As the calendar year comes to a close and I look back on the department’s achievements in 2008, I have a sense of pride for the growth of the department and the outstanding accomplishments of our faculty, residents and fellows. Yes, there have been growing pains and times of frustration with the pace it takes to structurally implement our ideas into actions; yet we, our faculty, staff and trainees have relentlessly persevered to successfully enhance our UC Davis missions of clinical care, community engagement, research and teaching.

**Clinically**, we have expanded our specialty care by 25 percent with the recruitment of our new service chiefs for foot and tumor oncology. We have implemented an internal block release program, which has increased utilization for our operating rooms. This has greatly contributed to our increase in RVU production. For FY08, we had just over 100,000 work RVUs for our department, an increase of 21% compared to FY07.

As our clinical productivity increased, the need for us to strengthen partnerships with other hospitals grew apparent. This past October, we began performing elective cases at Mercy San Juan. This opportunity has solidified our coordination of care efforts and has improved access for our patients. Our sports medicine physicians continue to provide care to our UCD sports teams and our community basketball teams, the Kings and Monarchs. Beyond Sacramento, our faculty offer service, through treatment and education, to those beyond our borders.

**Community engagement** efforts to reach out to our patients, alumni and friends have been on the forefront. We have enhanced our communication avenues by updating our website, starting a quarterly newsletter, and strengthening our relationship with 740 orthopaedic physicians in our community by launching our new physician-to-physician referral line. We had our first grateful patient campaign. These donations coupled with our endowments and private gifts from our alumni and friends have provided a fiscal stimulus for our education and research missions. For this, I extend a gracious thank you.

Our **research** structure continues to evolve. This fall, we recruited an epidemiologist who will begin to develop a clinical registry outcomes database in early 2009. Our faculty and trainees continue to reach out to industry for research support and as a result, we have seen an increase in grant approvals and research projects. Orthopaedic research continues to be cutting edge with our faculty’s participation in stem cell advancement and biomechanics.

Forefront research, community engagement and clinical care are the educational experiences we aspire to provide. Our **trainees**, residents, fellows, research students and acting interns are top notch. As our programs expand, a more robust infrastructure is being implemented. We now have co-instructors of record, an assistant residency director in addition to our residency director and a growth in fellowship directors as our pediatrics fellowship will begin in 2009 and a sports medicine fellowship is targeted for 2010.

As you look back on 2008, I ask that you think about the attainments for which you are proud and then take a moment to start to develop your line of sight to those goals you have set to accomplish in 2009.

**Seasons greetings.**

Paul E. Di Cesare, MD, FACS
Michael W. Chapman Endowed Chair

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**Faculty Awards through Sponsored Programs**

<table>
<thead>
<tr>
<th>Faculty Name</th>
<th>Award Amount</th>
<th>Sponsor</th>
<th>Project Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paul Di Cesare, MD</td>
<td>$54,194.02</td>
<td>GlaxoSmithKline</td>
<td>&quot;The Effects of Arixtra on Wound Drainage Following Total Joint Arthroplasty&quot;</td>
</tr>
<tr>
<td>Tania Ferguson, MD</td>
<td>$34,000.00</td>
<td>Stryker</td>
<td>&quot;Compare the strength of trans-sacral fixation with iliosacral fixation with/without anterior fixation in a vertically unstable pelvic ring fracture&quot;</td>
</tr>
<tr>
<td>Mark Lee, MD</td>
<td>$57,000.00</td>
<td>Smith &amp; Nephew</td>
<td>&quot;Biomechanical Comparison of VLP: Tubular Plates in Osteoporotic Fibula Fracture&quot;</td>
</tr>
<tr>
<td>Robert Szabo, MD</td>
<td>$11,400.00</td>
<td>Stryker</td>
<td>&quot;Biomechanical Comparison of Metacarpal Plating&quot;</td>
</tr>
</tbody>
</table>
The trend shows an increase in our outpatient surgery cases. This is largely due to the opening of the Same Day Surgery Center in November 2007.

Our clinical productivity is in an upward trend. Since FY07, we have increased our clinical faculty by four, created an internal operating room block release system, and are working to minimize clinic cancellations.

Using FY07 data, Health Strategies & Solutions, Inc. predicts Orthopaedics will increase inpatient surgeries by 30 percent; outpatient surgeries by 40 percent, and clinic visits by 24 percent by 2013. As seen above, we are on par to hit this target 4 years ahead of schedule.

**ACGME Site Review**

Our Residency Program underwent an ACGME site visit for its accreditation on December 9, 2008. Richard Haynes, Pediatric Orthopaedics, was our site visit representative from the ACGME. While results of the site visit are not yet available, we anticipate full accreditation with a 5 year accreditation cycle. In addition to the normal residency review process, we have submitted to the ACGME permission to expand the program from 4 to 5 residents per year. Action on the request will be determined by the Residency Review Committee on January 16, 2009.

As we approach the new academic year, we work collectively to provide for our residents a world class Orthopaedic Residency training experience, carrying on the legacy of excellence in Orthopaedics championed by Dr. Michael Chapman and other founders of the UC Davis Department of Orthopaedics.

**Resident Applicants…**

**…did you know?**

- 374 applicants applied for 4 spots (5-3 year slots and 1-6 year slot)
- 12.8 percent of all applicants are interviewed
- 17 of 48 selected for interview were acting interns at UCD Department of Orthopaedics
- Resident interviews are January 12 and 20, 2009
- Resident applicants are invited to enjoy a social gathering with current residents the evening prior to interview
- 10 faculty and 2 chief residents conduct the round robin interview sessions
- Applicants receive a tour of the hospital, attend grand rounds, experience morning triage, and meet with the residency director
- Our new residency brochure can be viewed at www.ucdmc.ucdavis.edu/orthopaedics/education/residency
Fyhrie selected for study section of NIH’s Center for Scientific Review

David Fyhrie, PhD, UC Davis Professor of Orthopaedic Surgery, has been appointed as a member of a study section for the National Institute of Health’s Center for Scientific Review.

Fyhrie has been selected to serve on the Skeletal Biology Structure and Regeneration Study Section through June 2012. Members are selected on the basis of their demonstrated competence and achievement in their scientific discipline, as reflected by the quality of their research accomplishments, publications in scientific journals, and other significant scientific activities, achievements and honors.

Fyhrie is the Director of the Orthopaedic Research Laboratory and holds the David Linn Chair in Orthopaedic Surgery. His research interests include bone biomechanics, bone remodeling, cartilage mechanical properties, bone cell mechanobiology, fracture mechanics and finite element modeling.

Spotlight on……..

Orthopaedic Sports Medicine Service

The Sports Medicine service at UC Davis was established in 1986. At the time, a subspecialty devoted to caring for athletic injuries, providing athletic team coverage and specializing in arthroscopic surgery were relatively new concepts. Since then, the service has experienced rapid growth. To answer increased demands, UC Davis Sports Medicine was developed at J Street to offer comprehensive care for sports injuries. There are operative and non-operative clinicians, on-site physical therapy and a sports physiology lab. Satellite clinics have been added to the Auburn, Folsom, Davis and Roseville Primary Care Network offices in order to extend sports medicine services to the greater Sacramento area. In 2007, the delivery of operative care was modernized with the opening of the Sam Day Surgery Center at the Sacramento campus.

Richard Marder, MD, our service chief, established the service in 1986. He graduated from the UCLA orthopaedic residency and trained in sports medicine under Dr. Zarins in Boston at Harvard. As a sport injury (continued on next page)
specialist, Dr. Marder has been head team physician for Sacramento’s professional men’s basketball team since 1987. He has also worked with the Sacramento professional soccer and women’s basketball teams, as well as the Sacramento Ballet and intercollegiate athletics at UC Davis and American River College.

Kirk Lewis, MD joined the service in 2007. He received his Sports Medicine training at UCLA under Dr. Finerman. He brings 23 years of experience to UC Davis. His practice focuses on knee and shoulder arthroscopy and reconstruction, and, along with Dr. Marder, he serves as team physician to UC Davis athletics and the Sacramento Kings and Monarchs.

Eric Giza, MD joined the service as the Foot and Ankle specialist in 2008. He is a graduate of the Harvard Combined Orthopaedic Residency and did his Sports Medicine fellowship with the Santa Monica Orthopaedic and Sports Medicine Group. Dr. Giza specializes in reconstruction of the foot and ankle, arthroscopy, and knee and shoulder surgery. He is a member of the US Soccer Federation physician pool.

Another member of our service is James Van den Bogaerde, MD. He is a graduate of the UC Davis Orthopaedic residency and did his Sports Medicine fellowship at the Steadman Hawkins Clinic in Vail, Colorado. His practice includes shoulder, elbow and knee arthroscopy, reconstruction and arthroplasty. He is a member of the US Ski Team physician pool.

With the support of Chair Michael Chapman, MD in 2001, Dr. Marder teamed up with Dr. Jeffrey Tanji as co-directors to establish the multi-disciplinary specialty practice site for UC Davis Sports Medicine at the J Street building in mid-town Sacramento. Board certified specialists include Jeffrey Tanji, MD, David Cosca, MD and Gina Lokna, MD from the Primary Care Network, as well as Brian Davis, MD and Brandee Waite, MD; faculty of the Department of Physical Medicine and Rehabilitation. Sports Medicine physicians have access to their own x-ray suite, physical therapy and the Sports Performance Lab for physiological testing, biomechanical analysis, sports nutrition and sport psychology consults. Research interests in sports medicine and exercise science have fostered collaborative efforts between Gretchen Casazza, PhD and several of the members of the orthopaedic faculty. Rebecca Misner is the on-site academic coordinator for Dr. Marder and Dr. Lewis.

Within the Ambulatory Care Division, Penny Herbert, MS, provides the seasoned leadership for all musculo-skeletal services. As the Practice Manager, Nancy Sardon, MHSA, manages the daily operations for the

(continued on back page)

In 2010 we are hoping to expand our educational offerings by implementing a Sports Medicine Fellowship. The department is slated to present this request to UC Davis in February 2009.

Save the date!
Resident Symposium and Graduation
June 18-19, 2009
Granite Bay Golf Club

Fast and friendly
Physician-to-Physician
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All services are accepting new patients
Annual Meeting Presentations

The following members of our department are scheduled to present at upcoming annual meetings:
The American Academy of Orthopaedic Surgeons (Feb 25-28) and The Orthopaedic Research Society (Feb 22-25)

AAOS
Mark A Lee, A. Hari Reddi, Susan Tseng. Poster: Prevention vs. Treatment of a Rat Atrophic Nonunion with Bone Marrow-Derived Mesenchymal Stem Cells


GD DuRaine, CP Neu, A. Hari Reddi. Abstract: Alternative Splicing of prg4 is Regulated by the TGF-β Pathway


Robert M. Szabo. ASSH Specialty Day Presentation: Carpal Tunnel Syndrome: Where are we now?

Edward Harvey, Lawrence X. Webb, Philip R. Wolinsky & Nirmal C. Tejwani (Moderator). Trauma Educational Session #272: Management of High Energy Soft Tissue Trauma in Orthopaedics


Mark A. Lee & Pierre Guy. OTA Specialty Day -- Fracture Management Controversies: Open Grade IIIA Tibia at 11:00pm: Can It Wait Until 7:00am?

ORS
GD DuRaine, CP Neu, A. Hari Reddi. Abstract: Alternative Splicing of prg4 is Regulated by the TGF-β Pathway

Paul Di Cesare. Moderator Session 34 Total Knee

SMT Chan, Corey P Neu, K Komvopoulos, AH Reddi, Paul Di Cesare. Poster: Friction and Wear of Biomaterials Against Articular Cartilage

Tomasz Antkowiak, David Moehring, Afshin Khalafi, Corey Neu. Poster: Biomechanical Evaluation of the Surgical Implant Generation Network (SIGN) Intramedullary Tibial Nail

Calvin Kuo, David Fyhrie, Amir Jamali. Poster: The Role of Opioid Agonists for Chondrocyte Preservation in the Storage of Osteochondral Allografts

Dominik Haudenschild, J Chen, Lotz, D’Lima. Poster: Short Talk: Rho Kinase Phosphorylates and Activates Sox9 in Chondrocytes

Dominik Haudenschild, J Chen, N Pang, Steklov, Lotz, D’Lima. Poster: The Vimentin Cytoskeleton Contributes to Chondrocyte Stiffness and changes with OA

RK June, Dominik Haudenschild, J Chen, Lotz, RA Terkeltaub, D’Lima. Poster: Transglutaminase 2 Colocalizes with Vimentin and Actin in Chondrocytes

Dominik Haudenschild. Moderator. Session 31: Mesenchymal Stem Cells/ Chondrogenesis

Bertha Kuo, David Fyhrie. Poster: Substrate Stiffness Affects Spreading in UMR106 Osteoblasts

David Fyhrie, Xiang Wang, Matthew Allen, David Burr. Poster: Influence of Bone Hardness on Microcrack Density

David Fyhrie. Poster: The Evolution of Cancellous and Cortical Bone

Matthew Soicher, Xiang Wang, Roger Zauel, David Fyhrie. Paper Presentation: Damage Initiation Sites in Osteoporotic and Normal Human Cancellous Bone

RC Entwistle, SC Sammons, RF Bigley, Scott J. Hazelwood, David Fyhrie, SM Stover. Poster: Cortical Bone Material Properties are Related to Stress Fracture

RC Entwistle, Scott J. Hazelwood, David P. Fyhrie, SM Stover Poster: Sites of Stress Fracture Lack extensive Remodeling Prior to Injury

RC Entwistle, SC Sammons, Scott Hazelwood, David P. Fyhrie, SM Stover. Poster: Cortical Bone Material Properties are affected by High-Speed Training and Exercise

YN Yeni, M Zinno, D Vashishth, David Fyhrie. Poster: trabecular Stress and Microstructural Variability are Associated with Osteocyte Density in Human Vertebral Cancellous Bone

YN Yeni, M Zinno, J Yerramshetty, R. Zauel, David P Fyhrie. Poster: Within-bone Variability of Human Vertebral Trabecular Microstructure is Age, Gender and Vertebral-Dependent and Affects Stress Distribution Properties Independently from Average Bone Volume
Spotlight on........ Orthopaedic Sports Medicine Service

(continued from page 4)

The Sports Performance Laboratory performs physiological testing and biomechanical analysis for athletes as well as active adolescents and adults. Supervised by Stacey Streuber, MS, the team of exercise physiologists includes Judd Van Sickle, MS, Cortney Martellucci, MEd, John Hansen, MS, Gretchen Casazza, PhD and Diana Prince. Clients with sports nutrition concerns are referred to Marlia Braun, RD, PhD, while Kimberly Cusimano, PhD provides consults on sports psychology.

A word from one of our residents...

“The faculty’s commitment to education is phenomenal.... especially in the area of didactic education and the diverse and frequent operative experience from the junior year on. But the primary reason that I selected this program is because of the exceptional camaraderie between residents and between residents and faculty..... it’s the best I’ve ever seen.”

-Tomasz Antkowiak, PGY2

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