol interaction on a multi-organ level," Dr. Wyatt said. "We hope to make relevant discoveries that impact peoples' lives through advancing public health."

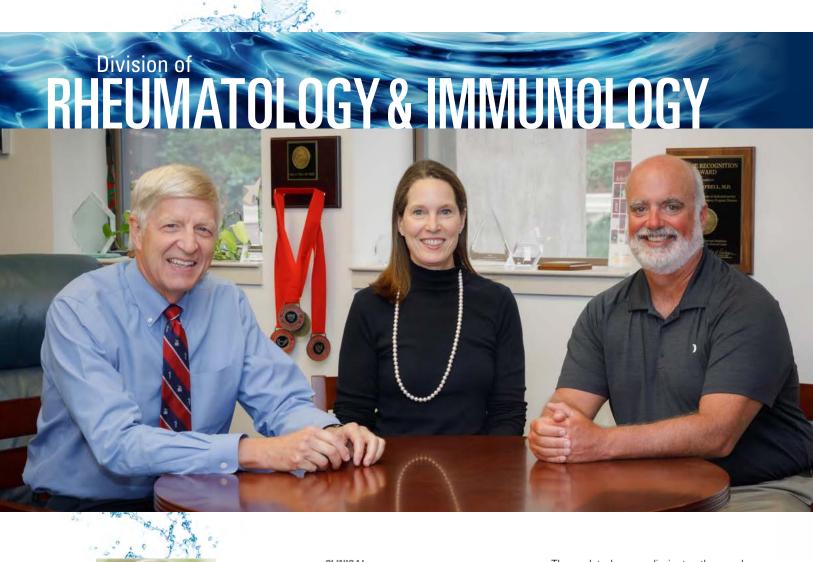
EDUCATION FELLOWSHIP PROGRAM HIGHLIGHTS

Each year, the division enrolls five new fellows into the three-year pulmonary and critical care fellowship, which trains its graduates in advanced bronchoscopy, compassionate outpatient care and multidisciplinary critical care.

Craig Piquette, MD, PCC fellowship director, said recent graduates have gone on to lung transplant and interventional pulmonology. Dr. Piquette, a professor of pulmonary, critical care and sleep medicine, also noted that the PCC fellows have a 100%, first-time taker board pass rate over the past six years.

Said Chaaban, MD, associate professor in the division, will take over as the PCC fellowship's program director at the start of the 2024 – 25 academic year.

The division also offers a one-year sleep fellowship, with up to two fellows per year and John Harrington, MD, associate professor, is the fellowship director.





CLINICAL PATIENTS, LEARNERS BENEFIT FROM **EXPANDED CLINICAL FOOTPRINT**

The Westroads Clinic is a one-stop shop for rheumatology. Patients can see their rheumatologist, have labs drawn, get X-rays or infusion treatments, all without leaving the building.

And the clinic, which was acquired in 2022, adds to the division's portfolio of clinics. Growing the rheumatology clinic footprint has expanded opportunities for patient care as well as education and research, said James O'Dell, MD, chief of the division.

"By incorporating this in the right way, it is a win-win," Dr. O'Dell said.

The Westroads Clinic — formerly known as Westroads Rheumatology Associates - was acquired by Nebraska Medicine following the 2021 death of William Palmer, MD, the first board-certified rheumatologist in Omaha.

The updated space eliminates the need for patients to travel to multiple locations for their care, thereby improving the patient experience as all the services are under one roof, said Ellie Stull, nurse manager. She helped to oversee the transition at the Westroads Clinic, along with the staff growth and the complete remodel of the physical space.

Transition of the Westroads Clinic is complete and the Village Pointe Clinic — the division's second rheumatology clinic — got a remodel in early 2024. Rheumatology services also are offered on the UNMC campus.

Expansion, which has included adding providers at clinic sites, comes at a time when there's a national shortage of rheumatologists but a definite need of those services, Dr. O'Dell said.

New clinic locations and more providers also offers the opportunity for more education and research. Trainees get the valuable experience of practicing in different environments and treating varying patient populations, Dr. O'Dell said.

"Our No. 1 goal is to be the very best division for education and research," he said. "And at the same time, provide the very highest quality clinical care."

RESEARCH MENTORING ELEVATES DIVISION'S RESEARCH

Ted Mikuls, MD, was only the fourth physician in the division of rheumatology in 2002 when he came to UNMC.

Since then, the division has seen an upward trajectory that boasts 15 rheumatologists, two faculty with PhD degrees, one with a dual MD/PhD degree, and a nationally renowned, sought-after fellowship program that's been in existence for 18 years.

It's largely due to the outstanding mentors who continue to nurture the next generation of providers, said Dr. Mikuls, who is the Stokes-Shackleford Professor of Rheumatology. He credits such individuals as James O'Dell, MD, Lynell Klassen, MD, and Gerald Moore, MD, "who mentored me and are passionate about helping others reach their goals," Dr. Mikuls said.

Positive mentoring experiences continuing to the next generation of physicians is exemplified in the career of Bryant England, MD, PhD, an associate professor in the division, who credits the mentorship of Dr. Mikuls for helping him realize his goals.

"Our mentors share their resources, professional connections, experiences and skills, which are essential to new fellows who are just getting a foothold in the field," Dr. England said.

When Dr. England started his two-year fellowship in 2015, Dr. Mikuls encouraged his interests and helped him become ingrained in a productive research network and navigate funding opportunities.

"Without any of that I wouldn't be in academic medicine, and I certainly wouldn't be doing research," Dr. England said.

Now, Dr. England is paying it forward by mentoring others, calling it "the best part of what I get to do."

And the division continues to grow because of it

Research doesn't happen in isolation, Dr. England said. "It takes a critical mass of people doing work and when more people start mentoring younger people, they in turn are more successful, more productive and produce more papers."

EDUCATION DIVISION SUCCESS ANCHORED IN ACADEMIA

It's no accident that the division of rheumatology and immunology is an academic powerhouse. It's been their goal — and culture — from day one.

Launched in 1982, UNMC's division is relatively young when compared to national peers. And yet, it is known for its national footprint.

"The UNMC rheumatology program has been on a meteoric rise during the past two decades," said David Wofsy, MD, past president of the American College of Rheumatology and professor of medicine and microbiology/immunology at the University of California San Francisco. "No other rheumatology program in the country matches the growth in outstanding faculty and superb trainees that has characterized the UNMC program during this period of time."

That's a result of visionary leaders and high expectations.

James O'Dell, MD, who has chaired the division for the past 33 years, said, "We're proud of our clinical care and care to patients, but we have always aspired to be known for our academic accomplishments. It's been our vision from day one."

And national leaders have taken note:

"The Nebraska Rheumatology Program has expanded under Dr. O'Dell's leadership to become one of the premier programs in the country," said V. Michael Holers, MD, Smyth Professor of Rheumatology at the University of Colorado School of Medicine and president of the Rheumatology Research Foundation.

A plethora of teaching awards support the group's vision, and rheumatology rotations consistently rate at the top of all internal medicine rotations, Dr. O'Dell said. Faculty members engage in roles beyond the classroom, serving as leaders in the UNMC College of Medicine, as well as at regional and national levels, including with the American College of Rheumatology.

"Our vision as an academic division is broad," Dr. O'Dell said. "And it is absolutely critical in terms of obtaining grant funding and building a network, so reviewers know who you are and fellows know about UNMC and want to come here for training."

No other rheumatology program in the country matches the growth in outstanding faculty and superb trainees that has characterized the UNMC program during this period of time.

DAVID WOFSY, MD, PAST PRESIDENT, AMERICAN COLLEGE OF RHEUMATOLOGY AND PROFESSOR, MEDICINE AND MICROBIOLOGY/IMMUNOLOGY, UNIVERSITY OF CALIFORNIA SAN FRANCISCO

CHIEF RESIDENTS & GRADUATES

GRADUATES, CLASS OF 2022

Rees O. Adomako, DO, MHS

Cardiology Fellowship, University of Nebraska Medical Center, Omaha, Nebraska

Elizabeth Blowers, MD, PhD

Hematology/Oncology Fellowship, University of North Carolina, Chapel Hill, North Carolina

Noel Bruner, MD

Ambulatory Chief Resident, University of Nebraska Medical Center, Omaha, Nebraska

Domenic P. DiSanti, DO

Endocrinology Fellowship, University of North Carolina, Chapel Hill, North Carolina

Joshua Slogr Edgar, MD

General Internist, Methodist Physicians Clinic/Methodist Fremont Health, Fremont, Nebraska

Alyssa Rose Emodi, MD

Geriatric Fellowship, University of Nebraska Medical Center, Omaha, Nebraska

James P. Fagerland, MD

VA Chief Resident, University of Nebraska Medical Center, Omaha, Nebraska

John P. Gallagher, MD

Quality Improvement and Patient Safety Chief Resident, University of Nebraska Medical Center, Omaha, Nehraska

Noah Benjamin Hammond, MD

Hospitalist, Inpatient Physician Associates, Bryan Health, Lincoln, Nebraska

Dustin Herring, MD

Hospitalist, Saint Luke's Hospitalist Group, Kansas City,

Donghyun Kim, MD

Hematology/Oncology Fellowship, University of Iowa Hospitals and Clinics, Iowa City, Iowa

Jessica L. Larson, MD

Gastroenterology Fellowship, University of Nebraska Medical Center, Omaha, Nebraska

Hannah Luksa, MD

Hospitalist, Nebraska Medicine/University of Nebraska Medical Center, Omaha, Nebraska

Rosalyn I. Marar, MD

Hematology/Oncology Fellowship, Mayo Clinic, Rochester, Minnesota

Scott M. Mawer, DO

Cardiology Fellowship, University of Nebraska Medical Center, Omaha, Nebraska

Sean M. McMillan, MD

Hospitalist, Nebraska Methodist Hospital, Omaha, Nebraska

Sean McNitt, DO

Hospitalist, Minnesota Health Fairview Lakes Medical Center, Wyoming, Minnesota

Amal Musa, MD

Hospitalist, Nebraska Medicine/University of Nebraska Medical Center, Omaha, Nebraska

Bridgette Genevieve O'Neill, MD

Hospitalist, Nebraska Medicine/University of Nebraska Medical Center, Omaha, Nebraska

Matthew W. Schmitt, MD

Primary Care Physician, Nebraska Medicine Village Pointe Health Center, Omaha, Nebraska

Alex Sorrick, MD

UNMC Chief Resident, University of Nebraska Medical Center, Omaha, Nebraska

Cristina J. Torres, MD

Infectious Diseases Fellowship, University of Nebraska Medical Center, Omaha, Nebraska

Morgan C. Walgren, MD

Hospitalist, Nebraska Medicine/University of Nebraska Medical Center, Omaha, Nebraska

Austin Craig Wilson, MD

Geriatric Hospitalist Fellowship - University of Nebraska Medical Center, Omaha, Nebraska

MED-PEDS

Micah Adalia Fischer, DO

Hybrid Internal Medicine-Pediatrics Hospitalist and Primary Care, Schneck Medical Center and Schneck Internal Medicine Clinic, Seymour, Indiana

Raquel Lamarche, MD

Critical Care Medicine Fellowship, Cleveland Clinic, Cleveland, OH

Courtney Lynne Plemel, MD

Hospitalist and Medicine-Pediatrics Primary Care Physician, Alomere Health, Alexandria, Minnesota

Spencer M. Robinson, MD

Pediatric Cardiology Fellowship, University of Nebraska Medica Center/Children's Nebraska, Omaha, Nebraska

CHIEF RESIDENTS 2022-2023



Amy C. Dreessen, MD Hospitalist/Primary Care Physician, Nebraska Medicine/University of Nebraska Medical Center, Omaha, Nebraska



Jonathan Henry Hall, MD Nephrology Fellowship, University of Nebraska Medical Center, Omaha, Nebraska



Clayton Kane Oakley, DO Hematology/Oncology Fellowship, University of Nebraska Medical Center, Omaha, Nebraska



Evan Byron Symons, DO Pediatric Hospital Medicine Fellowship, University of Nebraska Medical Center, Omaha, Nebraska

GRADUATES, CLASS OF 2023

Humza Ahmed, MD Hospitalist, Atlanta, GA

Brett Andrew Begley, MD VA Chief Resident, University of Nebraska Medical Center, Omaha, Nebraska

Elliot D. Blue, MD Hospitalist, Avera Health, Sioux Falls, South Dakota

Michael Choi, MD Hospitalist, Presbyterian St. Luke's Hospital, Denver, Colorado

Jacob Martin Haiar, MD Hospitalist, Bryan Health, Lincoln, Nebraska

Katelyn Renee Haiar, MD Geriatric Fellow/Hospitalist Hybrid, University of Nebraska Medical Center, Omaha, Nebraska

Conor James Houlihan, MD Hematology/Oncology Fellowship, University of Iowa, Iowa City, Iowa

Grayson Powell Huben, MD Hospitalist, Nebraska Medicine/University of Nebraska Medical Center, Omaha, Nebraska

Brendan Joseph Hurley, MD Cardiology Fellowship, University of Nebraska Medical Center, Omaha, Nebraska

Ellen Marie Janssen, MD Outpatient Internist, Methodist Fremont Health, Fremont, Nebraska

Asmini KC, MD Hospitalist, Emory University Hospital Midtown, Atlanta, Georgia Blake Aaron Kooima, DO Cardiology Fellowship, University of Nebraska Medical Center, Omaha, Nebraska

Hannah Leigh Alta Kruger, MD Nephrology Fellowship, University of Nebraska Medical Center, Omaha, Nebraska

Mitchell Lee Milanuk, MD, MS Hospitalist, Methodist Hospital, Omaha, Nebraska

Pavan K. Myneni, MD Hospitalist, CHI St. Elizabeth, Lincoln, Nebraska

Chloe Genevieve Peyton, MD Rheumatology Fellowship, University of Nebraska Medical Center, Omaha, Nebraska

Samuel Roy Robertson, MD, MS Cardiology Fellowship, University of Nebraska Medical Center, Omaha, Nebraska

Remy Grace Marie Sass, MD UNMC Chief Resident, University of Nebraska Medical Center, Omaha, Nebraska

Claire Chandler Schmitz, MD Hospitalist, University of Colorado, Denver, Colorado

Steven P. Schutte, MD Outpatient Primary Care, Boys Town National Research Hospital, Omaha, Nebraska

Jared D. Vanlandingham, MD Hospitalist, Nebraska Medicine/University of Nebraska Medical Center, Omaha, Nebraska

Joshua Logan Warner, MD Gastroenterology Fellowship, University of Nebraska Medical Center, Omaha, Nebraska Debra Asusa Sabina Wekesa, MD Scholarship & Patient Safety Chief Resident, University of Nebraska Medical Center, Omaha, Nebraska

Nicholas Clayton Yeutter, MD Ambulatory Chief Resident, University of Nebraska Medical Center, Omaha, Nebraska

MED-PEDS

Snehal Gajiwala, MD Cardiology Fellowship, University of Nebraska Medical Center, Omaha, Nebraska

Natasha D. Gallett, MD Hybrid Internal Medicine & Pediatrics , Great Falls Clinic and Hospital, Great Falls, Montana

Nehemiah S. Gebreegzabeher, MD Hospitalist, Methodist Hospital, Omaha, Nebraska

James Marlin McCluskey III, MD Infectious Disease Fellowship, Northwestern University, Chicago, Illinois

CHIEF RESIDENTS 2023-2024



Alex Sorrick, MD Hospitalist/Primary Care Physician, Nebraska Medicine/University of Nebraska Medical Center, Omaha, Nebraska



James P. Fagerland, MD Rheumatology Fellowship, University of Nebraska Medical Center, Omaha. Nebraska



Noel Bruner, MD Hospitalist/Primary Care Physician, Nebraska Medicine/University of Nebraska Medical Center, Omaha, Nebraska



John P. Gallagher, MD Gastroenterology Fellowship, University of Nebraska Medical Center, Omaha, Nebraska

OUR LEGACIES

REMEMBERING DIANA FLORESCU, MD

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Now, her team strives to carry on her research.

"She had high standards for everyone all of the time," said senior research coordinator Natasha Wilson. "So, we try to maintain that, and when we encounter difficult

situations, we sit down and often say, 'What would Diana do?""

"She always knew what to do," said Natalia Castillo Almeida, MD, assistant professor of infectious diseases and the medical director of the solid organ transplant clinical research team. "She had this unparalleled passion, and it was reflected in everything that she did."

Dr. Florescu cared deeply about research, her team said, because she genuinely cared about her patients and wanted to offer them the latest developments. And her patients

"They loved her," Dr. Castillo said. "She was candid with patients, and they greatly appreciated that. She would go the extra mile, and that's what motivated her to go into research."

In her memory, the team continues to work on more than a dozen protocols including trials on the treatment and prevention of infection by respiratory viruses, drug-resistant herpes virus, and adeno virus. These trials could bring up to \$3 million into the medical center, Dr. Rupp said.

The infectious diseases division has established the Diana Florescu Education and Clinical Research Excellence fund to preserve her memory and further her work.

"Dr. Diana Florescu was a cherished member of the ID Division," Dr. Rupp said. "She was an astute clinician, a gifted researcher, and a generous teacher and mentor. She continues to be very much missed. I am pleased that her legacy fund has been established and will be used to further clinical research and education in the division — things to which Diana was so very dedicated."

Contributions to the Diana Florescu **Education and Clinical Research** Legacy Fund may be made through the University of Nebraska Foundation, P.O. Box 82555, Lincoln, NE 68501-2555 or online at nufoundation.org/memorialgift.

REMEMBERING ROBERT WIGTON, MD



Robert Wigton, MD, longtime leader at UNMC, died Aug. 22, 2022.

A man of many interests and talents, he leaves a mark on UNMC both in his role in improving medical student education and as a curator of UNMC history.

Dr. Wigton devoted more than 40 years to improving the educational experience for medical students at UNMC through innovations in medical decision-making. His process enabled his students to make their own choices on cases and learn from their mistakes in a supportive environment. Dr.

Wigton's work in the classroom and studies in medical decision-making led him to publish more than 160 scientific papers and book chapters on the topic, in addition to studies on computer-based teaching programs.

He was a Renaissance man with many interests beyond medicine. Dr. Wigton was a jazz musician, playing the saxophone and clarinet while attending Central High School. He attended Harvard College and received a BA in English literature. While in medical school, Dr. Wigton taught a cinematography course at Creighton University and his filmmaking skills led him to assist UNMC faculty in creating instructional material. His interest in science fiction dovetailed into his professional interest in computers and decision-making.

Dr. Wigton also was an accomplished artist. During his residency and as a faculty member, he used his drawing skills to create training

materials and announce presentations. Later in his career, Dr. Wigton exhibited oil and watercolor paintings and photography at several local galleries.

Born into an Omaha medical family, Dr. Wigton followed in his family's footsteps, earning his medical degree from UNMC in 1969. But he broke with family tradition by pursuing internal medicine. After completing his residency at UNMC, Dr. Wigton joined the faculty in general internal medicine. In 1972, he received an MS in physiology from UNMC.

Given his family's long history in Omaha medicine and at UNMC, it was only natural that Dr. Wigton would become the "unofficial historian" for the campus.



REMEMBERING MICHAEL SORRELL, MD



Michael Sorrell, MD, emeritus professor in the UNMC Department of Internal Medicine and a legendary UNMC physician world-renowned for expertise in liver disease, liver transplantation and

gastrointestinal disorders, died May 25, 2024.

Dr. Sorrell, who retired from UNMC in December 2021, held several key leadership positions at both UNMC and the Omaha VA Hospital. He is credited with recruitment of top UNMC physicians and researchers and growth of facilities and programs to include the world's leading liver transplant and bone marrow transplant programs.

"There is perhaps no one who has had more

of an impact on shaping the department of internal medicine and the UNMC College of Medicine than Dr. Sorrell," said Bradley Britigan, MD, dean of the UNMC College of Medicine.

James O'Dell, MD, chief of the division of rheumatology, considered Dr. Sorrell a mentor.

"Every successful academician owes his or her success to their mentors," Dr. O'Dell said. "People who come along at just the right time — and by their example and belief in their mentees — inspire them and allow them to thrive. Mike Sorrell was that person for me. I had the singular privilege of being Mike's first chief resident — his belief in me meant everything. He truly was bigger than life and will be sorely missed."

The native of Syracuse, Neb., graduated from the University of Nebraska-Lincoln in 1955 and graduated in 1959 from the UNMC College of Medicine. He served as a general

practitioner in Tecumseh, Nebraska, until 1966 then pursued advanced training in gastroenterology and hepatology then joined UNMC's faculty in 1971.

In the 1980s, he served as chair of the UNMC Department of Internal Medicine and later stepped down to become medical director of the liver transplant program and chief of gastroenterology and hepatology. His work was funded for decades with large grants from organizations including the National Institutes of Health and the Department of Veterans Affairs.

Dr. Sorrell had a vision of making UNMC a first-class medical center. The Michael F. Sorrell Center for Health Science Education and Michael F. Sorrell Distinguished Chair in Internal Medicine were named in his honor.

OUR PARTNERS

NEBRASKA MEDICINE

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

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.

VHA NEBRASKA-WESTERN IOWA HEALTH CARE SYSTEM

Affiliation with the VA Nebraska-Western lowa Health Care System (NWIHCS) is critical

to the Department of Internal Medicine's tripartite mission of clinical care, research and education. NWIHCS provides integrated inpatient and outpatient care to veterans in Nebraska, western lowa and portions of Kansas and Missouri.

The Omaha VA Medical Center (OVAMC) is an acute care, highly affiliated facility that operates approximately 100 inpatient beds and provides full-service medical care to thousands of veterans. Inpatient and outpatient health care is provided in this integrated system through a strong system of primary care supported by tertiary specialty activity in medicine, surgery and psychiatry. 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.

