Orthopaedic Surgery and Rehabilitation

BREAKING NEWS

FALL 2004

For Graduates and Friends of the University of Nebraska Medical Center Department of Orthopaedic Surgery and Rehabilitation

Graduation Send Off

“send-off” during graduation in June. The four graduating residents, several faculty members and area practitioners attended a scientific program and tour of the Biomechanics Laboratory at the Scott Technology Transfer and Incubation Center.

A golf outing at Indian Creek Golf Course and dinner at the Shadow Ridge Country Club rounded out the weekend. Guest speaker Dr. Anthony Herring, chief of staff at the Texas Scottish Rite Hospital for Children in Dallas, gave two presentations, one on the history of polio, the other about the multicenter Legg Perthes study.

“Graduation is a milestone for our residents and their families,” said Dr. Kevin Garvin. “Many department staff and faculty are involved in making graduation weekend a true celebration.” The department’s development fund, which receives contributions from our alumni, helps sponsor graduation activities.

The newest graduates have moved on to the next phase of their careers in Nevada, Texas, Indiana, and Florida, but not before a few awards were given. Dr. Lori Reed received the Frank P. Stone Award for Academic Excellence. Dr. Brian Hasley received the John F. Connolly Award for outstanding Research and the Pfizer Scholars in Pain Management Award. The residents presented Dr. Edward Fehringer with the Award for Faculty Excellence in Teaching.

New Directions for MIS Data, Research and Training

The Department of Orthopaedic Surgery is exploring new approaches to minimally invasive surgery (MIS), and they don’t all involve the operating room. The department is directing resources to design a computer-assisted freehand navigation and surgical simulation system, create a surgical patient database with detailed survey information, and provide hands-on training in MIS techniques.

- Freehand Navigation Research: One of the most exciting intersections of computer technology and surgery is taking place in the Biomechanics Laboratory at the Scott Technology Transfer and Incubation Center (STC). Orthopaedic department engineers, computer scientists, technicians, and surgeons are going beyond computer-assisted surgery to make total knee replacement surgery easier for the surgeon and less invasive for patients. UNMC’s team is developing a novel navigation system that will improve surgical precision, help patients recover more quickly, and prolong the life of the artificial joints.

Creating surgery simulation and navigation software is complicated and has taken years. Researchers must create a 3-D bone model on a flat screen, drive several cameras tracking movement, and make instruments and bones on the screen move realistically. The process of simulated free-hand cutting must be “translated” from a surgeon’s hands to the computer through mathematical calculations programmed into computers. The benefit is to achieve faster, more accurate bone cutting and alignment of implants with less trauma to soft tissue.

“We are designing this new freehand simulation navigation system to facilitate minimally invasive knee joint replacement surgery,” says Dr. Hani Haider, associate professor and director of the Biomechanics (Continued on next page)
A Message From the Chair

This issue of Breaking News highlights several gains and losses. Earlier this summer we “lost” four orthopaedic residents when they graduated and moved on to the next phase of their careers; and we “gained” five new incoming residents.

Dr. Huurman’s history series chronicles the many scientific and educational gains in our department and at the medical center over the years. One of the most promising advances for our specialty relates to minimally invasive surgery. Our department approaches this advance from several angles: with innovative biomechanical initiatives, careful patient follow-up, and providing hands-on education in this technique for practitioners. You can read how these areas of excellence are gaining national recognition while helping patients live longer, more active lives.

We are gaining two new educational venues for our residents. Our residents have started a sports medicine rotation at the Nebraska Orthopaedic Hospital, which opened in April. And future residents will have training opportunities at the Nebraska Medical Center now in the planning stages for West Omaha.

A major loss for our department happened when Dr. Max Jardon, 72, a long-time faculty member and mentor to many residents, passed away in August. Dr. Jardon served this department for many years before he retired and moved to Texas, where his wife, Moyra Jardon, still lives. Dr. Jardon was a wonderful friend and contributed to the department in many ways. We will miss him greatly.

This issue is also a thank you to those who have supported the department and highlights the many ways we use contributions from alumni, faculty, and friends. Many of our advances in research, education, and patient care would not be possible without generous support from individuals and organizations. We have printed an honor roll of contributors in this issue as a way to recognize and thank you for your vital support. On behalf of our residents, faculty, staff, and patients—thank you!

Dr. Kevin L. Garvin

New Directions for MIS Data, Research and Training

(Continued from previous page)

Laboratory. Dr. Haider and researcher Andres Barrera program computers that allow 3-D tracking of bone-cutting instruments and simulate (on-screen and in real-time) the cutting and removal of bone. When surgeons use computer-guided freehand cutting, without bulky cutting blocks or other jigs, surgery can be less invasive and damaging to soft tissue and bone. Dr. Haider’s team has presented research results at international scientific meetings and will give a presentation at the 2005 AAOS meeting.

Dr. Kevin Garvin and Dr. Todd Sekundiak provide the hands for the computer simulation. “It’s taken more than two years and the cooperation of many people to get this far,” says Dr. Garvin. He estimates it will take another two years before surgeons can use the new system in the OR. This project has been funded by a generous gift from Christina M. Hixson at the Lied Foundation. “Without private support, innovative research like this computer-aided surgery project could not move ahead,” said Dr. Garvin.

• Survey Database: One growing project that links research, patient treatment, and education is the department’s new surgery survey database. Clinical Research Coordinator Connie Feschuk says they began gathering information for the database in March 2003. As of this fall, there are over 850 hip and knee entries in the database. After patients consent to participate in the study, they fill out a 15-minute survey that collects information about pain, joint function, and general physical and psychological health. The physician then completes a physical examination of the joint, including range of motion. Patients complete the survey before surgery and again after surgery at regular intervals, usually at six months, one year, two years, and four years. Feschuk says most patients are willing to participate in the study and be part of the database.

“Each week, we collect data from up to 20 hip and knee surgeries performed by Dr. Garvin and Dr. Sekundiak,” says Connie, “that includes total joint replacement, revision surgeries, and uni-knees.” She says the database “gives us the opportunity to analyze patient outcomes from several different variables, such as gender, age, or change in pain or joint function. We can also do retrospective studies.” The database allows physicians to evaluate and compare the effectiveness of MIS procedures. Feschuk says, “Most of all, the database gives surgeons and patients solid, scientific information on what to expect.” Dr. Ed Fehringer’s shoulder surgery patients and Dr. Ake Nystrom’s patients being treated for whiplash associated disorders are also contributing to the database. Dr. Todd Sekundiak, who pioneered the concept and set up the patient database soon after he joined the department, says, “The database will continue to grow and will be an extremely valuable decision-making tool for surgeons and patients as well as providing a valuable source for a variety of information.”

• MIS Training: In April, Dr. Todd Sekundiak and Dr. Jack Bowling of Wilmington, NC, presented a hands-on instructional seminar on MIS procedures and techniques for hip and knee surgery. Twelve surgeons from around the country participated. “We built the seminar around the three steps of learning: observe, assist, practice,” said Dr. Sekundiak. “First, participants received classroom instruction and then observed Dr. Bowling and me as we did the procedure on a cadaver in the Comparative Medicine Lab. Finally, we assisted participants as they practiced the MIS techniques they learned.” Dr. Sekundiak says UNMC is one of the few places between the East and West Coasts to offer this hands-on MIS training. He hopes to offer more training sessions next year. MIS techniques decrease the length of the incision, causing less trauma and minimizing post-surgery complications. Dr. Sekundiak hopes most patients will spend less time in the hospital; and he expects patients will experience less blood loss, have less risk of infection, and be able to resume light activity more quickly than with surgery involving a longer incision.
Welcome to our New Residents — Class of 2009

Welcome to our four first-year residents and one HO II who began their orthopaedic surgery residency training in July.

Erica M. Burns
B.A., biology, Central Washington University, 1999
M.D., Creighton University School of Medicine, 2004

Growing up in Washington state, Erica Burns was involved in dance, music, drama, sports, and outdoor activities. After college, she moved to Omaha to attend Creighton University Medical School where she served as a representative to the Organization of Student Representatives to AAMC and as vice president of her class. She did a family practice clerkship in Yakima, WA, and a clerkship on the Total Joint Replacement Team at the University of Iowa. At Creighton Medical Center, she worked as a research assistant, focusing on Lyme disease and cartilage damage. Dr. Burns has volunteered for service agencies such as Habitat for Humanity and Special Olympics, and she went to the Dominican Republic as part of a medical team treating people in rural areas. Dr. Burns says she is attracted to orthopaedic surgery because of its ingenuity and demand for innovation as well as the opportunity to improve the quality of life for patients of all ages.

Casey D. Johnston
B.S., radiation science, technology, University of Nebraska Medical Center, 1999
M.D., University Nebraska College of Medicine, 2004

Born in Alliance, NE, Casey Johnston attended the University of Nebraska-Lincoln before entering the Nuclear Medicine Technology program at UNMC. He worked as a nuclear medicine technologist for Nebraska Health System, and continued to work as a nuclear medicine technologist at Alegent Health System while studying at UNMC Medical School. In medical school, he served as a member of the University of Nebraska Board of Regents, president and other leadership positions in the UNMC student senate. He served on several campus committees including the search committee for the new College of Medicine Dean and chair of the Student Health Insurance Committee. Dr. Johnston says he chose orthopaedics because it offers "the reward of returning patients with injuries or disabilities to their previous or higher levels of functioning…" He enjoys football and wrestling, hunting, and fishing. He also plays golf, runs, lifts weights, and water ski.

Brian D. Kleiber
B.S., biology, University of Missouri-Columbia, 2000
M.D., University of Missouri-Columbia School of Medicine, 2004

During his high school years in St. Louis, MO, Brian Kleiber participated in a summer "Adventures in Medicine and Science" camp. As a student at the University of Missouri-Columbia College of Medicine, he enjoyed all the clerkships, but was drawn to surgery because of the opportunities to treat patients of all ages and to see the results of surgery. Dr. Kleiber served as a volunteer for the Children's Health and Medicine Program and as a standardized patient for underclass medical students. He's been a leader in the Surgery Club, the American Medical Students Association, and Alpha Chi Sigma Professional Chemistry Fraternity. Dr. Kleiber has published and presented research results from his work as a research fellow and intern in the departments of orthopaedics and physiology. As a student he participated in intramural sports and continues to enjoy baseball, softball, football, basketball, and racquetball, as well as hunting and fishing.

Justin C. Siebler
B.S., biotechnology, University of Nebraska-Omaha, 1999
M.D., University of Nebraska College of Medicine, 2004

A native of Lincoln, NE, Justin Siebler played varsity baseball and majored in biotechnology at the University of Nebraska-Omaha. He earned numerous awards including Academic All-North Central Conference in baseball. He served as a volunteer coach in Youth Baseball Leagues. During college, he worked as a lab technician at UNMC and did a biotechnology internship where he assisted in a gene therapy project aimed at blocking DNA replication of osteosarcoma cells. At the UNMC College of Medicine, he was active in professional organizations and tutored freshmen medical students. He was also involved in a research project in the tuberculosis clinic at the Indian-Chicano Health Center, evaluating compliance with TB therapy. As a student-athlete, he saw first-hand how orthopaedic surgeons helped resolve teammates’ injuries, and he learned the importance of rehabilitation. An orthopaedic surgery rotation in medical school helped him decide to pursue orthopaedics. Dr. Siebler enjoys running, biking, skiing, and photography.

Class of 2008

John R. Gardner
B.S., kinesiology, 1991; M.S., physiology, 1998; Ph.D., physiology, 1999, University of Illinois at Urbana-Champaign
M.D., University of Illinois College of Medicine, Chicago, 2001
Emergency Medicine Residency, University of Illinois College of Medicine at Peoria, 2001-2004

John Gardner grew up in Urbana-Champaign, IL, and earned B.S. and M.S. degrees from the University of Illinois in his home town. He went on to complete the combined M.D. - Ph.D. degree program at the University of Illinois. His thesis research involved development of a ground-based murine model of spaceflight that allowed him to examine changes in bone and muscle associated with loss of weight-bearing. As a clinical assistant at the UI College of Medicine in Peoria, Dr. Gardner taught the cardiovascular physiology lab course for first-year medical students. Before coming to UNMC as an HO II, Dr. Gardner was in the third year of an emergency medicine residency at the University of Illinois College of Medicine in Peoria. He was team physician for the Peoria Rivermen ice hockey team and earlier worked as an athletic trainer for high school and university teams. He enjoys biking, running, hiking, carpentry, and Aikido.
Growing in a New Century

The early 1900s saw the University of Nebraska College of Medicine grow nationally in stature and influence among the nation’s medical schools. During these years several new facilities were built including:

- University Hospital Unit 1 (1917) and Unit 2 (1927)
- North Laboratory (1913) named Poynter Hall after Dean C.W.M. Poynter, M.D. (1930-1946)
- South Laboratory (1919), now named after Dr. A.L. Bennett, professor of physiology
- Conkling Hall, the nurse’s dormitory
- Power Plant on the south side of Emile Street (rebuilt 1932)

Specialization was slow to come to the University of Nebraska College of Medicine. Historic records reveal that the exclusive purpose of the school’s existence during the first half of the twentieth century was apparently to prepare students for general medical practice. This is reflected in the organization of the faculty. The majority of clinicians, including the chairs of all clinical departments, held part-time or volunteer appointments, including the Department of Orthopaedic Surgery chairs:

- Dr. J.P. Lord, 1914-1933
- Dr. Robert Schrock, 1934-1949
- Dr. William Hamsa, Sr., 1949-1963
- Dr. Chester Waters, Jr., 1963-1967
- Dr. L. Thomas Hood, 1967-1973

All these individuals were trained elsewhere. Dr. Lord received his orthopaedic training at Rush Medical College in Chicago, Dr. Schrock at Cornell University in New York, Dr. Hamsa at the University of Iowa, Dr. Waters at Duke University, and Dr. Hood at the Mayo Clinic. These department heads and their volunteer faculty members were responsible for educating medical students and rotating interns in caring for orthopaedic problems as well as supervising inpatient orthopaedic care at the University and Douglas County hospitals.

Following the stock market crash in 1929, the University Hospital fell upon hard financial times. In order to maintain quality of care, the institution was forced to close down some of its hospital beds and reduce the size of the medical school classes.

The administrative organization at the University of Nebraska College of Medicine was considerably smaller in the early 1900s than it is today. There was no chancellor for the Medical Center campus; the College of Medicine dean reported directly to the University of Nebraska President. In addition to many academic responsibilities, the dean also had full administrative responsibility for operation of the University Hospital. Not until 1953 was the first professionally trained hospital administrator (Duane Johnson) named.

Today the University of Nebraska Medical Center is much larger and more complex. UNMC is administered by a chancellor, three vice chancellors, and a dean for each of the health colleges: the Colleges of Medicine, Nursing, Dentistry, Allied Health, Pharmacy, and Graduate Studies.

In the College of Medicine, there are 10 associate and assistant deans. The University Hospital (now a part of The Nebraska Medical Center) is managed by a chief executive officer and three senior executive vice presidents.

In the next issue of Breaking News, we will explore the evolution of post-graduate education and the development of residencies, with particular attention to the Department of Orthopaedic Surgery.
Gifts from orthopaedic alumni, friends, faculty members, foundations, and corporations support the department’s mission by providing vital resources for resident education, scientific research, equipment purchases, and much more.

“With the state’s financial problems and university budget cuts, private contributions to our department are vital,” said Dr. Kevin Garvin. “Private gifts make a day-to-day difference in the educational opportunities we provide for our orthopaedic residents, the research breakthroughs in our laboratories, and the children and adults we treat in our clinics.”

Some people support the department’s annual development fund (department-wide fund) that is used primarily for resident education. Others choose to direct their gifts to specific funds for scholarships, research, or library resources, for example.

The following honor roll alphabetically lists the names of individuals and organizations that supported the Department of Orthopaedic Surgery and Rehabilitation between July 1, 2003, and June 30, 2004.

$100,000 and above
Ryan, Wayne and Eileen

$5,000 - $9,999
Clare, Michael P.
Esposito, Paul W.
Fehringer, Edward V.
Garvin, Kevin L.
Ginsburg, Glen M.
Hendler, Robert C.
Mormino, Matthew A.
Neff, James R.
Nystrom, N. Ake
Sekundiak, Todd D.

$1,000 - $4,999
Chavda, Deepak and Pallavi
Clare, Patrick E. and Linda L.
Davis, Tom
Fitzgibbons, Timothy C.
Scherl, Susan A.
Schwab, Terry D.
Scott-Miller, James R. and Joanne
Surgical Solutions of Nebraska, Inc.
Wall, Roger

Up to $999
Brush, John H. and Louise
Devney, James P. and Susan A.
Drs. Gross, Iwersen, Kratochvil & Klein, PC
Duwelius, Paul J.
Fischer, Brett W.
Guse, Roy
Health Services One
Huurman, Walter W.
McGuire, Michael H.
Minard, David W.
Miyano, John A.
O’Neil, Michael T.
Sicuranza, Michael J.
Smith, Samuel E.
Strasburger, Scott E.
Walsh, Michael M.
Wiebe, David A.

Thank you for your vital support! If you have questions or corrections to this honor roll, please contact the University of Nebraska’s Omaha office at 8712 West Dodge, Suite 100, Omaha, NE 68114. Or you may call them at (402) 595-2302.

Honor Roll of 2003-2004 Contributors

2005 AAOS and MAOA Meetings

Mark your calendar for two important meetings coming up in 2005. The American Academy of Orthopaedic Surgeons (AAOS) will be in Washington, D.C., February 23-27. The department will sponsor an alumni reception on Friday, February 25, from 6-8 p.m. at the Grand Hyatt Hotel (Renwick Room). Later this year, the department will mail invitations to the annual gathering. In addition to the many alumni who gather at the reception, several current faculty and residents will give research presentations at this year’s AAOS meeting.

The Mid-America Orthopaedic Association (MAOA) will hold its annual meeting April 20-24 at the Amelia Island Plantation in Florida, a nationally known, family-friendly golf and tennis resort. Dr. Kevin Garvin is president of the MAOA this year, and Dr. James Neff will be the presidential guest speaker at the MAOA meeting.
Richard Croson Receives Silver U Award

Richard Croson, a chief technician in Biomedical Engineering, Implant Design and Testing, recently received the Chancellor’s Silver U Award. Dr. Hani Haider says Richard is a pillar in their team which builds and tests knee and ankle joint simulators. Richard says he enjoys the variety of his work and “being part of a great team.”

At the Scott Technology Center, Richard works with the engineering team to custom build prototypes and fixtures to hold joint implants during rigorous wear testing. He has played an important role in upgrading the state-of-the-art knee simulator machines and built new implant testing machines. When a new design idea came up, Richard made it physically happen. “I’ve even dabbled in electronics and computer control interfaces, which has given me new knowledge and skills,” he says. Richard is looking forward to helping test a new robot for possible use in minimally invasive surgery (MIS) (see story page 1).

An Iowa native, Richard grew up “fixing things.” He helped his father with a side business of repairing firearms and went to Iowa Western Community College for tool and die training. Richard, his wife Tammy, and four children live in Arlington. He enjoys hunting and fishing when he isn’t busy with kids’ activities and home or car repairs. The family is also dedicated to their church. Congratulations, Richard!

Dr. O. Max Jardon, 72, passed away in Corpus Christi, TX, on August 23, 2004. He will be remembered for his many years as a faculty member and mentor to residents.

Born in Long Island, KS, Oscar M. Jardon graduated from Nebraska State College at Kearney in 1952 and from UNMC’s College of Medicine in 1957. He completed an internship at Clarkson Hospital and served four years in the Army. Dr. Jardon operated a family practice in Loop City, NE, before returning to UNMC for an orthopaedic residency. When he graduated in 1972, he became the second person to complete the department’s modern-era training program. During his residency, Dr. Jardon joined the Air Force Reserve, eventually reaching the rank of Brigadier General.

Dr. Jardon joined the UNMC orthopaedic faculty and later served as acting chairman of the department. As a faculty member, Dr. Jardon focused on adult reconstructive surgery and trauma management. His research interests were in biologically fixed endoprosthetics, heat stress, and malignant hyperthermia. Dr. Jardon also served as a consultant to State Services for Crippled Children, was chief of orthopaedic surgery at Omaha’s Veterans Administration Hospital, and was active in many medical organizations and civic groups. Dr. Jardon retired from the Air Force in 1993 and from UNMC in 1996, achieving professor emeritus status.

According to Dr. Walter Huurman, Dr. Jardon was widely known as an innovative, pioneering surgeon and endearingly recognized as a rough, gruff orthopaedist who was sensitive and soft under that veneer. “Max played a major role in molding the career of more than 75 orthopaedic residents,” says Dr. Huurman. “They and all others who worked with him have forever etched in their memories a long list of never-to-be forgotten euphemistic Max-isms.” Teacher, counselor, surgical healer and friend, Max you will be missed.

Visiting Speakers Expand Education

This year two of the department’s guest speakers were former Nebraska residents. In April, Dr. John Miyano (1996), an orthopaedic hand surgeon from Seattle, presented two seminars: “Distal radius fractures” and “Vascularized bone grafts for wrist surgery.” In August, Dr. Brian Brigman (2000), chief of Orthopaedic Oncology and assistant professor of Surgery at the Duke University Medical Center in North Carolina, presented “Musculoskeletal Oncology.”

Dr. John Anthony Herring, chief of staff at the Texas Scottish Rite Hospital for Children in Dallas, presented two seminars as part of graduation weekend in June.

Annual contributions to the department’s development fund help to bring guest speakers to campus. “Visiting speakers provide valuable perspectives and enhance the educational opportunities for our residents,” said Dr. Kevin Garvin. “In addition, our faculty and staff, as well as Omaha-area surgeons benefit from this exchange of expertise and experience.”

Department Loses Long-time Faculty Member

Dr. John Anthony Herring, chief of staff at the Texas Scottish Rite Hospital for Children in Dallas, presented two seminars as part of graduation weekend in June.
Department and Alumni News
Here is our bulletin from UNMC orthopaedic faculty and graduates in Nebraska, the U.S., and around the world.

Dr. R. Michael Gross was awarded the Orthopaedic Overseas Volunteer of the Year Award at the annual AAOS meeting in March 2004. Above: Surgery continues by flashlight after a power failure in the hospital Dr. Gross was working at in Kumi, Uganda.

Dr. Charles Burt (1998) is now the chief executive officer of the new Nebraska Orthopaedic Hospital, located at 144th and West Center Road in Omaha, which opened in April. Billed as the “First specialty hospital of its kind in Nebraska,” the new facility handles inpatient and outpatient procedures.

Welcome back to Dr. Eric Watson (2000). Dr. Watson moved to Kansas following his residency and is now taking an informal sabbatical to work at UNMC with Drs. Michael Clare, Dave Inda, and Scott McMullen. He will spend a few months to gain additional training and expertise in orthopaedic foot and ankle surgery.

Volunteer Faculty Member Receives National Recognition

Dr. Michael Gross is known for his many years of volunteer work, from teaching in orthopaedics at UNMC to treating patients in Uganda. His first overseas trip was through the Christian Medical Society in 1986 when he and a group of physicians and nurses worked in clinics across Honduras. His other volunteer medical travels have been with Orthopaedics Overseas (OO), including return trips to some countries: St. Lucia (1), Uganda (3), Bhutan (2), and Ethiopia. Orthopaedics Overseas emphasizes clinical and didactic teaching at the local sites as the best way to have a lasting impact on local health care. Assignment lengths vary, but are usually one month. While he typically travels to sites alone, Dr. Gross usually meets volunteers from other countries. His daughter, a medical student, has accompanied him to Uganda and Bhutan. Dr. Gross has been practicing in Omaha since 1977. He calls his foreign medical work “second fellowships,” and says the experiences are rewarding and energizing. Next trip? Probably Nicaragua, perhaps Ethiopia in 2005. At the 2004 AAOS meeting, Dr. Gross received the “Orthopaedics Overseas Volunteer of the Year Award.” If you are interested in overseas medical work, feel free to contact Dr. Gross.
# Continuing Education and Grand Rounds

All UNMC orthopaedic graduates are welcome to attend the following continuing education seminars and Grand Rounds presented by department faculty, current residents, and guest speakers. Please call the department (402-559-4533) to check on possible updates to this schedule.

## November 2004
1. Ankle Fractures (Dr. Clare)
2. Soft Tissue Management in LE trauma (Dr. Hollins)
3. Scaphoid Fractures (Dr. McCarthy)
4. Management of Middle Age Knee arthritis RP (Dr. Otterberg)
5. Management of Lesser Toe Deformities (Dr. Hubley)

## December 2004
1. Distal Humerus Fractures (Dr. Rosipal)
2. Open Fractures (Dr. Volin)
3. Radiation Exposure to the Orthopaedic Surgeon (Dr. Prince)

## January 2005
1. Morbidity & Mortality (Drs. Lauder, Hubley, Humphrey)
2. Acetabulum Fractures (Dr. Tarkin)
3. Alternative Bearings (Dr. Garvin)
4. Adult Flat Foot (Dr. Hubley)

## February 2005
1. Kienbach’s Disease (Dr. Lauder)
2. Lower Extremity Amputations (Dr. Dietrich)
3. TKA and Knee Stiffness/Arthrofibrosis (Dr. Sekundiak)
4. AAOS national meeting, Washington, D.C.
5. Locked Plating: Indications and Biomechanics (Dr. Mormino)

## March 2005
1. Diabetic Foot Ulcers (Dr. Volin)
2. Rotator Cuff Repair: Arthroscopic Approach (Dr. Burt)
3. Lis Franc Injuries (Dr. Clare)
4. Complex Regional Pain Syndrome (Dr. Rakes)

## April 2005
1. Morbidity & Mortality (Drs. Prince, Mulconrey, Lauder)
2. Mid-America Meeting Presentations
3. Avascular Necrosis of the Hip (Dr. Dietrich)

## May 2005
1. Scapula/Clavicle Joint Injuries (Dr. Rosipal)
2. Cartilage Regeneration (Dr. Brown)
3. Implant Design/Kinematics of the Knee (Dr. Haider)
4. Lumbar Spine Fractures (Dr. Mulconrey)

## June 2005
1. MIS: Total Joint Arthroplasty (Dr. Sekundiak)
2. Morbidity & Mortality (Drs. Tarkin, Volin, Prince)

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## Breaking News

*Breaking News* is published twice a year (spring and fall) by the Department of Orthopaedic Surgery and Rehabilitation, University of Nebraska Medical Center.

Visit the department online (www.unmc.edu/orthosurgery).

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Department of Orthopaedic Surgery and Rehabilitation
The University of Nebraska Medical Center
Breaking News
981080 University of Nebraska Medical Center
Omaha, NE 68198-1080
Faculty Presentations, Seminars, and Publications

Department faculty members present many lectures, seminars, and courses on the UNMC campus and in the Omaha area. They also serve in leadership positions and offices for local, state, national, and international organizations. Here are some of our faculty’s presentations, publications, awards, offices, and other professional activities June-October 2004.


Haider, H; Barrera, O; Walker, P; Sekundiak, T; and Garvin, K: Freehand Navigated Bone Cutting for TKR Without Jigs - Assessment of First Cuts. 5th Combined Meeting of the Orthopaedic Research Societies of Canada, USA, Japan and Europe, Banff, Alberta, Canada, October, 2004. Poster 246.

Barrera, O; Haider, H; Walker, P; Sekundiak, T; and Garvin, K: Intra Operative Graphical Interface for Freehand Navigated Bone Cutting for Knee Replacement Surgery without Jigs. 5th Combined Meeting of the Orthopaedic Research Societies of Canada, USA, Japan and Europe, Banff, Alberta, Canada, October, 2004. Poster 246.


Mormino, MA: Course Chairman, 3rd Annual Trauma Update, Omaha, NE, September 2004.


Mormino, MA: Biomechanics of Locked Plating. 2nd Annual Trauma Update, Omaha, NE, September 24-25, 2004.

Mormino, MA: Talus Fractures Treatment Options. 3rd Annual Trauma Update, Omaha, NE, September 24-25, 2004.

Mormino, MA: Proximal Femur Fractures Treatment Options. 3rd Annual Trauma Update, Omaha, NE, September 24-25, 2004.


Scherl, S: Child Abuse - The Orthopaedist Role in Diagnosis and Management. Visiting Professor (Grand Rounds), Boston University School of Medicine, Boston, MA, June 13-14, 2004.


(Continued on back of page)
Conference Presentations, Seminars and Publications
(Continued from front page)

Neff, JR: Staging and Current Surgical Management of Osteosarcoma. Nebraska Medical Center Operating Room Nurses, Omaha, NE, June 2004.


Barrera, O; Haider, H; Walker, P; Sekundiak, T; and Garvin, K: Combined Surface and Volumetric Rendering on a PC for Real Time Feedback of Bone Cutting in Orthopaedic Arthroplasty. 17th Nebraska Biomedical Engineering Research Workshop, Lincoln, NE, May 1, 2004. Poster

Barrera, O; Haider, H; Walker, P; Sekundiak, T; and Garvin, K: Experimental Cuts with an In-house Developed System for Image-guided Navigation of Total Knee Replacement Surgery Without Jigs. 17th Nebraska Biomedical Engineering Research Workshop, Lincoln, NE, May 1, 2004. Platform

Haider, H; Obrien, B; Croson, R; and Walker, P: A New Lower Limb Simulator to Test Total Knee Replacement Systems in High Flexion. 17th Nebraska Biomedical Engineering Research Workshop, Lincoln, NE, May 1, 2004. Poster

Mupparapu, S; Haider, H; Piltner, R; Barrera, O; and Walker, P: Development of Finite Elements Models of Implants and Bones with Distributed Strength for Minimally Invasive Knee Replacement Surgery. 17th Nebraska Biomedical Engineering Research Workshop, Lincoln, NE, May 1, 2004. Poster

Tarkin, I; Haider, H; Fiedler, M; Mormino, M; and Clare, M: Decoupled Rotational Testing of Anterior Supplementation in Ankle Arthrodesis Constructs. 17th Nebraska Biomedical Engineering Research Workshop, Lincoln, NE, May 1, 2004.

Prince, EJ; Duffy, MF; Otterberg, ET; and Garvin, KL: Seventeen to Twenty Year Follow-Up After Total Hip Arthroplasty Using a Tapered Tri-Lock Component Inserted Without Cement. Mid-America Orthopaedic Association Annual Meeting, La Quinta, CA, April 14-18, 2004.


Kudos to...

• Dr. Michael Clare was recently approved by the North American Musculoskeletal Trauma Education Committee as an orthopaedic faculty member for the Association for the Study of Internal Fixation (AO/ASIF).

• Dr. Paul Esposito has been re-elected to serve on the executive committee of the Section on Orthopaedics of the American Academy of Pediatrics (AAP). He also became a reviewer for the Journal of American Academy of Pediatrics.

• Dr. Walter W. Huurman received the 2004 Distinguished Service Award from the American Academy of Pediatrics, Section on Orthopaedics for “his dedication to the section, his longtime commitment to the specialty, and his tireless efforts on behalf of children.”

• Dr. Anthony J. Lauder, HO V, is the AOA-OREF-Zimmer Resident Leadership Forum recipient, University of Nebraska.

• Dr. Matthew Mormino has been promoted from Assistant Professor to Associate Professor in the Department of Orthopaedic Surgery. He is now also the Program Director for Residency Training (formerly Assistant Program Director).

• Dr. James Neff was selected for America’s Top Doctors, 4th Edition, 2004, published by Castle Connolly Guide.

• Dr. Edward Prince, HO V, received a $2,000 Annual Meeting Travel Grant from the Mid-America Orthopaedic Association (MAOA). The award he received was sponsored by DePuy and will pay for his travel to attend the 2005 MAOA meeting.

• Drs. David Buck, HO III, Beau Konigsberg, HO III, Scott Swanson, HO III, and Kimberly Turman, HO III, received Synthes Educational Grant Awards to attend the Principles of Fracture Management Courses. Two residents took the course in August, and two are taking the October course.

• Department of Orthopaedic Surgery Administrative Director David Staiert was honored for his 15 years of employment at the UNMC annual Service Awards Dinner. More than 300 UNMC employees were honored at the June dinner.

• In June, oncologists and researchers from Europe and North America attended the Children’s Oncology Group International Summit on the Biology and Treatment of the Pediatric Soft Tissue Sarcomas at UNMC. Dr. Julia Bridge, a pathologist, cytogeneticist, and courtesy professor in orthopaedics, was a keynote presenter and spoke on pathologic evaluation and classification of non-rhabdomyosarcoma soft tissue sarcomas.

• UNMC Kudos: UNMC ranked 95th out of 534 U.S. educational institutions by receiving $37.3 million in total National Institutes of Health (NIH) research funding support during the 2003 fiscal year. Several health colleges helped advance the ranking. The College of Medicine received $31.1 million from NIH, to be ranked 79th out of 121 medical schools, College of Medicine Dean John Gollan reported. The UNMC College of Nursing ranked 22 out of 98 nursing schools around the country, receiving $1.78 million in NIH research support during fiscal year 2003; and the College of Dentistry moved up to a ranking of 20th out of 55 schools by receiving $3.44 million. The College of Pharmacy ranks 42 out of 64 U.S. pharmacy schools and continues to increase external funding.