

Orthopaedic Surgery NEWS

UCDAVIS HEALTH SYSTEM

Celebrating 40 years of service



MESSAGE FROM THE CHAIR

In January, each department was asked to submit a SWOT (strengths, weaknesses, opportunities, threats) analysis. I recently reviewed our SWOT submission with Deans Pomeroy and Meyers in order to align our department's priorities and concerns with the leadership of the medical school and health system, and to look for opportunities to partner with one another on key initiatives. Outlined below is a subset of our SWOT submission.

Strengths

This past year we have expanded our fellowship programs to include a pediatrics fellowship. Beginning August 1, 2010, we will have an additional spine fellow, an additional trauma fellow, and our first sports medicine fellow.

We continue to diversify our research program by focusing on the clinical research side with the development of a clinical outcomes registry by Sunny Kim, PhD. Our biomedical engineering research has been enhanced with the appointments of Blaine Christiansen, PhD and Kyriacos Athanasiou, PhD, (the new chair of Biomedical Engineering).

Weaknesses

Our clinical access remains an opportunity for development, as some patients have longer wait times for surgery or clinic visits than we would prefer. With the opening of the Pavilion, we hope the operative block time issue will improve and we are currently embarking on methodologies for advancing the management of referrals in the clinic.

We hope to increase attendance at our

quarterly Lipscomb Lectureships and evening Grand Rounds, generally scheduled on a Thursday around 5:30 pm in the Medical Education Building. Appetizers and beverages are served.

We have a strong desire to build a strong relationship with the Orthopaedic community in the Sacramento region, and we wish to improve our access to referrals. If you have suggestions on ways to increase community physician involvement or attendance, please e-mail Kimberly Anderson at kimberly.anderson-knight@ucdmc.ucdavis.edu.

Opportunities

We are focused on increasing clinical flow and reducing costs while looking for revenue enhancing opportunities in our clinic. Our new practice manager, April Hillard, began in early January and is spearheading this focus.

We continue to look for ways to expand our patient portals in the greater Sacramento area. We currently have faculty members who practice at various PCN locations as follows: Placer Center for Health (adult reconstruction), Roseville (adult reconstruction, sports medicine), Folsom (sports medicine), Elk Grove (sports medicine), and J Street (sports medicine).

Threats

There has been ongoing recruitment for a Doris Linn Endowment Professorship. We will likely need a robust start-up package and there is concern that we may not be able to financially meet stellar candidates' start-up package requests without School of Medicine or Health System support. We have requested this support in our budget negotiation process.

We have approximately 300 operative cases per year that are being performed outside of UCD. There is always the threat that the agreements in place

(continued on page 2)



We are excited to welcome our new practice manager, April Hillard. With her on board, we are looking to make great improvements in the patient, staff and physician experience in our clinic.



*Welcome,
April*

April joins our team with 20 years of medical group practice management experience from right here in Sacramento. She is working on several projects, which include:

- increasing reimbursement through proper documentation
- charge recapture for DME
- enhancing the quality of the demographic and insurance data collected prior to the visit
- improving patient/employee satisfaction
- Joint Commission inspection preparedness
- developing reference tools that will empower our staff

April has lived in the Carmichael area for 25 years. She has a 23 year old son, Matt, two Boston Terriers and a Dachshund. She is an avid gardener, downhill snow skier and thrift store shopper.

Great News!

The ACGME has approved our request for an increase in permanent residency allocation from 4 to 5 each year, expanding our program to 25 permanent resident slots. The first increase in residency allocation is effective for the 2010-2011 academic year.

History of the Department

*continued from Winter 2010 newsletter
by Dan Benson, MD*



Dick Riggins, MD, organized the laboratory that was originally in one of the temporary medical school buildings on the

Davis Campus. Jane Wierman was one of the first secretaries in the lab and helped to recruit the first full-time basic scientists, Stan and Kathy Brown.

In 1975, Dr. Riggins was selected as one of four orthopaedists from the US to be an AOA traveling fellow. He would spend seven weeks touring England, Scotland and Wales. This honor is one of the highest attainable in our specialty. Interestingly, when he lectured there, one of his topics was "Healthcare: Can We Foot the Bill".

In 1982, when Dick Riggins left UC Davis to become chairman at Emory in Atlanta, pediatrics was left uncovered. At that time, George Rab stopped doing total joint replacements and became our pediatric specialist. During the next 27 years, he served as chief of the pediatric service.

Peter Salamon joined George Rab in 1985, first as a member of the volunteer clinical faculty, and in 1990 as a permanent member of the faculty. Lori Karol joined the faculty in the early 1990's before leaving for the Texas Scottish Rite Hospital in Dallas. Debra Popejoy joined us in 2007.

In 1997 San Francisco Shriners Hospital moved to Sacramento. Originally, Steve Skinner was the chief surgeon. When he left for Oakland Children's Hospital, Michelle James took his place. James is now the chief of Pediatric Orthopaedics at both UCD and Shriners. The hospital is also staffed by pediatric orthopaedists Jenny Boakes, Joel Lerman and Debra Popejoy. Drs. Rab, Benson, Gupta, Roberto, Jamali, Lewis, Salamon and Meehan also provide orthopaedic care to children.

(more history in Summer edition)

*We are pleased to welcome two new faculty to the
Lawrence J. Ellison Musculoskeletal Research Center*



*Blaine
Christiansen, PhD*

Dr. Christiansen has joined our department as an Assistant Professor in Residence.

Dr. Christiansen completed his undergraduate work in Biological Systems Engineering at the

University of Nebraska; he earned his Masters and Doctorate degrees in Biomedical Engineering at Washington University in St. Louis, and has had a postdoctoral fellowship at Harvard School of Medicine, Orthopaedic Biomechanics Laboratory in Boston.

Dr. Christiansen's research explores the role of the mechanical environment in determining the structure and strength of bone. His interests include investigating bone adaptation to various methods of increased and decreased mechanical loading, as well as the use of cutting edge imaging methods for quantifying bone morphology and adaptation.



MESSAGE FROM THE CHAIR

(continued from page 1)

could terminate, leaving us short of operative block time.

Departmentally, UCD Orthopaedics remains a strong and growing presence in the Sacramento market. In the coming months, I am confident that we will continue our trajectory of taking measures to reinforce our strengths, develop our opportunities, rehabilitate areas of weakness, and consciously evaluate options to minimize our threats. Overall, we have made great progress in moving the orthopaedics department toward our goal of becoming one of the best departments in the country.

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

Distinguished Professor and Chair of Biomedical Engineering, Dr. Athanasiou will hold a joint appointment with the Department of Orthopaedic Surgery and Biomedical Engineering on the Davis Campus.



*Kyriacos
Athanasiou, PhD*

Professor Athanasiou completed his undergraduate work in Mechanical Engineering at the New York Institute of Technology; he earned his Masters and Doctorate degrees in Mechanical Engineering (Bioengineering) from Columbia University. He formerly was the Karl F. Hasselmann Professor of Bioengineering at Rice University

Dr. Athanasiou's research is focused on a search to understand and enhance the healing process of cartilage. He and his team have used adult stem cells from bone marrow and skin, as well as human embryonic stem cells, to grow cartilage tissue in the lab. They currently are experimenting with various chemical and mechanical stimuli to improve the properties of engineered cartilage.

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Physician volunteers.....an integral part of our department

Meet Michael Klein, MD, FACS



It has been my privilege to be a part of this excellent department since 1977. My relationship began with Dr. Lipscomb, when the department

was in its initial phase of development and I observed it's growth under the leadership of Dr. Chapman, Dr. Rab, and now Dr. Di Cesare.

I began my relationship by attending the Tuesday morning conference and the programs offered by the Lipscomb Society. As the department grew, I always enjoyed the social gatherings of current and former residents at the

annual AAOS meeting. I became a Clinical Instructor sometime in the early 80s, with periodic breaks based on the demands of my own practice and while I was on active duty during Operation Desert Storm in 1991. I am very proud to be a Clinical Associate Professor at this time.

I absolutely enjoy all the time I spend interacting with the resident staff when I attend the VCF clinics and during the Resident Journal Clubs, when I facilitate them. I feel I am the one making the greatest gain by being exposed to brilliant young minds and new ideas.

I hope that I am providing some expertise as well, not only in the field of orthopaedics, but also in the practice of medicine, in this current era of uncertainty regarding the future of health care in the United States.

Those who can, do.

Those who can do more, volunteer. ~Author unknown

The **Volunteer Clinical Faculty Award** goes to.....

M. Richard Goldberg, MD, Assistant Clinical Professor, and volunteer in the Hand, Upper Extremity and Microvascular Service, was honored at the **Volunteer Clinical Faculty Appreciation Reception**, held in February and hosted by Claire Pomeroy, MD, MBA, Dean of the School of Medicine.

Congratulations!!!



Dean Pomeroy, Dr. Richard Goldberg, his wife Celeste, and their daughter, Dr. Dara Goldberg

*I can no other answer make, but, thanks, and thanks.
~William Shakespeare*

2010 JERRY FIELDER MEMORIAL AWARD



Michael Chapman, MD, '58, professor emeritus and former chair, was awarded the **Jerry W. Fielder Memorial Award** for extraordinary service to the alumni association, the UC Davis Foundation and the university. Under his leadership, our department became one of the most respected in the nation, and he is recognized as one of the founding fathers of modern trauma surgery. Dr. Chapman served on the foundation's board of trustees and continues to serve as chair emeritus of its executive committee. Generous as a volunteer and donor, he has recently accepted an invitation to be one of the founding members of the cabinet heading up UC Davis' first comprehensive campaign.

OREF Grants and Awards

John Meehan, MD, is the recipient of an OREF Fellowship Award for \$72,000, which pays salary and benefits for the 2010/2011 fellows.



Eric Giza, MD, was awarded the OREF Residency Enhancement Grant for \$6,310. This will be used for supplies such as cadavers, OITE

Question Preparation Sessions and saw bones. Dr. Giza also received a \$17,000 award from Artimplant.

Eric Klineberg, MD, was awarded an OREF Fellowship Grant in the amount of \$69,500 which will be used to pay expenses for the Spine Fellowship Program.



Robert Szabo, MD, received an OREF Fellowship award for \$25,000 which helps support the 2010/2011 hand fellow's salary and benefits.

*Thank you to Administrative Staff
Mazie Ngai, Margaret MacNitt,
Barbara Pettitt and Dyana Greene
for their significant
contributions to these award and
grant submittals.*

Derek Amanatullah, MD, PGY2, was selected to receive the **J. Harold LaBriola, MD Resident Award** for his paper entitled "Comparison of Surgical Outcomes and Implant Wear between



Ceramic-on-Ceramic and Ceramic-on-Polyethylene Bearing Surfaces in Total Hip Arthroplasty". The award will be presented at the California Orthopaedic Association's 2010 Annual Meeting in April.

Annual Meeting Presentations

The following members of our department have presented at:

The Orthopaedic Research Society (March 6-9) and The American Academy of Orthopaedic Surgeons (March 9-13)

ORS

ORS Presentation

Reciprocal Regulation of ADAMTS7 and ADAMTS12 by Dexamethasone in Chondrocytes

Haudenschild, D; Di Cesare, P; Yik, J; Hong, E

ORS Presentation

LRF Inhibits Chondrogenesis of MSC

Yik, J; Di Cesare, P

ORS Presentation

COMP Fragments Generated by Extracts of Arthritic Osteochondral Tissue and ADAMTS12

Haudenschild, D; Di Cesare, P; Hong, E

ORS Presentation

SZP Immunolocalization in Human Articular Cartilage with Late-State Osteoarthritis

Neu, C; Reddi, H; Di Cesare, P; Komvopoulos, K

ORS Poster

Human Allograft Characterization after 3 Years in Vivo: Location Dependence

Haudenschild DR; Hong E; Di Cesare PE; Jamali A

ORS Poster

COMP Fragments Generated by Extracts of Arthritic Osteochondral Tissue and ADAMTS12

Hong E; Di Cesare PE; Haudenschild DR

ORS Poster

Reciprocal Regulation of ADAMTS7 and ADAMTS12 by Dexamethasone in Chondrocytes

Hong E; Yik JHN; Di Cesare PE; Haudenschild DR

ORS Poster

Leukemia/Lymphoma-Related Factor (LRF) Inhibits Chondrogenesis of Human Mesenchymal Stem Cells

Yik JHN; Li H; Haudenschild DR; Di Cesare PE

ORS Poster

Temporal and Spatial Expression of BMPs and BMP Antagonists in Posterolateral Lumbar Fusion

Ye X; Tang Y; Klineberg E; Curtiss S; Maitra S; Gupta MG

ORS Poster

Determining Fracture Toughness of Bone with Double Notched Beams in Four Point Bending

McCormack, K; Wang, X; Stover, SM; Gibeling, JC; Fyhrie, DP

ORS Poster

Effects of Mineral Content on the Fracture Properties of Equine Cortical Bone in Double Notched Beams

McCormack, K; Wang, X; Stover, SM; Gibeling, JC; Fyhrie, DP

ORS Poster

R-curve Fracture Mechanics of Equine Cortical Bone Specimens Tested in Multiple Crack Propagation Orientations

Creel, J; Stover, SM; Martin, R; Fyhrie, DP; Hazelwood, S; Gibeling, J

ORS Poster

Mineralization Heterogeneity Separates Fracture Patients with Suppressed Turnover (SSBT) from Health Controls

Tjhia, C; Zauel, R; Wang, X; Odvina, CV; Rao, S; Fyhrie, DP

ORS Poster

Positive Effects of Glycation on Dynamic Mechanical Response and Static Swelling of Stored Articular Cartilage

Anderson, MJ; Jamali, A; Stover, SM; Fyhrie, DP

AAOS

AAOS Instructional Course Lecture (ICL 282)

"Hand and Wrist Problems Orthopods Treat (or should treat): Diagnostic and Operative Tips"

Szabo RM

AAOS Instructional Course Lecture (ICL 132)

Soft Tissue Management

Wolinsky P

AAOS Instructional Course Lecture (ICL 252)

Surgical Techniques for Complex Proximal Tibia Fractures

Wolinsky P; Lee M

AAOS Instructional Course Lecture (ICL 235)

OTA Symposium Surgical Timing: What's Emergent and What's Not

Lee M; Ferguson T

AAOS Podium Presentation

"Volar Osteotomy and Plating for Radius Malunion"

Szabo RM

AAOS Podium Presentation

Proximal Tibia Fracture Nailing with a Retropatellar Technique: A Cadaveric Study.

Eastman J; Tseng S; Lo E; Yoo B; Lee M

AAOS Podium Presentation

Insurance status and operative fracture care

Wolinsky P

AAOS Podium Presentation

Retropatellar Nailing

Yoo B

AAOS Podium Presentation

Is It Safe To Use rhBMP-2 In Pediatric Spinal Surgery?

Gogia, J; Wright, D; Abbi, G; Klineberg, E; Roberto, R; Gupta, M

AAOS Poster

Preventing Atrophic Nonunion with BM-MSC or AD-MSC with BMP

Lee M

AAOS Session Moderators

Trauma Session

Wolinsky P; Ferguson T

*National
Doctors' Day
March 30, 2010*

IN RECOGNITION OF
ALL PHYSICIANS FOR
YOUR LONG HOURS
AND DEDICATION TO
THE CARE OF OTHERS

We thank you!



We'd like to introduce our
**Patient
Records
Abstractors**

Joe Henderson
Grace Lee
Jennifer Miller

JOE HENDERSON

I have been working for UCD for 10 years, after having attended the UCD Skills Center. I have worked in hospitals for 14 years now and find the work both interesting and challenging. I come from a family with a background in medical records and coding, a mother who formerly served as a director of medical records and a brother in pharmacy administration.

I am originally from Anaheim, CA (go Angels/Lakers!) and am a computer hobbyist and member of the Free Software Foundation.

GRACE LEE

I started this position in December 2008 after working 23 years as a Staff Research Associate at the UCD School of Veterinary Medicine. I have a Masters Degree in Comparative Pathology. My medical coding training was through the UCDHS HIM Coding, Education and Training Program and in May 2009 I received my Certified Coding Specialist - Physician-based certificate.

I enjoy the complexity of my work and am really happy to be a part of such a dedicated team here in the Ortho Clinic.

JENNIFER MILLER

I have been with UCD for 7 years. I started as a temp in the wonderful department of Patient Financial Services. I worked my way through the Patient Biller series as I furthered my coding education. I joined the Orthopaedic team as a PRA in 2008. I enjoy working with the Ortho doctors and staff to help ensure timely and correct submission of charges. I find my job to be very rewarding, challenging and fun.

I am originally from Montana. I am happily married and live in Elk Grove. I enjoy camping, NASCAR, and playing poker.

The Patient Records Abstracting staff in the Orthopaedics Department are working on a very important project. They are reviewing the CPT coding outcome for the lower level CPT codes (level 1-2) to determine what elements of the history, examination and medical decision making could have increased the level of the CPT billed. The research has revealed some interesting trends. The coding staff feels that the higher level of service is frequently being provided to the patient, but that missing components of the documentation prevent them from billing at the higher level. The coders will be meeting with the individual doctors who are participating in the study to review their findings and educate the doctors on how to better document their encounters for more appropriate code selection.

Spotlighting

PEDIATRIC ORTHOPAEDICS

The pediatric subspecialty at UCD is closely affiliated with Shriners Hospital for Children. All pediatric orthopaedists based at Shriners have patient care, volunteer clinical or administrative obligations at UCD. The Chief of Service for the pediatric division is Michelle James, MD.



Michelle James, MD

Clinical faculty includes Drs. Jennette Boakes, Joel Lerman, Debra Popejoy, George Rab and Peter Salamon.

Patient Care. General pediatric orthopaedic care is provided at Shriners Hospital for Children, with weekly clinics and pediatric trauma care and fracture clinics at UCD. Shriners specialty clinics include Scoliosis, Hand & Upper Limb, Cerebral Palsy/Spasticity Management, Limb Deficiency/Prosthetics, Spina Bifida, Clubfoot, Brachial Plexus Birth Palsy and Spinal Cord Injury. Pediatric Physical Medicine and Rehabilitation Physicians, Drs. Craig McDonald,

Loren Davidson and Larry Manhart help care for children with neuromuscular conditions. Pediatric spine care is provided by Drs. Munish Gupta and Rolando Roberto along with Drs. Lerman, Popejoy and Boakes. Dr. James provides hand and upper extremity care. Dr. Lerman directs the clubfoot clinic at Shriners Hospital. Along with Drs. Popejoy and Boakes, he provides expert Ponseti casting for infants with clubfeet. Dr. James directs a weekly brachial plexus birth palsy clinic.

Teaching Residents and Fellows. Our pediatric faculty train orthopaedic (continued on page 6)

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2922

*Save
the dates!!!*
**Resident
and Fellow
Symposium
and
Graduation**

June 17

Evening Grand Rounds
with guest speaker
Joseph Borrelli, Jr., MD

June 18

Research Symposium
at Shriners Hospital for Children

Graduation Dinner
at
Elk's Tower
Downtown Sacramento

Please let us know how we can communicate with you electronically, by sending your e-mail address to orthowebmaster@ucdavis.edu *Thank you!*

**PEDIATRIC
ORTHOPAEDICS (CONTINUED)**

residents from UCD, UCSF and the San Francisco Orthopaedic Residency Program, in addition to pediatrics, physical medicine and rehabilitation and family medicine residents from UCD. Hand fellows from UCD and UCSF rotate with Dr. James at Shriners. Our division is training three fellows in three different subspecialties this year. Our current SHC-UCD Pediatric Orthopaedic fellow is Teresa Mosqueda, MD; Carolien de Roode, MD is our Pediatric Upper Extremity fellow; and our Pediatric Musculoskeletal fellow is Fatema Lakhani Iqbal, MD. In addition, Lindsey Sheffler, third year medical student at UC Davis had become our pre-doctoral clinical research fellow.

Research. Dr. George Rab is working on a complex 3-D computer shoulder model with the goal of understanding the role of shoulder weakness in BPBP as a cause of shoulder subluxation.

Dr. James is the principle investigator on a funded multicenter trial comparing the results of surgery, botulinum toxin injections and therapy for children

with upper extremity cerebral palsy, along with Anita Bagley, PhD, Co-Director of the Motion Analysis Lab.

Jennette Boakes, along with Michelle James, is studying the sarcomere length of muscles before and after transfer to restore pinch following spinal cord injury, as part of a multi-center study.

Two basic science researchers at Shriners Hospital were recently awarded grants to study congenital problems with orthopaedic manifestations. David E. Pleasure, MD, Director of Research at Shriners Hospital and Professor of Neurology and Pediatrics at UCD was awarded a two-year grant to develop new therapies for children with Charcot-Marie-Tooth disease. Laura Borodinsky, PhD, an Assistant Investigator at Shriners and Assistant Professor of Physiology and Membrane Biology at UCD is the recipient of the 2009 Basil O'Connor Starter Scholar Research Award from the National Foundation of the March of Dimes. She is studying spinal cord development.

Service work. Several members of our division are enthusiastic participants

in service work all over the world. Peter Salamon's trip to Cambodia was featured in the winter edition of this newsletter. He plans to visit CURE Children's Hospital in San Pedro Sula, Honduras in September; he will travel to Bhutan with Health Volunteers Overseas in May 2011.

Jennette Boakes has served in Sierra Leone with Mercy Ships. She also traveled to Honduras with MedMissions, and with International Missions Assistance to Valladolid, Mexico. She's currently planning a trip to Mongolia with a team of pediatric specialists, including orthopaedists, neurologists, developmental pediatricians, and occupational and physical therapists, sponsored by Mongolian Asia Reach.

Michelle James has served with Health Volunteers Overseas in Honduras and Nicaragua. Along with Carolien de Roode, she recently started a new pediatric upper extremity HVO rotation at Valez Paiz Children's Hospital in Managua, Nicaragua. Carolien and Michelle returned to Velez Paiz in March to further establish this rotation and to spend time with their Nicaraguan friends and colleagues.