

Friday, June 17, 2011 The Learning Center Lion's Building – 2020 Gravier Street 6<sup>TH</sup> Floor – Room #632



Faculty and Residents 2010

## 8<sup>TH</sup> ANNUAL ROBERT D. D'AMBROSIA LECTURESHIP & RESEARCH DAY

## The Lectureship and Research is named in honor of:

### ROBERT D. D'AMBROSIA, M.D.

Dr. D 'Ambrosia's service to the LSU Department of Orthopaedic Surgery has spanned over 30 years. While Chair of the Department he trained and mentored over 100 LSU graduates. His contributions to the LSU program are long lasting and a lectureship and chair have been established in his honor. We are very grateful for Dr. D's contributions to LSU and to the department. He exemplifies leadership and humanity and we are proud to continue and honor his legacy with our eighth year of lecture series.

# Agenda

8:30-9:15	Breakfast
9:15-9:30	Opening Remarks <b>Andrew King, M.D.</b> Department Chairman
9:30-10:30	Guest Speaker <b>Louis W. Catalano III, M.D.</b> "Surgical Treatment of Distal Radius Fractures"
10:30-10:50	<b>Martin J. deGravelle Jr., M.D.</b> <i>"Quad Loop Palmaris for Medial Ulnar Collateral Ligament Reconstruction of the Elbow".</i> <i>Reviewer:</i> Michael Hartman, M.D.
10:50-11:10	Matthew C. Lafleur, M.D. "Motion of a Cervical Disk between Cranial and Caudal Arthroplasty Compared to Arthrodesis" Reviewer: Andrew King, M.D.
10:10-11:30	<b>Blane A. Sessions, M.D.</b> <i>"The Physician and Orthopaedic Workforce in the United States:</i> <i>Forecasting an Aging Physician Population"</i> <i>Reviewer:</i> Vinod Dasa, M.D.
11:30-11:50	<b>Rahul D. Chaudhari, M.D.</b> <i>"Outcomes in Neuromuscular Scoliosis Patients for Correction of Scoliosis and pelvic obliquity after Instrumented posterior Spinal Fusion"</i> <i>Reviewer:</i> Andrew King, M.D.
11:50-12:20	Q&A
12:20-12:30	Closing Remarks



Louis W. Catalano III, M.D.

Louis W. Catalano, III, M.D., is an orthopedic surgeon with expertise in hand, shoulder, elbow, wrist and hand surgery. Dr. Catalano's caring communication style enables him to get a complete picture of his patients' complaints and address their upper extremity problems with a combination of therapies.

Dr. Catalano is an Assistant Professor of Orthopedic Surgery at Columbia University College of Physicians and Surgeons, Attending Surgeon in the Department of Orthopedic Surgery at St. Luke's-Roosevelt Hospital, and Attending Hand Surgeon at the CV Starr Hand Surgery Center at Roosevelt Hospital. His numerous publications have appeared in the Journal of the American Academy of Orthopedic Surgeons, Hand Clinics, Journal of Hand Surgery, and other leading surgical publications. He is an associate scientific editor for the Journal of Hand Surgery and a consultant reviewer for the Journal of Bone and Joint Surgery. Dr. Catalano has been Fordham University's team physician since 2002 and is the shoulder specialist for Team New York Aquatics swim team. Dr. Catalano frequently gives national research presentations on hand and upper extremity surgery and was named teacher of the year by the St. Luke's-Roosevelt Orthopedic Surgery Program in 2005.

After receiving his undergraduate degree from Johns Hopkins University, Dr. Catalano earned his M.D. from New York University School of Medicine and was a resident at Washington University/Barnes Hospital. He was awarded a fellowship in congenital hand deformities at Texas Scottish Rite Hospital, a shoulder surgery fellowship at Columbia University, and an upper extremity fellowship at Roosevelt Hospital.

Originally from Pittsburgh, PA, Dr. Catalano currently resides in Pelham Manor with his wife and two children. In addition to fishing, Dr. Catalano participates in marathon and triathlon races to raise money for cancer research. He is also a founding member of Team Continuum, which has raised over 3.5 million dollars in four years for cancer patients and their families.

## 2011 Orthopaedic Surgery Graduate



Martin Joseph deGravelle Jr., M.D.

Dr. Martin deGravelle, Jr. was born in Galveston, TX on June 6, 1974. He earned his undergraduate degree in Zoology from Louisiana State University and his Masters of Science in Ichthyology at Old Dominion University. He then received his medical degree from Louisiana State University in Shreveport in 2005. He continued his medical training at the Louisiana State University Health Sciences Center Department of Orthopaedic Surgery.

Dr. deGravelle is currently one of three Chief Residents in the Department of Orthopaedic Surgery. After graduation Dr. deGravelle will begin a Hand and Upper Extremity fellowship at Allegheny General Hospital in Pittsburgh, PA.

The topic for Dr. deGravelle's research presentation is "Quad Loop Palmaris for Medial Ulnar Collateral Ligament Reconstruction of the Elbow".

Dr. Martin deGravelle is married to Dana deGravelle and they are the proud parents of one daughter, Camille.

#### Quad loop palmaris for medial ulnar collateral ligament reconstruction of the elbow

Mark H. Field, M.D., Martin deGravelle, M.D., Jason R. Determann, M.D., Beau B. Lowery, MS, PT, ATC, SCS

**OBJECTIVE:** The purpose of this study is to describe our method of reconstruction of the medial ulnar collateral ligament using a double thickness palmaris tendon graft or "quad loop" fully seated in all tunnels, and to report the results of the first twenty-four patients on whom this procedure was performed between June 2004 and April 2008 (1). The average age at reconstruction was 20 years (range 15 to 24 years). Of the twenty-four patients twenty-two were male and two were female. All twenty-two male patients played baseball, and the female athletes were softball players.

**STUDY DESIGN:** A total of 35 reconstructions using the palmaris quad loop technique have been performed by one of the authors (MHF). Of these, twenty-four of the patients met the minimum of 12 month post-op requirement for the follow-up. The average time of follow-up was 30 months after reconstruction (range, 14 to 48 months). These reconstructions were performed between June 2004 and April 2008. The average age at reconstruction was 20 years (range 15 to 24 years). Twenty-two patients were male and two were female. All twenty-two male patients played baseball, and the female athletes were softball players.

**RESULTS:** Of the twenty, twenty-four patients, two played or currently play at the minor league level, sixteen at the collegiate level, and six at the high school level of competition. All cases reported dominant arm involvement.

At mean follow-up time of 30 months (range, 14 to 30), twenty-two of the twenty-four had returned to their previous level of play or higher. The average time elapsed from competition was 12 months. Two patients were unable to return to their previous level of competition. Both had pain after successful fall season, which included bullpens and scrimmages.

**CONCLUSION:** Our follow-up has shown using the "quad loop" palmaris graft, 92% of the throwing athletes were able to return to play at their previous level or better. We have encountered no fractures to date.

## 2011 Orthopaedic Surgery Graduate



Matthew Curtiss Lafleur, M.D.

Dr. Matt Lafleur was born in Mobile, Alabama on October 20th, 1979. He earned a degree in Zoology from Auburn University in 2002. He graduated from medical school at the University of South Alabama in 2006. He continued his training as an Orthopaedic resident at Louisiana State University Health Sciences Center.

Dr. Lafleur is currently one of three Chief Residents in the Department of Orthopaedic Surgery. After Graduation, he will be taking a position as a spine surgery fellow at the University of Colorado in Denver.

#### Motion of a Cervical Disk between Cranial and Caudal Arthroplasty Compared to Arthrodesis

#### Gabriel Tender, M.D., Matthew C. Lafleur, M.D.

**OBJECTIVE:** To compare motion at an index disk (C4-C5) with both adjacent levels treated with either arthroplasty or arthrodesis.

#### **STUDY DESIGN:** Biomechanical comparison

**RESULTS:** Increased rotational motion was found in flexion/extension with the ACDF group. The motion increased from 0.9 degrees to 3.3 degrees (367%). Motion in this plane was not significantly different between control and ACDA groups. Motion in all other planes was not found to be significantly different.

**CONCLUSION:** Clinical studies are conflicted when comparing outcomes of single level cervical arthroplasty. It is believed that with increasing number of instrumented levels, the benefits of arthroplasty relative to arthrodesis will emerge. This study shows the biomechanical benefit of an above and below cervical arthroplasty in preventing an increase in motion that would accompany an above and below fusion construct.

## 2011 Orthopaedic Surgery Graduate



Blane Adam Sessions, M.D.

Dr. Blane Sessions was born in Baton Rouge, Louisiana on September 17, 1979. He earned his undergraduate degree in Biology with minors in Business Administration and German from Centenary College in Shreveport, LA and his medical degree from Louisiana State University in New Orleans in 2006. He continued his medical training at the Louisiana State University Health Sciences Center – New Orleans, Department of Orthopaedic Surgery.

Dr. Sessions is currently one of three Chief Residents in the Department of Orthopaedic Surgery. After graduation Dr. Sessions will begin a Hand fellowship at the Philadelphia Hand Center/Thomas Jefferson in Philadelphia, PA.

The topic for Dr. Sessions' research presentation is *"The Physician and Orthopaedic Workforce in the United States: Forecasting an Aging Physician Population"* 

Dr. Blane Sessions would like to thank all his fellow residents and staff for a great five years.

# The Physician and Orthopaedic Workforce in the United States: Forecasting an Aging Physician Population

Blane Sessions, M.D., Peter Fos DDS, PhD, MPH, Tong Yang MD, MS, Shelia Chauvin Med, PhD, Vinod Dasa, MD

**OBJECTIVE:** This study examines the physician workforce in the United States, as well as the physician workforce in the specialty of orthopaedics, in an attempt to understand the influence of an aging physician population on workforce predictions.

**STUDY DESIGN:** The study data consisted using the AMA's Master file data reported in the 1989 through 2011 editions of the annual publication *Physician Characteristics and Distribution in the US*, U.S. population data from the U.S. Census Bureau, and forecasting data from Statistical Analysis Software, Inc.

The number of physicians in the workforce was estimated from 1989 to 2030. The percentage and number of physicians in the workforce were also stratified by age. In an attempt to further specify the physician workforce, a specialty was selected for examination. The orthopaedic physician workforce was estimated during the same time period, 1989 to 2030.

**RESULTS:** The U.S. physician population is expected to grow steadily and double by the year 2030, when there will be an expected 1.35 million U.S. physicians. The forecasting model anticipates that the greatest increase will be in the number of U.S. physicians between the ages of 55 and 65 years and over 65 years of age and by 2030 the percentage of physicians over 55 will make up 54.6 percent of the U.S. workforce. Additionally, the model indicates that the rate of growth for physicians less than 54 years of age in all age categories will plateau and remain constant. The U.S. orthopaedic workforce is expected to increase to 30,890 physicians in 2030, a 19 percent increase from 2009. The trend for the orthopaedics mirrors the trend for all physicians. By the year 2030, physicians over 55 will make up 44.2 percent of the total U.S. orthopaedic physician population. Also the rate of growth for younger physicians remains level.

**CONCLUSION:** The study suggest that within the physician workforce there will be a significant increase in the number of older U.S. physicians in the future, while the number of younger physicians will remain constant. A similar movement is seen in the orthopaedic workforce. These projections raise concern with respect to meeting the future need for health care service in the U.S.

The benefit of using a forecasting model is that it provides a perspective that should lead to greater discussion, more investigation, and development of additional models for forecasting the physician supply.

## 2011 Pediatric Orthopaedic Surgery Graduate



Rahul D. Chaudhari, M.D.

Dr. Rahul Chaudhari was born in Jalgaon, India on October 8, 1978. He completed his medical schooling and orthopedic residency in Mumbai, India in 2006. He is interested in spine subspecialty. In the previous year, he received training in the adult spine surgery at Hospital for Special Surgery, New York.

Currently, he is working as a fellow in the Department of Orthopaedic Surgery at Children's Hospital New Orleans. After fellowship training Dr. Chaudhari will return to his home country and he will start his practice as an adult and pediatric spine surgeon.

The topic for Dr Chaudhari's research presentation is *"Outcomes in neuromuscular scoliosis patients for correction of scoliosis and pelvic obliquity after instrumented posterior spinal fusion".* 

Dr Rahul Chaudhari is married to Amrapali Chaudhari.

# Outcomes in Neuromuscular Scoliosis Patients for Correction of Scoliosis and Pelvic obliquity after Instrumented Posterior Spinal Fusion

#### Rahul Chaudhari, M.D., William Accousti, M.D., Joseph Gonzales, M.D.

**OBJECTIVE:** To evaluate outcomes in cerebral palsy patients with neuromuscular scoliosis for correction of scoliosis and pelvic obliquity after posterior spinal fusion ending either in lower lumbar level or pelvis. To study the scoliosis curve patterns and to correlate outcomes between two fusion groups.

**STUDY DESIGN:** Retrospective analysis of surgical outcomes in cerebral palsy patients operated for neuromuscular scoliosis. All patients underwent posterior spinal fusion with pedicle screw construct and the caudal extent of fusion ending either in L4/5 lumbar spine or pelvis.

The number of physicians in the workforce was estimated from 1989 to 2030. The percentage and number of physicians in the workforce were also stratified by age. In an attempt to further specify the physician workforce, a specialty was selected for examination. The orthopaedic physician workforce was estimated during the same time period, 1989 to 2030.

**RESULTS:** Initial correction of scoliosis was similar between groups, with 67% correction in the lumbar group and 70% correction in the pelvis group, and follow up correction was 60% and 64%, respectively. Initial pelvic obliquity correction was 64% in the lumbar group and 74% in the pelvis group. Follow up correction was 51% in the lumbar group and 63% in the pelvis group. In the lumbar group, the mean blood loss was 670 ml, mean intraoperative time was 237min, and average post-operative stay was 6 days and in the pelvis group, they were 1167ml, 309 min and 7.1 days, respectively. There were four complications in the lumbar group, including late infections in two cases, revision of instrumentation prominence at proximal end in one case and loosening of bottom L5 screws which needed partial implant removal in one case. The pelvis group also had four complications, including three late infections and one patient with right iliac screw disconnected from main construct without any clinical consequence. In the 34 patients with pelvic obliquity, 13 patients had II C curves, and 21 patients had II D curves. Patients with fractional lumbar curves tend to have lesser pelvic obliquity (mean 10.3<sup>o</sup>) as compare to the patients with no fractional lumbar curves (mean 27.7<sup>o</sup>). In the lumbar group, patients with II D curves (n=11) showed better initial correction of pelvic obliquity as compare to patients with II C curves (n=10) however 4 out of 11 patients with II D curves showed worsening of pelvic obliquity more than 5° till latest follow up. In the pelvis group, II C (n=3) and II D (n=10), worsening pelvic obliquity was seen in only one patient who was complicated with late infection.

**CONCLUSION:** Scoliosis correction was comparable in both groups. However, pelvis fixation proved to be more effective in correcting pelvic obliquity as compare to the lumbar group. Patients with the lumbar fractional curves tend to have lesser pelvic obliquity and fusion ending in lower lumbar level is advisable in this patient population. Pelvis fixation was associated with increased risk of operative morbidity and deep infection.

## **Department of Orthopaedic Surgery**

### Faculty

Andrew King, MD Professor & Chair Spine Pediatric Orthopaedics

**Peter Krause, MD** Assistant Professor & Program Director Trauma Orthopaedics

> William Accousti, MD Assistant Professor Pediatric Orthopaedics

**Vinod Dasa, MD,** Assistant Professor Adult Reconstruction Orthopaedics

**Robert Dugas, MD** Assistant Professor Sports Medicine Orthopaedics

> Melissa Gorman, MD Assistant Professor Trauma Orthopaedics

#### Michael Hartman, MD Assistant Professor Sports Medicine Orthopaedics

**Christopher Marrero, MD** Assistant Professor General Orthopaedics

**Keith Melancon, MD** Assistant Professor General Orthopaedics

#### **Prerana Patel, MD** Assistant Professor

Pediatric Orthopaedics

**Ronald Rooney, MD** 

Associate Professor Oncology and Total Joints Orthopaedics

#### Harold Stokes, MD

*Professor* Hand Orthopaedics

#### Stephen Heinrich, MD Clinical Professor

**Pediatric Orthopaedics** 

#### Joseph Gonzales, MD

Clinical Assistant Professor Pediatric Orthopaedics

#### John Thomas, MD

*Clinical Assistant Professor* General Orthopaedics

#### **Ronnie Mathews, MD**

Clinical Assistant Professor General Orthopaedics

#### **Brent Bankston, MD**

*Clinical Assistant Professor* Sports Medicine Orthopaedics

#### Monroe Laborde, MD

*Clinical Assistant Professor* Foot & Ankle Orthopaedics

#### Mandy Lopez, PhD

Associate Professor Research

#### Jeffrey Gimble, PhD Professor Research

#### Stephen Cook, PhD Professor Research

## **Department of Orthopaedic Surgery**

#### Residents

#### <u>PGY-1</u>

Shaun Accardo, M.D. Jared Braud, M.D. Karim Meijer, M.D. Wame Waggenspack, M.D.

#### <u>PGY-2</u>

James Kyle, M.D. Dale Landry Jr., M.D. Russell Russo, M.D. Kristopher Sirmon, M.D.

#### <u>PGY-3</u>

Brandon Donnelly, M.D. Katy Lybarger, M.D. Blaine Walton, M.D. Jeffrey Witty, M.D.

#### <u>PGY-4</u>

Robert Duarte, M.D. Noah Marks, M.D. Davida Packer, M.D. Christine Seaworth, M.D. Barton Wax, M.D.

### Staff

Linda Flot Coordinator of Academic Area Sven Oertel Business Manager Jennifer Doughty Administrative Assistant Edwina Jackson Administrative Assistant Jennifer Perilloux Clinical Associate Dana Stewart Administrative Coordinator

## Congratulations and Best Wishes

## To Our

## 2011 Graduates

## From the Residents, Faculty, and Staff

# Department of Orthopaedic Surgery



Drs. R. Chaudhari, M. deGravelle, M. Lafleur, and B. Sessions