Department continues growth trend

Since 2000, the number of faculty in the Department of Orthopaedic Surgery and Rehabilitation has increased from 7 to 23.

Physicians in the department are focused on providing the best and most innovative care for our patients’ musculoskeletal problems. Each of our orthopaedic surgeons are specialty-trained in a specific area of orthopaedic treatment, which means we offer individualized care in all of the orthopaedic subspecialties.

(continued on pp. 10-11)
Message from the chair

New growth

As we come into the spring season of change, it’s exciting to see the growth our department is also experiencing. In fact, the number of faculty is the largest the department has seen, and we are excited to continue expanding our reach.

On pages 10 and 11 you will find a two-page spread of our faculty, grouped by subspecialty. Consider this an introduction, or reintroduction to our department. I encourage you to visit our website, where there are more details about our faculty.

Last year held many exciting events and accomplishments for the department and we look forward to building upon those in 2018. In October, we hosted more than 100 orthopaedic surgeons from throughout North America for the 50th Summer Meeting of the Hip Society. It was an honor to host this event on such a significant anniversary for the society and members were pleased with Omaha’s warm hospitality.

We also continue to see great strides being made in the reach of the department’s research. In December, we welcomed 10 FDA implant reviewers who visited the department to learn from our biomechanics lab. Hani Haider, Ph.D., led lectures and lab demonstrations for the group. Department faculty exchanged ideas on the clinical perspective of implant longevity and patient safety with the reviewers, who are responsible for ensuring U.S.-marketed medical devices are safe and effective.

Last fall, we also held our annual Resident Research Forum. Eighteen of our residents presented their research projects and received feedback from department faculty and visiting professor Paul Anderson, M.D. Events like this are an important way of fostering educational opportunities for the next generation of orthopaedic surgeons.

Alumni, make sure to mark your calendars for our 2018 resident graduation. Ceremonies have been scheduled for June 8 and 9. As always, we hope to see you there!

Sincerely,

Kevin L. Garvin, M.D.
Professor and Chair
L. Thomas Hood, M.D., Professorship

Welcome Class of 2023

Five new residents from across the country will join the department in July. Please join us in welcoming our resident Class of 2023!

Mark Amirtheraj, M.D.
Georgetown University School of Medicine

Brandon Bennett, M.D.
University of Nebraska Medical Center

Matt Freeman, M.D.
University of Nebraska Medical Center

Charles J. (CJ) Hansen, M.D.
Indiana University School of Medicine

Erin Stockwell, M.D.
University of Arizona – Phoenix
More than 100 orthopaedic surgeons throughout North America were welcomed to Omaha Oct. 5-7 for the 50th Summer Meeting of The Hip Society.

The annual members-only meeting commemorated the society’s five-decade dedication to its mission of advancing knowledge of hip disorders, promoting evidence-based treatment, and refining surgery of the hip in order to improve the lives of patients. The meeting included a welcome from Dr. Garvin, remarks from the society’s past presidents, 75 paper presentations and 15 moderated panel sessions.

“It was an honor to host this distinguished event, especially as we commemorate the society’s historic 50th anniversary,” said Kevin Garvin, M.D., professor and chair of the UNMC Department of Orthopaedic Surgery and Rehabilitation. “Omaha proved to be an ideal location, and we received tremendous feedback about our city’s excellent hospitality.”

Dr. Garvin was elected president of the society for 2017-2018 and is the only member from Nebraska. In his role as president, he works alongside other members of the board to provide information and education to orthopaedic surgeons and residents regarding disorders of the hip.

Visiting members and their guests experienced a first-class tour of Omaha, including a visit to UNMC’s Biomechanics and Advanced Surgical Technologies Laboratory, a reception at the Holland Performing Arts Center, a private rehearsal of the Omaha Symphony led by Maestro Thomas Wilkins and a behind-the-scenes tour of the Henry Doorly Zoo.

The Hip Society was founded in 1968 with 21 original members. Founding members William H. Harris, M.D., D.Sc., Harvard University, and Richard C. Johnston, M.D., University of Iowa, attended this year’s meeting. Efforts to create the society were led by the late Frank Stinchfield, M.D., former professor and chairman of orthopaedic surgery at Columbia’s School of Physicians and Surgeons, and past president of the American Association of Orthopaedic Surgeons.

Today, there are more than 200 members across various membership categories, dedicated to research aimed at understanding disease processes and patient care of the hip. The society holds two yearly conferences—a closed summer meeting and an open winter meeting.
Seventeen orthopaedic residents gave presentations at this year’s resident research forum, followed by a Q&A session from faculty advisers and a guest professor Paul A. Anderson, MD. The forum was held Friday, Sept. 29 in the Lauritzen Outpatient Center Auditorium, Level 4.

Phillip Thomas, M.D., HO II: “An Immediate weight bearing protocol versus stress radiography to determine ankle stability in patients with isolated SER distal fibula fractures”

Chris Deans, M.D., HO II: “Orthopaedic In-Training Examination (OITE) Preparation and Study Habits of Orthopedic Residents: Revisited”

David Kusin, M.D., HO II: “Is Cement Necessary in Modern Pegged Glenoid Components in Anatomic Total Shoulder Arthroplasty?: A Biomechanical Study”

Kent Rinehart, M.D., HO II: “Gender differences in glenoid remodeling in glenohumeral degenerative joint disease”

Joshua Cameron, M.D., HO II: “Biomechanical evaluation of glenoid seating in anatomic total shoulder arthroplasty”

Joshua Locker, M.D., HO III: “Postoperative outcomes of hip fracture surgery in older patients on clopidogrel or warfarin at the time of surgery”

Darin Larson, M.D., HO III: “Pain associated with increasing length of long-stemmed tibial components in revision total knee arthroplasty”


Dan Sveom, M.D., HO III: “Biomechanical Study Comparing All-suture Anchor Fixation and Interference Screw Fixation for Subpectoral Biceps Tenodesis using a Sawbones Model”

Emmett Gannon, M.D., HO III: “Efficacy of Liposomal Bupivacaine in Lumbar Spine Surgery”

Erik Bowman, M.D., HO IV: “Pre-operative Rand SF-36 Scores Predict Functional Outcomes After Total Hip and Knee Arthroplasty?”

Todd Gilbert, M.D., HO IV: “Late Reinfection May Recur More Than 5 Years After Reimplantation of THA and TKA: Analysis of Pathogen Factors”

Ryan Miller, M.D., HO IV: “Is Padding Necessary Beneath the Pneumatic Tourniquet in Upper Extremity Surgery?”

Tyler Larson, M.D., HO IV: “Survivorship of an Uncemented Tapered Stem in Primary Total Hip Arthroplasty with Minimum Ten-Year Follow-up”

Sayfe Jassim, M.D., HO V: “Short-Term Outcomes of a Titanium Fluted Tapered Stem in Revision Total Hip Arthroplasty”


Noah Porter, M.D., HO V: “Osteocyte Viability and Perioperative Storage Following Human Iliac Crest Bone Graft Harvest”

Benjamin Ogden, M.D., HO V: “Performance Improvement Project in Antibiotic Administration in Open Fractures”

Visiting Speaker, Paul A. Anderson, M.D.: “Linkage of Osteoporosis and Periprosthetic Fractures: Research Methodology”
FDA comes to department for two-day intensive learning

Ten implant reviewer experts from the FDA's Center for Devices and Radiological Health (CDRH) visited Omaha Dec. 6–7 to study the orthopaedic implant testing techniques and innovative developments at the department's Biomechanics and Advanced Surgical Technologies Laboratory.

In Omaha, the FDA had six one-hour lecture/seminars delivered by Dr. Haider, and approximately 10 practical lab demonstrations on various aspects of cutting-edge technology and procedures for implant wear testing. The FDA group also met with UNMC adult reconstruction, shoulder and spine surgeons to exchange ideas on the clinical perspective of implant longevity and regulatory procedures for patient safety.

“We work hard to develop new testing methods for regulatory purposes and we work with the FDA and the orthopaedic industry for these to become industry standards,” said Hani Haider, Ph.D., lab director. “The FDA experts coming to Nebraska represent the best that our federal government offers. They are the guardians to screen for badly designed implants, and their excellent work helps most joint replacement patients today enjoy a renewed pain-free life.”

Dr. Haider and his team at UNMC have spent nearly two decades establishing a preeminent, international implant testing lab. Knee and hip simulators developed by Dr. Haider allow the lab to perform in vitro implant tests, mimicking lifelike complex forces and motions of the human body, to investigate the function and longevity of artificial joints.

“Our internationally renowned research lab and the contributions of our faculty to the advancement of the orthopaedic surgery field are further assurance to our local community patients that they will be well taken care of at UNMC,” said Kevin Garvin, M.D., professor and chair of the UNMC Department of Orthopaedic

On a non-profit basis, the lab has conducted more than 75 orthopaedic implant testing contracts for more than 26 different orthopaedic companies and university labs in the U.S. and internationally, including France, Germany, Italy and Japan. Since 2000, the lab has attracted more than $10 million in industrial and some government funding for this purpose.

“Our work has firmly engraved the name of Nebraska as a haven for innovative excellence in the world of orthopaedic implant technology testing,” Dr. Haider said. “Year after year, I see the rest of the world’s regulatory authorities from China to Brazil emulating how the U.S. FDA screens implants for their own patients. This helps the U.S. to cement its categorical lead in this arena, helps the U.S. economy, and, most importantly, helps patients worldwide. I am proud for Nebraska that we are contributing to this process and warmly welcome the FDA experts coming to Omaha to add to their learning.”

Dr. Haider, center, was the head of the United States Delegation to the International Organization for Standardization (ISO) annual meeting on Medical Devices held in Nagoya, Japan in September 2017. The U.S. had the largest official delegation of all countries and produces more orthopaedic arthroplasty implants than the rest of the world combined.
Alumni Feature:
Roy Guse, M.D.,
Class of 1990

Shortly after completing UNMC residency in 1990, Roy Guse, M.D., was deployed to Germany for preparation staging of hospitals and clinics as part of Operation Desert Storm, beginning a long and rewarding orthopaedic career.

With an interest in joint replacement surgery stemming from his residency research, Dr. Guse returned stateside eager to work in academic medicine. After completing a 3-month total joint fellowship in 1993, he was reassigned to Lackland Air Force Base’s Wilford Hall Medical Center, the Air Force’s only orthopaedic teaching hospital. There he became Chief of Adult Reconstructive Surgery for the entire Air Force.

"Military personnel and their families were flown in from Air Force bases around the country and the world to have their surgery done here," he said.

He also served as consultant to the surgeon general on joint replacements and soon became one of the senior surgeons and then deputy department chairman. Dr. Guse describes his military experience as a "7-year fellowship in orthopaedics."

"I had to make the decision if command pilots who came in to get a hip or knee replaced could ever fly again," he said. "It was an enormous responsibility to deal with such decision-making at a young age."

Dr. Guse credits the breadth and depth of his residency training as the solid preparation for being a good surgeon. He came to UNMC as a second-year research resident after completing a year-long internship at Mount Sinai Medical Center and earning a medical degree from the Medical College of Wisconsin. At the time, UNMC’s residency program allocated one spot each year to a resident who primarily focused on research during the traditional third year.

The research and skills learned during residency, including collaboration on a major bone marrow project with the late John Connolly, M.D. (former department chairman), continue to inform his joint surgery practice.

"I still apply those same principals today in things I do like bone marrow grafting," he said.

In 1997, Dr. Guse finished his Air Force commitment and settled in Texas, his wife Leslie’s home state. He joined four orthopaedic surgeons in Lufkin, a town of 35,000, with a service area of a quarter million people.

Today, elective joint replacements dominate Dr. Guse’s work and he also is involved in the practice’s operations. With a career spanning nearly three decades, the majority of it in Lufkin, the most important advice he passes on to younger surgeons is to understand their impact on the community.

“Living in a smaller town, there’s nowhere I can go that I don’t run into someone who will walk up to me and say I’ve operated on them or taken care of a relative or friend,” he said. “Being in a smaller community as long as I have, it’s quite rewarding to see the impact on the local community, with people physically healthy and able to work.”

Dr. Guse enjoys spending time with wife Leslie and two adult children, Allison and Nicholas. He and his wife share a passion for golf and have played on several continents.

“My wife has become my partner in playing and has almost the same desire for the game as I do,” he said. “We’ve met a lot of interesting people through it and friends that have taken us to far-fetched places to play golf. It’s funny how small the world becomes when you reach out like that.”
Class of 2018

Congratulations to all four residents on their upcoming graduation and fellowship opportunities. The Class of 2018 is pictured above, left to right:

**Leonid Grossman, M.D.**  
Orthopaedic Trauma Fellowship  
University of Pittsburgh  
Pittsburgh, PA

**Benjamin Ogden, M.D.**  
Hand and Upper Extremity Fellowship  
Florida Orthopaedic Institute  
Tampa, FL

**Sayfe Jassim, M.D.**  
Adult Reconstructive Fellowship  
The CORE Institute  
Phoenix, AZ

**Noah Porter, M.D.**  
Spine Fellowship  
University of Pittsburgh  
Pittsburgh, PA

Save the date:  
2018 Resident Graduation

Nebraska Orthopaedic Surgery Residency Program Graduation Ceremonies

**FRIDAY, JUNE 8**

**Chief Resident Presentations/Guest Speakers**

7:30 a.m. – 12:00 p.m.
Lauritzen Outpatient Center Auditorium, Level 4  
4014 Leavenworth Street  
Omaha, NE

**BBQ**

3:00 p.m.
Location TBA

**SATURDAY, JUNE 9**

**Shoulder Symposium**

8:00 – 11:00 a.m.
Lauritzen Outpatient Center Auditorium, Level 4  
4014 Leavenworth Street Omaha, NE

**Banquet**

6:00 p.m. Cocktail Hour  
7:00 p.m. Dinner and Program  
Omaha Country Club  
6900 Country Club Road, Omaha, NE

Evan L. Flatow, M.D. to be graduation guest speaker

**Dr. Flatow is president of Mount Sinai West and an internationally recognized surgeon.**

Dr. Flatow received his medical degree from Columbia University College of Physicians and Surgeons. He completed a surgical residency at Roosevelt Hospital and an orthopaedic residency and fellowship at Columbia-Presbyterian Medical Center. Dr. Flatow spent 11 years on the faculty of Columbia before joining Mount Sinai in 1998.

At Mount Sinai, Dr. Flatow has established an internationally renowned shoulder service, with particular interest in minimally invasive fracture repair, arthroscopic repair, arthroscopic rotator cuff surgery, and shoulder replacement. He has pioneered in collaboration with the Department of Anesthesiology, the use of regional blocks so that shoulder operations may be performed without general anesthesia. One of his most significant contributions has been the development of a comprehensive shoulder replacement system, which is widely used by shoulder surgeons around the world.

Dr. Flatow has received numerous honors and awards, including the American Shoulder and Elbow Surgeon’s Neer Award, the organization’s highest award for shoulder research, which he has won four times. He has helped to train many of the nation’s leading shoulder surgeons, has chaired or served on the faculty of most of the major national shoulder courses, and has been a sought-after speaker in Europe, Asia, South America, and Australia.
AAOS Annual Meeting

The 2018 American Academy of Orthopaedic Surgeons Annual Meeting was held in New Orleans, Louisiana, March 6-10.

POSTER PRESENTATIONS:

Haider, H., Weisenburger, J., Konigsberg, Beau., Hartman, C., Garvin, G. For Lower Wear of Total Knee Replacements, is Higher or Lower Contact Area Better?

Haider, H., Weisenburger, J., Konigsberg, Beau., Hartman, C., Garvin, G. Contemporary Total Knee Replacement Design: Reduce Contact Stress or Reduce Contact Area?

PAPER PRESENTATIONS:

Siebler, J. Trauma (Moderator)

Tao, M. A Novel Analysis of Return-to Play Criteria at Six Months Following Anterior Cruciate Ligament Reconstruction

Vincent, S. The Utility of Intraoperative Neuromonitoring for Minimally Invasive Lateral Approach to the Lumbar Spine

Konigsberg, B. Adult Reconstructive Hip (Moderator)

INSTRUCTIONAL COURSE LECTURES:

Garvin, K., Hartman, C. Total Hip Arthroplasty—How Do I Get Out of this Problem?

CASE PRESENTATIONS:

Garvin, K., Hartman, C. Periprosthetic Fractures of the Hip and Knee: A Case-Based ICL

Garvin, K., Hartman, C. Revision Total Knee Arthroplasty Essentials: A Case-Based Approach

Garvin, K. Management of Infected Total Joint Arthroplasty in 2018—Where Do We Stand Now?

SYMPOSIA:

Garvin, K. Everything You Need to Know About Simple and Complex Primary Total Hip Arthroplasty

Garvin, K. Performing a Revision Total Hip Arthroplasty: What You Need to Know

SPECIALTY DAY:

Garvin, K. The Hip Society Awards/The Hip Society Rothman-Ranawat Traveling Fellowship/The 50th Anniversary Spotlight Presentation, The Knee Society and The Hip Society Specialty Day. (Moderator)

Garvin, K. Value and Economics in TJA, The Knee Society and The Hip Society Specialty Day. (Moderator)

ORTHOPAEDIC RESEARCH SOCIETY:


Haider, H. Knee—Kinematics and Gait Poster. A Simulator Study of the Kinematics: Should Larger Size Total Knee Replacements Move More Than Smaller Ones?
A study by a team of researchers in the Department of Orthopaedic Surgery has challenged a doctrine surrounding knee replacement design.

The team’s study asking, “For Lower Wear of Total Knee Replacements, Is Higher or Lower Contact Area Better?”, was awarded the best poster prize in the category of Adult Reconstructive Knee at the recent American Academy of Orthopaedic Surgeons Annual Meeting in New Orleans March 6-10. Ten first-place posters were awarded from 7,000 entries.

“Technologists and surgeons have designed artificial knees which can alleviate pain and permit almost normal motion for daily living activities. In fact, good knee replacement designs can now last the lifetime of a patient,” said Hani Haider, Ph.D., professor and principal investigator of the study.

“In the evolution of knee replacements since the 1970s, designers focused on stress reduction in the bearings to reduce wear, which should be avoided for many reasons,” Dr. Haider said. “They did so by increasing contact area of the bearings to spread the load, which was vital for the older generation of bearing materials and early designs of the artificial joint.”

Using test data from UNMC’s Biomechanics and Advanced Surgical Technologies Laboratory, Dr. Haider and colleagues found that increasing contact area to reduce stress with contemporary joint materials is like a law of diminishing returns. When taken too far, larger total knee replacement sizes and contact area can actually increase wear with modern designs and materials. This was confirmed by eight separate studies in Nebraska contracted with UNMC by multiple companies from the orthopaedic industry.

“Joel Weisenburger is a formidable member of our engineering team,” Dr. Haider said. “His contribution and the good teamwork with my surgeon colleagues – Kevin Garvin, M.D., Beau Konigsberg, M.D., and Curtis Hartman, M.D. – helped make this happen. It should further enhance confidence of our local patients that they are getting the best medical care at UNMC, the haven where such innovative research was fostered.”

Working closely with multiple companies from industries worldwide makes the team’s results meaningful, relevant and translatable to tangible benefits, Dr. Haider said.

“This is yet another tremendous achievement by our faculty and we wish to thank all who have supported this research resulting in further international recognition,” said Kevin Garvin, M.D, professor and chair of the Department of Orthopaedic Surgery.

“In this case, our results were described to shine a new beacon for artificial knee designers everywhere,” Dr. Haider said. “This award by our peers at the American Academy of Orthopaedic Surgeons recognizing the quality and impact of our research makes us very proud for Nebraska and the local community which has helped champion the lab,” Dr. Haider said. “It means that our Nebraska team of surgeons and engineers can pitch at the highest level in this important research and development arena.”
Orthopaedic Surgery & Rehabilitation

The Department of Orthopaedic Surgery and Rehabilitation clinical faculty take an assertive, interdisciplinary approach to the prevention, diagnosis and treatment of musculoskeletal disorders. Our leading orthopaedic surgeons work closely with experienced nurses and collaborate with other physicians to treat pediatric, upper extremity, lower extremity, sports medicine, orthopaedic oncology, spine, trauma and adult reconstructive patients.

Adult Reconstructive Surgery

Our adult reconstruction surgeons specialize in the surgical treatment of bone and joint disorders and consult with and receive assistance from the departments of Internal Medicine, Radiology, Physiatry, and other medical and surgical subspecialties. Hundreds of total knee and total hip replacements are conducted each year, with a strong emphasis on the complex revision cases. The clinical joint replacement activity is supported by a strong biomechanics laboratory which is growing into a leading international simulation and testing research facility for total knee replacement implants.

Kevin L. Garvin, M.D.  
Curtis W. Hartman, M.D.  
Beau S. Konigsberg, M.D.  
Hani Haider, Ph.D.

Orthopaedic Oncology

Orthopaedic Oncology strives to provide expert interdisciplinary care for a variety of benign and malignant bone and soft tissue malignancies and tumor-like conditions. Bone and soft tissue tumors in all areas of the axial and appendicular skeleton are addressed. We emphasize a modern approach to preservation of skeletal function, and often use bone allografts and custom prosthetic implants.

Sean V. McGarry, M.D.

Adult Spine Surgery

Our Spine Service team provides comprehensive evaluation and treatment for a wide range of conditions involving all aspects of the spine—cervical, thoracic and lumbar. Our surgeons specialize in degenerative conditions/arthritis, spinal stenosis, myelopathy, spondylolisthesis, disc herniations, instability, scoliosis, tumors, and trauma.

Chris A. Cornett, M.D.  
Scott A. Vincent, M.D.

Pediatric Orthopaedics

Our specialty-trained pediatric orthopaedic surgeons are dedicated to the care of all musculoskeletal problems in infants, children, and adolescents. These physicians treat limb and spine deformities (clubfeet, scoliosis, hip dislocations, for example); gait abnormalities; bone and joint infections; and fractures and dislocations of the arms, legs, and spine.

Paul W. Esposito, M.D.  
Brian P. Hasley, M.D.  
M. Layne Jenson, M.D.  
Susan A. Scherl, M.D.  
Maegen J. Wallace, M.D.
Sports Medicine

Our sports medicine physicians deal with a variety of ailments, including strains and sprains, running injuries, instability of the major joints, and ligament or cartilage injury of the major joints such as the knee, shoulder and ankle.

Hand & Upper Extremity Surgery

Our hand and upper extremity surgeons usually start treatment with non-operative modalities such as medications, splints, injections and/or therapy. However, if required, surgical treatment may be recommended with alternatives ranging from arthroscopic nerve release, joint replacement, fracture fixation and ligament and tendon repair or reconstruction. Our surgeons are trained to treat conditions including carpal and cubital tunnel syndrome; tennis elbow; joint pain and stiffness; fractures and dislocations of the hand, wrist, forearm, elbow and shoulder; trigger finger; tendon and nerve injuries; and arthritis (degenerative, rheumatoid, posttraumatic).

Trauma

Nebraska Medicine, the hospital partner of UNMC, offers a level 1 Trauma Center and provides 24/7 trauma coverage for Omaha and the surrounding areas. Nebraska Medicine is the only state designated Comprehensive Trauma Center in Nebraska serving both pediatric and adult patients.

Our trauma specialty team evaluates and treats fractures and dislocations, both common and complex. Poly-traumatized patients and those with long-bone and pelvic trauma benefit from a full array of emergency services, diagnostic imaging, and consultation with a variety of subspecialty medical and surgical services. Our outpatient clinic is also available for long-term follow-up.

Shoulder & Elbow

Our Shoulder and Elbow Service team provides comprehensive evaluation and management for a wide range of shoulder and elbow problems, including arthritis; dislocation or instability; fractures; rotator cuff tears and tendon tears; joint stiffness; and complications due to unsuccessful previous surgery.
UNMC’s Department of Orthopaedic Surgery and Rehabilitation and the University of Nebraska at Omaha (UNO) joined forces Nov. 18 to inspire young women to pursue careers in the male-dominated fields of orthopaedic surgery and engineering.

Nearly 40 young women from area high schools attended the day-long Perry Outreach Program at UNO’s Biomechanics Research Building, where they performed mock orthopaedic surgeries, conducted biomechanical engineering experiments and heard from prominent female engineers and surgeons in the field.

Participants learned to suture using pig’s feet, performed a knee arthroscopy on replicas of human bones and gained hands-on experience in simple and complex fracture repair with plates and intramedullary nails.

“It is a fun-filled educational day of speakers and hands-on modules where the girls get to use saws, drills, screws and get a glimpse into what orthopaedic surgery is like,” said Maegen Wallace, M.D., assistant professor of orthopaedic surgery at UNMC.

Founded in 2009, the Perry Initiative was named in honor of Dr. Jacquelin Perry, one of the first female orthopaedic surgeons in the country. This is the fourth year UNMC has been involved with the Perry Outreach Program, which partners with medical centers and universities to hold events at more than 30 locations nationwide each year.

According to the Association of American Medical Colleges, women account for only five percent of U.S. orthopaedic surgeons. Similarly, women make up just 13 percent of mechanical engineering bachelor’s degrees awarded in the country. The Perry Initiative aims to bridge the gap in these fields and offer support to young women considering STEM careers.

“It is a fun-filled educational day of speakers and hands-on modules where the girls get to use saws, drills, screws and get a glimpse into what orthopaedic surgery is like,” said Maegen Wallace, M.D., assistant professor of orthopaedic surgery at UNMC.

“Dr. Firestone receives subspecialty hand certification”

Daniel Firestone, M.D., assistant professor in the Department of Orthopaedic Surgery and Rehabilitation, recently received a Subspecialty Certificate in Surgery of the Hand by the American Board of Orthopaedic Surgery (ABOS).

The elective certification demonstrates qualifications in hand surgery beyond those expected of other orthopaedic surgeons, including a diverse and high-volume hand surgery practice and passing a standardized exam.

Dr. Firestone specializes in complex wrist fractures, local/wide awake hand surgery, and hand and wrist surgery implant design.
Honor roll of contributors 2016-2017

The Department of Orthopaedic Surgery and Rehabilitation is grateful for generous gifts from individuals and organizations every year. These contributions support various departmental programs that may not otherwise be possible. Some choose to contribute to our department-wide Development Fund, which is dedicated to resident education, while others specify their gifts be applied to scholarships, research, library resources, laboratory equipment or other resources.

The following honor roll recognizes individuals and organizations that have supported the department between July 1, 2016 and December 31, 2017.

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<td>Dr. Maegen Wallace</td>
<td>Theodore C. Yee, M.D.</td>
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Visiting speakers expand resident education

Visiting speakers offer new and innovative ideas in surgical techniques, research topics and patient care. It is an integral part of the resident educational experience and is made possible with the help of annual contributions to our Development Fund.

The following speakers presented from August 2017-March 2018:

**Sept 18**
“Updates on Coding/Compliance/Billing”
(Terri Reeves, RHIA, CCS-P, CPC)

**Oct 23**
“Osteoporosis Update” (Laura Armas, M.D., assistant professor, internal medicine, endocrinology)

**Sept 29**
Visiting Speaker, Paul A. Anderson, M.D.:  “Linkage of Osteoporosis and Periprosthetic Fractures: Research Methodology”

**Oct 25**
“Osteogenesis Imperfecta and Its Management: the Sheffield Approach”
Stephen Giles, M.D., Sheffield Children’s Hospital, England
Publications, presentations & honors

Department faculty and residents present many lectures, seminars, and courses at local, regional, national and international meetings. They also serve in leadership positions and offices for local, state, national and international organizations. The following are our faculty and staff’s presentations and publications, awards and achievements, offices held, and other professional activities from August 2017 - March 2018:

Publications (peer-reviewed):


Weng, L.; Boda, S.K.; TEUSINK, M.; Shuler, F.; Li, X.; Xie, J. Binary Doping of Strontium and Copper Enhancing Osteogenesis and Angiogenesis of Bioactive Glass Nanofibers while Suppressing Osteoclast Activity, ACS Applied Materials and Interfaces. 9 : 24484-24496. 2017


Book Chapters:


Presentations (National and International):


Haider H; Weisenburger JN; Konigsberg BS; Hartman CW; Garvin KL. “For Lower Wear of Total Knee Replacements, Is Higher or Lower Contact Area Better?” annual closed meeting of The Knee Society, Columbus, OH, September 15-16, 2017.


Scheri, SA: “Physeal Injuries in Children”, 8th Annual Dr. Rex & Lillian Dively Pediatric Orthopedic Visiting Professorship, Children’s Mercy Hospital, Kansas City, MO, October 19, 2017


• Session VI: Pearls of Constrained Primary Total Knee Arthroplasty

• Session VII: Cased-based Presentations on Postoperative TKA Dilemmas, moderator

• Session VIII: Ask the Experts, Case-based Presentations: Patella Instability

• Session XII: Total Hip Arthroplasty Post Femoral Trauma

• Session XIV: Revision THA: Preventing Instability-Large Femoral Heads

• Session XVII: The Socioeconomics of TKA/THA-Patient Reported Outcomes

Esposito, P. Bones, Joints and Obesity in Children. Project ECHO (Extension for Community Healthcare Outcomes); March 1, 2018. Children’s Hospital & Medical Center, Omaha, NE.

Esposito, P. Common Orthopedic Problems in the Pediatric Patient. 21st Annual Practical Pediatrics Update; March 2, 2018. Omaha, NE.

Wallace, M. Operative Management of the Long Bones in Patients with Osteogenesis Imperfecta. Association of Surgical
Posters:

Bragdon, C., Barr, C., Skovgaard-Nielsen, C., Berry, D., Garvin, K., Johanson, P., Clohisy, J., Malchau, H. “Minimum 10-13 Yr Multi-Center Study of THA with Highly Crosslinked Polyethylene and Ceramic or Cobalt Chrome Femoral Heads”, annual meeting of the AAHKS, Dallas, TX, November 2-5, 2017

Current Grants:

Pellegrini, V.; Garvin, K.: Comparative Effectiveness of Pulmonary Embolism Prevention after Hip and Knee Replacement: Balancing Safety and Efficacy, Medical University of South Carolina/PCORI. 2016-2020. Pellegrini, V (PI); Garvin, K (Co-I).


Haider, H: Arthrex - Pin-on-Disk UHMWPE Wear Comparison Between Titanium vs Cobalt- Chrome Orthopaedic Metal Alloys, May 2017-completion

Haider, H: Arthrex - In-Vitro Study on the Initial Fixation and Micromotion of an Uncemented TKR Baseplate, May 2017-completion


Community Service:

Scheri, S: Perry Initiative, a daylong program to introduce high school age girls to the possibility of a career in orthopaedics. November 18, 2017

Wallace, M: Perry Initiative, a daylong program to introduce high school age girls to the possibility of a career in orthopaedics. November 18, 2017

Wallace, M: Member, Board of Directors, Jansen’s Foundation, February 2017-present

Memberships and Offices Held:

Garvin, K.: The Hip Society:

• President, March 2017-March 2018

Board of Specialty Societies, American Academy of Orthopaedic Surgeons, March 2016-present

Nebraska Medicine:

• Clinical Chairs Advisory Board, July 2016-present

• Perioperative Executive Committee, Jan. 2015-present

• Ambulatory Executive Committee, 2014-present

• Surgical Services Executive Committee, 2014-present

UNMC:

• Strategic Investment Group, 2015-present

• Dissertation Committee, Ph.D Haider H; Weisenburger, JN; Konigsberg, BS; Hartman, CW; Garvin, KL. For lower wear of Total Knee Replacements, is higher or lower contact area better? Closed meeting of the Hip Society, Naples, FL, September 15-16, 2017. Student, College of Pharmacy, 2014-present

The Knee Society:

• Chair, Membership Committee, September 2017-present

• Member, Membership Committee, September 2015-Sept. 2017

Delegate-At-Large, American Orthopaedic Association, 2017-present

Board Member, Omaha Sports Commission, Omaha, NE 2007-present

Board of Trustees, University of South Dakota Foundation, 2006-present

Editorial Board Member, Techniques in Knee Surgery, 2002-present

Consultant Reviewer:

• British Bone and Joint Journal, Nov. 2014-present

• The Knee, March 2012-present

• European Journal of Epidemiology, 1995-present

• Clinical Orthopaedics and Related Research, 1991-present

• Journal of Bone and Joint Surgery, 1990-present

Cornett, C:

Board Member, Journal of Orthopaedics and Physical Therapy, 2017-Present

Member, Continuing Medical Education Committee, UNMC, 2016-present

Nebraska Medicine:

• Medical Director, Spine Program, 2017-Present

• Committee Member, Surgical Services Operations Committee, 2017-Present

• One Chart Operational Owner, Dec. 2015-present

• Provider Advisory Group for Patient Experience, November 2015-present

• Medical Director of Physical and Occupational Therapy, The Nebraska Medical Center and Bellevue Medical Center, 2014-present

• Physician Advisory Team Committee, 2013-present

Department Deputy for Orthopaedics, One Chart, 2013-present

Consultant Reviewer:

• Pain Medicine, 2016-present

• Journal of Orthopaedic Research, October 2015-present

• Clinical Orthopaedics and Related Research, 2014-present

Dieitrich, M:

UNMC:

• Member, Physicians Leadership Academy, 2015-present

• Member, Surgical Services Operation Committee, 2015-present

Member, Sports Medicine Steering Committee, 2015-present

Sideline Physician for area high school teams, 2013-present
Esposito, P:
Medical Advisory Council, Osteogenesis Imperfecta Foundation, July 2011-present
Medical Staff Committees, Children’s Hospital & Medical Center:
• Clinical Service Chief, Orthopaedic Surgery, 2009-present
• Information Technology Oversight Committee, 2009-present
• Allied Health Committee, 2008-present
• Credentials Committee, 2008-present
• Quality and Patient Safety Committee, 2008-present
• Focused Peer Review Committee, 2004-present
• Physician’s Health Committee, 2004-present
• Surgical Services Performance Improvement & Safety (PIPS)
• The Surgical Chiefs Committee (SSC)
Consultant Reviewer:
• Journal of Pediatric Orthopaedics, BMJ Case Reports, 2015-present
• Clinical Orthopaedics and Related Research (CORR) 2010-present
• PEDIATRICS, American Academy of Pediatrics, 2005-present

Haider, H:
Journal of Engineering in Medicine:
• Reviews Editor, IMechE Part H, March 2012-present
• Editorial Board Member, IMechE Part H, 2009-present
• Reviewer, 2007-present
International Society of Technology in Arthroplasty (ISTA):
• Director, Scientific Review and Information Technology, September 2011-present
• Board of Directors, 2005-present
Editorial Board, Advances in Orthopedics, June 2010-present
Reviewer of abstracts, Orthopaedic Research Society, August 2009-present
International Standards Organization (ISO):
• Fundraising chairman, 2016-present
• Elected Deputy Chair of the US Delegation, 2015-present

Hartman, C:
Member, Adult Reconstruction Hip Program Committee, AAOS, 2016-present
Board of Directors, Metro Omaha Medical Society Foundation, January 2015-present
UNMC:
• Faculty Senate, July 2016-present
• Dissertation Committee, Kelsey Yamada, Ph.D. Student, Department of Pathology/Microbiology, 2016-present
• UNMC Graduate Faculty, May 2013-present
• Dissertation Committee, Raheleh Miralami, Ph.D. Student, MSIA Program, UNMC College of Medicine, 2012-present
• M3 Course Instructor September 2009-present
Nebraska Orthopaedic Hospital:
• Utilization Review Committee, 2013-present
• Finance Committee, 2012-present

Hasley, B:
Medical Staff Committees, Children’s Hospital & Medical Center:
• Surgical Services Performance Improvement & Safety (PIPS), 2018-present

Hartman, C:
• Coordinator/Liaison Officer, Working Group 2 (Implant Wear), ISO TC150 US Tag, 2013-present
• United States Delegation to Committee SC 150 (Medical Devices), 2002-present
American Society of Testing and Materials (ASTM) International:
• Technical (Expert) contact, Friction of Hips Standard Writing Committee, Working Group/Item WK 28778, 2011-present
• Co-Chair, Knee Wear Testing Standards Committee, 2002-present
• Chair, Ankle Replacement Testing Standards Committee, 2000-present
Reviewer:
• Clinical Orthopaedics and Related Research, July 2010-present
• Journal of Orthopaedic Research, 2007-present

Jenson, M.L.:
Children’s Hospital and Medical Center:
• Program Developer, New Sports Medicine Program, 2013-Present

Konigsberg, B:
Member, Adult Reconstruction Hip Program Committee, AAOS. June 2015-present
UNMC:
• Faculty Senate, January 2014-present
• Graduate Medical Faculty, 2013-present
• Dissertation Thesis Committee, Krishna Sarma, Ph.D. student, Department of Genetics, Cell Biology and Anatomy, December 2013-present
• Admissions Committee, College of Medicine, May 2011–present
• Course Director, UNMC Orthopaedic Surgery Grand Rounds, October 2010-present
• Instructor, 2nd Year Medical Students, August 2009-present

Nebraska Medicine
• Medical Director, Lauritzen Outpatient Center and Oakview Medical Building Orthopaedic Clinics, August 2016-present
• Ambulatory Rooming Project, November 2015-present
• Perioperative Quality, Safety & Patient Experience Committee, September 2015-present
Section Chief, Orthopaedics, Nebraska-Western Iowa VA Medical Center, January 2009-present
Consultant Reviewer:
• Journal of Arthroplasty, 2017-present
• Techniques in Orthopaedics, June 2015-present
• Orthopaedics, September 2013–present
• Journal of the American Geriatrics Society, September 2010-present
McGarry, S:
UNMC:
- Faculty Senate, June 2013-present
- Continuing Education Committee, October 2012-present
- Tissue Bank Review Committee, Member, 2006-present
Musculoskeletal Transplant Foundation (MTF):
- Executive Committee, January 2015-present
- Membership/Nominations Committee Member, February 2012 – present
- Medical Board of Trustees, April 2006-present
Member, Children’s Hospital of Omaha Bylaws Committee, January 2008-present
National Comprehensive Cancer Network (NCCN):
- Soft Tissue Sarcoma Panel, July 2007-present
- Bone Cancer Panel, May 2006-present
Consultant Reviewer:
- Clinical Orthopaedics and Related Research, March 2011-present
- Orthopaedics, February 2011-present
Mormino, M:
Mid-America Orthopaedic Association:
- First Vice President, 2018-2019
- Treasurer, 2016-2017
- Chairman, Finance Committee, 2014-present
AO North America:
- Fellowship Advisory Board, 2011-present
- Faculty, 1997-present
Nebraska Medicine
- Medical Director Perioperative Services, 2008-present
- Graduate Medical Education Committee
Consultant Reviewer:
- Journal of Orthopaedic Trauma, February 2014-present
- Journal of Surgical Education, 2010-present
- Journal of the American Academy of Orthopaedic Surgeons, 1999-present
Scherl, S:
Allied Health Representative, AAOS Annual Meeting Program Committee, June 2016-present
American Academy of Pediatrics
- Liaison from the Section on Orthopaedics to the Committee on Child Abuse and Neglect, June 2016-present
- Section on Orthopaedics Executive Committee, September 2017-present
Children’s Hospital & Medical Center:
- Medical Education Committee, January 2011-present
- Trauma Performance Improvement and Patient Safety Committee, 2009-present
Pediatric Orthopaedic Society of North America:
- Liaison between the American Association of Orthopaedic Surgeons Pediatric Education Chair and the Pediatric Orthopaedic Society of North America Education Council, Ag. 2016-present
- Advocacy Committee, May 2013-present
Consultant Reviewer:
- Journal of Pediatric Orthopaedics, 2007-present
- Journal of Orthopaedic Trauma, 2004-present
- Clinical Orthopaedics and Related Research, 2004-present
- Pediatrics, 2003-present
Siebler, J:
Program Committee, Mid-America Orthopaedic Association, 2017-2019
Trauma Program Committee, AAOS, 2015-present
Nebraska Medicine:
- Patient Outcomes Committee, 2016-present
- Perioperative Surgical Services Operations Committee, 2015-present
- Co-Leader, Clinical Effectiveness Trauma Committee, 2015-2016
- Trauma Peer Review Committee, 2014-present
- Trauma Performance Improvement/ Patient Safety Committee, 2014-present
Streubel, P:
International Relations Committee, American Society for Surgery of the Hand, 2016-present
Orthopaedic Surgery Resident Research Committee, UNMC, 2016-Present
Research and Development Committee, UNMC, 2015-present
AO North America
- Trauma Faculty, 2014-present
- Hand Faculty, 2014-present
Consultant Reviewer
- Journal of Hand Surgery (European Volume), 2017-Present
- Journal of Orthopaedic Research, 2017-Present
- Journal of Orthopaedic Trauma, 2012-present
- Journal of Shoulder and Elbow Surgery, 2012-present
Tao, M:
Nebraska Medicine:
- Member, Sports Medicine Steering Committee, 2017-present
- Member, Orthopaedics Operations Committee, 2017-present
Teusink, M:
Emerging Leaders Program, American Orthopaedic Association, June 2015-present
UNMC:
- Musculoskeletal Phase One Curriculum Design Committee, 2016-present
- Continuing Medical Education Committee, 2015-present
- Career Launch Oversight Committee, 2015-present
Consultant Reviewer:
- Journal of Shoulder and Elbow Surgery, 2014-present
- Orthopaedics, 2013-present
Wallace, M:
Children’s Hospital & Medical Center

- Credentials Committee, January 2016-present
- Medical/Surgical Interdisciplinary Committee, September 2015-present
- Children’s Speciality Physicians Operating Compliance Committee, 2016-present

Pediatrics Content Committee, American Academy of Orthopaedic Surgeons, January 2018-present
Residents Review Newsletter Publication Committee, Pediatric Orthopaedic Society of North America, 2015-present
Member, Emerging Leaders Program, American Orthopaedic Association, 2013-present

Continuing Education and Grand Rounds

CME Accredited Grand Rounds are held in the Lauritzen Outpatient Center Auditorium, Level 4 on Mondays at 6:30 a.m. Continuing education seminars and Grand Rounds presentations by department faculty, current residents and guest speakers are open to any interested participants. To obtain an updated schedule or information on how to earn CME credits for these presentations, contact Geri Miller at 402-559-2258 or gmiller@unmc.edu.

Presentations given from August 2017 – March 2018:

**August 2017**
7 “Anatomy Dissections—Pelvis/Acetabulum & Hip/Thigh” (Erik Bowman, M.D.)
14 “Anatomy Dissections—Knee and Leg/Ankle”
21 “Anatomy Dissections—Spine”
28 “Robotics and Navigation Use in Hip and Knee Arthroplasty” (Erik Bowman, M.D.)

**September 2017**
4 No Grand Rounds
11 “Diabetic Foot Wounds: An Orthopaedic Perspective” (Tyler Larson, M.D.)
18 “Updates on Coding/Compliance/Billing” (Terri Reeves, RHIA, CCS-P, CPC)
25 “The Young Arthritic Knee” (Sayfe Jassim, M.D.)

**October 2017**
2 “Morbidity & Mortality Conference Part 1” (Chief Residents)
9 “Morbidity & Mortality Conference Part 2” (Chief Residents)
16 “Flexor Tendon Injuries” (Joseph Morgan, M.D.)
23 “Osteoporosis Update” (Laura Armas, M.D.)
30 “Minimal-stem Shoulder Arthroplasty” (Philipp Streubel, M.D.)

**November 2017**
6 “Opioids & Orthopaedics” (Ryan Miller, M.D.)
13 “ACL Tears” (Matthew Tao, M.D.)
20 “Femoral Shaft Fractures” (Justin Siebler, M.D.)
27 No Grand Rounds

**December 2017**
4 “Complex Elbow Dislocations: Evaluation and treatment based on mechanism of injury” (Leonid Grossman, M.D.)
11 “Orthobiologics” (Todd Gilbert, M.D.)
18 No Grand Rounds
25 No Grand Rounds

**January 2018**
1 No Grand Round

**February 2018**
5 No Grand Rounds—Mid Year Reviews
12 No Grand Rounds—Mid Year Reviews
19 No Grand Rounds—Mid Year Reviews
26 No Grand Rounds

**March 2018**
5 No Grand Rounds—AAOS Annual Meeting
12 No Grand Rounds—AAOS Annual Meeting
19 “Maximizing the Surgical Experience in Residency” (Ben Ogden, M.D.)
26 “Integrative Medicine in Orthopaedics” (Ryan Miller, M.D.)
Orthopaedic News & Notes

Employee service anniversary

Geri Miller, residency program coordinator, marked 35 years with UNMC in March. Geri has been an important part of the residency program since joining the department in 2004. She supports residents and Dr. Matthew Mormino. Geri began at UNMC in 1983 in the Department of Pediatrics. Department faculty, residents and staff recognized Geri at a March celebration.

Extraordinary nurse Linette Jahn

Linette Jahn was chosen as this year’s Extraordinary Nurse by colleagues in the Nebraska Medicine Orthopaedic Clinic and will be recognized by the hospital during National Nurses Week in May.

Jahn works as clinic nurse in the Sports Medicine clinic where she supports a busy practice.

“In the three and a half years that Linette has worked within the orthopaedic department, she has come to be recognized as an incredibly dedicated nurse, a fun-loving person, positive role model, and our extraordinary nurse,” colleagues wrote in her nomination form. “She is a wonderful problem solver and works to ensure her patients are treated with respect and that they are confident in placing their care in the hands of their orthopaedic provider and team.”

Her job requires her to be a liaison between providers, patients and staff. Colleagues noted her excellent communication skills, diverse skill set and compassionate care.

How your support helps us excel at the Department of Orthopaedic Surgery

Your contributions have allowed the department to develop a national reputation for educating outstanding surgeons, build a world-class research program where we are developing cutting-edge technology that is helping to shape the field of orthopaedic surgery, and enabled us to offer the latest techniques and most advanced diagnosis and treatment to our patients.

Please join us in supporting the Department of Orthopaedic Surgery and Rehabilitation and help us continue to strengthen our ongoing mission to excel in these areas. On behalf of our residents, faculty, staff and patients who will benefit from your contribution, THANK YOU for your vital support!

Visit: NUfoundation.org/orthopaedic
In this issue

3 Omaha hosts The Hip Society
Professor and Chair Kevin Garvin, M.D. presides over the 50th Anniversary celebration in Omaha in October.

7 Save the date: 2018 Resident Graduation
Evan L. Flatow, M.D., president of Mount Sinai West and an internationally recognized surgeon, will be the guest speaker.

9 Department faculty receive AAOS award
A study by a team of researchers in the department has challenged a doctrine surrounding knee replacement design.

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Reverse Total Shoulder Arthroplasty for Chronic Posterior Shoulder Dislocation with Rheumatoid Arthritis

Matthew J. Teusink, M.D., Assistant Professor
Shoulder and Elbow Surgery, Department of Orthopaedic Surgery

Case Report

Background:
Reverse total shoulder replacement was originally developed to treat the rotator cuff-deficient shoulder. The reverse shoulder replacement “reverses” the normal ball and socket configuration of the shoulder joint, placing the concave glenoid with a spherical component on the scapula side of the joint and the humeral head with a socket component (Figure 1). This joint configuration is semiconstrained, which provides improved stability of the joint in absence of a competent rotator cuff and allows the deltoid to function effectively. An associated advantage of the reverse placement is that all designs utilize a central screw or post ingrowth design, which allows greater initial fixation in cases of deficient glenoid bone. Given improved longer-term results with reverse total shoulder arthroplasty, indications have expanded from rotator cuff deficiency and arthritis to cases of glenoid bone deficiency as well.1,2,3

Patients treated before the use of reverse shoulder replacement for treatment of locked posterior dislocation of the shoulder showed improved pain with limited functional outcomes and satisfaction following anatomic shoulder arthroplasty.4 These limited results are secondary to recurrent posterior instability of the prosthesis and glenoid loosening. Reverse shoulder arthroplasty has been shown to have good results for treatment of locked anterior shoulder dislocation with improved pain, range of motion, and clinical outcome scores.5,6

The following is an example of reverse total shoulder arthroplasty use in an elderly female patient with rheumatoid arthritis and a locked posterior shoulder dislocation.

Case Example:
The patient was an 82-year-old woman with a long-standing history of rheumatoid arthritis. She reported excellent function in her right shoulder as well as minimal pain prior to her injury. She fell at home three months prior to her presentation at our clinic. She struck her right shoulder on a door frame as she fell on her deck. Since that time, she noted pain and severely limited range of motion. She had one injection into her shoulder before she was referred to our clinic. Prior to the injury she was able to live independently, but since that time has had to live with one of her children due to her difficulties with activities of daily living.

Her exam revealed no gross deformity about the right shoulder. She had minimal active elevation to approximately 30° exclusively from scapular rotation on her thoracic cavity. She could only externally rotate to neutral.

Radiographs of her right shoulder showed findings of chronic posterior dislocation with a “trough line sign” on the AP radiograph (Figure 2) and posterior dislocation on the axillary view (Figure 3). Her CT scan also revealed a chronic posterior dislocation of the humeral head with erosion of the anterior humeral head and erosion of the posterior glenoid (Figure 4-5).
Due to the severe deformity of her humeral head and glenoid with a chronic posterior dislocation, she was indicated for a reverse total shoulder arthroplasty. During the case she was noted to have chronic posterior dislocation of her shoulder. She had anterior erosion of her humeral head with posterior erosion of her glenoid. Her rotator cuff was grossly intact, however the subscapularis was severely attenuated and the posterior rotator cuff and capsule were contracted. The quality of her remaining glenoid bone allowed for excellent screw fixation and purchase.

She did well following the procedure and was discharged home on postoperative day two. She was discharged in a sling and allowed to use her arm at the side for activities of daily living. She returned to clinic at two weeks doing well with minimal pain. She was allowed to begin pendulum exercises with her shoulder and to remove her sling for activities of daily living in her house. At her six-week postoperative visit she noted no pain. She had active elevation of 90° and felt comfortable performing activities of daily living. Her radiographs showed a well-positioned prosthesis with no signs of loosening, fracture, or complications (Figure 6). The postoperative axillary view showed excellent position of the glenosphere baseplate screws into her glenoid bone (Figure 7).

References: