

Joint Ventures



Boonshoft
School of Medicine
WRIGHT STATE UNIVERSITY

Department of Orthopaedic Surgery
Sports Medicine & Rehabilitation

IN THIS ISSUE

Message from the Chair	1
Orthopaedic Surgery Residency Update	2
Orthopaedic Trauma Updates	2
Orthopaedic Interest Group	2
8th Annual Graduation Symposium	3
2013 New Residents and Fellows	3
2013 40th Annual Graduation Ceremony	4
Graduates	4
Department Awards	4
WSP News	5
Resident Education Fund Contributions	5
Visiting Professors	5
Department News	6
Research News	7
Plastic Surgery Residency Update	8
Graduation	8
2013 Plastic Surgery Residents	9
Visiting Professors	9
Scholarly Activity	9
Upcoming Events	11

MESSAGE FROM THE CHAIR



Translational research—this has become a buzzword around the university and medical school as the research world has made this a priority for funding. Defining the term has been very interesting and has sparked many discussions between clinicians and scientists. At its base level, this is a step in the right direction. The purpose of funding this type of research is to accelerate the passage of new information/discoveries from the lab to the patient. Furthermore, collaboration allows investigators to focus questions to increase the clinical relevance. There are great benefits to this collaboration as each individual brings a different perspective to the problem.

In the Department of Orthopaedic Surgery, we are developing this strategy in many areas. One example is our work on tendon disease, in particular the Achilles tendon and rotator cuff. In the case of Achilles tendonosis, we have done mechanical studies on repair techniques in our biomechanical lab under the guidance of Greg Gould and with support from industry. We have looked at degenerative patterns in tendons in a diabetic mouse model, as well as muscle changes that occur with chronic tendon tears with Greg Boivin, D.V.M., in the Wright State animal laboratories. We have a clinical study in progress collecting outcomes on injections of platelet rich plasma into diseased Achilles tendons, following them for a year to grade their functional outcomes. Finally, our latest endeavor under Michael Johnson, M.D., in plastic surgery involves a tissue engineering lab at Miami Valley hospital which is working on adipose stem cells to develop models for adhesion and manipulation into specific cell lines that will lead to soft tissue restoration. As we have developed these projects, we have had excellent support from Dana Duren, Ph.D., and Ron Markert, Ph.D., in scientific design and grant writing. The collaboration we have had with basic scientists gives excellent input and direction into the scientific basis of research keeping the projects on course and focused. Our goals for the coming year are to develop our relationships with Athletic Training at our new sports medicine facility on the Wright State campus that will allow motion analysis and evaluation of rehabilitation techniques as well as injury prevention.

As we try to tie all these areas together, we continually try to step back and view the big picture, which really is what translational research is. Bringing people together to study a clinical problem from the cell level all the way to rehabilitation of the patient. Doing this challenges us to understand each part of the whole picture pushing toward the common goal of improved patient care.

—Richard T. Laughlin, M.D.



Find us on Facebook:
[/WrightStateOrthopaedics](#)
[/WrightStateOrthoResidency](#)

Wright State Orthopaedic Surgery, Sports Medicine & Rehabilitation

30 E. Apple Street, Suite 2200
Dayton, OH 45409

Tel: 937.208.2741

Fax: 937.208.2920

E-mail: tonia.combs@wright.edu
med.wright.edu/ortho

ORTHOPAEDIC SURGERY RESIDENCY UPDATE



I believe without any doubt that the residents at Wright State are what make this a special place to train. Our program had another quality class of

graduating chief residents to send off to the world to take care of people. Dr. Chris Lyons and Dr. Michael Coffey accepted hand fellowships in Colorado and Louisville, respectively. Dr. Mark Stouffer accepted a spine fellowship at Texas Back Institute. We are proud to introduce Dr. Indresh Venkatarayappa as a full-time faculty member as assistant professor of trauma here at Wright State University. We were very fortunate in the NRMP match this past year and are proud to have matched with Dr. Zac Dipaolo and Dr. Dan Luckenbill from

Wright State University, Dr. Jessica Lee from Indiana University, and Dr. Rufus Van Dyke from the University of Washington. We welcome our new residents to the Wright State University Orthopaedic Surgery family and our graduates to the Wright State Orthopaedic Surgery alumni group. The residency continues to grow and flourish with quality graduates and an impressive complement of new residents.

We are now over a year into our new system-based educational curriculum and we feel very positive about the impact this has had in our educational process. Integrating multiple teaching disciplines from the Wright State and community faculty has yielded a higher quality educational model centered on maximizing residency education. We are dedicated to staying ahead of the educational curve by creating unique

learning environments that improve procedural skills and orthopaedic knowledge for our residents. We have increased internet-based learning tools and other electronic media as a means of supplementing education and making learning more efficient for residents. As healthcare policy changes, resident demands increase, and work hours become more restricted, we are constantly looking for ways to optimize the educational process. We thank our dedicated alumni for the time you dedicate in educating our residents and your financial support. Know that your contributions to the Wright State University Orthopaedic Residency Program continue to improve resident education and make this a special place to train.

Michael A. Herbenick, M.D.

ORTHOPAEDIC TRAUMA UPDATE



The orthopaedic trauma service at Miami Valley Hospital remains busy. The trauma volume is slightly higher than 2012. The Level 2 trauma status at

Kettering Hospital does not appear to have had a major impact on the volume at Miami Valley Hospital. Over 90 percent of our trauma admissions occur through a blunt mechanism of injury. Falls and motor vehicle collisions remain the two most common mechanisms of injury.

Nine faculty members (both academic and clinical) contribute to the orthopaedic trauma coverage at the hospital. Additionally, the orthopaedic trauma fellow, three orthopaedic residents (chief, R-3, intern), Diane Kimpel, R.N., and an emergency medicine resident

provide daily coverage and support for the service. This year we had two orthopaedic PA-Cs join us during their training from Wright-Patterson Air Force Base.

The orthopaedic trauma fellowship remains strong with solid support from Miami Valley Hospital. Last year's graduate, Kim Poludniansky, D.O., returned to where she completed her orthopaedic residency training in Clemens, Michigan. Our current fellow, Nicholas Quercetti, D.O., is currently interviewing for various trauma opportunities. Next year, Tejas Patel, D.O., will join us from his orthopaedic training program in New Jersey. Two affiliates of our program, Drs. Jerele and Horne, will begin their trauma fellowships in 2014.

Michael J. Prayson, M.D.

ORTHOPAEDIC INTEREST GROUP



For 2013-14, the Wright State University Boonshoft School of Medicine Orthopaedic Interest Group was led by fourth-year student Kevin Magone. Much

thanks goes out to Kevin as he was solely responsible for organizing the meetings and ultimately the success of the group this year. The highlight of the year was a sawbones session where the medical students could perform a total knee arthroplasty from start to finish. We appreciated the support of Jarrod Keely from Zimmer for supplying us with the instruments and materials. Also, our gratitude extends to those of our residents who taught during a casting workshop and stayed after hours for a panel discussion on how to obtain an orthopaedic residency. We look forward to seeing the interesting topics the leaders of the group plan for 2014-15.

Michael D. Barnett Jr., M.D.

EIGHTH ANNUAL GRADUATION RESEARCH SYMPOSIUM

The Annual Graduate Research Symposium was held June 7, 2013. Residents presented their completed projects and received input from the department research committee and orthopaedic community. The quality of the presentations improved each year as many of the projects are presented in regional and national meetings.

“Knotted vs. Knotless Suture Bridge Repair of the Achilles Tendon Insertion: A Biomechanical Study”

Joe Cox, M.D.

“IV vs. Intra-articular Administration of Tranexamic Acid in Total Knee Arthroplasty—Part I”

Ryan Rieser, M.D.

“Effects of Corticosteroid Injection on Serum Glucose Levels in Diabetic and Non-diabetic Patients”

Mark Stouffer, M.D.

“Comparative Analysis of Stability of Initial Management of Humerus Fractures”

Chris Lyons, M.D.

“Glove-gauze Regimen for the Treatment of Hand Burns”

Michael Coffey, M.D.

“Treatment of Acute Humerus Fractures with Taylor Spatial Frame—A Retrospective Study”

Indresh Venkatarayappa, M.D.

“Semitendinosus Muscle Fatty Infiltration Following Tendon Harvest in Rabbits”

Jason Vourazeris, M.D.

“Effects of the LRU Pillow on Active Assistive Knee Range of Motion and Pain Scores Following Total Knee Arthroplasty”

Jenifer Jerele, M.D.

“Hybrid Fixation with Sublaminar Polyester Bands in the Treatment of Neuromuscular Scoliosis: A Comparative Analysis”

Brett LaFleur, M.D.

“Rabbit Supraspinatus Motor Endplates Are Unaffected by a Rotator Cuff Tear”

Chris Gayton, M.D.

“Cannulated Screw with Solid Core Insert; Improved Strength Compared to Standard Cannulated Screws”

John Dundon, M.D.

“A Retrospective Study Analysis of a Comprehensive Pain Protocol Using a Continuous Fascia Iliac Compartment Block”

Elizabeth Dulaney-Cripe, M.D.

“Locking Screw Placement in Hybrid Fixation of Distal Femur Fractures”

David Nelles, M.D.

“Effect of Exercise and Glycemic Control on Diabetic (db/db) Mouse Achilles Tendons”

Peter Knoll, M.D.

“Association Between Diabetes, Obesity and Short-term Outcomes Among Patients Surgically Treated for Ankle Fractures”

Matt Cavo, M.D.

IV vs. Intra-articular Administration of Tranexamic Acid in Total Knee Arthroplasty—Part II”

Jed May, M.D.

“Proximal Phalanx Structural Integrity In Flexor to Extensor Tendon Transfer: A Biomechanical Study”

Matt Ross, M.D.

2013 NEW RESIDENTS AND FELLOWS



Zachery DiPaolo, M.D.

WSU Boonshoft School of Medicine



Jessica Lee, M.D.

University of Indiana



Rufus Van Dyke, M.D.

University of Washington



Daniel Luckenbill, M.D.

WSU Boonshoft School of Medicine



Roman Trimba, M.D.

Jefferson Medical College
Research Resident



Chad Williams, M.D.

Creighton University School of Medicine
Research Resident



Nick Quercetti, M.D.

Trauma Fellow

40TH ANNUAL GRADUATION CEREMONY

Orthopaedic Surgery Residency Program ■ Dayton Country Club ■ June 22, 2013



2013 graduates (L-R): Indresh Venkatarayappa, M.D., Mark Stouffer, M.D., Chris Lyons, M.D., and Mike Coffey, M.D.



Mike Prayson, M.D., and Kim Popudnianyk, D.O.

GRADUATES

Michael Coffey, M.D.

Medical School—Creighton University
Completing a Hand Fellowship at the University of Louisville

Indresh Venkatarayappa, M.D.

Medical School—Bangalore Medical College
Wright State Physicians Department of Orthopaedic Surgery,
Trauma and Adult Reconstructive

Mark Stouffer, M.D.

Medical School—Medical College of Wisconsin
Completing a Spine Fellowship—Texas Spine Institute

Chris Lyons, M.D.

Medical School—University of Cincinnati
Completing a Hand Fellowship at the University of Colorado

Kim Poludnianyk, D.O.

Medical School—McLaren Macomb Hospital
Completing Trauma Fellowship at WSU, Department
of Orthopaedic Surgery.

DEPARTMENT AWARDS

1st Place Basic Science Award

Indresh Venkatarayappa, M.D.

2nd Place Basic Science Award

Brett LaFleur, M.D.

Dr. Coffey's Teaching Excellence Award

Peter Barre, M.D.

Dr. Lyon's Teaching Excellence Award

Douglas Gordon, M.D.

Dr. Stouffer Teaching Excellence Award

James Lehner, M.D.

Dr. Venkatarayappa's Teaching Excellence Award

Michael Prayson, M.D.

Resident Education Award

Matthew Lawless, M.D.

Legacy Society Orthopaedic Trauma Association

James C. Binski, M.D.

Team Physician of the Year—Ohio Athletic Trainers Association

Matthew Lawless, M.D.

The Arnold P. Gold Foundation Humanism and Excellence in Teaching Award

David Jerkins, M.D.

ALAN MARCO NAMED PRESIDENT AND CEO OF WRIGHT STATE PHYSICIANS



Alan P. Marco, M.D., M.M.M., FACPE, has been appointed associate dean for faculty and clinical affairs at the Wright State University Boonshoft School of Medicine and president and CEO of Wright State Physicians, one of the largest physician-managed multispecialty groups in the Dayton region, effective Sept. 9, 2013.

Marco comes to Wright State from the University of Toledo College of Medicine and Life Sciences, where he served as professor and chair of the Department of Anesthesiology and the program director for the residency-training program in anesthesiology.

A graduate of the Johns Hopkins University, he received his medical training at the Johns Hopkins University School of Medicine and his training in anesthesiology at the Johns Hopkins Hospital. He earned a Master of Medical Management degree from Carnegie Mellon University in 2000.

After serving on the faculty at Johns Hopkins for eight years, he joined the faculty of what was then the Medical College of Ohio (now University of Toledo) in 1998. He was named chair in 2003, where he continued serving in a variety of hospital and university roles, including president of the faculty senate and University of Toledo Medical Center Medical staff secretary/treasurer.

Board-certified in anesthesiology, Marco is also a Certified Physician Executive, a Diplomate of the American Board of Quality Assurance & Utilization Review Physicians, and a Fellow of the American Institute for Healthcare Quality.

Marco is a noted leader locally, regionally, and nationally. Named a Fellow of the American College of Physician Executives in 2001, he served as chair of ACPE's Council of Fellows in 2011-2012.

WELCOME DR. INDRESH VENKATARAYAPPA



Indresh Venkatarayappa, M.D., joined Wright State Orthopaedics in July 2013. He is seeing patients at Miami Valley Hospital and Atrium Medical Center. He

also is an assistant professor of orthopaedic surgery at the Wright State University Boonshoft School of Medicine.

Dr. Venkatarayappa completed his residency with the Boonshoft School of Medicine Department of Orthopaedic Surgery. He also completed an orthopaedic trauma fellowship with Wright State Orthopaedic Surgery, Sports Medicine, and Rehabilitation. He is a member of the American Academy of Orthopaedic Surgeons.

VISITING PROFESSORS

Our 2013 Visiting Professors were welcomed back to Dayton. Tim Moore, M.D., and Jim Rosneck, M.D. Both attended medical school at Wright State University and had a distinguished academic career. Dr. Rosneck has become a national authority on hip arthroscopy and travels internationally, teaching in this rapid expanding area of orthopaedics. Tim Moore, M.D., has made his name in the area of spinal service at Metro Medical Center in Cleveland. He, too, is a national authority on the treatment of acute spine trauma.

Our department has known each surgeon since they were medical students at Wright State, and it is very rewarding to see them develop in their academic careers. Their visit was enlightening for our medical students and residents as they had the unique connection of training in the Miami Valley.



Timothy A. Moore, M.D.

Associate Professor –
Department of
Orthopaedic Surgery
Case Western Reserve
University

Cleveland, Ohio

“Radiation Exposure” and Grand Rounds:
“Spine Trauma”



James Rosneck M.D.

Associate Staff –
Orthopaedic Surgery
Cleveland Clinic Sports
Health Center
Cleveland, Ohio

“Extra Articular Hip
Joint Disorders” and Grand Rounds: “Hip
Arthroscopy and Treatment of the Non
Arthritic Hip”

RESIDENT EDUCATION FUND CONTRIBUTIONS

Cadence Pharmaceuticals

Jan Wineberg

Dayton Orthopaedic Medical Fund

KCI

Mike Link

Metro Med Innovations

David Bockerath

Mid America Orthopaedic Association

Stryker/ Ben Roelle & Jason Brown

2013 DEPARTMENT NEWS

Wright State Orthopaedic Surgery Educational Sessions for the Public

Wright State Orthopaedics is offering educational sessions for the general public. The sessions provide a free service to the public providing information on common orthopaedic injuries.

2014

Back to School – A Common Sense Approach to Avoiding Back Pain

Iva Staats, P.T. (January)

Minimally Invasive Shoulder Surgery: When Is It Right for You?

Matthew DiPaola, M.D. (February)

Walk Wright: Putting your best foot forward

Justin Lodge, P.T., D.P.T. (March)

Concussion Update

Corey Ellis, M.D. (April)

2013

Common Causes of Knee Pain

L. Joseph Rubino, M.D. (January)

Common Causes of Shoulder Pain

Michael Herbenick, M.D. (February)

Plastic Surgery: More Than Just Cosmetic

Salim Mancho, D.O. (March)

Concussion Clinic

Corey Ellis, M.D. (April)

Muscle, Bone or Joint Pain?

Gregory L. Stover, D.O. (May)

Osteoporosis and Bone Health

Thomas Koroscil, M.D., Ph.D. (June)

Concussion Clinic

Corey Ellis, M.D. (July)

Shoulder Arthritis

Matthew DiPaola, M.D. (August)

Exercise: Benefits, Progression, and Prevention

Justin Lodge, P.T., D.P.T. (September)

Common Problems of the Front Part of the Foot

Michael Barnett Jr., M.D. (October)

Shoulder Pain and You

Matthew DiPaola, M.D. (November)

Third Annual Orthopaedic Symposium

Corey J. Ellis, M.D., served as director for the Fall Orthopaedic Symposium held November 15, 2013, at the Nutter Center. "Acute Management of Orthopaedic Injuries" featured physicians from Wright State Orthopaedic Surgery, Sports Medicine and Rehabilitation.

The sessions identified orthopaedic injuries requiring immediate and specific treatment – both in a clinical setting and in the field; common mechanisms of acute injuries; and initial treatment to produce the best long-term results.

The individual sessions may be viewed online at the following link: med.wright.edu/ortho/symposium

R. Michael Johnson, M.D.: Initial Evaluation and Treatment of Lacerations and minor burns

Gregory L. Barbour, D.P.M.: Initial Evaluation and Treatment of Foot and Ankle Injuries

Indresh Venkatarayappa, M.D.: Initial Evaluation and Treatment of Common Hand Injuries

R. Joseph Rubino, M.D.: Initial Evaluation and Treatment of Common Athletic Shoulder Injuries

Matthew W. Lawless, M.D.: Initial Evaluation and Treatment of Common Knee Injuries

Save the Date... Spring Symposium

The Department of Orthopaedic Surgery, Sport Medicine & Rehabilitation will host its Spring Symposium, Upper Extremity Musculoskeletal Care on Friday, May 2, 7:30 a.m.–noon. The symposium will be held in at the Nutter Center in the Berry Room on Wright State University's campus. The symposium will detail current best practices for physicians, nurses, and other healthcare professionals. Presentations will cover care for upper extremity injuries, including topics such as common injuries to the wrist, elbow, shoulder, and fractures and common in youth specified injuries.

Registration information:

Upper Extremity Muscular Skeletal Care
May 2, 2014 at 7:30 a.m.–noon
Ervin J Nutter Center Berry Room
Wright State University, 3640 Colonel Glenn Hwy., Dayton, Ohio 45435
med.wright.edu/ortho/symposium

Weddings

David Jenkins and Malissa Warzeka

May 19, 2013

Births

Everette Asher Cripe

January 23, 2013
Liz Dulaney-Cripe, M.D.

Evlene Afton Herbenick

August 20, 2013
Mike and Wendy Herbenick

Nora Jane Jerele

August 23, 2013
Jennifer Jerele, M.D.

William Thomas Lodge

November 18, 2013
Justin and Brooke Lodge

Elsie Kennedy Hudson

November 18, 2013
Jonathan and Allison Hudson

Brady Patrick Finnan

June 25, 2013
Ryann and Erica Finnan

In Memoriam

Marcos Amongero, M.D., passed away after a short illness August 19, 2013. The orthopaedic community and residency suddenly lost one of its most influential members this past summer. Dr. Amongero was in the prime of his career and will be missed greatly. He was a great teacher and role model for the orthopaedic residents who rotated on his spine service. He was known as a tremendous technician surgically, but more importantly was a compassionate physician and true gentleman. He was able to balance a busy surgical career with his family and provided a shining example of how this can be done to the orthopaedic residents. Dr. Amongero not only taught the residents, but he took time to teach the surgical technicians and nursing staff in the operating room and on the patient care units. He was memorialized in a private service with a plaque in OR 8 at Miami Valley Hospital, so though he is gone his spirit remains.

James Funkhouser, M.D., passed away on July 16, 2013. As many of you know, Dr. Funkhouser was a long time director of the MVH diagnostic laboratories and cofounded the Community Tissue Center and the Compunet Clinical Laboratories. After his retirement in 1997, Dr. Funkhouser voluntarily taught orthopaedic pathology to the orthopaedic residents for over 10 years. He maintained his passion for teaching and was always interested in the new ways musculoskeletal pathology was treated. He focused on diagnosis and gave great historical perspective to tumor care in the orthopaedic field. He was a dedicated physician and true gentleman.

Rudy Hofmann passed away unexpectedly on June 18, 2013, in his home. Rudy was one of the first surgeons to complete the Miami Valley Hospital Orthopaedic Surgery residency training in 1977. He came to Dayton from Germany, graduating from the University of Freiberg. After completing his residency, he practiced general orthopaedic surgery in La Junta, Colorado, until his return to Dayton in 1996 to join Danny Reveal, M.D. in practice.

Rudy was a very well read gentleman who had a vast knowledge in medicine and in many other fields. His knowledge and historical perspective of the development of orthopedic surgery always provided interesting topics for discussion and will be missed.

Robert Turk, M.D., passed away January 16, 2014. After a distinguished career as a general surgeon in the US Air Force, Dr. Turk retired in Dayton and took on a second career in medical education. He worked in the department of medical education at St. Elizabeth Medical Center from 1979 to 2000 and was instrumental in forging the long-standing relationship between Wright-Patterson Air Force Base and Wright State University School of Medicine and the general surgery residency training program. He influenced hundreds of medical students and residents and is one of the local icons who will be long remembered by those who trained in Dayton. His enthusiasm and passion for teaching is missed. He was a tremendous role model to young physicians, and his words of wisdom will be long remembered.

ORTHOPAEDIC RESEARCH

Crossing disciplines and making a difference in patient care

Dana Duren, Ph.D., has been named director of Orthopaedic Research for the department of Orthopaedic Surgery. Her focus is to oversee current projects and to identify funding sources for future projects. Current research activities include:

An exciting collaboration between Dr. Michael Johnson's group, including chief resident Dr. Sunishka Wimalawansa, and Dr. Katherine Excoffon in the Department of Biological Sciences explores the novel use of bioengineered adipose stem cells for chronic wound healing. They have submitted two grants to accomplish this goal: a one-year pilot research grant from the Plastic Surgery Foundation, and a two-year grant from the National Institutes of Health to conduct proof-of-principle experiments with these cutting-edge techniques.

Dr. Matthew Lawless and residents (Drs. Joe Cox and Jed May) are collaborating with Dr. Andrew Froehle of the Division of Morphological Sciences and Biostatistics in the Department of Community Health on a sports medicine project investigating the role of pubertal timing in knee injury susceptibility in female collegiate athletes.

New suture techniques are being investigated by research residents Drs. Roman Trimba and Chad Williams.

Orthopaedic resident Dr. Roman Trimba teamed up with Drs. Laughlin and Krishnamurthy and surgery resident Dr. Justin Fox investigating patient outcomes (readmittance) following total hip and total knee replacement procedures using a large dataset from across the nation.

Fracture studies using longitudinal data from the Fels Longitudinal Study with Dr. Dana Duren are elucidating additional risk factors for non-traumatic fracture, including childhood and early adulthood bone structure, particularly in men.

New opportunities in biomedical engineering are being explored with Dr. Catherine Cao to improve training in surgical skills. Stay tuned for advances in this arena.



PLASTIC SURGERY UPDATE



The Plastic Surgery Division of the Boonshoft School of Medicine continues its efforts to provide service to people both locally and internationally. The addition of Dr. Salim Mancho to our practice has further enhanced the reconstructive and aesthetic depth of service provided by our division. Partnership with Dayton Children's has supported the early development of a pediatric craniofacial program. Procedures popularized at Los

Angeles Children's Medical Center now are available in Dayton. Dr. Mancho also performs adult reconstructive procedures and hand surgery. Our relationship with Transforming Techniques Medical Spa has also enhanced the capability of our division to provide high quality aesthetic services.

The residents have continued an excellent track record of clinical and academic success. Over the years, we have had two of our residents win the university's humanitarian award, Sunishka Wimalawansa, M.D., and David Jerkins, M.D., both Rice University graduates, by the way. Sunishka and Justin Fox, M.D., won the American Society for Aesthetic Plastic Surgery award for paper of the year entitled, "The Measurable Cost of Complications for Outpatient Cosmetic Surgery in Patients with Mental Health Diagnoses."

Greg Gould continues his excellent work in the biomechanics and tissue engineering lab. He and Sunishka have developed protocols for adult stem cell culture and transfer. We are looking forward to collaboration with Dr. Kate Excoffon in the biology department. One of our medical students, Bobby Papas, presented "Transduction of Adipose Stem Cells with Adeno-Associated Virus" at the Eastern Great Lakes Burn Conference. A total of five oral presentations from our residents and burn team were presented. The event was hosted by the Adult Regional Burn Center at Miami Valley Hospital with participants from burn centers at Cincinnati, Akron, Cleveland, Ohio State, Michigan, Pittsburgh, and Rochester, among others.

We have been very successful at placing our graduates in fellowship programs. Sunishka will be doing a hand fellowship at the University of Louisville.

Our international service work continues. Dr. Steven Schmidt's Legacy of Healing group went to Honduras for mission work. Drs. Mancho and Lindsay Abbott performed multiple surgeries on this trip. Dr. Johnson has developed new relationships with the Tiwanaku Project in Oruro, Bolivia, through Dr. Raul Caceres, who graduated from the Kettering Plastic Surgery Program in the '70s. Dr. Caceres is a plastic surgeon in Manhattan who is giving back to his hometown by starting a burn and cleft lip center adjacent to the government hospital. We are working with Operation Smile leadership to get funding for this project.

Finally, the residents and WSU faculty would like to thank all of the clinical faculty for their generous donation of time and energy to our program.

R. Michael Johnson, M.D.

The Wright State Plastic Surgery Tissue Lab

The Wright State Plastic Surgery Tissue Lab is located in the Orthopaedic and Plastic Surgery Clinical Office. The lab focuses on using adipose tissue donated from patients to isolate adipose-derived stem cells for use in regenerative medicine applications. Currently the lab has IRB approval through Wright State University and Miami Valley Hospital for an Adipose Tissue and Total Knee Repository. These repositories allow for the lab to bank tissues and cells extracted from surgeries such as liposuction, abdominoplasties, and total knee replacement for use at a later date. Currently the lab is focusing on characterizing and modifying harvested adipose stem cells to help solve age-old clinical problems in surgery related to deficiencies of bone and soft tissues. Working in collaboration with Dr. Katherine Excoffon and her team of research associates at Wright State University, the lab is pursuing NIH funding for projects involving the genetic modification of adipose stem cells to deliver cutting-edge surgical solutions. The lab also has been working with Dr. Atef Shrit in the pathology department to develop a protocol for identifying the adipose stem cells using flow cytometry.

Graduation



Benham's Grove June 5, 2013

The Division of Plastic Surgery enjoyed a pig roast in honor of our 2013 graduate, M. Colin Rymer, M.D. Following graduation, Colin reported to Southern Illinois University School of Medicine in July 2013 to do a Hand and Microsurgery Fellowship. He earned his bachelor's from University of Dayton, and his doctorate

from West Virginia University School of Medicine in Morgantown, West Virginia. He started as a Wright State University Boonshoft School of Medicine general surgery resident before completing his plastic surgery residency training with our Division of Plastic Surgery.

Division of Plastic Surgery Awards

Outstanding Teaching Award—A. Reza Miremadi, D.D.S., M.D.

Academic Achievement Award—Sunishka Wimalawansa, M.D.

Gregory E. Maupin Chief's Award for Outstanding Contributions to Plastic Surgery—Marti Shapiro, R.N., M.S.N.



SCHOLARLY ACTIVITY

2013 Plastic Surgery Residents

Michelle Sieffert, M.D.

University of Arizona College of Medicine
Tucson, AZ

David Jerkins, M.D.

UT Medical School
Houston, TX

Maximilian Malotky, M.D.

University of Arkansas for Medical Sciences College of Medicine
Little Rock, Ark.

Francisco Sanchez-Navarro, M.D.

University of Iowa Roy J. and Lucille A. Carver College of Medicine
Iowa City, IA

Lindsay Abbott, M.D.

University of Kansas School of Medicine
Kansas City, KS

Sunishka Wimalawansa, M.D.

Baylor College of Medicine
Houston, Texas

Visiting Professors

Kevin P. Yakuboff, M.D., F.A.C.S.

Professor
Division of Pediatric Surgery
Children's Hospital, Cincinnati
April 17, 2013
"Brachial Plexus/Pediatric Hand"

Dennis Hammond, M.D.

Cosmetic Plastic Surgeon
Grand Rapids, MI
October 23, 2013
"Immediate Breast Reconstruction"

Publications—Peer Reviewed

Wind, M, Swank, M, **Sorger J**: Short-term Results of a Custom Triflange Acetabular Component for Massive Acetabular Bone Loss in revision THA. *Orthopaedics*, 2013 March; Vol. 36(3);e260-265

The Science of Variation Group (participating member -**Prayson MJ**). Diagnosis of elbow fracture patterns on radiographs: Interobserver reliability and diagnostic accuracy. *Clin Orthop Relat Res*. 2013 Apr; 471(4):1373-8. 10.1007/s11999-012-2742-4. Epub 2012 Dec 18

Prayson MJ. The Science of Variation Group (participating member -Prayson MJ). Variation in recommendation for surgical treatment for compressive neuropathy. *J Hand Surg Am*. 2013 May;38(5): 856-62. doi: 10.1016/j.jhsa.2013.02.008. Epub 2013 Apr 3.

Prayson MJ. The Science of Variation Group (participating member, Prayson MJ). How surgeons make decisions when the evidence is inconclusive. *J Hand Surg Am*. 2013 Jun;38(6); 1202-8 doi: 10.1016/j.jhsa.2013.02.032. Epub 2013 May 4.

Prayson MJ. Patel V, Venkatarayappa I, Goswami T. Biomechanical evaluation of hybrid locking plate constructs. *Hard Tissue* 2013 Jun;01;2(4):32.

Prayson MJ. FAITH trial investigators (participating member, Prayson MJ). Femoral neck shortening after internal fixation of a femoral neck fracture. *Orthopedics*. 2013 Jul;36(7); e849-58. doi: 10.3928/01477447-20130624-13.

Prayson MJ. The Science of Variation Group (participating member, Prayson MJ). Diagnosis of union of distal tibia fractures: accuracy and Interobserver reliability. *Injury*. 2013 Aug;44(8); 1073-5. doi: 10.1016/j.injury.2012.10.034. Epub 2012 Nov 28.

Prayson MJ. The Science of Variation Group (participating member, Prayson MJ). Radiographic diagnosis of scapholunate dissociation among intra-articular fractures of the distal radius: Interobserver reliability. *J Hand Surg Am*. 2013 Sep;38(9); 1685-90. doi: 10.1016/j.jhsa.2013.05.039. Epub 2013 Jul 30.

Prayson MJ. The Science of Variation Group (participating member, Prayson MJ). Interobserver reliability of classification and characterization of proximal humeral fractures: a comparison of two and three-dimensional CT. *J Bone Joint Surg Am*. 2013 Sep 4;95(17); 1600-4. doi: 10.2106/JBJS.L.00586.

Gayton JC, **Rubino LJ**, Rich MM, Stouffer MH, Wang Q, Boivin GP. Rabbit supraspinatus motor endplates are unaffected by a rotator cuff tear. *J Orthop Res*. 2013;31(1):99-104.

Stroud NJ, **DiPaola MJ**, Martin BL, Steiler CA, Flurin PH, Wright TW, Zuckerman JD, Roche CP. Initial glenoid fixation using two different reverse shoulder designs with an equivalent center of rotation in a low-density and high-density bone substitute. *J Shoulder Elbow Surg*. 2013 Nov;22(11):1573-9. doi: 10.1016/j.jse.2013.01.037. Epub 2013 Apr 10.

Roche CP, Stroud NJ, Martin BL, Steiler CA, Flurin PH, Wright TW, **DiPaola MJ**, Zuckerman JD. The impact of scapular notching on reverse shoulder glenoid fixation. *J Shoulder Elbow Surg*. 2013 Jul;22(7):963-70. doi: 10.1016/j.jse.2012.10.035. Epub 2013 Jan 16.

May J, Kleinhenz B, **DiPaola MJ**. A Review of the Metal Backed Component in Total Shoulder Arthroplasty. Submitted to *Journal of Shoulder and Elbow Surg.*, 2013.

May J, **DiPaola MJ**. A Review of Diagnosis and Treatment of Deltoid Fibrosis. Accepted for online publication by *Medscape*, 2013.

DiPaola MJ, Abzug J, Pizzitullo P, Herman M,. Incidence of the scheduled cast changes in a pediatric population: etiology and implications. Submitted to *Journal of Pediatric Orthopedics*, Accepted for publication 2014.

Roche CP, Stroud NJ, Martin BL, Steiler CA, Flurin PH, Wright TW, Zuckerman JD, **DiPaola MJ**. Achieving fixation in glenoids with superior wear using reverse shoulder arthroplasty. *J Shoulder Elbow Surg*. 2013 Dec;22(12):1695-701. doi: 10.1016/j.jse.2013.03.008. Epub 2013 May 8.

Stroud N, **DiPaola MJ**, Flurin PH, Roche CP. Reverse shoulder glenoid loosening: an evaluation of the initial fixation associated with six different reverse shoulder designs. *Bull Hosp Jt Dis* (2013). 2013;71 Suppl 2:S12-7.

Franko O, **DiPaola MJ**. Developer of Top Apps Discusses the Risks and Roles of Medical Apps. *Ortho Apps Column: Orthopedics Today*, January 2013.

DiPaola MJ, Franko O. Orthopedic Surgeon Describes His Tech Ventures as an Internet Entrepreneur. *Ortho Apps Column: Orthopedics Today*, February 2013.

DiPaola MJ, Franko O. Apps That Integrate Touch-Screens Provide Interactive Learning for Anatomy, Radiology. *Ortho Apps Column: Orthopedics Today*, March 2013.

DiPaola MJ, Franko O. Meeting Sparks Business Platform for Health Care Professionals, Industry. *Ortho Apps Column: Orthopedics Today*, April 2013.

DiPaola MJ, Franko O. Further Patient, Health Care Provider Education with 3-D Anatomy Apps. *Ortho Apps Column: Orthopedics Today*, May 2013.

DiPaola MJ, Franko O. Through the Looking Glass: The Potential of Google's New Platform. *Ortho Apps Column: Orthopedics Today*, June 2013.

DiPaola MJ, Franko O. New OrthoMind App Unshackles Surgeons From Stationary Computers. *Ortho Apps Column: Orthopedics Today*, July 2013.

DiPaola MJ, Franko O. How 3-D Printing Could Fundamentally Change Orthopedics. *Ortho Apps Column: Orthopedics Today*, August 2013.

DiPaola MJ, Franko O. Apps From Orthopedic Specialty Societies Continue to Emerge. *Ortho Apps Column: Orthopedics Today*, September 2013.

DiPaola MJ, Franko O. Protected Communication: A Look at Apps That May Improve Privacy. *Ortho Apps Column: Orthopedics Today*, October 2013.

DiPaola MJ, Franko O. Apps Personalizes Orthopedic Media. *Ortho Apps Column: Orthopedics Today*, November 2013

DiPaola MJ, Franko O. Sookasa: An App That Protects Sensitive Files Across Devices. *Ortho Apps Column: Orthopedics Today*, December 2013.

Bates B, Wimalawansa SM, Monson B, Rymer MC, Shapiro R, **Johnson RM**. A simple cost-effective method of microsurgical simulation training: The turkey wing model. *Journal of Reconstructive Microsurgery*, 2013

Dundon JM, Rymer MC, **Johnson RM**. Total Patellar Skin Loss from Cryotherapy after Total Knee Arthroplasty. February 2013, *The Journal of Arthroplasty*.

Wimalawansa SM, Fox JP, **Johnson RM**. The measurable cost of complications for outpatient cosmetic surgery in patients with mental health diagnoses. *Aesthetic Surgery Journal*. (Submitted for publication: June 2013; accepted, pending press).

Chad Williams. Staged Subtalar Fusion for Sever Calcaneus Fractures with Bone Loss. In *Open Orthopaedics Journal*. Volume 7. 2013.

Coffey MJ, Shorten P, Lyons JD, **Laughlin RT**. Staged subtalar fusion for severe calcaneus fractures with medial extrusion of the posterior calcaneal facet: a case series. Submitted to *The Open Orthopaedics Journal*. March 2013.

Froehle AW, **Laughlin RT**, Sherwood RJ, Duren DL. Excess body weight loss is associated with non-pathological gait patterns in women four to five years after bariatric surgery. Submitted to *Obesity Surgery*. April 2013.

Grannis K, Graham M, **Laughlin RT**, Cox J. Retained internal fixation as a cause for late prosthetic fitting problems in early transtibial amputation: a case series. Submitted to *Journal of Prosthetics and Orthotics*. April 2013.

Iossi MF, Konstantakos Ek, Teel DD, Sherwood R, **Laughlin RT**, Duren D. Musculoskeletal function following bariatric surgery. *Obesity Journal*. Published online 13 May 2013. Doi:10.1002/oby.20155.

Presentations

Ellis CJ. ENT Lecture. Presented at WSP Health Center, Fairborn, OH, March 2013.

Ellis CJ. Grand Rounds. Presented at UD Boesch Lounge, Dayton, OH, March 2013.

Ellis CJ. WSU Family Medicine Musculoskeletal Workshop. Presented at WSP Health Center, Fairborn, OH, April 2013.

Ellis CJ. WSU Family Medicine Musculoskeletal Workshop. Presented at WSP Health Center, Fairborn, OH, June 2013.

Ellis CJ. WSU Family Medicine Musculoskeletal Workshop. Presented at WSP Health Center, Fairborn, OH, July 2013.

Ellis CJ. WSU Family Medicine Musculoskeletal Workshop. Presented at WSP Health Center, Fairborn, OH, August 2013.

Ellis CJ. WSU Family Medicine Musculoskeletal Workshop. Presented at WSP Health Center, Fairborn, OH, October 2013.

Ellis CJ. WSU Family Medicine Musculoskeletal Workshop. Presented at WSP Health Center, Fairborn, OH, November 2013.

Binski JC., Technological Advances in Distraction Osteogenesis. Lecturer, Limb Lengthening & Reconstruction Society Specialty Day, American Academy of Orthopaedic Surgeons Annual Meeting, Chicago, IL, March 23, 2013.

Binski JC., The Role of External Fixation for Periarticular Fractures. Lecturer, 26th Annual Meeting of the Japanese Association of External Fixation & Limb Lengthening, Nagasaki, Japan, March 29-30, 2013.

Binski JC., Pitfalls in Limb Lengthening: Recovering from Problems with Taylor Spatial Frame. Lecturer, 14th Current Concepts in Orthopaedics, Tokyo, Japan, April 1, 2013.

Binski JC., How I See It Case Presentation Discussions. Lecturer, Past Presidents' Discussion, 23rd Annual Scientific Meeting of the Limb Lengthening & Reconstruction Society, New York, NY, July 19-20, 2013.

Binski JC., Indications & Techniques for Use of Taylor Spatial Frame in Various Ankle Conditions Including Arthrodesis Correction of Soft Tissue Contractures and Distraction Arthroplasty. Lecturer, Lab & Demonstration: TSF Butt Frame for Mid Foot Deformity. Advanced Taylor Spatial Frame Course, Memphis, TN, August 2-3, 2013.

Binski JC., Six-Axis External Fixation Lab x4, Lab Instructor, 23rd Annual Baltimore Limb Deformity Course. August 30-September 2, 2013. Baltimore, Maryland

Binski JC., External Fixation: Complications are the Rule Not the Exception... What to Do? Six Axis External Fixation Lab - Special Lecturer/Lab Instructor: , 23rd Annual Baltimore Limb Deformity Post Course: Intermediate Taylor Spatial Frame Course. September 3, 2013. Baltimore, Maryland,

Mancho S., Plastic Surgery: More Than Just Cosmetic Surgery. Wright State Orthopaedics Educational Session, March 2013

Sorger J., Bone-Forming Lesions, presented at Summa Health System Akron City Hospital in Akron, Ohio October 2013.

Sorger J., Metastatic Lesions/Myeloma/Lymphoma Presented at Summa Health System Akron, City Hospital In Akron, Ohio October 2013.

Prayson MJ. A Retrospective Study of a Comprehensive Pain Protocol Using a Continuous Fascia Iliaca Compartment Block. Poster presented at the Mid-America Orthopaedic Association 31st Annual Meeting, Amelia Island, Florida, April 17-21, 2013.

Prayson MJ. A Comparative Analysis of Stability of Initial Management of Humeral Fractures. Poster presented at the Mid-America Orthopaedic Association 31st Annual Meeting, Amelia Island, Florida, April 17-21, 2013.

Prayson MJ., EXOGEN Bone Healing System. Invited Lecturer. Presented at Bioventus Regional Meeting, Wichita, Kansas, July 15, 2013.

Prayson MJ., Faculty, 19th Annual Comprehensive Fracture Course for Residents at the Orthopaedic Trauma Association 29th Annual Meeting, Phoenix, Arizona, October 8-12, 2013.

Prayson MJ., A Retrospective Study of a Comprehensive Pain Protocol Using a Continuous Fascia Iliaca Compartment Block. Poster presented at the Mid-America Orthopaedic Association 31st Annual Meeting, Amelia Island, Florida, April 17-21, 2013.

Prayson MJ., A Comparative Analysis of Stability of Initial Management of Humerus Fractures. Poster presented at the Mid-America Orthopaedic Association 31st Annual Meeting, Amelia Island, Florida, April 17-21, 2013.

DiPaola MJ. Shoulder Arthritis: What it is, what it isn't and your treatment options. Arthritis Foundation, Arthritis Expo. June 20, 2013, Dayton Ohio. Featured Speaker and Moderator of Educational Sessions.

DiPaola MJ., Leading a Digital Life in Orthopedics. Instructional Course Lecture. AAOS Annual Meeting Chicago, Illinois, March 21, 2013.

Herbenick M. Common Causes of Shoulder Pain in Overheated Athletes, Miami Valley Hospital Athlete's Update. February 2013.

Herbenick Shoulder Instability, Wright State Residency Program Morning Conference, March 2013.

Herbenick Ischial Avulsion Fractures and Proximal Hamstring Ruptures, Miami Valley Hospital Sports Medicine Symposium 2013.

Herbenick Upper Extremity Orthopaedic Surgery, University of Dayton Doctorate Physical Therapy Program, Dayton, Ohio; September 11, 2013.

Herbenick Common Causes of Shoulder Pain, Wright State University Community Educational Series, February 2013.

Rieser GR, Dulaney-Cripe EM, LaFleur BC, Hadaway SJ, Smith CA, Bauman RD, Markert RJ, Prayson MJ, **Laughlin RT**. A retrospective study of a comprehensive pain protocol using a continuous fascia iliaca compartment block in patients treated for hip fractures. Presented at the Mid-America Orthopaedic Association 31st Annual Meeting, Amelia Island, FL, April 2013.

Ross MS, Gould GC, Flower K, **Laughlin RT**. Proximal phalanx structural integrity in flexor to extensor tendon transfer: A biomechanical study. Presented at the Mid-America Orthopaedic Association 31st Annual Meeting, Amelia Island, FL, April 2013.

Knoll P, Chu J, Cox J, Hamilton R, **Laughlin RT**, Boivin G. Effect of exercise and glycemic control on diabetic (db/db) mouse Achilles tendons. Electronic poster presented at the AOFAS Annual Summer Meeting, Hollywood, FL, July 2013.

Ross MS, Gould G, Flower K, **Laughlin RT**. Proximal phalanx structural integrity in flexor to extensor tendon transfer: a biomechanical study. Presented at the 16th Annual OREF/ORS Central Indiana Regional Resident Research Symposium, Indianapolis, IN, April 2013.

Laughlin RT. Foot/ankle scientific paper session comoderator at the Mid-America Orthopaedic Association 31st Annual Meeting, Amelia Island, FL, April 2013.

Ross MS, Gould G, Flower K, **Laughlin RT**. Proximal phalanx structural integrity in flexor to extensor tendon transfer: a biomechanical study. Presented at the 75th Ohio Orthopaedic Society Annual Meeting, Dublin, OH, May 2013.

Froehle AW, **Laughlin RT**, Sherwood RJ, Duren DL. Gait characteristics in women five years after bariatric surgery relate to post-surgical weight loss. Submitted for presentation at the 2013 Gait & Clinical Movement Analysis Society (GCMAS) Annual Meeting, May 15-17, 2013.

Prayson., American Academy of Orthopaedic Surgeons 80th Annual Meeting, Chicago. March 20-23, 2013 (CME).

Prayson MJ., Mid-America Orthopaedic Association 31st Annual Meeting, Amelia Island, FL; April 17-23, 2013 (CME).

Prayson MJ., Ohio Orthopaedic Society, Columbus, OH; May 17, 2013 (CME).

Prayson MJ., Amniotic Membrane Transplantation for Foot and Ankle Surgery, San Diego, CA; August 23-24, 2013.

Prayson MJ., Orthopaedic Trauma Association 29th Annual Meeting, Phoenix, AZ; October 8-12, 2013 (faculty, CME).

Sieffert M, **Johnson RM, Mancho S,** Perry T, Jenkins D, Luckenbill D. Lower extremity Burn Reconstruction Using a Spare Ribs Parts " Fillet of Sole" Flap. Eastern Great Lakes; Dayton, Ohio , October 2013.

Publications Non Peer Review

Franko O, **DiPaola MJ.** Developer of Top Apps Discusses the Risks and Roles of Medical Apps. January 2013. <http://tinyurl.com/bd6eq5w>

Chad Williams. **Laughlin RT.,** Staged Subtalar Fusion for Sever Calcaneus Fractures with Bone Loss. In *Open Orthopaedics Journal.* Volume 7. 2013.

Accepted Publications

Ross MS, Gould G, Flower K, **Laughlin RT.** Proximal phalanx structural integrity in flexor to extensor tendon transfer: a biomechanical study. Presented at the 16th Annual OREF/ORS Central Indiana Regional Resident Research Symposium, Indianapolis, IN, April 2013.

Ross MS, Gould G, Flower K, **Laughlin RT.** Proximal phalanx structural integrity in flexor to extensor tendon transfer: a biomechanical study. Presented at the 75th Ohio Orthopaedic Society Annual Meeting, Dublin, OH, May 2013.

Grants and Research

Growth factor elution rates from various commercial grade cements in differing morphologies. Ross MS, **Laughlin RT** (Co-PI). May 9, 2012-June 9, 2013

Mass Spectrometry of the Achilles Tendon in Diabetic Mice with and without Treatment. Knoll P, **Laughlin RT** (Co-PI). November 2, 2012-December 15, 2013

Clinical Relevance of Outcomes of Biomechanical Studies **Prayson MJ.,** February 2013.

Surgical Decision for Operative Treatment of Distal Radius Fractures **Prayson MJ.,** April 2013.

Variation in Treatment Recommendations for 5th Metacarpal Fractures **Prayson MJ.,** June 2013.

Surgical Decision for Operative Treatment of Proximal Humerus Fractures **Prayson MJ.,** October 2013.

UPCOMING EVENTS

ORTHOPAEDIC SURGERY

2014 Orthopaedic Surgery Graduation

Orthopaedic Surgery Residency Program
Dayton Racquet Club
Dayton, Ohio
May 23, 2014

Visiting Professor

James McCarthy, M.D.
Dayton Ortho Society meeting
Dayton Country Club
June 24-25, 2014

Annual Spring Orthopaedic Symposium

Upper Extremity
Musculoskeletal Care
Wright State Orthopaedic Surgery, Sport
Medicine & Rehabilitation
Berry Room, Nutter Center, WSU
May 2, 2014

PLASTIC SURGERY

Plastic Surgery Graduation

Benham's Grove
Centerville, OH
June 1, 2014



Boonshoft
School of Medicine
WRIGHT STATE UNIVERSITY

Orthopaedic Surgery, Sports Medicine and Rehabilitation
30 E. Apple Street, Suite 2200 ■ Dayton, OH 45409