University of Nebraska Medical Center

Summer 2025

BREAKING NEWS

for the alumni & friends of the University of Nebraska Medical Center
Department of Orthopaedic Surgery & Rehabilitation

The Chairs Silver Anniversary

Over the last quarter century, UNMC's Department of Orthopaedic Surgery & Rehabilitation has expanded its clinical reach, advanced research innovation, and strengthened its commitment to training future leaders—progress made possible through the leadership of Dr. Kevin L. Garvin, now completing his 25th year as Chair. When Dr. Garvin began as Chair in 2000, the department was a modest team of 5 faculty and 20 residents. It has evolved into a robust force featuring 24 full-time orthopaedic surgeons, one Ph.D. faculty, one adult reconstructive surgery fellowship, 30 residents, and 15 advanced practice providers (APPs) in 2025.

Education has been a cornerstone of that growth. In 2000, the residency program carried on a long tradition but remained limited in size. By 2015, the program expanded from four to five residents per year, and by Summer 2024, UNMC welcomed its first class of six annually after gaining approval from the Residency Review Committee. The department will have trained over 200 residents by 2025. In addition, since launching the adult reconstructive surgery fellowship in 2020, the department has successfully trained four orthopaedic fellows in this subspecialty.

Patient care innovation accompanies this educational expansion. The department now delivers over 7,700 surgeries annually, ranking it among the busiest services in Nebraska Medicine and Children's Nebraska Hospitals. It operates clinics across multiple sites, including Nebraska Medicine's main campus, Children's Nebraska Hospital, Bellevue, Blair, and Village Pointe, to help strengthen community access. **Adult Orthopaedic care is also ranked #1 in Nebraska and in the top 10% nationally.**

The department's research portfolio has grown alongside its clinical presence. Faculty are currently supported by multiple NIH and PCORI grants and publish approximately 100 peer-reviewed articles annually. UNMC Orthopaedics researchers continue to share their work at premier national and international conferences and serve in leadership roles for the AAOS, ABOS, and specialty societies.

Dr. Garvin credits these achievements to a collaborative team dedicated to compassionate care, innovation in research, and outstanding education. "Our strength as a department comes from succeeding across all pillars of academic medicine—exceptional patient care, innovative research, and a deep commitment to education," said Dr. Kevin Garvin, L. Thomas Hood Professor and Chair of Orthopaedic Surgery. "We have built a legacy of excellence by fostering collaboration, investing in future leaders, and advancing orthopaedics in ways that make a lasting impact on our field and our patients' lives."

Grounded in a legacy of academic excellence and propelled by a bold vision for the future, the department is stronger and more committed than ever to advancing the full mission of academic medicine. With world-class facilities, a collaborative care model, and a culture that values curiosity and continuous learning, the department is not only shaping the future of orthopaedic care—it's redefining what's possible. From pioneering research and transformative education to life-changing clinical innovation, the department is charting a course toward a future where excellence isn't the goal—it's the standard. The next chapter is already being written, and its impact will be felt far beyond the walls of the operating room or the pages of a ranking—it will be measured in knowledge shared, lives improved, and futures restored.

BREAKING NEWS
Spring 2025

Breaking News is published two times a year for alumni and friends of the UNMC Department of Orthopaedic Surgery.

Chair:
Kevin L. Garvin, M.D.

For questions or comments, call 402.559.4251

Department of Orthopaedic Surgery
985640 Nebraska Medical Center
Omaha, NE 68198-5640

Find us online!
www.unmc.edu/orthosurgery

Message from the Chair

As I reflect on the department's many accomplishments, milestones, and moments of inspiration, I am both humbled and energized by all we have achieved over the last six months — and even more excited about what lies ahead. It is a privilege to share these highlights with you in this summer edition of Breaking News. Our momentum continues to build, fueled by the passion, talent, and collaboration of our faculty, residents, alumni, and partners across Nebraska and beyond.

This issue honors the legacy of Dr. Benjamin Ogden, whose extraordinary orthopaedic artwork now graces our department as a tribute to his talent, friendship, and uncompromising pursuit of excellence. We also remember Dr. Nicholas Aberle, whose generosity of spirit and commitment to patient care will be remembered by all who knew him.

We celebrate our graduating residents—five individuals who have completed rigorous training and are advancing to prestigious fellowship programs. Their scholarship, curiosity, and clinical skill embody the very heart of our mission. Likewise, our incoming residents and a new adult reconstructive surgery fellow represent the promising future of orthopaedics at UNMC.

In this edition, you will find compelling examples of research and innovation that are pushing the boundaries of musculoskeletal care. From the pioneering work of NeAT Surgical and the introduction of new revision knee instruments to our leadership in the national PIKASO trial exploring metformin's role in preventing post-ACL osteoarthritis – our department is not just participating in progress, we are driving it.

Our department is also helping the national conversation around opportunities in education. A recent resident appointment to the ACGME Review Committee, the growth of our local RJOS chapter, and the continued success of the Sports Medicine Research Fellowship all underscore our unwavering commitment to leadership, mentorship, and advancing opportunity in orthopaedics.

We are incredibly proud of the outstanding care our providers and clinical staff deliver each day—care that helped us earn the distinction of being r**anked #1 hospital for orthopaedic care in Nebraska and among the top 10% nationwide in orthopaedic care by U.S. News & World Report** again. This national recognition is further complemented by individual honors within our team, including several members recognized by Nebraska Medicine during Nurses Week and the Press Ganey Patient Voice Award presented to one of our providers. These achievements are well-deserved and a testament to the compassion and excellence that define our clinical practice.

Finally, I want to extend my sincere thanks to our alumni, supporters, and friends. Your generosity is not only sustaining our work – it is propelling us into a future of bold possibilities. Together, we will continue to innovate, educate, and elevate the standard of care. I invite you to stay connected, remain engaged, and be inspired by the life-changing work happening in Nebraska – an impact that is reaching patients and communities far beyond our state.

Warm regards,

Kevin L. Garvin

Kevin L. Garvin, MD
L. Thomas Hood Professor of Orthopaedic Surgery
Chair, UNMC Department of Orthopaedic Surgery & Rehabilitation

U.S. News & World Report:

Nebraska Medicine Orthopaedics continues to be #1 in Nebraska and top 10% Nationwide

For the 14th consecutive year, Nebraska Medical Center has been named the No. 1 hospital in Nebraska by U.S. News & World Report—a reflection of the unwavering dedication of its providers, staff, and faculty. In this year's national rankings, Nebraska Medicine also earned the top spot for orthopaedic care in the state and was designated "High Performing" Nationwide in Orthopaedics. The distinction of "High Performing" places Nebraska Medicine Orthopaedics, in the top 10% of orthopaedic programs nationwide.

"This recognition reflects the strength of our academic mission and the exceptional outcomes our teams deliver every day," said Dr. Chris Cornett, orthopaedic spine surgeon, professor of orthopaedic surgery, and vice chair of clinical service. "Our nationally ranked program is built on a foundation of collaboration—among surgeons, APPs, nurses, and care teams—who are united in advancing evidence-based care, educating future leaders, and ensuring that every patient receives the highest level of orthopaedic treatment available."

Nebraska Medicine Orthopaedics has earned this elite designation consistently for over a decade. The "High Performing" status is awarded based on rigorous, objective criteria including patient survival rates, outcomes for complex procedures, patient experience, nurse staffing levels, and the use of advanced clinical technologies—further solidifying the program's national reputation for excellence.

Thunderous Applause for Dr. Tao

Matthew Tao, MD

Honored with a Press Ganey Patient Voice Award

We are thrilled to announce that Dr. Matthew Tao has been recognized with a prestigious Press Ganey Patient Voice Award, a testament to the extraordinary care he provides and the deep trust he cultivates with his patients every day.

The Press Ganey Patient Voice Awards celebrate healthcare providers who excel in listening to, understanding, and responding to their patients. These individuals consistently demonstrate the highest levels of empathy, communication, and compassion—qualities that make a meaningful difference in the patient experience. Selected based on direct patient feedback, the award reflects what matters most: the voices of those we serve.

Celebrating the Class of 2025: Orthopaedic Surgery Residency Graduation

The journey from student to surgeon is no small feat—and this June, we proudly celebrated five exceptional physicians who have completed that journey with distinction. The UNMC Department of Orthopaedic Surgery and Rehabilitation is thrilled to honor the Class of 2025, a group of residents who have demonstrated outstanding clinical skill, academic curiosity, and an unwavering commitment to excellence. Each will now advance to competitive fellowship programs across the country, poised to shape the future of orthopaedic care.

Brandt Buckner, MD

Fellowship: Lower Extremity Adult Reconstruction, Indiana University

Medical School: University of Washington School of Medicine

Undergraduate: Brigham Young University

Presentation: *Long-term Polyethylene Wear Rates and Clinical Outcomes of Oxidized Zirconium Femoral Heads on Highly Cross-linked Polyethylene in Total Hip Arthroplasty.*

Dylan Fischer, MD

Fellowship: General Orthopaedic Surgery, U.S. Navy, Jacksonville, FL

Medical School: Indiana University School of Medicine

Undergraduate: Illinois Wesleyan University

Presentation: *Beach Chair Positioning Increases Risk of Cerebral Deoxygenation Events for Upper Extremity Fracture Surgery.*

Keagan Gertz, MD

Fellowship: Spine, University of Pittsburgh

Medical School: University of Cincinnati

Undergraduate: Bowling Green State University

Presentation: *Methadone Analgesia and Narcotic Use Following Lumbar Spinal Fusion.*

Matthew Hays, MD

Fellowship: Sports Medicine and Shoulder, UTHealth Houston

Medical School: McGovern Medical School at UT Health Science Center

Undergraduate: University of Texas at Austin

Presentation: *Increased Incidence of Methicillin-Resistant Staphylococcus aureus in Knee and Hip Prosthetic Joint Infection.*

Carla Strohhofer, MD

Fellowship: Adult Reconstruction, The CORE Institute

Medical School: McGovern Medical School at UT Health Science Center Houston

Undergraduate: University of Miami

Presentation: *Preoperative Mental Health and Postoperative Outcome Measures in Total Joint Arthroplasty – Is There a Relationship?*

Brandt Buckner, MD, Dylan Fisher, MD, Carla Strohhofer, MD, Keagan Gertz, MD, and Matthew Hays, MD

Matt Mormino, MD and the Orthopaedic residents

The Journal Club Journey: An Orthopaedic Resident's Perspective

Imagine walking into a room filled with orthopaedic residents and faculty, each armed with a research paper. The air buzzes with curiosity and the promise of discovery. This is the Journal Club, where residents gather not just to read but to question, learn, and grow.

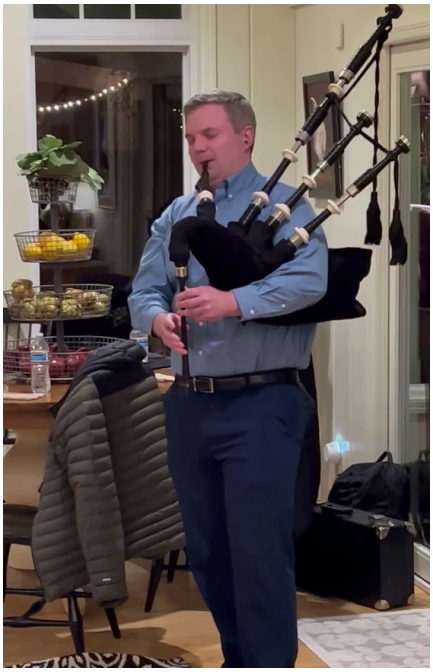
For a young resident, it starts with a challenge: dissecting a study on a groundbreaking surgical technique. As the group delves into the details, questions fly. Was the study design solid? Were the results significant? Could biases have crept in? Each resident hones their ability to critically appraise research, a skill that will serve them for a lifetime.

Nevertheless, the Journal Club is more than just analysis. It is a bridge between science and practice. One week, a discussion on cartilage repair might inspire new approaches in the operating room. Next, an exploration of biologics could reshape how patients with osteochondral defects are treated. Each session equips residents with tools to bring evidence-based care to their patients.

It is also a place for connection. Residents debate, faculty mentor, and ideas collide in lively discussions. This collaborative spirit fosters not only better understanding but also more assertive communication—essential for teamwork in the fast-paced world of orthopaedics. Beyond the intellectual engagement, Journal Club often has a social aspect, offering residents and faculty a chance to unwind, share stories, and build camaraderie. Whether over a shared meal or casual conversation after the formal discussion, these moments strengthen bonds and create a supportive community.

Perhaps the most lasting gift of the Journal Club is the habit it instills: a commitment to lifelong learning. In a field that evolves as quickly as orthopaedics, staying current is not optional. By regularly engaging in research, residents prepare themselves to navigate the future of medicine with confidence.

In the end, the Journal Club is more than a meeting—it is a journey. It is where orthopaedic residents sharpen their minds, connect with peers and mentors, and lay the foundation for careers defined by curiosity and excellence. And it all starts with a room, a paper, and a conversation.



John Pettit, MD

Leonard appointed to the ACGME Review Committee

House Officer III, Annemarie Leonard, MD, has been appointed to the Accreditation Council for Graduate Medical Education (ACGME) Review Committee (RC) for Orthopaedic Surgery.

This prestigious position places her at the forefront of medical education and accreditation, helping to shape the future of graduate medical education (GME) for orthopaedic surgery residents nationwide.

In addition to serving on the RC, Dr. Leonard will also be a member of the Council of Review Committee Residents (CRCR) during her term. The CRCR, composed of resident members from all ACGME Review Committees, plays a vital role in advising on policies that impact medical education, physician training, and accreditation standards.

The Council of Review Committee Residents (CRCR) provides critical insights on key issues affecting resident education and well-being. Over the years, the CRCR has contributed significantly to areas such as:

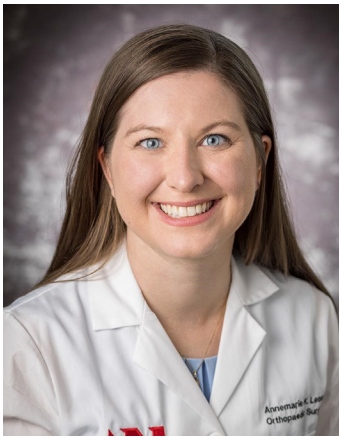
- Physician Well-being & Parental Leave Policies
- Common Program Requirement Revisions
- Milestones and Professionalism Standards
- Resident Mistreatment Prevention Initiatives
- Duty Hour Regulations & Training Enhancements

Additionally, the CRCR spearheaded the Back to Bedside initiative, a grant-funded program empowering residents and fellows to develop innovative projects that enhance patient care and restore meaning in their clinical experiences.

CRCR members actively share their work through publications in the Journal of Graduate Medical Education (JGME) and by presenting research at the ACGME Annual Educational Conference (AEC). Their contributions help advance discussions on accreditation, training improvements, and resident experience.

This appointment is a testament to Dr. Leonard's dedication to medical education, leadership, and the future of orthopaedic surgery training. Her contributions will play an important role in shaping policies and ensuring a high standard of excellence in GME.

Please join us in congratulating Dr. Annemarie Leonard on this outstanding achievement!



Annemarie Leonard, MD

Dr. Sara Powell Recognized for Excellence in Research and Training

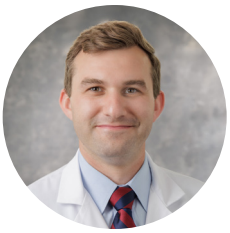
Sara Powell, MD

The Department of Orthopaedic Surgery & Rehabilitation congratulates Sara Powell, MD, on two outstanding achievements that reflect her dedication to advancing both orthopaedic care and gender equity in medicine. Dr. Powell was awarded a full sponsorship to attend the prestigious Ruth Jackson Orthopaedic Society Traumaplasty Course in late June. This hands-on program focuses on complex fracture management and reconstructive techniques and is designed to support the advancement of women in orthopaedics.

In addition, Dr. Powell received the "Best Oral Presentation" award at this year's Graduate Medical Education (GME) Research Symposium for her project, "Increased Utilization of Assistive Reproductive Technologies Amongst Female Orthopedists." Her research explores a critical intersection of reproductive health and professional challenges faced by women in surgical fields, adding an important voice to ongoing discussions on equity in medicine.

Welcoming Our Future: Meet the Class of 2030 and Our New Fellow

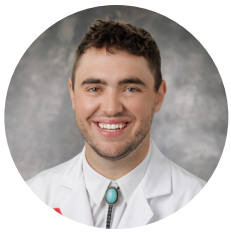
We are excited to welcome the exceptional Class of 2030 Orthopaedic Surgery residents to our program—an impressive group of individuals who represent the future of our field. We are equally thrilled to introduce our 2025–2026 Fellow in Adult Reconstruction Surgery, whose expertise will further strengthen our commitment to excellence in advanced surgical training. As you begin this next chapter, know that you are joining a collaborative, innovative, and supportive community committed to your growth and success. We cannot wait to see the impact you will make.



Aaron Cohen, MD

Undergrad: Barrett The Honors College, Tempe

Medical School: University of Miami



Drake Giese, MD

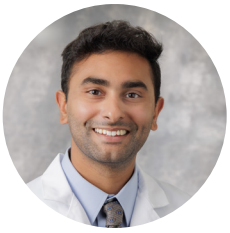
Undergrad: University of Colorado, Boulder

Medical School: Medical School of Wisconsin

Christian Hecht, MD

Undergrad: Loyola University, Chicago

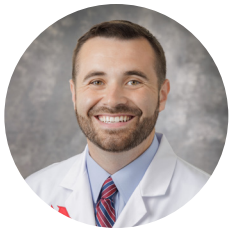
Medical School: Case Western Reserve University



Vignesh "Vigi" Krishnan, MD

Undergrad: Rhodes College, Memphis

Medical School: University of Arkansas



Cole Tessendorf, MD

Undergrad: Augustana University, Sioux Falls

Medical School: University of South Dakota

Currey Zalman, MD

Undergrad: University of Nebraska, Lincoln

Medical School: University of Nebraska

2025–2026 Adult Reconstruction Fellow

Ennio Rizzo Esposito, MD

Hometown: Caracas, Venezuela

Undergraduate: College Nuestra Senora de Pompei

Medical School: Central University of Venezuela Luis Razetti School of Medicine

Residency: University of Missouri Orthopaedic Surgery

UNMC ADULT RECONSTRUCTIVE SURGERY FELLOWSHIP RECEIVES AAHKS RECOGNITION

We are proud to announce that the University of Nebraska Adult Reconstructive Surgery Fellowship has officially received Recognition from the American Association of Hip and Knee Surgeons (AAHKS), effective July 1, 2025. This prestigious five-year designation affirms our program's commitment to excellence in education and training in adult reconstruction. Congratulations to Dr. Hartman and the fellowship leadership team for achieving this significant milestone.

RESIDENT PUBLICATIONS & PRESENATIONS

Our residents continue to raise the bar through their contributions to academic scholarship, professional conferences, and collaborative research. Over the past year, they have shared their work through podium and poster presentations and contributed to peer-reviewed publications. This section highlights the breadth and impact of their efforts, reflecting not only clinical excellence but a deep commitment to advancing the field of orthopaedics. We are proud to celebrate their achievements and the curiosity, rigor, and collaboration that made them possible.

PRESENTATIONS

American Orthopaedic Association Annual Leadership Meeting
June 2025; Minneapolis, MN

Atteberry M*, **Leonard AK*,** Thomas O, Garvin KL, Putnam SM. Female Medical Students' Exposure and Perceptions of the Field of Orthopaedics

American Academy of Orthopaedic Surgeons Annual Meeting
March 2025, San Diego, CA

Leonard AK*, Buckner B, Staple B, Salaymeh J, Holubeck P, Lyden E, Cortes-Penfield N, Hewlett A, Kildow B, Hartman C. Are Real Component Articulating Spacers a Safe and Effective Option compared to All Cement Spacers for the Treatment of Prosthetic Joint infection in Total Knee Arthroplasty?

American Orthopaedic Society for Sports Medicine (AOSSM) Annual Meeting
March 2025, San Diego, CA

Kallman, Tyler, MD,* Mark Amirtharaj, MD, Melissa Manzer, Matthew Tao, MD, Elizabeth Wellsandt. Increased anterior tibial translation not associated with degradation in knee articular cartilage following anterior cruciate ligament reconstruction.

Zitsch, B. MD,* Freeman, M., MD, Taylor, B., Jensen, S., Wellsandt, E., Lyden, E., Tao, M., MD, Hartman, C., MD. A Prospective Randomized Clinical Trial to Assess the Effects of Tourniquet Use on Gait Parameters Following Primary Total Knee Arthroplasty.

Current Concepts in Joint Replacement Annual Meeting
December 2024; Orlando, FL.

Leonard AK, Buckner B*, Staple B, Salaymeh J, Holubeck P, Lyden E, Cortes-Penfield N, Hewlett A, Kildow B, Hartman C. Are Real Component Articulating Spacers a Safe and Effective Option compared to All Cement Spacers for the Treatment of Prosthetic Joint infection in Total Knee Arthroplasty?

Zitsch, B. MD,* Freeman, M., MD, Taylor, B., Jensen, S., Wellsandt, E., Lyden, E., Tao, M., MD, Hartman, C., MD. A Prospective Randomized Clinical Trial to Assess the Effects of Tourniquet Use on Gait Parameters Following Primary Total Knee Arthroplasty.

Eastern Orthopaedic Association
October 2024, Palm Beach, FL

Sarah Powell, MD, Medical Student Interest in Orthopaedics Before and After Sawbones Lab.

Mid-America Orthopaedic Association (MAOA) Annual Meeting
April 2025, San Antonio, TX

Tyler Kallman, MD, Elizabeth Lynden, Ph.D., Justin Greiner, MD. Multi-Ligament Knee Injuries in National Football League Athletes

Oliva Thomas, MD, Thomas Clare, BS, Joseph Morgan, MD. Antibiotic Prescription Practices in Revision Finger Amputations

Sarah Powell, MD, Aidan Gaertner, BS, Granlee Nguyen, BS, Elizabeth Lynden, MS, Annemarie Leonard, MD, Christopher Deans, MD. Predictors of Five-Year Mortality in Femoral Neck Fractures

Ashwin Garlapaty, BS, **Nathan Cherian, MD,** Brett Crist, MD, FACS. Factors That Influence the Quality of Letters of Recommendation for Orthopedic Trauma Fellowship Applicants: A Survey of Fellowship Directors

Annemarie Leonard, MD, Frances Akwuole, Thomas Leonard, Mazie Atteberry, Sara Putnam, MD. Analysis of Female Medical Student Matriculation into Orthopedic Surgery Nationally.

UNMC GME Research Symposium
April 2025, Omaha, NE

The Graduate Medical Education (GME) Research Symposium offers an engaging platform for house officers from UNMC and CHI Health to showcase their research across a broad range of disciplines, including clinical outcomes, basic science, education, health policy, business, and the humanities.

The Department of Orthopaedic Surgery & Rehabilitation was well-represented with poster and oral presentations moderated by Dr. Kevin Garvin. Our residents delivered impactful research on topics ranging from opioid use to gender equity in medical education.

Presenters and Topics Included:

- Annemarie Leonard, MD – Analysis of Female Medical Student Matriculation Into Orthopaedic Surgery Nationally by Medical School
- Annemarie Leonard, MD – Exploring Barriers to Pre-Clinical Female Medical Student Involvement in Orthopaedics at a Single Institution
- Annemarie Leonard, MD – A Quality Improvement Initiative: Retrospective Analysis of Impact of Cytogenetics in Orthopedic Oncologic Diagnosis and Subsequent Management
- Sarah Powell, MD – Increased Utilization of Assistive Reproductive Technologies Amongst Female Orthopedists

- Tyler Sharp, MD – A Novel Multi-Disciplinary Opioid Tapering Program for Standardized Postoperative Opioid Use
- Olivia Thomas, MD – Antibiotic Prescription Practices in Revision Finger Amputations
- Olivia Thomas, MD – High-Energy, High-Resource: Attempting to Predict 4th of July Hand Call Burden

The presentations demonstrated the department's continued commitment to research excellence and innovation in patient care, medical education, and diversity in medicine.

PUBLICATIONS

Ashley E. Creager Justin C. Siebler, Optimizing the Orthopaedic Trauma Patient- Staged Management, Operative Techniques in Orthopaedics, Volume 34, Issue 3, 2024, 101127, ISSN 1048-6666.

Deans, C., **Zitsch, B.,** Kildow, B., Garvin, K. Cementless Total Knee Arthroplasty: Is it Safe in Demineralized Bone. Orthopaedic Clinics of North America. July 2024.

Zitsch, B., Salaymeh, J., Burdyny, M., Buckner, B., Lyden, E., Konigsberg, B., Garvin, K., Hartman, C. Metaphyseal Fixation Using Cones and Sleeves for Severe Proximal Tibia Bone Loss. Journal of Arthroplasty. August, 2024.

Zitsch, B., Cahoy, K., **Urban, N., Buckner, B.,** Garvin, K.Highly Cross-Linked Polyethylene in Patients 50 Years of Age and Younger: A 20-year Follow-Up Analysis. Journal of Arthroplasty. September, 2024.

Erin Stockwell, MD, **Nathanael D. Urban, BS, Mathew Hays, MD,** Meghan Mccaskey MD, Meghan Maseda, MD, Matthew A. Mormino, MD, Justin C. Siebler, MD, Hassan R. Mir, MD, MBA,; Sara M. Putnam, MD. Unrestricted Weightbearing and Ability to Achieve Postoperative Ambulation After Distal Femur Fracture Fixation in Elderly Patients is not Associated with Decreased Mortality. European Journal of Orthopaedic Surgery and Traumatology, Vol 35, article number 70, Feb 2025.

Zitsch, B., Byrd, J., **Buckner, B.,** Konigsberg, B., Hartman, C.Tapered Fluted Titanium Stems in Revision Total Hip Arthroplasty. Orthopedics. Published March 2025.

Samuelson, E., Fehringer, E., Hatzidakis, A., Weisenburger, J., Lyden, E., Mauter, E., Bader, J., **Lackner, T., Zitsch, B.,** Haider, H. Angular Stable Intramedullary Nail Versus Locking Plate Fixation of Osteoporotic Surgical Neck Proximal Humerus Fracture: A Biomechanical Comparison. Shoulder and Elbow. Mar 13, 2025.

Curtis W. Hartman, Nicholas C. Branting, Matthew A. Mormino, **Timothy J Lackner, Bradford P. Zitsch,** Edward V. Fehringer, Hani Haider. Unicortical Locking Screws Provide Comparable Rigidity to Bicortical Compression Screws in Clavicle Plate Fixation Con-structs. Clinics and Practice. April 2025.

Byrd JJ, **Leonard AK,** Samson KK, Larson JE, Shaw J, Halanski MA. Optimal Timing for Safe Bivalving of Fiberglass Casts Is Before the Exothermic Peak. J Am Acad Orthop Surg. 2025 May 1;33(9):e480-e490. doi: 10.5435/JAAOS-D-24-00729. Epub 2024 Dec 3. PMID: 39638315.

Curtis Hartman, MD, Olivia Thomas, MD, and Sarah Powell, MD

Brains and Buzzers

UNMC Takes the Win at MAOA Resident Quiz Bowl

Congratulations to **Olivia Thomas, MD, and Sarah Powell, MD,** on taking first place in the Resident Quiz Bowl at MAOA. The Quiz Bowl is a fast-paced, competitive event where residency programs from across the region go head-to-head, testing their clinical knowledge, decision-making, and teamwork in front of a live audience. Dr. Thomas and Dr. Powell represented UNMC with confidence, composure, and depth of expertise—bringing home a well-earned victory. Well done!

Inspiring the Next Generation of STEM Leaders: The Perry Outreach Program

On Saturday, March 29, 2025, Children's Nebraska and UNMC proudly hosted The Perry Outreach Program, a one-day, hands-on experience for high school students interested in careers in medicine and engineering—specifically in the field of orthopaedics.

The event was led by Dr. Smitha Mathew, a fellowship-trained pediatric orthopaedic surgeon, along with a dedicated team of 10 orthopaedic providers and residents from Children's Nebraska and UNMC. Together, they guided students through a full day of learning, mentorship, and hands-on surgical simulation.

Throughout the day, participants attended engaging lectures, practiced surgical techniques through training modules, and received personalized mentorship from local orthopaedic surgeons and biomedical engineers. The program, held in the Solarium from 8 a.m. to 4 p.m., offered students a rare opportunity to explore what it is really like to work in the world of STEM—particularly in the operating room.

The Perry Initiative, a national nonprofit organization, is committed to inspiring high school students and young adults to become leaders in orthopaedic surgery and engineering. Children's Nebraska was honored to serve as a host site this year, and we are proud that so many of our own team members helped bring the event to life. It was an energizing and inspiring event, and we hope it helped light the spark for the next generation of orthopaedic and STEM leaders.

We had 7 ortho providers – Drs. Smitha Mathew, Brian Hasley, Dutt, Susan Scherl, Sara Putnam, Nate Hallman, PA-C, Chauna Weyermueller, DNP, APRN.

Smitha Mathew, MBBS, Sara Putnam, MD and Hannah

Advancing Pediatric Excellence Through Visiting Faculty Engagement

Dr. Jose Morcuende, MD, PhD, Professor of Orthopedics and Rehabilitation, University of Iowa, and Director of the Ponseti International Association, visited the Clubfoot Clinic at Children's Nebraska on April 14 and 15, 2025. His visit served as a meaningful follow-up to the Neubauer Fellowship Program and brought valuable opportunities for clinical collaboration and learning. Dr. Smitha E. Mathew, who heads the Clubfoot Clinic at Children's Nebraska, was a Neubauer fellow under the direction of Dr. Morcuende in April 2024.

Dr. Morcuende observed patient care, engaged with our team, and shared valuable insights into best practices for treating clubfoot using the Ponseti Method. He also spoke at the orthopaedic grand rounds at UNMC on April 14. His visit reinforced the clinic's leadership in pediatric orthopaedics, highlighted our commitment to excellence, innovation, and health equity in pediatric musculoskeletal care and strengthened our connection to a global network of providers dedicated to improving lives through evidence-based treatment.

Dr. Brian Hasley, MD, Dr. Kwangwon Park, MD, Dr. Paul Esposito, MD, Dr. Jose Morcuende, MD

From ACLs to Huskers: A Year in the Life of Our Sports Medicine Research Fellows

Step into the Sports Medicine Research Lab at UNMC, and you will discover more than just data and devices — you will uncover stories of ambition and innovation from two outstanding Orthopaedic Sports Medicine Research Fellows: Manuel Romero-Padron, MD, and Obinna Chinweze, MD. These global citizens, hailing from Mexico and Nigeria, respectively, have converged in Omaha, united by a mission to advance patient care through cutting-edge research in sports medicine.

A Fellowship Built for Future Leaders

The Orthopaedic Sports Medicine Research Fellowship at the University of Nebraska Medical Center is a one-year, immersive experience designed to deepen fellows' expertise in clinical research while strengthening their path toward orthopaedic surgery residency. Hosted by the Department of Orthopaedic Surgery and Rehabilitation and the Physical Therapy Program, the fellowship emphasizes interdisciplinary collaboration — blending clinical insight with biomechanics, imaging, and rehabilitation science.

"Our fellows are not just here to do research," says **Elizabeth Wellsandt, PT, DPT, PhD, OCS,** *Associate Professor in Physical Therapy.* "They are here to grow into well-rounded future physicians, contributing meaningfully to musculoskeletal health."

Driven by Curiosity, Grounded in Purpose

For Dr. Romero-Padron, research is about stepping back to ask, "How can we do better?" Originally from Tampico, Mexico, he moved north seeking the kind of training unavailable back home. His work focuses on ACL reconstruction, exploring the effects of body weight changes and rehabilitation progress on surgical outcomes. He is also leading a project on a knee sleeve device that tracks motion patterns — an exciting fusion of technology and clinical care.

Meanwhile, Dr. Chinweze, who has journeyed through Germany, the UK, and Belarus, brings a relentless curiosity to his projects. A self-described "compulsive fixer," he has been investigating post-operative outcomes in ACL patients, including the impact of joint effusion and psychological factors on recovery. "Research lets me ask 'why not?' just as much as 'why?'" he says.

Mentorship That Matters

Central to the fellowship's success is mentorship. Fellows work closely with leaders like **Dr. Wellsandt** and **Matthew A. Tao, MD,** *Associate Professor, Sports Medicine and Medical Director of the Sports Medicine Program.*

"We care tremendously about the people we work with," Dr. Tao explains. "Our goal is to mentor fellows in a way that prepares them not just for residency but for impactful careers in orthopaedics."

Fellows benefit from a structured environment of didactics, clinical observation, and interdisciplinary research. They engage with faculty from orthopaedic surgery, radiology, engineering, and physical therapy, contributing to high-impact studies on ACL injuries, biomechanics, and osteoarthritis prevention.

Research, Recognition, and Community

Throughout the year, both fellows have immersed themselves in scholarly activity, with presentations at regional and international conferences and nearly ten research projects, each on track for publication. Beyond academia, what is their most surprising discovery? Nebraska's unpredictable weather — from sun to snow in a single day — and the welcoming, team-oriented culture at UNMC.

"Everyone has been incredibly supportive," says Dr. Romero-Padron. "There is a real commitment to quality and detail here."

And for both, nothing topped the thrill of their first Huskers game — 87,000 fans, "Go Big Red!" chants, and in Dr. Chinweze's case, a lost voice from cheering so loud.

Looking Ahead

The fellowship is more than a stepping stone — it is a launchpad. Past fellows have been matched into top orthopaedic residency programs and contributed to multi-site research, shaping the national conversation on musculoskeletal care. As Dr. Wellsandt notes, "There is no better feeling than seeing our fellows reach their goals."

Their advice to future applicants? Set goals, ask questions, work smart, and embrace the journey — weather swings and all.

Manuel Romero-Padron, MD, and Obinna Chinweze, MD

UNMC Researchers Among the World's Most Cited

More than 100 current and former researchers from the University of Nebraska Medical Center (UNMC), including Dr. Kevin Garvin, have been ranked among the top 2% of researchers worldwide in their respective fields.

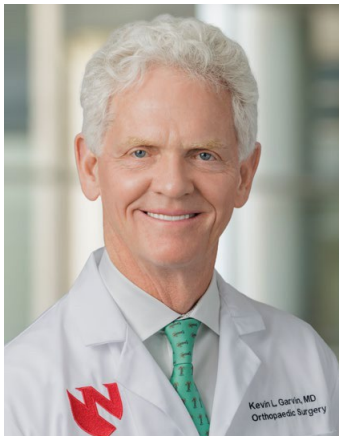
This recognition comes from a Stanford University study that evaluates researchers using standardized citation metrics to measure their global impact.

Citations in academic papers reflect the influence of a researcher's work, serving as a strong indicator of their reputation. The Stanford team analyzed over 6 million scientists globally, using a composite citation score (c-score) based on multiple citation metrics, to identify the most impactful researchers.

UNMC Interim Chancellor H. Dele Davies, MD, expressed pride in this achievement, saying, "Research is an integral part of UNMC's mission to create healthier futures for people in Nebraska and beyond. We are excited to see so many of our investigators recognized for their influence."

Vice Chancellor for Research Ken Bayles, PhD, highlighted the significance of this recognition: "These rankings are a testament to the productivity of our talented faculty and the impact their work has on the global research community."

This achievement underscores UNMC's dedication to advancing research that shapes the future of healthcare.



Kevin L. Garvin, MD

Can a Diabetes Drug Prevent Osteoarthritis After ACL Tear?

A groundbreaking national research study is exploring whether a common diabetes medication, metformin, could prevent osteoarthritis (OA) in patients recovering from anterior cruciate ligament (ACL) tears. OA is the most common form of arthritis and a leading cause of disability, often developing after knee injuries.

Dr. Matthew Tao, an orthopaedic surgeon, highlights the risk: "At 10 years post-injury, about 50% of people show signs of osteoarthritis on X-rays. By 20 years, it jumps to 70%." Alarmingly, ACL injuries leave individuals aged 30-39 up to 20 times more likely to require knee replacements than their peers.

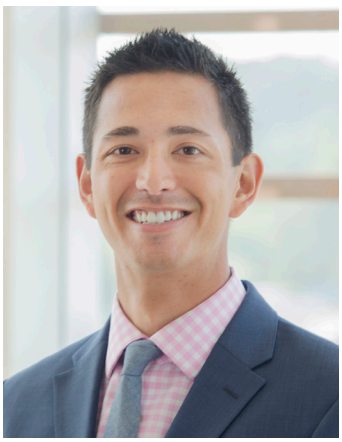
The Preventing Injured Knees from osteoArthritis: Severity Outcomes (PIKASO) trial, led by top researchers from nine institutions, aims to determine whether metformin can reduce knee inflammation and slow cartilage degradation following ACL reconstruction. Co-principal investigators Dr. Liz Wellsandt and Dr. Yvonne Golightly from the University of Nebraska Medical Center (UNMC) are spearheading this effort locally.

"Metformin has shown promise in reducing inflammation in previous studies, particularly in people with obesity and knee osteoarthritis," says Dr. Wellsandt. "The PIKASO study is the first to test its effects following an ACL injury."

This randomized, double-blind clinical trial assigns participants to take either metformin or a placebo daily for one year. Researchers will monitor knee pain and early OA signs using MRI scans over two years.

Dr. Tao notes the transformative potential of this study: "If successful, metformin could revolutionize sports medicine by offering an easy, safe solution to a major long-term problem."

Enrollment is open at UNMC for individuals aged 19 to 45, with the trial expected to conclude in 2028. If proven effective, metformin could significantly improve post-injury knee health and quality of life for patients.


Matthew Tao, MD

Overcoming the Odds: A Patient's Journey from Chronic Pain to Thriving Life

For nearly 30 years, Karen Linnell lived with chronic back pain that started during her first pregnancy.

As a physical therapist, she tried everything she knew to ease the discomfort—but nothing worked. By 2020, even sitting for a few minutes became unbearable, leaving her feeling hopeless.

Determined to find relief, Karen sought help from orthopaedic surgeon Dr. Chris Cornett, who diagnosed severe arthritis in her lower spine. Initially hesitant about surgery, Karen explored every noninvasive option. But as her pain grew worse, she made the courageous decision to undergo an anterior lumbar fusion.

In July 2022, Dr. Cornett performed the procedure, stabilizing her spine without cutting muscle. Though recovery was difficult, Karen stayed committed to her rehabilitation plan. Eight weeks later, she began to feel real relief, and by October, she was back to work and enjoying life pain-free.

Today, Karen is hiking, active, and living without limits. Her experience not only gave her a new lease on life but also reshaped how she approaches her work as a physical therapist.

"If you're struggling with back pain, don't give up," she encourages. "It's okay to feel scared, but trust in the process. Dr. Cornett's expertise and compassionate care changed my life, and I'm forever grateful to him for helping me reclaim the life I love."

Karen Linnell with Dr. Chris Cornett

Game Not Over

How an Iowa Woman Beat the Odds After a Devastating Hand Injury

In April 2022, Jennifer Meese-Cherry experienced a life-changing accident while using a table saw. Her glove got caught in the blade, pulling her hand in and nearly severing three fingers. Initially, she was told amputation was the likely outcome. But determined to explore every option, Jennifer sought a second opinion and was transferred to Nebraska Medical Center — a decision that changed everything.

Orthopaedic surgeon and hand specialist Dr. Joseph Morgan performed a highly complex seven-hour surgery to save her fingers. The injuries were extensive: severed arteries, tendons, and nerves, fractured bones, and massive tissue loss. One of the most innovative aspects of her surgery was the use of cadaver nerves to replace her own — a technique not commonly available outside of major academic medical centers. She also underwent a "cross-finger flap" procedure, where two fingers were temporarily sewn together to allow healthy skin to grow and cover the damaged site.

The road to recovery was just as intense as the surgery. Jennifer required several additional operations and a long course of occupational therapy focused on retraining hand movement, restoring tendon function, and regaining strength. One of her biggest cheerleaders was her wife, Hayley, who worked from home to support her every step of the way. Her niece kept her spirits high with creative bandage artwork, and therapists at Nebraska Medicine provided specialized hand therapy to rebuild function.

Jennifer Meese-Cherry and Dr. Joesph Morgan

Today, Jennifer has regained impressive mobility. Although she deals with occasional sensitivity and grip challenges — and has had to give up playing guitar — she approaches life with humor and gratitude. Her advice to others: "Follow your doctor's orders to a T," and, "It hurts because you're getting better."

For Dr. Morgan, Jennifer's journey represents the best of what expert care and personal resilience can achieve. "To nearly lose three fingers and now have this level of function — that's nothing short of phenomenal."

Celebrating Meg Cordes: 40 Years of Compassionate Leadership

After four decades of dedicated service to Nebraska Medicine, Meg Cordes is marking her 40th work anniversary — including a recent return to her Orthopaedic roots.

Meg began her nursing career on July 1, 1985, as a 20-year-old graduate of Clarkson School of Nursing. She started in Critical Care on the same day the hospital launched its liver transplant program and spent many years caring for transplant patients. That early experience, shaped by the guidance of her preceptor Linda Dye, laid the foundation for Meg's values: kindness, respect, and listening.

She later served as a nursing resource coordinator, then stepped into leadership in 2010 as associate nurse manager for 9 North, an orthopaedic unit in Clarkson Tower. That role, under the mentorship of Michelle Freeman, now Executive Director of Acute Care Services and Nursing Practice, sparked a pivotal shift toward leadership.

Meg's leadership journey continued across several inpatient and ambulatory roles, but in 2023 she returned to Orthopaedics as manager of the Orthopaedic Clinic, which spans Lauritzen Outpatient Center, Bellevue Medical Center, and Village Pointe Health Center. The transition from inpatient to ambulatory came with a learning curve — from scheduling templates to budgeting — but Meg embraced the challenge with the same steady heart and team-first focus that has defined her career.

"I love building relationships with my team," Meg says. "And here in the clinic, I've been able to build great partnerships with the physicians and advanced practice providers. I may not always have the answer, but I always know who to ask."

In 2022, she received the DAISY Nurse Leader Award at Bellevue Medical Center — a testament to her enduring impact on staff and patients alike.

As she celebrates 40 years of service (and 40 years of marriage this fall), Meg remains grateful for the opportunities she's had and the people she's served alongside. "It's been a lot of ups and downs, but I wouldn't want to be anywhere but Nebraska Medicine."

Megan Cordes, RN

Celebrating Nurses Week: Honoring the Heart of Orthopaedics

At Nebraska Medicine, Nurses Week is more than a celebration — it's a heartfelt recognition of the extraordinary individuals who bring skill, compassion, and dedication to every patient encounter. This year, our Orthopaedic department is proud to spotlight the incredible contributions of our nursing staff who truly embody the ITEACH values.

During the 2025 Nurse Appreciation and Awards Ceremony, several of our Orthopaedic nurses were recognized and nominated for their outstanding work:

- **Spirit of Nursing** nominees: *Alissa Olsen, RN and Christy Johnson, RN*
- **Carol Wilson Quality in Nursing** nominees: *Peggy Mazzeo, RN and Kerby Selmer, APRN*

ITEACH Values Nominations:

- **Innovation:** *Kerby Selmer, APRN, Amy McGarry, RN, Danelle Goltz, APRN*
- **Teamwork:** *Jessica Pfeilfer, LPN, Michaiah Anderson, RN, Sandi Wakehouse, RN, Kelli Hubley, APRN*
- **Excellence:** *Heidi Philp, LPN, Peggy Mazzeo, RN, Kerby Selmer, APRN*
- **Accountability:** *Kayla Mace, RN, Debbie Warren, APRN*
- **Courage:** *Sandi Wakehouse, RN*
- **Healing:** *Cindy Fibranz, LPN*

Each year, our department also comes together to select one peer-nominated nurse who exemplifies excellence across all areas of care. We're proud to announce that the 2025 Extraordinary Nurse award was presented to Caitlyn Johnson, RN. Her dedication, leadership, and compassion set a high standard for us all.

To every nurse in the Orthopaedic department — thank you for the exceptional care you provide and the difference you make in the lives of our patients and team members every day.

From Tragedy to Triumph: An Incredible Journey

Every day, Nebraska trauma surgeons tackle the unexpected, saving lives and futures in ways that often go untold. However, in November 2022, Elizabeth Nelson's story became a shining example of courage, resilience, and the power of a furry friend.

That night, Elizabeth was doing everything right. A night out with friends ended responsibly with a designated driver. But fate had other plans. A drunk driver struck their car, leaving Elizabeth with a severe neck injury. "I remember waking up in the ER and being told I was being admitted," she recalls.

Enter Dr. Emmett Gannon, Nebraska Medicine's own "carpenter" of spinal surgery. Using rods, screws, and a graft, he stabilized her injury, preventing a life-altering neurologic outcome. Today, Elizabeth is not just walking—she is thriving. "Dr. Gannon and his team saved my life," she says.

Nevertheless, the journey was not just physical. Emotional healing came with the help of Cannon, Elizabeth's aptly named four-legged companion. "When PTSD hit, Cannon was there," Elizabeth shares. Her dog's name honors Dr. Gannon's lifesaving work, reminding her daily of the strength it took to heal. "I said, 'You know what, I broke my Cervical spine,' and then I said, 'Dr. Gannon put me back together, so I am going to name her Cannon' because she is my survivor puppy."

In January, Cannon and Elizabeth reunited with Dr. Gannon, a meeting that encapsulated the power of teamwork and hope. "Cannon represents everyone who helped her—friends, nurses, therapists, and family," Dr. Gannon says.

Now a recent University of Nebraska-Omaha graduate, Elizabeth looks forward to a brighter future. With Cannon by her side and a forgiving heart, she is stepping forward with grace and gratitude, reminding us all that even in the darkest times, hope can shine brightly.

Elizabeth Nelson, Cannon, Emmett Gannon, MD

Mentorship in Orthopaedic Surgery: Spotlight on RJOS and UNMC's Chapter

Orthopaedic surgery continues to trail other specialties in achieving gender and URM (under-represented minority) parity. Despite nearly half of medical school graduates being women, only 16% of active orthopaedic surgery residents and a mere 6% of practicing orthopaedic surgeons are women. The reasons for this disparity are complex, but lack of exposure and mentorship are often cited as key barriers.

To help address this issue, the Ruth Jackson Orthopaedic Society (RJOS) was established in 1983 with just 42 members. Its mission is to promote the professional development of women in orthopaedics across all career stages. Today, RJOS has grown to include over 1,400 members and welcomes medical students, residents, fellows, and attendings. The society offers invaluable resources, including career advice, contract negotiation guidance, leadership training, and mentorship networking. RJOS also hosts an annual meeting during the AAOS Annual Meeting, with this year's event scheduled for March 14.

In the latter half of last year, UNMC proudly launched its own RJOS chapter. Currently, the chapter has 15 members, with an additional 7 members from Creighton University who actively participate in events and meetings. The UNMC chapter is chaired by Dr. Sara Putnam. This year, the chapter joined the Midwest Region RJOS Medical Student Conference at the University of Kansas Medical Center (KUMC) in March. Members presented research and exchanged ideas with other chapters, furthering their professional growth and networking with mentors and peers in the region.

By fostering mentorship and offering critical resources, RJOS and its local chapters are working to make orthopaedic surgery more accessible and welcoming to women and other non-traditional medical professionals.

Sara Putnam, MD

Dr. Konigsberg's New Knee Replacement Surgical Tool

Over countless revisions and total knee replacements, Beau Konigsberg, MD, noticed room for improvement. "There are certain instruments we use to take out knee replacements to do a revision and put a new one in," says Dr. Konigsberg. "This surgery can be particularly challenging, especially to cleanly remove the first knee replacement, so you do not lose a lot of bone."

With these difficulties in mind, about a year and a half ago, Dr. Konigsberg approached the manufacturer of these instruments, Innomed, at a meeting in Dallas. After presenting his ideas in person, Dr. Konigsberg later emailed the company with his notes. Innomed took these Dr. Konigsberg's ideas and made them a reality. After a few months, in December 2024, Innomed presented him with an initial prototype.

Now, the company manufactures real sets of this instrument, which Dr. Konigsberg has used since and is available for anyone. These instruments are especially beneficial for Dr. Konigsberg, as Nebraska Medicine performs more knee revision surgeries than any other provider in the State or region.

"One of the key aspects of this surgery is successfully removing the original implant without destroying any bone," says Dr. Konigsberg. "And I think these instruments will help make the surgery more efficient, safer, and better for patients. I have used them, and they have worked really well."

Through Innomed, this instrument is now available across the globe. "Hopefully, providers will more widely implement them, and they will make revision knee replacement surgeries easier and safer," says Dr. Konigsberg.

Dr. Konigsberg's New Knee Replacement Surgical Tool

NeAT Surgical: Pioneering the Future of Orthopaedic Surgery

NeAT Surgical, a start-up originating from the Department of Orthopaedic Surgery and Rehabilitation at the University of Nebraska Medical Center, is revolutionizing the field of orthopaedics through advanced smart instruments and robotic technologies. With a foundation built on over 20 years of rigorous research and development in the Orthopaedics Biomechanics and Advanced Surgical Technologies Laboratory, the company is at the forefront of innovation in surgical solutions. This extensive body of work has led to the creation of eight patents, underscoring the cutting-edge nature of NeAT's advancements.

The mission of NeAT Surgical is clear: to provide surgeons with tools that are not only more accurate and efficient but also easier to use. By leveraging smart technology, NeAT aims to enhance surgical precision while simplifying procedures. Unlike traditional robotic solutions that often come with hefty contracts, NeAT's approach is designed to offer cost-effective alternatives, reducing the financial burden on the healthcare system.

Currently, NeAT Surgical is in the process of submitting its innovations to the FDA, marking a significant milestone on the path to clinical application. The company anticipates that its smart instruments will be ready to perform surgeries as early as the first quarter of 2026. This timeline reflects a commitment to advancing patient care through technology while maintaining the highest standards of safety and efficacy.

As NeAT Surgical moves forward, it holds the promise of reshaping orthopaedic surgery by making it more accessible, efficient, and precise. With its groundbreaking tools, the company is poised to set a new standard in the operating room, benefiting both surgeons and patients alike.

NeAT surgical

A Lasting Impression

Honoring Physician's Legacy Through Art and Anatomy

The UNMC Department of Orthopaedic Surgery displays a special collection of a former resident's orthopaedic artwork to memorialize a friend and colleague.

Benjamin Ogden, MD, completed his residency in orthopaedic surgery at the med center in 2018. He was later diagnosed with a brain tumor and died in 2021 at the age of 36.

Outside the orthopaedic resident lounge on the fourth floor of the Lauritzen Outpatient Clinic, 13 of Dr. Ogden's orthopaedic drawings are displayed in three frames. They show Dr. Ogden's detailed drawings of a pelvis bone, a femur, and detailed musculature of a shoulder and an arm, among other images. The entire collection is part of the McGoogan Health Sciences Library's **Department of Special Collections and Archives** whose staff collects, stores, and makes available items documenting university history in many formats.

Fellow residents from Dr. Ogden's time at the med center have arranged for the display to happen, making prints of his artwork. Those classmates and colleagues are Todd Gilbert, MD, Leonid Grossman, MD, Sayfe Jassim, MD, and Noah Porter, MD.

Dr. Gilbert, who now practices in Utah, said his friend Dr. Ogden had an artistic gift, and his classmates wanted to create the display to remember their friend and highlight his talent.

But beyond that, Dr. Gilbert said, he hopes people who see Dr. Ogden's artwork to recognize how much colleagues and friends can impact other people's lives. Perhaps future residents, Dr. Gilbert said, will "recognize how special of an opportunity that is to form really deep bonds with someone other than your family."

Matthew Mormino, MD, professor of orthopaedic surgery and residency program director, said it is touching to see how much of a friend Dr. Ogden was to his residency classmates and how much he impacted their lives.

"Ben was an excellent physician with a keen attention to detail and a drive to be the best surgeon for his patients," Dr. Mormino said. "His presurgical plans were a testament to his desire for self-improvement. The detail and the artistry of his surgical plans were like no other."

He added, "These representations of his skill as an artist and his classmates' words about Ben are truly touching, and our department is proud to be the recipients of their efforts to memorialize our friend and colleague."

Dr. Ben Ogden's drawings

Remembering Dr. Nicholas "Nick" Aberle, Class of 2012

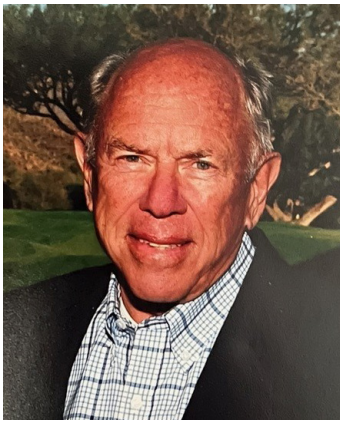
We remember Dr. Nicholas "Nick" Aberle as a valued member of the UNMC Orthopaedics Residency Program, graduating in 2012. Nick approached residency with focus, integrity, and a calm presence that earned the respect of his peers, faculty, and staff. He was a steady team player—hardworking, thoughtful in his clinical approach, and quietly dependable in both routine and high-pressure situations.

Nick was well-liked among his co-residents for his grounded nature and his sense of humor, which brought levity to long hours and demanding rotations. He was particularly drawn to sports medicine and pursued fellowship training following residency, but during his time at UNMC, he developed into a well-rounded surgeon committed to patient care and continuous learning. His years in our program left a strong impression, and we are proud to have been part of his professional journey.

Dr. Nicholas "Nick" Aberle

UNMC Graduate's Gift Funds Biomechanics Chair

By the time he was 13, Robert Volz, MD, had found what would be a lifelong love: climbing mountains. In his lifetime, the Lincoln, Nebraska, native scaled nearly all 58 of Colorado's 14,000-foot peaks and led five trips to Nepal, twice reaching the base camp of Mount Everest.



Dr. Robert Volz, MD

His desire to reach new heights was also reflected in his 35-year career as an orthopedic surgeon and an inventor of several innovations, including the first wrist prosthesis, a total elbow prosthesis and an artificial knee.

It's appropriate that Dr. Volz, a 1954 University of Nebraska graduate and 1957 University of Nebraska College of Medicine graduate, left a legacy for the next generation of innovators. Through his estate, he established an endowed fund — the Robert G. Volz Chair of Biomechanics in UNMC's Department of Orthopaedic Surgery and Rehabilitation — at the University of Nebraska Foundation.

Dr. Volz had warm memories of his time as a University of Nebraska and UNMC grad, his son Jack said.

"He was very proud to have graduated from both of those schools. He wore his Nebraska ring for his wedding ring."

His family remembers Dr. Volz, who died in 2023 at age 91, as someone who was always looking for a better way to do things.

"That was just his nature," said his wife, Ann. "'If something doesn't work well, then we'll find another way to do it.' He was a 'get it done and move on to the next thing' person, not being satisfied with the status quo, always thinking there might be something better ahead."

Jack Volz recalls when his father was working on the wrist prosthesis.

"He came home with a cast on, and I said, 'What are you doing?' He said, 'I want to see what it's like to not have any range of motion of my wrist.' So, for a week or so he was walking around the house with the cast on."

That curiosity and a desire to put himself in others' shoes motivated Dr. Volz.

In the early 1970s, he was recruited to build a total joint surgery program at the University of Arizona Medical Center for its new Department of Orthopedics. There, he established a biomechanics research laboratory — known today as the Robert G. Volz, MD, Orthopedic Research Laboratory — for the design and testing of new total joints.

He encouraged collaboration in his practice, creating a patient-centered model for orthopedic residents and their rheumatology fellows caring for patients in the same clinic. It was the same in his lab, where he invited engineering students to work with him.

Hani Haider, Ph.D. – an engineer himself — knows the importance of collaboration. Director of the UNMC Orthopaedic Biomechanics and Advanced Surgical Technologies Laboratory and professor in the UNMC Department of Orthopaedic Surgery and Rehabilitation, he holds the Volz Chair.

Haider came to the university from the London Medical School at the Centre of Biomedical

Engineering in Stanmore, where he developed one of the most successful knee simulators in the field.

UNMC took note of his innovation and acquired two of the simulators for the Department of Orthopaedic Surgery and Rehabilitation. And "eventually, they got me," said Haider, who joined the department in 2000.

Under his guidance, UNMC has developed methodologies for evaluating total knee replacement (TKR) devices and other joint replacement devices in vitro — or "on the bench." Simulating their motion and the forces put on them, the devices are tested for stability, functionality and wear.

Both the American Society for Testing Materials International (ASTM) and the International Organization for Standardization (ISO) have adopted the TKR methodologies Haider and his team have created. They've become the internationally adopted standards all over the world.

UNMC has an ongoing partnership with the organizations: Each time the testing standards are updated, UNMC works with ASTM and ISO to help revise them.

Dr. Volz's gift will help the lab continue to serve the area of joint replacement, including TKR as well as hip replacement. In turn, the lab's work will help ease the pain of patients around the world and enhance their mobility.

"A gift like Dr. Volz's is fantastic," said Haider. "It will help us recruit and retain the best faculty and pay for equipment to develop testing technologies. We couldn't have set up this lab here in Omaha, Nebraska, and make international contributions without substantial gifts from generous people like Dr. Volz."

The Volz gift will also help the lab continue the momentum it has developed in research. Without it, Haider said, the team's work would face limitations.

Haider had an opportunity to meet with Dr. Volz after he had retired, an encounter that left an impression.

"From our meeting, I could tell that he was an individual hungry for progress," something Haider said he understands. "I identified with that because I'm passionate about what I do. Dr. Volz's quest for progress in this field could not be quenched, and now it's working through his legacy."
Though he had reached the heights in his profession and paved new paths in orthopedic surgery and biomechanics, Dr. Volz remained humble, said Jack Volz.

"He was very modest — a lot like his dad, my grandfather, who's from Omaha. He didn't toot his own horn at all."

Instead, his family said, he was focused on the people he served.

"He was proud of what he'd done to make lives better and more comfortable for his patients through research and development," said Ann Volz.

Thanks to Dr. Volz's gift, curious minds at UNMC can continue striving for their own heights in the field.

To learn more about giving to the department, please reach out to Emily Tiensvold, Senior Director of Development at the University of Nebraska Foundation, at emily.tiensvold@nufoundation.org or 402.502.4107.

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