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Dear Friends & Colleagues,

We are excited to present the third biennial Rady Children’s Specialists of San Diego, A Medical Foundation, Department of Children’s Surgery 2011-2013 report. This report is a culmination of the accomplishments of our surgeons and surgeon-scientists following the inception of the medical foundation at Rady Children’s Hospital-San Diego (RCHSD) in September 2009.

The Department of Surgery of the medical foundation includes clinically active members of the hospital divisions of:

- Cardiovascular Surgery
- Neurosurgery
- Ophthalmology
- Otolaryngology and Head and Neck Surgery
- Maternal and Fetal Medicine
- Pediatric General Surgery
- Orthopedics
- Urology

The medical practice foundation has provided a structure for the surgical faculty to work collaboratively to improve surgical clinical care, education, and enhance research activities. Members of the department are faculty in the Departments of Surgery, Orthopedics, Reproductive Medicine and Neurosciences at the University of California, San Diego (UC San Diego). The foundation has fostered even greater synergy between surgical colleagues at UC San Diego and RCHSD. This partnership has allowed the department to continue to provide world class surgical care for the region’s patients and families.

RCHSD has continued to grow its surgical volume, performing greater than 21,000 operative cases in the last year. We are also very close to performing our first cardiac transplant procedure after successfully attracting a world class pediatric cardiac transplant surgeon. Our new Cardiovascular Intensive Care Unit is providing the best of care to our Heart Institute patients.

A new surgical academic fund has been created in partnership with RCHSD to help finance surgical research on campus and to leverage our electronic medical record. This complements the remarkable basic science achievements of the research faculty at UC San Diego. RCHSD is committed to providing the best of care for children through research and clinical expertise.

Sincerely,

Donald B. Kearns, MD
Surgeon-In-Chief,
Rady Children’s Specialists of San Diego, A Medical Foundation

Kathleen A. Sellick
President and CEO
Rady Children’s Hospital-San Diego

Herbert C. Kimmons, MD
Executive Director,
Rady Children’s Specialists of San Diego, A Medical Foundation
Rady Children's Heart Institute was created to integrate and coordinate the clinical, research and educational programs of the Cardiology and Cardiovascular Surgery Divisions at Rady Children’s Hospital-San Diego (RCHSD).

The Division of Cardiology currently includes 13 full time cardiologists. Recruitments since July 2012 include: Dr. Fagan, a general cardiologist who joined the Cardiology Division in January 2013, Dr. Sun, an expert in fetal echo and imaging who joined the Cardiology Division in August 2013, and Dr. Hedge, an expert in cardiac MRI and imaging who joined the Cardiology Division in August 2013.
FACULTY

John W. Moore, MD, MPH, Division Chief, Professor of Clinical Pediatrics; Medical Director of Division of Cardiology, RCHSD; Medical Director, Cardiac Catheterization Laboratory, RCHSD
Christopher K. Davis, MD, PhD, Assistant Clinical Professor of Pediatrics; Medical Director of Exercise Laboratory, RCHSD
Howaida G. El-Said, MD, PhD, Associate Professor of Pediatrics
Jeffrey R. Frazer, MD, Associate Clinical Professor of Pediatrics
Raymond R. Fripp, MD, Clinical Professor of Pediatrics; Medical Director of Echocardiography Laboratory, RCHSD
Paul D. Grossfeld, MD, Associate Clinical Professor of Pediatrics; Director of Pediatric Cardiology Fellowship Program
Sanjeet Hegde, MD, HS Assistant Clinical Professor
Stanley E. Kirkpatrick, MD, Associate Clinical Professor of Pediatrics, retired (volunteer faculty)
Delaram Molkara, MD, Assistant Clinical Professor of Pediatrics
Vishal Nigam, MD, Assistant Professor of Pediatrics in Residence
James C. Perry, MD, Clinical Professor of Pediatrics; Medical Director of Electrophysiology, Pacing and Adult Congenital Heart Disease, RCHSD
Beth Printz, MD, Associate Professor of Clinical Pediatrics; Medical Director of Non-Invasive Cardiac Imaging, RCHSD
Heather Sun, MD, HS Assistant Clinical Professor

POSTDOCTORAL FELLOWS

Mohammad Ebrahim, MD 1st year, UCSD
Serena Sah, MD, 2nd year, UCSD
Gabrielle Vaughn, MD, 3rd year, UCSD
Juliana Gomez-Arostegui, MD, 3rd year, UCSD
Matthew Williams, MD, 3rd year, UCSD
Kiran Mallula, MD, 4th year Interventional Clinical Fellow, UCSD

Left to Right: Howaida El-Said, Jeffrey Frazer, Beth Printz, Sanjeet Hedge, James Perry
of which were interventional catheterizations. The echocardiography laboratory performed 9511 echocardiograms.

In the last five years there has been steady growth in all categories. The growth of the division clinical volumes has been related both to expanding the referral practice within Southern California and neighboring states, as well as to meeting previously unmet demand for services within the traditional referral regions. The Division’s clinical volumes place the program among the largest pediatric and congenital heart disease centers in the United States.

CLINICAL ACTIVITIES
INPATIENT/OUTPATIENT

The Cardiology Division is the only comprehensive tertiary care provider of cardiovascular services in the region (San Diego, Imperial, and South Orange Counties), and it receives referrals from Balboa Naval Medical Center, as well as the San Diego Regional Kaiser Medical Center. In addition, the Division is the major off island referral center for the State of Hawaii. The Division’s clinical volumes for the academic year 2012-2013 were 12,085 total outpatient visits including 1397 patients seen in satellite offices. 697 catheterizations were performed, about 70% of which were interventional catheterizations. The echocardiography laboratory performed 9511 echocardiograms.

Left to Right: Brian Fagan, Vishal Nigam, John Moore, Heather Sun, Paul Grossfeld, Delaram Molkara, Christopher Davis, Raymond Fripp
RESEARCH ACTIVITIES

The Division’s basic and translational research program is anchored by Dr. Paul Grossfeld and Dr. Vishal Nigam.

Dr. Grossfeld investigates the genetic basis of congenital heart defects and Jacobsen Syndrome (11qdel). His additional projects include induced Pluripotent Stem Cells to derive cardiac lineages from human Jacobsen syndrome patient fibroblasts (“Disease in a Dish”); defining gene regulatory pathways involving ETS-1 in cardiac neural crest cell development, and pathways that suppress the development of heart defects; and the genetic basis of cognitive and behavioral defects in Jacobsen syndrome.

Dr. Nigam’s laboratory is focused on investigating the molecular and genetic mechanisms involved in aortic valve stenosis and in valve calcification. In addition, he is studying the role of biomechanical stretch on activation of calcification pathways and the role of biomechanical stressors on cardiac defects, and the mechanism of how stretch and shear stress stimulate ventricular growth in utero.

The Division’s faculty and fellows have also been involved in a large number of clinical research projects. There are currently 31 active IRB approved clinical projects:

Christopher Davis, MD, PhD
Determining the Natural and “Unnatural” history of Anomalous Aortic Origin of a Coronary Artery with Interalteral or Intracanal or Intramural Course (AAOCA): Establishing a Multi-Institutional Registry

The Hybrid Procedure as an Alternative to the Norwood Sano in High Risk Hypoplastic Left Heart (HLHS) Patients (Retrospective Chart Review)

Howaida El-Said, MD, PhD
ADO II Clinical Study
Closure of Muscular Ventricular Septal Defects with the AMPLATZER Muscular VSD Occluder–Post Approval Study native to the Norwood Sano in High Risk Hypoplastic Left Heart (HLHS) Patients (Retrospective Chart Review)

Use of the Melody Transcatheter Pulmonary Valve Ensemble (Melody TPV) as a Humanitarian Use Device (HUD) under a Humanitarian Device Exemption (HDE) HDE#: H080002 designated July 10, 2007 and approved January 25, 2010–HUD #07-0810
The Damus-Kaye Stansel (DKS) Surgical Procedure: Quality of Life After DKS Continued Access to Covered Cheatham Platinum Stent for Prevention or Treatment of Aortic Wall Injury Associated with Aortic Coarctation (COAST II CA)
Coarctation of the Aorta Stent Trial (COAST) Phase I
Implantation of the Medtronic Melody Transcatheter Pulmonary Valve (TPV) in Patients with Dysfunctional Right Ventricular Outflow Tract (RVOT) Conduits: A Post Market Approval Study
Covered Cheatham-Platinum Stent for Prevention or Treatment of Aortic Wall Injuries Associated with Aortic Coarctation (COAST II)
The Damus-Kaye Stansel (DKS) Surgical Procedure: Long-term Follow-up of Survivors and Analysis of Possible Sequelae Congenital Cardiac Catheterization Outcomes Project (C3PO) Protocol Version 3–May 2009 Congenital Cardiac Catheterizations Project on Outcomes (C3PO) Quality Improvement Registry Congenital Cardiac Catheterizations Project on Outcomes (C3PO-QI) Quality Improvement–Radiation Project Transcatheter Closure of Atrial Septal Defect (ASD) using the Amplatzer Septal Occluder with Transthoracic Echocardiography or Transesophageal Echocardiography Pulmonary Artery Repair with Covered Stents (PARCS): The Use of Covered Cheatham Platinum Stents for Repair of RV to PA Conduits Disruption During Preparation for Implantation of the Melody Transcatheter Pulmonary Valve–Pending Approval Continued Access to Covered Cheatham Platinum Stent for Prevention or Treatment of Aortic Wall Injury Associated with Aortic Coarctation (COAST II CA)

Paul Grossfeld, MD
Trial of Beta Blocker Therapy (Atenolol) vs. Angiotensin II Receptor Blocker Therapy (Losartan) in Individuals with Marfan Syndrome. This study is sponsored by the National Heart, Lung & Blood Institute (NHLBI) of the National Institutes of Health (NIH), and through the Pediatric Heart Network (PHN). New England Research Institutes serves as the Data Coordinating Center (DCC) for the PHN Network under grant No. U01 HL68270, CFDA # 93.837. IND#76,539

John W. Moore, MD, MPH
Pulmonary Artery Repair with Covered Stents (PARCS): The Use of Covered Cheatham Platinum Stents for Repair of RV to PA Conduits Disruption During Preparation for Implantation of the Medtronic Transcatheter Pulmonary Valve–Pending Approval

Jeffrey Frazer, MD
Outcomes in Preterm and Low Birthweight Newborns Undergoing Cardiac Surgery

Raymond Fripp, MD
Trial of Beta Blocker Therapy (Atenolol) vs. Angiotensin II Receptor Blocker Therapy (Losartan) in Individuals with Marfan Syndrome. This study is sponsored by the National Heart, Lung & Blood Institute (NHLBI) of the National Institutes of Health (NIH), through the Pediatric Heart Network (PHN). New England Research Institutes serves as the Data Coordinating Center (DCC) for the PHN Network under grant No. U01 HL68270, CFDA # 93.837. IND#76,539
HEART INSTITUTE—SURGERY

ADO II Clinical Study
Closure of Muscular Ventricular Septal Defects with the AMPLATZER Muscular VSD Occluder—Post Approval Study
Transcatheter Closure of Atrial Septal Defect (ASD) using the Amplatzer Septal Occluder with Transthoracic Echocardiography or Transesophageal Echocardiography

Congenital Cardiac Catheterizations
Outcomes Project (C3PO) Protocol Version 3–May 2009
Congenital Cardiac Catheterizations Project on Outcomes (C3PO-OI) Quality Improvement Registry

Congenital Cardiac Catheterizations Project on Outcomes (C3PO-OI) Quality Improvement—Radiation Project
The Hybrid Procedure as an Alternative to the Norwood Sano in High Risk Hypoplastic Left Heart Patients (Retrospective Chart Review)

Vishal Nigam, MD
MicroRNA Profiling in Neonates Undergoing Cardiopulmonary Bypass
Profiling of Tissues from Patients with Congenital Heart Defects
Modeling Hemodynamic Stresses in Congenital Heart Disease
Retrospective Profiling of Hypoplastic Left Heart Ventricular Tissue
The Damus-Kaye Stansel (DKS) Surgical Procedure: Quality of Life After DKS
The Damus-Kaye Stansel (DKS) Surgical Procedure: Long-term Follow-up of Survivors and Analysis of Possible Sequelae

James Perry, MD
Transmural Atrial Leads in Adult Congenital heart patients: Lead Performance in Long-Term Follow-Up (Retrospective Chart Review)
SPKLS002: Echocardiographic Assessment of Cardiac Left Ventricular Strain, Torsion and Blood Flow Analysis in Subjects with Congenital and Acquired Heart Disease

A Retrospective Study of Children Presenting with Tachycardia-Mediated Cardiomyopathy
The Damus-Kaye Stansel (DKS) Surgical Procedure: Quality of Life After DKS
Outcomes in Preterm and Low Birth-weight Newborns Undergoing Cardiac Surgery

Beth Printz, MD, PhD
SPKLS002: Echocardiographic Assessment of Cardiac Left Ventricular Strain, Torsion and Blood Flow Analysis in Subjects with Congenital and Acquired Heart Disease
Implantation of the Medtronic Melody Transcatheter Pulmonary Valve (TPV) in Patients with Dysfunctional Right Ventricular Outflow Tract (RVOT) Conduits: A Post Market Approval Study
Use of the Melody Transcatheter Pulmonary Valve Ensemble (Melody TPV) as a Humanitarian Use Device (HUD) under a Humanitarian Device Exemption (HDE) HDE#: H080002 designated July 10, 2007 and approved January 25, 2010–HUD #07-0810

TEACHING ACTIVITIES
The Division provides a comprehensive accredited educational program for fellowship training in pediatric cardiology. Dr. Grossfeld is the Fellowship Program Director. Fellows are offered clinical teaching and mentoring in all aspects of clinical cardiology: Outpatient care and evaluation, Inpatient and ICU care Echocardiography, CT and MRI, Diagnostic and Interventional Cardiac Catheterization, Electro-physiology and Pacing, Exercise Physiology and Clinical Research. A broad schedule of lectures and presentations are offered including: Weekly Surgery Conference, Weekly Catheterization Conference, Weekly Core Lecture, and Monthly Journal Club and Research Meeting. The three-year program has full ACGME accreditation.

The Division offers a fourth year position for an Advanced Fellow in interventional congenital cardiology. This position includes training and experience as operator or first assistant in approximately 200 procedures, teaching conferences, and training in clinical research. Faculty/staff cardiologists are also active in training of pediatric residents and medical students. Rotation in pediatric cardiology is not mandatory for residents, but many selected the one month Pediatric Cardiology elective designed by Dr. Perry. This elective provides both inpatient and outpatient experiences.

Dr. Davis participates as an Instructor in the “Clinics” course required for second year medical students.

AWARDS, HONORS, AND MAJOR PRESENTATIONS
Christopher Davis, MD, PhD

Howaida EL-Said, MD, PhD
Randomized trial of transthoracic echocardiography versus transesophageal echocardiography for definitive assessment and guidance of transcatheter closure of ASDs in children using the Amplatz Septal Occluder. Pediatric Interventional Cardiac Symposium (PICS), Boston, MA, July 2011
A risk stratified algorithm for eclectic use of hybrid palliation in high risk neonates. PICS, Boston, MA, July 2011
Use of TPA for femoral artery obstruction post catheterization. PICS, Boston, MA, July 2011
First report of atretic coronary sinus stenting resulting in dramatic improvement of ventricular function in functional single ventricle. PICS, Boston, MA, July 2011
Breaking the Limits-Extensibility of Medium and Large Stents. Presented in PICs, April 2012

Walking on Ice with the GUCH. Interventions for Adults with Congenital Heart Disease. Invited speaker. Maui Cardiovascular Symposium, September 2012

Prospective Randomized Trial of Trans-thoracic Echocardiography (TTE) vs. Trans-esophageal Echocardiography (TEE) for Definitive Assessment and Guidance of Transcatheter Closure of Atrial Septal Defects (ASD) in Children using the Amplatzer Septal Occluder (ASO). Oral presentation PICS, Miami, FL, January 2013

Paul D. Grossfeld, MD

Oral presentation, New basic and genetic insights into HLHS. American Heart Association, Orlando, FL, November 2011

Update on genes causing cognitive and behavioral disorders in 11q. Seventh European 11q Research and Resource Group meeting, Pforzheim, Germany, November 2011

The role of ETS-1 in causing human congenital heart defects. Department of Cardiology, University of Arizona School of Medicine, March 2012

John W. Moore, MD, MPH


Invited Speaker, Controversies in Pediatric Cardiology for the Primary Care Professional. Small PDA's & ASD's: Do They Need to be Closed? Orange, CA, March 3, 2012

Invited Speaker, PDA in Children and Adults. ACC.12, Chicago, IL, March 2012

Invited Speaker, IMPACT Registry. Children's Hospital Association Meeting, San Diego, CA, April 19, 2012

Invited Speaker, IMPACT Registry. Treatment of Coarctation in Adults. SCAI, Las Vegas, NV, May 11, 2012

Invited Testimony before FDA Panel investigating ASD device safety representing American College of Cardiology. Gaithersburg, MD, May 24, 2012


Invited Speaker, Embolization Therapy in Congenital Heart Disease. ACC.13, March 9, 2013, San Francisco, CA

Moderated Abstract, IMPACT Registry: First Review of Community Practice with Respect to Device Closure of ASD and PDA. ACC.13, San Francisco, CA, March 12, 2013

Invited Speaker, WSOPC. Melody Valve. Monterey, CA, June 8, 2013

James Perry, MD

Device therapy in adult congenital heart patients: saving lives? Prague Symposium on Congenital Heart Disease, Prague, Czech Republic, December 2011

Adults with Congenital Heart Disease: What Does Transition Look Like? UCSD/Rady Children's Grand Rounds, San Diego, CA, December 2011

When is Primary Prevention ICD Therapy an Appropriate Consideration in Adult CHD? Evolving Concepts in CV Management Symposium, San Diego, CA, January 2012


Good Old Antiarrhythmic Therapy. Heart Rhythm Society Annual Sessions, Boston, MA, May 2012

Beth Printz, MD, PhD

Invited Speaker, Conference on Sudden Cardiac Arrest in Children, Anaheim, CA (Non-invasive Imaging), 2011

MRI assessment of cardiac tumors. International Society for Cardiac MR, January 2013

Friday AM Core Cardiology Lecture–Pediatric Heart Network Review, January 2013

Pediatric Residency Noon Conference Lecture–Cardiac MRI and CT. April 2013

San Diego Society for Cardiac MRI Lecture–Case Presentation, June 2013

Heather Sun, MD


Pediatric Resident Board Review, Cyanotic Congenital Heart Disease. Lucile Packard Children's Hospital, August, 2012

Echocardiography Laboratory Teaching Conference, Single Ventricle Reconstruction Trial Highlights, Fetal Cardiac Interventions, Measures of RV Function, Neurodevelopmental Outcomes in Congenital Heart Disease. Lucile Packard Children's Hospital, 2012/2013

PUBLICATIONS


Margossian R, Lu M, Minich LL, Bradley TJ, Cohen MS, Li JS, Printz BF, Shirali GS, Sleeper LA, Newburger JW, Colan SD. Predictors of coronary artery


CARDBIOTHORACIC SURGERY

The Pediatric Cardiac Surgery Division of the Division of Cardiothoracic Surgery at the UC San Diego (UCSD) School of Medicine is based at Rady Children’s Hospital-San Diego (RCHSD). The Division, in conjunction with the Division of Pediatric Cardiology, provides cardiovascular surgery services for infants, children and adults with congenital and acquired heart disease. The Division serves the San Diego metropolitan area (population: 3.2 million) and it is a major referral center for Imperial and Orange Counties, Hawaii, New Mexico, Mexico, and the Pacific Rim Islands. Dr. John J. Lamberti is the Joyce and Eugene Klein Director of the Heart Institute at RCHSD and he is Division Chief of Cardiovascular Surgery at RCHSD. Dr. Eric Devaney joined the division on April 1, 2012. Dr. Devaney is an Associate Professor of Surgery at UCSD and he is the Director of Cardiac Transplantation and Cardiac Assist Devices at RCHSD. Dr. Devaney has also assumed the role of Medical Director of Pediatric Cardiac Surgery Critical Care at RCHSD.

The Division’s clinical volume for the academic years 2011-2013 remained steady when compared to previous academic years. The complexity of the caseload has increased due to increasing referrals from outlying areas in Southern California and the State of Hawaii. RCHSD is a “high volume” pediatric cardiac surgical program according to the Society of Thoracic Surgeons (STS) Congenital Heart Surgery Database. The Division’s outcomes are comparable with other leading high volume centers. The STS analysis is based upon risk-adjusted data. The complexity score for RCHSD is slightly higher than the national average reflecting our role as a major referral center.

FACULTY

John J. Lamberti, MD, Professor of Surgery, Chief of Cardiac Surgery at RCHSD Eugene and Joyce Klein Director of the RCHSD Heart Institute

Eric J. Devaney, MD, Associate Professor of Surgery Director of Cardiac Transplantation and Assist Devices at RCHSDDirector of Pediatric Cardiac Surgical Critical Care at RCHSD

Peter Pastuszko, MD, Associate Clinical Professor of Surgery (resigned eff. 4/8/2013)
POSTDOCTORAL FELLOWS
Seema Mumtaz, MD 2011-2013

CLINICAL ACTIVITIES INPATIENT/OUTPATIENT
The Division of Cardiothoracic Surgery receives referrals from San Diego, Orange and Imperial counties; the Naval Medical Center, San Diego; the San Diego Regional Kaiser Medical Center; Tripler Army Medical Center, Honolulu, Hawaii; Kapiolani Medical Center for Women and Children, Honolulu, Hawaii; Straub Clinic, Honolulu, Hawaii and the Kaiser Permanente Medical Group, Honolulu, Hawaii. The Division’s clinical volume for the academic years 2011-2013 included 514 open-heart, 137 closed-heart and 229 miscellaneous cardiovascular surgical procedures. The faculty provides consultative services at UCSD Medical Center, RCHSD, Sharp Mary Birch Hospital and at all referral sites in Hawaii. In addition, faculty members provide varying levels of support for adult patients with congenital heart disease undergoing treatment at all of the adult hospitals in San Diego County.

Dr. John Lamberti and Dr. John Moore organized and coordinated a three day symposium in January 2012. The symposium was entitled “Evolving Concepts in the Management of Complex Congenital Heart Disease III”. The symposium represented the third in a series of biennial meetings designed to address the management of the most complex forms of congenital heart disease. The faculty consisted of multiple experts in surgery and cardiology drawn from the finest programs in North America.

RESEARCH ACTIVITIES
John J. Lamberti, MD: The Division participates in multiple longitudinal studies of congenital heart disease sponsored by the Congenital Heart Surgeons’ Society. Dr. Lamberti is the principal investigator on multiple clinical protocols involving complex congenital heart defects. The studies are designed to evaluate the natural history, including before and after surgical therapy, of relatively rare congenital heart defects in a multi-center collaborative effort.
The RCHSD and UCSD Pediatric Cardiology and Cardiovascular Surgery programs are committed to fulfilling our mission to provide optimal care for infants, children and adults born with Congenital Heart Defects and to advance our knowledge and understanding of Congenital Heart Disease.

To implement our strategic plan for Cardiac Services we have:

1. successfully completed the recruitment of a third pediatric cardiothoracic surgeon, who is expected to begin operating on site in November 2013. We have recently added additional cardiology faculty with strong expertise in fetal echo and cardiac MRI.

2. funding for and are in the process of physician recruitment for leadership positions in Cardiac Transplantation and Cardiac Critical Care.

3. completed the installation of and are currently actively using a dedicated pediatric Cardiac MRI Scanner and a new state of the art dedicated Pediatric Cardiac Catheterization Laboratory. We are also working in our new cardiac operating room. We have opened a dedicated Cardiovascular Intensive Care Unit (CVICU), and we are on the verge of moving into an expanded, new Heart Center.

4. administrative and Board of Directors approval in place to establish an in-house pediatric heart transplant program associated with the UCSD adult program. We are in process of submitting our UNOS application for cardiac transplantation with the long range goal of adding a program in lung transplantation.
Eric J. Devaney, MD: Dr. Devaney has a strong interest in basic science, clinical research and cardiac transplantation. Dr. Devaney has been instrumental in the creation of a cardiovascular ICU (CVICU) at RCHSD. Dr. Devaney is responsible for the recruitment of personnel and the creation of the infrastructure that will permit RCHSD to begin cardiac transplantation in 2014. Dr. Devaney is a member of the RCHSD Research Council.

Basic Science Focus:
1. Sarcomeric basis of contractile dysfunction in heart failure and cardiomyopathy
2. Genetic modification of motor proteins in normal and failing myocytes
3. Analysis of thin filament maintenance in cardiac myocytes

Clinical Focus:
1. Clinical applications of assist devices in pediatric heart failure
2. Clinical outcomes in pediatric cardiac surgery

Dr. Peter Pastuszko: Dr. Pastuszko is the primary cardiac surgeon involved in an ongoing series of research projects at the University of Pennsylvania in Philadelphia, PA. Dr. Pastuszko travels to Philadelphia five times a year for an intense schedule of experiments designed to evaluate the effects of cardiopulmonary bypass on brain structure and function in a neonatal piglet model. In addition, Dr. Pastuszko collaborated with Dr. Vishal Nigam from the Division of Cardiology on several projects (see publications).

DIVISIONAL FACULTY TEACHING ACTIVITIES
The cardiac surgeons participate in the following teaching activities:
- Daily morning and afternoon rounds at RCHSD with cardiac surgery fellows, cardiology fellows, ICU fellows, nurses, nurse practitioners, nurses in training, medical students, pediatric residents and cardiology attendings
- Biweekly teaching rounds with the PICU team and monthly teaching conferences with the NICU team
- Conferences at RCHSD and UCSD Medical Centers including the transplantation conference, adult cardiothoracic surgery conference, pediatric cardiology/cardiothoracic surgery conference and cardiothoracic surgery resident teaching conference
- Cardiothoracic surgery outpatient and the Transplant clinics at UCSD and RCHSD
- Medical student rotations in CT surgery and Clinical Anatomy. Dr. Lamberti is the mentor, consultant and advisor to the congenital heart surgery program at Kapiolani Medical Center for Women and Children (KMCWC) in Honolulu, Hawaii. KMCWC is the primary pediatric teaching hospital of the John A. Burns School of Medicine Department of Pediatrics at The University of Hawaii/Manoa. Since 1994, Dr. Lamberti has spent five weeks each year at KMCWC assisting in surgery, participating in pre and postoperative care and overseeing quality assurance aspects of the cardiac surgery program. Dr. Lamberti makes teaching rounds every morning during Hawaii Heart Week. He also chairs the peer review committee meeting at KMCWC, and participates in the case review conferences.
- Dr. Devaney leads a surgical team on an annual humanitarian teaching mission to Arturo Grullon Children’s Hospital, Santiago, Dominican Republic and Bloom Hospital, San Salvador.

AWARDS, HONORS, AND MAJOR PRESENTATIONS

John J. Lamberti, MD
## Research Support

<table>
<thead>
<tr>
<th>Grant/Contract #</th>
<th>Total Direct Dollars/ Duration of Grant</th>
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<tbody>
<tr>
<td><strong>Paul David Grossfeld, MD</strong></td>
<td></td>
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<tr>
<td>Marfan Trial</td>
<td>$50,000 per year</td>
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<tr>
<td>Children's Heart Foundation</td>
<td>$75,000 per year</td>
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<tr>
<td><strong>Vishal Nigam, MD</strong></td>
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</tr>
<tr>
<td>Identification of Genes for Cognition in Distal 11q: Further Genotyping</td>
<td>$75,000</td>
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<tr>
<td><strong>John Moore, MD</strong></td>
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</tr>
<tr>
<td>STARFlex in Atrial Septal Defect- Long term Status Assessment of Patients</td>
<td>$2,900</td>
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<td>Following Closure of ASD with the STARFlex Septal Occlusion System in IDE Study G-960098 (SALSA)/NMT MEDICAL, INC.</td>
<td>Aug. 2007-Indefinite</td>
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<td>Coarctation of the Aorta Trail (COAST)</td>
<td>$198,865</td>
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<tr>
<td>Johns Hopkins University</td>
<td>Sept. 2007-Indefinite</td>
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<tr>
<td>Closure of Muscular Ventricular Septal Defects with the Amplatzer Muscular VSD Occluder-Post Approval Study (Muscular VPA)</td>
<td>$26,600</td>
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<td>AGA Medical Corporation</td>
<td>Sept. 2008-Indefinite</td>
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<td><strong>Eric Devaney, MD</strong></td>
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<tr>
<td>NIH K08 Mentored Scientist Award</td>
<td>$620,000</td>
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<td>2009-2014</td>
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Invited Speaker, The CVICU. 2014 Charity Ball Committee Meeting, RCHSD, MOB 113, September 18, 2013

**Eric J. Devaney, MD**

Results of Second Stage Palliation of Single Ventricle Heart Disease. 39th Annual ODICH Society Conference, Cleveland, OH, May 13-14, 2011

Cardiac Surgical Management of the LowBirth Weight Infant. Evolving Concepts in the Management of Complex Congenital Heart Disease, San Diego, CA, January 19-21, 2012

**PUBLICATIONS**

**Dr. Lamberti’s Publications**


Dr. Pastuszko’s Publications


Dr. Denavey’s Publications


Book Chapters


Book Chapters


Book Chapters


Brief Publications
Physicians of the Maternal-Fetal Medicine Division of Rady Children’s Specialists of San Diego (RCSSD) have been providing prenatal diagnosis, ultrasound imaging, consultation, and pregnancy care to families and physicians in San Diego, Imperial, and Riverside Counties since 1990.

The Division continues to focus on:
1. Expanding clinical activities.
2. Recruiting, and
3. Increasing our CME outreach.

**Clinical Activities.** Our inpatient service is at Sharp Mary Birch Hospital for Women, and the outpatient offices are in the Frost Street complex adjacent to the Sharp/Rady Children’s Campus, as well as in Encinitas, Murrieta, San Ysidro, and Grossmont Hospital. The group’s consultation and outpatient volume continues to increase; we project that we will perform over 15,000 ultrasound examinations, over 700 fetal echocardiogram, and nearly consultations this year. The group continues to limit our delivery volume to 500-700 deliveries per year.

**Recruiting.** The Division of Maternal Fetal Medicine welcomed Dr. Tevy Tith in August, 2013. Dr. Neha Trivedi, who joined us in September 2011, will be leaving us for Kaiser this year, and we are in the process of recruiting a replacement for her.

**CME.** The Division continues to sponsor a yearly High Risk Obstetrics course each fall, and a Prenatal Diagnosis course each spring or early summer. Registration numbers have risen each year. Our 2013 Prenatal Diagnosis Course, at Scripps Schaetzel Center on May 31/June 1, attracted over 200 participants, and we are in the final planning stages for our High Risk OB course, which will be on November 2 at the TriCity Hospital.
FACULTY
Val Catanzarite, MD, PhD,
Division Chief
Joanna Adamczak, MD
Holly Casele, MD
Larry Cousins, MD
Sean Daneshmand, MD
Wade Schwendemann, MD
Tevy Tith, MD
Neha Trivedi, MD

Tevy Tith, MD, joined the Division in August, 2013. She received her undergraduate education at University of California, Berkeley, and then completed Medical School at UCSD, Residency in Obstetrics and Gynecology at UCLA, and Fellowship in Maternal Fetal Medicine at UC Irvine in July of 2013. Dr. Tith’s major clinical interests include prenatal diagnosis, especially prenatal diagnosis of congenital heart defects, and diagnosis and medical/surgical management of acute maternal morbidities. Academic honors include Charles Kimball Award for Best Poster at the 2009 Pacific Coast Obstetric and Gynecologic Society.

Research projects during fellowship included:
- Maternal serum cytokine levels and angiogenic factor levels in singleton pregnancies conceived with assisted reproductive technology versus spontaneously conceived pregnancies.
- Post-Cesarean hyperglycemic control in Diabetic pregnancies and subsequent maternal complications.
- Differential VEGF splicing in normal pregnancies and pregnancies complicated by adverse outcomes.

LEFT TO RIGHT: Val Catanzarite, Holly Casele, Wade Schwendemann, Joanna Adamczak, Larry Cousins, Tevy Tith, Sean Daneshmand
Dr. Tith is a member of the American Congress of Obstetrics & Gynecology, Society for Maternal Fetal Medicine, and Society for Gynecologic Investigation. She serves as a reviewer for the American Journal of Obstetrics and Gynecology.

Dr. Tith speaks Cambodian and Spanish fluently.

Joanna Adamczak, MD, received her undergraduate training at the University of California, Santa Barbara, followed by medical school at St. Georges University and Obstetrics and Gynecology Residency at St. Barnabas Medical Center in Livingston, New Jersey. Her fellowship training was at Robert Wood Johnson Medical Center and the University of Pennsylvania. Academic honors include Dean's Honor Roll in medical school, and election as a resident representative to the Committee on Resident Education in Obstetrics in Gynecology/Association of Professors of Gynecology and Obstetrics (CREOG/APGO). She has bee active in the Crudem Foundation for Haití Medical/Surgical Relief. During her fellowship Dr. Adamczak achieved certification in Fundamental Critical Care by the Society of Critical Care Medicine.

Clinical interests include prenatal care for women with complex medical complications including maternal cardiac disease, organ transplants and cancer, and Dr. Adamczak also has a strong interest in prenatal diagnosis. She is the fourth member of our Division to provide CVS.

Dr. Adamczak is fluent in Polish and speaks Spanish as well.

Holly Casele, MD received her undergraduate degree magna cum laude from Brown University, followed by medical school and residency at Northwestern University, where she was elected into the Alpha Omega Alpha Honor Medical Society. She then completed a fellowship at the University of Pittsburgh, Magee-Women's Hospital. She was an Assistant Professor at Northwestern University Medical School and a senior attending at the Evanston Hospital in Evanston, Illinois from 1997-2005, before joining our group. She has been elected as one of America's Best Doctors every year from 2007 to 2010 and again in 2013.

Dr. Casele's clinical interests include thrombophilies and thromboembolic disorders in pregnancy, a topic upon which she has written and lectured widely; recurrent pregnancy loss, and noninvasive screening for fetal aneuploidy. Dr. Casele is certified for chorionic villus sampling.

Dr. Casele is currently a co-principal investigator for a study assessing the accuracy of a noninvasive screening tool for Down syndrome and other aneuploidy detections. She was instrumental in bringing our ultrasound image storage/reporting system online, and has been involved in the implementation of our Epic electronic medical record system as well.

Larry Cousins, MD was a founding member of the Maternal-Fetal Medicine Division. His undergraduate education was at UCLA, followed by medical school and residency at Creighton University, and fellowship at the Harbor/UCLA Program. Subsequently, Dr. Cousins taught at the University of California, San Diego (UCSD) and Loma Linda University, and is a founding member of the Maternal Fetal Medicine group here.

Clinical interests include medical complications of pregnancy, particularly diabetes, and preterm birth prevention. He has been very active at Sharp Mary Birch Hospital for Women, where is currently a member of the ObGyn supervisory committee. He served as Director of Maternal-Fetal Medicine at Sharp and Co-Chair of the Women and Infants Research Forum since 1991, Co-Chair of the Perinatal Morbidity and Mortality Committee since 2004, and Chief of Staff at Sharp Mary Birch in 2008-2009. Dr. Cousins was honored with the Sharp HealthCare Core Award for Quality Pillar for his work with the Cerner Design Team in 2009, and received a commendation from Sharp Mary Birch for Perinatal Special Care Unit Teaching in 2009 as well. He has been selected as one of America's Top Doctors again in 2013.

Sean Daneshmand, MD received his undergraduate degree from the UCSD, completed medical school at New York Medical College in Valhalla, New York, residency at UCLA, and fellowship at UCSD, before joining the Maternal-Fetal Medicine Division in 2002.

Dr. Daneshmand has basic science interests in the underlying triggers for preterm labor, preterm rupture of the membranes, and preeclampsia. Major clinical interests include surgical complications of pregnancy and in particular management of invasive placentation.

Dr. Daneshmand has also been very active in fundraising for families with premature babies through Miracle Babies, a nonprofit organization which he founded in 2008. Miracle Babies' activities in 2013 included numerous charity events and a run/walk that attracted >1500 participants. Under Dr. Daneshmand's guidance, the Miracle Babies foundation recently received a substantial grant award for study of obesity in pregnancy. He has also been selected by the San Diego County Medical Society for Top Doctors honors.

Dr. Daneshmand speaks Farsi and conversational Spanish.

Wade Schwendemann, MD joined the Maternal-Fetal Medicine Division in 2009. Dr. Schwendemann was a cum laude graduate of Albion College in Michigan, then completed medical school at the Medical College of Ohio in Toledo, Ohio, residency at the University of Kentucky, and fellowship at the Mayo Clinic in Rochester, Minnesota. Dr. Schwendemann has particular interests in simulation tools for teaching in maternal-fetal medicine, and in the clinical arenas of prenatal diagnosis and management of multiple gestations. Dr. Schwendemann provides chorionic villus sampling services for early prenatal diagnosis.

Dr. Schwendemann as involved with development of the residency curriculum while at Mayo Clinic, including modules for preeclampsia/eclampsia/HELLP syndrome, and teaching of amnioncences. He is currently working with the blood bank and American Red Cross to augment blood banking services in San Diego, with particular interest in the potential for public cord blood banking, and is a member of the Board of Directors for the blood bank.
Neha Trivedi, MD, received her undergraduate training at the University of California, Los Angeles, and medical education at the University Of Pittsburg School Of Medicine, and then completed both Obstetrics and Gynecology Residency and Maternal Fetal Medicine Fellowship training at the University of California, San Diego. Academic honors include Magna Cum Laude and Neurosciences Departmental Honors while at UCLA, Alpha-Omega-Alpha honors, the University of Pittsburg Humanism award in 2004, and an HIV/AIDS Education Leadership Award while in medical school. Dr. Trivedi also received the Berlex Resident Teaching Award during residency.

Dr. Trivedi has basic science interests in microRNAs in early mammalian development. Her clinical interests include diabetes in pregnancy, biochemical markers in prediction of pregnancy outcomes, trauma in pregnancy, and prenatal diagnosis.

Dr. Trivedi speaks Spanish and conversational Gujarti and Hindi.

Val Catanzarite, MD, PhD received his undergraduate education at the California Institute of Technology, medical school at UCSD and a PhD in Biophysics at UC Berkeley, with thesis research in the field of medical artificial intelligence. He went on to residency at Stanford University Medical Center and fellowship at the University of New Mexico. He taught at UNM and the University of Arkansas before returning to San Diego in 1989. Dr. Catanzarite is a founding member of the Maternal-Fetal Medicine Division.

Dr. Catanzarite has a longstanding interest in continuing medical education, including computer based instruction.

Clinical interests include critical care in obstetrics, prenatal diagnosis, diagnosis and management of cardiac abnormalities of the fetus, identification and management of vasa previa, surgical and medical prevention of preterm birth, and emergency response teams in obstetrics.

Dr. Catanzarite has served as Co-director of the Sharp/Rady Children’s Prenatal Diagnostic Center since 1991, and chairs the Sharp Mary Birch Pharmacy, Nutrition and Therapeutics Committee.

Clinical Activities.

- Frost Street Site. We moved into new office space at 7910 Frost Street, and increased the capacity of our prenatal diagnostic center on the central campus by 20%.
- North County Coastal. In 2012, we moved our North County Coastal office to the Sanford Clinic in Vista. We will soon offer inpatient consultations at TriCity Medical Center.
- Grossmont Hospital. We increased capacity at our Grossmont site by 33% this year, and anticipate expanding availability of fetal echocardiography at Grossmont during the fourth quarter of 2013.
- South Bay. We are developing an additional site on the Sharp Chula Vista campus and increasing capacity at our San Ysidro site.

Research. We anticipate wrapping up ongoing projects (outlined above), and will soon submit a research protocol for a retrospective series of cases of prenatal diagnosis, obstetric and surgical management and maternal/fetal outcomes of invasive placentas.

Education: Rady and Arrowhead Medical Center are finalizing an agreement that will bring Maternal Fetal Medicine fellows to our centers for training starting in 2013 or early 2014. Our major CME events for 2013-14 will be a fall High Risk OB Course, which will be presented on the TriCity Hospital campus, and a spring Prenatal Diagnosis course. This year, we will update our website (sandiegoperinatal.com) and improve/revise our library of patient information and resources on that site.
Dr. Catanzarite organizes the Division’s monthly ultrasound and prenatal diagnosis conferences, and, has been course coordinator for our High Risk OB and Prenatal Diagnosis courses. He has also been selected by the San Diego County Medical Society for Top Doctors honors.

Dr. Catanzarite ran his 44th marathon in 2011, and recently published a book, Train Insane: Developing a lifelong plan for ultimate fitness.

Dr. Catanzarite speaks conversation- al Spanish and Russian, and reads German and French. Since 2011, he has been working on TORFL certification in Russian, and hopes to establish international CME courses in collaboration with colleagues in Kiev, Ukraine.

RESEARCH ACTIVITIES
Joanna Adamczak, MD
• (With others in the Division): Prenatal diagnosis, obstetric management, and neonatal outcomes in vasa previa

Holly Casele, MD
• (With others in the Division): Prenatal diagnosis, obstetric management, and neonatal outcomes in vasa previa

Val Catanzarite, MD, PhD
• (With others in the Division): Prenatal diagnosis, obstetric management, and neonatal outcomes in vasa previa
• (With others in the Division): Fetal anemia: A comprehensive review.
• (With others in the Division): Fetal diagnosis, obstetric management, and neonatal outcomes in vasa previa

Larry Cousins, MD
• Intra-amniotic infection assessment tools
• (With others in the Division): Prenatal diagnosis, obstetric management, and neonatal outcomes in vasa previa

Sean Daneshmand, MD
• (With others in the Division): Prenatal diagnosis, obstetric management, and neonatal outcomes in vasa previa

Wade Schwendemann, MD
• (With others in the Division): Fetal anemia: A comprehensive review.
• (With others in the Division): Prenatal diagnosis, obstetric management, and neonatal outcomes in vasa previa

MAJOR PRESENTATIONS


Schwendemann W. A Simulation Model for Fetoscopic Laser Photocoagulation; Society for Maternal-Fetal Medicine Annual Meeting, San Diego, CA, 2009

Schwendemann W. Vitamin C does not prevent ROS-mediated Syncytin expression or trophoblast differentiation. Society for Maternal-Fetal Medicine Annual Meeting, San Diego, CA, 2009

Schwendemann W. (1) Cervical models to teach interns accurate dilatation and effacement assessment skills during pregnancy; (2) Improvement in Breast Exam Skills During an Intern Training Program; (3) Changes to the PRIMER (Procedural Centered Repetition Involving Montessori-type Experience and Rehearsal) Program. CREOG/ APOG Annual Meeting, San Diego, CA, 2009

Trivedi N, Phan, J Woelkers D. Urine Sample Characteristics Do Not Affect Measurement of Urinary sFlt-1 or PlGF. Society of Maternal Fetal Medicine, 2009 Annual Meeting, San Diego, CA, January 2009


Adamczak J. Maternal Height is independently associated with Cesarean delivery. Poster presented at 2010 American College of Obstetrics and Gynecology Annual Meeting

Tith T. Diabetes, Pregnancy, and the Heart. The Orange County Diabetes Collaborative Conference. 7th Annual Event, Children’s Hospital of Orange County. April 2013


Zhang HH, Wang YP, Tith T, Chen DB. Analysis of Nitroso-Proteomes In Normotensive and Severe Preeclampsia Placentas. Poster presented at Society for Gynecologic Investigation, Miami, FL, March 2012


Adamczak JE. Direct Measurements of Cervical Remodeling for Predicting Preterm Birth. The Cervix Study, poster presentation at SMFM 2012

PUBLICATIONS


In Submission:

Rady Children’s Specialists San Diego’s (RCSSD) Neurosurgery Division has had a tremendously successful year, expanding its clinical activities and research, training the next generation of pediatric neurosurgeons, and continuing to broaden its national and international impact on neurosurgical care. Thanks to philanthropy and to the commitment of RCHSD physicians, nurses, staff and volunteers, we are able to provide the best neurosurgical care available to all children.

The Division of Neurosurgery is among the most respected centers in the United States. The Division provides pediatric surgical evaluation, surgery and pre-operative and post-operative care for disorders of the brain, spine and peripheral nerves. Among the conditions treated are cerebrovascular malformations, surgical treatment for epilepsy, peripheral nerve disorders or injuries, brain and spinal cord tumors, cerebrospinal fluid diversion, and craniofacial diseases. From July 2011 to June 2012, RCSSD’s Pediatric Neurosurgeons performed over 600 surgeries, including procedures for Brain Tumors (15%) including 17 skull base and 8 transsphenoidal approaches, Spinal Cord Tumors (3%), and CSF Diversion or shunting procedures (10%) consisting of Revisions (6%), Insertions (6%), Lumbar to Peritoneal Shunts (0.2%), and Reservoir Placement (0.5%). Our current infection rate for CSF diversion is < 2.0%.

Other approaches included, Craniofacial Procedures (15%: 80% Open and 20% Endoscopic), Epilepsy Surgery 6% (25% resective surgery and 75% VNS), Congenital Anomalies (Chiari Malformations 3%, Closed Neural Tube Defects 3%, Open Neural Tube Defects 1%, and Encephaloceles 1%), Intracranial Cysts (5%), Brachial Plexopathies (0.7%), and Vascular Anomalies (5%). Other cases included Skull Tumors (5%), Endoscopic Third Ventriculostomy (5%), and Trauma Related Cases (5%) with 42 Intracranial Monitor Placements. The overall infection rate was < 2%.

Operative Case Duration was mean 1.9 + 1.2 hours (Range 17 minutes to 8.05 hours) with a MODE of 2 hours. 65% of the procedures were graded as significant intracranial or spinal interventions.

We continue to offer tertiary care services for some of the county’s most complex cases, including cerebrovascular disease, skull base surgery, and minimally invasive endoscopic approaches. We continue to have one of the largest practices for tumors in the United States. Combined craniofacial and neurological surgery cases continue to increase from 2003 to the present. A number of patients present from National and International Referrals.

There has been significant growth in the Spasticity and Epilepsy Programs to date. The Pediatric Vascular Service remains one of, if not the busiest in the world.
Neurosurgical Teams

To maximize our ability to care for our patients, multispecialty approaches to complex neurosurgical issues have been developed. To date these include:

**Neural Tube Defects Team**
The Neural Tube Defects Clinic at RCHSD provides a comprehensive management approach to children and young adults with Neural Tube Defects, both open and closed. The Clinic Team includes Medical Directors Hal S. Meltzer, MD and Andrew Skalsky, MD (Director of Physiatry and the Pediatric Rehabilitation Program). It is composed of the specialties of Neurosurgery, Orthopedics, Urology, Pediatric Surgery, Physiatry, Nursing, Enterostomal Therapy, Physical Therapy, Occupational Therapy, Genetic Counseling, and Social Work. The clinic ensures that all patients can be seen by multiple subspecialties and makes available diagnostic and evaluative services, telephone consultation for families and professionals, patient/family education in Spina Bifida, patient/family training in specific areas, such as bladder and bowel management, skin and wound care, genetic counseling, limited psychosocial counseling, and linkage to other clinical and community services.

**CNS Oncology Team**
The Brain Tumor Service at RCHSD is one of the largest pediatric care facilities for children with brain tumors in the western United States. It consists of physicians, nurses, social workers,
child life specialists, parent liaisons and chaplains who help each family through the initial surgery and subsequent radiation and/or chemotherapy regimens. Services involved include Hematology/Oncology, Neurosurgery, Neurology, Radiology, Pathology, Ophthalmology, Craniofacial, Head and Neck Surgery, and Rehabilitation. Children are treated with state-of-the-art medical and surgical programs. The center specializes in the treatment of complex tumors in children involving the midline, posterior fossa, Cerebellopontine angle, and skull base. John R. Crawford, MD directs the neuro-oncology program. He is the co-director of the multidisciplinary neuro-oncology clinic and leads the Monthly CNS Tumor Conferences. He has also developed close relationships on an international level allowing for the inpatient surgery and care for children with complex brain tumor from both Hospital Infantil de las Californias in Tijuana and throughout the world.

Complex radiation therapies are provided by Kevin Murphy, MD, who serves as the Chief of the Pediatric Radiation Oncology Service, and is an active member of the Children’s Oncology Group (COG,) and Hal S. Meltzer, MD. Dr. Murphy also serves as a regional resource and primary radiation oncologist for RCHSD. Dr. Murphy has used and fostered the development of a number of emerging techniques in the treatment of brain tumors in children including Stereotactic Radiosurgery (SRS), Stereotactic Radiotherapy (SRT), Intensity Modulated Stereotactic Radiosurgery/Therapy (IMRS/IMRT), Hypo-fractionated Stereotactic Radiotherapy and Gliasite Iotrex brachytherapy. Dr. Meltzer continues to direct and develop the Gamma Knife and Proton Beam Stereotactic Programs.

The Division has developed a tissue bank at RCHSD (IRB 091542) and has developed close relationships with laboratories at the Scripps Institute, UCSD, and Burnham Institute over the past years.

Brachial Plexus Team
Justin M. Brown, MD continued to direct a multidisciplinary team for children with brachial plexus palsy, facial nerve injury, and peripheral nerve injury consisting of orthopedics, neurosurgery, occupational therapy/hand therapy, and physician assistants and nurse clinic coordinators. He brings many years of expertise dealing with the complex issues that can arise, and has evaluated hundreds of children with brachial plexus injuries. The team provides comprehensive evaluations and follow-up services as needed. Brachial plexus and other peripheral nerve surgeries currently represent a strength at RCHSD that we continue to address in conjunction with the UCSD Department of Neurosurgery.

Neurosurgery and Pediatric Dysmorphology
Craniofacial Services and Plastic Surgical Services and the Neurocraniofacial Team at RCHSD are among the most respected centers in the United States. The Division’s surgeons and physicians have achieved international reputations in craniofacial surgery, genetics and dysmorphology, neurological surgery, bone biology and basic bone research, and information technology. Presently, the Division offers tertiary care services for some of the county’s most complex cases, including major skull base surgery, endoscopic cranial reconstruction, distraction osteogenesis for midface and mandibular advancement, apnea and airway problems in newborns and children, orbital tumors, facial nerve paralysis, microsurgery and pediatric burn care. From 2011 to 2012, we performed 90 Craniofacial Procedures (80% Open and 20% Endoscopic). The Neurosurgical and Craniofacial Services are seeing clinic patients primarily in the Fresh Start Children’s Hospital Clinical and involved directly with the patient populations brought to RCHSD from other countries for charitable surgical interventions.

Neurovascular
A specific Vascular Clinic Program is held at RCHSD with participation from institutions throughout the San Diego area including UCSD, Sharp, San Diego Naval Medical Center and Kaiser Permanente Medical Center. The clinic is dedicated to a multidisciplinary approach toward the management of children and adults with complex or deforming vascular lesions. Dr. Lawrence J. Eichenfield is director of the vascular lesion clinic and is an internationally recognized expert in the area of pediatric and adolescent dermatology. The multidisciplinary team includes renowned specialists in plastic and craniofacial surgery, dermatology, diagnostic imaging and interventional radiology, laser surgery, genetics, orthopedics, otolaryngology and ophthalmology. The Division initiated a novel Cerebrovascular Multidisciplinary Clinic in 2009 including Neurosurgery, Neurology, Radiation Oncology, and Neuro-interventional Radiology. We now perform Pediatric Neuro-Interventional procedures at RCHSD with the addition of Alexander A. Khalessi, MD, MS. He performs both diagnostic and therapeutic interventions for cerebral vascular malformations and tumors in children.

Participation in professional societies has occurred at the regional, national, and international levels with a diffuse focus on numerous aspects of medicine. At the local level, Dr. Levy has been involved with the Los Angeles County Medical Association, Salerni Collegium-University of Southern California School of Medicine, California House Officer Medical Society, and Los Angeles Academy of Medicine. At the regional level, Dr. Levy has been involved with the California Medical Association, California Neurosurgical Association for Pediatrics, the American College of Surgeons in Los Angeles and San Diego, the Western Neurosurgical Society, and the San Diego Medical Society. At the national level, Dr. Levy has been involved with Alpha Omega Alpha, the American Association of Neurological Surgeons, the American Medical Association, the Congress of Neurological Surgeons, the Joint Section of Cerebrovascular Neurosurgery, the Joint Section of Pediatric Neurosurgery, the American Society of Pediatric...
Neurosurgery, the American College of Surgeons, and the American Academy of Neurological Surgery. At the international level, Dr. Levy has been involved with the Society of University Neurosurgeons and the Italian Congress of Neurosurgery.

Dr. Levy is a member of the Physicians Advisory Committee on Healthcare (2009–Current) and an Honorary Chairman for the State of California by the National Republican Congressional Committee (Chairman Pete Sessions. He was a member of the Member Benefit Development Committee (2007–2011) for the AANS, a member of the Executive (2005–Current) and Future Meetings (2006–Current) Committees for the Society of University Neurosurgeons and President Elect for 2015. Additionally, he is a Surgical Consultant for the NFL and NFL Players Association (NFLPA) (2010–Current).

Reviewing Grants and Manuscripts

Michael Levy is currently on the Medical Advisory Boards for the National Hydrocephalus Association (1998–Current), Arachnoid Cyst Foundation (2004–Current), Board of Directors for the Autism Tree Project Foundation (2002–Current), the Medical Board of Directors for Stemedica Inc. (2007–Current), and an Executive Member of the Medical Board of Directors for the Holy Innocents Hospital, Mbarara, Uganda (2010–Current). Michael Levy is additionally a member for the Board of Directors for the charitable organizations INCA and OMNI.

TEACHING
The Division was certified by the American Board of Pediatric Neurological Surgery to have a Board Certified Fellowship in pediatric neurosurgery with inclusion in the Match beginning in 2009. Our current fellow, Alexa Reeves, MD started the program in 2013. We also continue to train International Fellows throughout the world. Our first Fellow in pediatric neurosurgery graduated in 2010 and is currently working at the Barrow Institute in Phoenix, Arizona. Only 22 such Fellowships exist in the US and only 40% of those match a Fellow each year. We review and participate in the clinical in-service education programs and assure the delivery of quality pediatric clinical services, as appropriate and feasible. This results in our providing bi-monthly conferences to the ICU Fellows, semi-annual trauma conferences, and bi-annual lectures to the ancillary and nursing personnel in the IMU and ICU, lectures to the Residents in pediatrics, and frequent presentations at Grand Rounds and Morbidity and Mortality Conference. We also participate in undergraduate, graduate and post-graduate education programs.

We have been responsible for educational conferences including Pediatri c, the Trauma Division, and the Pediatric ICU Team. Michael Levy continues our yearly International Outreach Program with visits to pediatric facilities in Managua, Nicaragua, Lima, Peru, Kiev, Ukraine, and Mbarara, Uganda, in the past years. Over the past two years, Michael Levy has worked as an Executive Board Member (and current Medical Director) on the development, and construction, and current medical management of Holy Innocents Children’s Hospital in Mbarara, Uganda. He travels there every January to assess medical care and institutional needs.

MAJOR GOALS & PLANS

- Continue to develop what will be regarding as one of the largest centers for the care of children with tumors of the brain and spinal cord in the United States.
- Develop personalized therapies for the management of children with malignant brain tumors which will direct targeted therapies developed based upon analysis of the tumor type.
- Complete the integration of CT imaging, endoscopy, Pathology Telemedicine, and three-dimensional imaging into the Liam’s Neurosurgical Operative Suite.
- Promote and further develop our clinical relationships in Africa, Eastern Europe, South, and Central America.
We have assisted in developing an Educational Skull Base Dissection Laboratory for resident education in surgical anatomy and approaches. We have helped to develop a 3D video display system which maximizes the information available to residents and medical students during surgery.

We have had significant involvement in the education of pre-medical students, medical students, residents, and fellows over the past 15 years. At the national and international level, Michael Levy has been involved in the creation of numerous educational opportunities including being a member of the CNS Publications Committee (Current), and AANS Member Benefit Development Committee (Current) which is a program that facilitates member education. For the Society of University Neurosurgeons, he was Program Director of the Annual Meeting in San Diego (2006), on the Executive Committee (2006–Current), and President Elect in 2015. He currently serves as a mentor for pre-medical students clinical rotations (2003–Present) and as a mentor for UCSD pre-medical student and resident international charity programs including INCA, OMNI, Fresh Start, and UCSD Project Nicaragua (2003–Present). He was awarded the UCSD Division of Neurosurgery Resident Teaching Award in 2007.

AWARDS, HONORS AND PRESENTATIONS

Divisional Publications

Peer Reviewed:


Gonda DD, Meltzer HS, Crawford JR, Hilfiker ML, Shellington DK, Peter-

**Abstract/Poster Presentations**

**Peer Reviewed:**


Gonda D, Meltzer HS, Levy ML. Hematologic Abnormalities Observed in Pediatric Patients Treated with Prolonged Continuous Hypertonic Saline for Elevated Intracranial Pressure. Presented at the 61st Annual CNS Meeting, Washington D.C., 2011

Gonda D, Meltzer HS, Levy ML. Incidence of Renal Injury and Failure Measured by the RIFLE Scale in Pediatric Patients Treated with Prolonged Continuous Hypertonic Saline for Elevated Intracranial Pressure. Presented at the 61st Annual CNS Meeting, Washington DC, 2011

Menon J, Meltzer HS, Levy ML. The use of flexible CO2 laser for albumin solder-assisted dural tissue welding, Presented at the 39th Annual ISPN Meeting, Goa, India, 2011


Kim T, Gonda D, Meltzer HS, Levy ML. Importance of Neurologic Exam in Determining Management of Posterior Fossa Epidural Hematomas. Presented at the 40th Annual Meeting of the AANS/CNS Section on Pediatric Neurological Surgery, Austin, TX, 2011


Levy ML. Learning from failure: Professional and personal resilience.
# Research Support

<table>
<thead>
<tr>
<th>Grant/Contract #</th>
<th>Total Direct Dollars Duration of Grant</th>
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<tbody>
<tr>
<td>Development of neuropathology core telemetry for the intra-operative review of tissue harvested from children and adolescents with brain tumors Biolimage</td>
<td>$280,000.00 2010-Current</td>
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<tr>
<td>Phase I/II, multi-center, open-label study to assess the safety, tolerability, and preliminary efficacy of a single intravenous dose of allogeneic mesenchymal bone marrow cells to subjects with ischemic stroke IRB# 100325R/Stemedica (IND 14328)</td>
<td>$812,736.00 2011-Current</td>
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<tr>
<td>An exploratory Phase 2 study evaluating the efficacy and safety of fibrin sealant. Vapor heated, solvent/detergent treated (FS VS S/D) 500 S-APR for the sealing of dura defect sutures in posterior fossa surgery IRB# 12121/Baxter</td>
<td>$73,730.18 2010-2011</td>
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<tr>
<td>Diagnosing mild TBI in adolescents and adults using MEG and DTI. NFL</td>
<td>$99,741.00 2012-Current</td>
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<tr>
<td>Using Discarded CSF and Tissue to establish a neurosurgical tissue bank RCHSD IRB# 091542</td>
<td>Unfunded 2011-Current</td>
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<tr>
<td>Neurosurgical Database at RCHSD for prospective and Retrospective review of neurosurgical cases RCHSD IRB# 12120</td>
<td>Unfunded 2011-Current</td>
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<tr>
<td>Performing Affymetrix SNP 6.0 arrays on &gt;1200 of MAGIC bank medulloblastomas and using nanostring to subgroup medulloblastomas. RCHSD IRB# 091542/University of Toronto</td>
<td>Unfunded 2011-Current</td>
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<tr>
<td>An Integrated MEG and DTI Study for Differential Diagnosis of Mild TBI and PTSD. Huang (PI), Levy (Co-I) 1 R01 NS072601-01</td>
<td>Funded 2012-Current</td>
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<tr>
<td>Diagnosing Mild TBI in VA and Active Duty Military Patients using MEG and DTI. Huang (PI) Levy, (Co-I) 1 R01 CX000499-01</td>
<td>Funded 2012-Current</td>
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<tr>
<td>Human lysophosphatidic acid (LPA levels) and genetic mutations in CNS birth defects.; Yung (PI) Scripps Research Institute, Levy (PI) RCHSD IRB# 091542</td>
<td>Funded 2011-Current</td>
</tr>
<tr>
<td>Developing an in vivo model for verifying neural stem cell potency in chicken embryonic brain. Levy (Co-PI) Stemedica/Department of Research and Development</td>
<td>Funded 2012-Current</td>
</tr>
<tr>
<td>Utilization of intraoperative CT angiography and comparison to standard angiography in children with vascular malformations. Levy (PI) RCHSD IRB# 12120/Ceretom Technologies</td>
<td>Funded 2011-Current</td>
</tr>
<tr>
<td>Targeting Sonic Hedgehog-associated medulloblastoma through inhibition of Aurora and Polo-Like Kinases RCHSD IRB# 091542</td>
<td>Funded 2012-Current</td>
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Establishment of New Teaching Venues
The Division has developed Educational Skull Base Dissection Laboratories for Resident Education in surgical anatomy and approaches. We have worked with Johnson and Johnson Medical to develop educational materials regarding the use of hemostatic agents during neurosurgical procedures.

PATENTS AND INVENTIONS
Pluronic Surfactant Based Bone Wax (CHLA #99-09 Bonewax) which allows for the use of bone wax in all scenarios without risk of infection or non-union
EndActive Robotic Omnidirectional Neuroendoscope (Hans Hoag—California Institute of Technology—Inventor).

PUBLIC SERVICE AND OUTREACH PROGRAMS
The Autism Tree Project Foundation which was founded in 2003 to promote autism education and provide early intervention programs in the California community. Our main programs are a Preschool Screening Program, A quarterly Mentor program that pairs families new to the autism diagnosis with a “Mentor” to support and guide the family as well as assist in identifying autism related resources in the community, and a Preschool Teacher Training Program.
Liam’s Fund, which assists in procuring sophisticated equipment for use in the neurosurgical operating room in hopes of reducing the number of surgeries performed and significantly increasing the number of successful procedures for children requiring neurosurgical interventions. Over the past year Liam’s Fund has assisted in the funding of the Neurosurgical Operating room at RCHSD, now called the Liam’s Fund Neurosurgical Suite.
Holy Innocents Children’s Hospital Board of Directors, assisted with the Development and Construction of the HICH Children’s Hospital in Mbarara, Uganda.
Project Nicaragua, INCA and Open Mind Neurosurgical International (OMNI), which are nonprofit organizations providing charitable medical services in the form of neurosurgical procedures and the provision of complex neurosurgical equipment to the underserved and needy around the world. In combination with the Variety Children’s Lifeline, neurosurgeons from RCHSD have traveled to five countries over the past two years. In addition to the surgeries performed in San Diego in 2010, members of the Neurosurgery Division performed surgeries in Lima, Peru, Managua, Nicaragua, and Kiev, Ukraine through these Pediatric Neurosurgical Outreach Programs.

Presented at the Senior Society of Neurosurgeons resident Boot-Camp Annual Meeting, San Diego, CA 2013

Books Edited:

RESEARCH AND FUNDING
Revolutionary surgical techniques and technologically advanced approaches remain a primary pursuit of the Neurosurgical Team. New technology in neurosurgery includes the continued development of novel Robotic and three-dimensional endoscopes, High Definition 3D monitors for intra-operative use, and the potential uses of intra-operative CT imaging in 2013. We continue to work with our partner companies to advance closer to the reality of true stereoscopic endoscopes (Hans Hoag, PhD—Endactive technologies; Wei Su, PhD—IntraVista Medical Systems Inc., and Kaiser Medical). We have assisted in the development of a 3D displays which is utilized in our operative setting as a front projection 3D image. The primary purpose is for education and allowing the nursing and anesthesia teams to be consistently aware of the course of the surgical intervention.

Current avenues of research also include the evaluation of cGMP in novel neuronal stem cell lines, MEG imaging and neuropsychiatric testing for mild closed head trauma in adolescents, and the potential benefits of Neuronal and Mesenchymal based stem cells for treatment of stroke.

UNIVERSITY AND PUBLIC SERVICE
Michael L. Levy, MD, PhD
RCHSD, Advertising and Public Relations Committee
RCHSD, Innovation and Technology Committee
RCHSD, HIPAC
RCHSD, U.S. News & World Report Subcommittee
RCHSD, Academic Council Philanthropy Team
RCHSD, Brain Trauma Research Focus Group
RCHSD, Liam’s Fund Charity
The Division of Ophthalmology has seven physicians, each of whom is board certified by The American Academy of Ophthalmology (AAO) and is a Member of the American Association for Pediatric Ophthalmology and Strabismus (AAPOS). The Division is one of the largest pediatric ophthalmology groups in the United States.
**FACULTY**

Preeti Bansal, MD, *Acting Director*

Colin A. Scher, MD

Yvette M. Jockin, MD

Henry O’Halloran, MD

Angela M. Moll, MD

Edward W. Brown, MD

Chantal Boisvert, MD

Sandra Kohler, C.O., C.O.M.T.

Mona Adams, OD

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**Dr. Preeti Bansal** is board certified in Ophthalmology. She earned her medical degree from the University of Kentucky and completed her residency at the same institution where she was awarded the Tschafter Resident Teaching Award and served as chief resident. She completed a fellowship in Pediatric Ophthalmology and Strabismus at Duke University. She has been with RCSSD since 2005. She is currently the acting director of the Division. She also developed and runs Retinopathy of Prematurity screening and treatment program. Her special interests include Retinopathy of Prematurity and Pediatric Cataracts.

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**Dr. Colin Scher** has practiced pediatric ophthalmology at Rady Children's Hospital-San Diego (RCHSD) for over 20 years. He earned his medical degree from the University of Cape Town in South Africa. While completing his ophthalmology residency at the University of Pennsylvania, he was honored as the senior resident who most exemplified the ideal university resident.

Dr. Scher has received awards from the American Academy of Pediatrics and San Diego City schools for outstanding care for underprivileged and uninsured children. In addition to treating pediatric patients, Dr. Scher is a specialist in adult strabismus.

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**Dr. Yvette Jockin** specializes in pediatric ophthalmology. She has practiced at RCHSD since 1997. A summa cum laude graduate, she earned her medical degree from the State University of New York at Buffalo, School of Medicine & Biomedical Sciences where she was named class valedictorian. She completed a residency in ophthalmology at Case Western Reserve University Hospitals in Cleveland. Her postgraduate training also included a fellowship in pediatric ophthalmology at Children’s Hospital of Philadelphia.

While attending medical school, she was elected to the Alpha Omega Alpha Medical Honor Society and received the Dr. Janet M. Glasgow Award and the Dr. Thomas J. Guttuso Ophthalmology Award.
Dr. Henry O’Halloran is European and American board certified in ophthalmology. He joined Rady Children’s Specialists of San Diego (RCSSD) Division of Ophthalmology in November 2000. He earned his medical degree from Trinity College Medical School in Dublin, Ireland. His postgraduate training included a residency in ophthalmology in Ireland and at the University of Kentucky in Lexington, where he served as chief resident. Dr. O’Halloran also completed a fellowship in neuro-ophthalmology at the University of Kentucky, where he was also an assistant professor. Dr. O’Halloran’s clinical interests are in neuro-ophthalmology, specifically in optic nerve disorders and the management of head injury patients. He is an active volunteer with the Mercy Outreach Surgical Team and has acted as director and treasurer of the team. He is a director of the Scripps Mercy Foundation and a board member of the American Ireland Fund.

Dr. Angela Moll is a graduate of Wayne State University School of Medicine and completed a residency at the Kresge Eye Institute at Wayne State where she won the Barsky Research Award. She served as fellow in pediatric ophthalmology and strabismus at Children’s Hospital of Michigan. She has been with RCSSD since 2008.

Dr. Edward Brown has 28 years of experience in pediatric ophthalmology providing routine and specialized eye care for infants, children, and adolescents. He graduated from Temple University Medical School and spent his residency in ophthalmology at the Oakland Naval Hospital and the University of California, San Francisco. He finished his training in pediatric ophthalmology after completing a fellowship at the Children’s Hospital of Los Angeles in affiliation with USC. He recently joined RCSSD’s ophthalmology team after 25 years of private practice here in San Diego.

Dr. Chantal Boisvert is the newest member of the Division having joined in July 2013. She attained both a Medical Doctorate as well as a Doctorate of Optometry in Montreal Canada. She completed her Ophthalmology residency at the University of Montreal School of Medicine where she also served as Chief Resident. Dr. Chantal is fellowship trained in Pediatric Ophthalmology as well as Neuro-Ophthalmology.

Sandy Kohler, CO has over 20 years of experience in pediatric ophthalmology in the U.S. and on numerous mission trips to Mexico and Honduras. She received her training at a consortium program involving Eastern Virginia Medical School and Old Dominion University. As an Orthoptist, Sandy is uniquely skilled in the evaluation and treatment of children and adults with eye movement difficulties. Her specialty is strabismus, amblyopia and double vision for both adults and children. Sandy has been with Rady’s for over 13 years and is an active volunteer on mission trips with Mercy Outreach Surgical Team.

Dr. Mona Adams is a licensed Optometrist who joined the group in 2012. She completed her training at the Southern California School of Optometry in Fullerton, California where she received several scholarships and was the 1st place recipient at Southern California College of Optometry Student Research Symposium. Dr. Adams specializes in contact lens fitting and training for children and teens.

**RESEARCH ACTIVITIES**

The Ophthalmology Division focuses its research efforts on Pediatric Intraocular Lens implantation, pediatric refractive surgery, pediatric glaucoma and eye trauma.

**Recent Clinical Trials:**

- Clinical Study C-10-004 Durezol Pediatric Cataract Study
- Clinical Evaluation of Myopia Control Spectacles
- A multicenter Double-masked Randomized, Active Controlled Parallel Study of the Safety and Efficacy of Once daily Bimatoprost Preservative free Ophthalmic Solution in Pediatric Patients with Glaucoma

**TEACHING ACTIVITIES**

The Division of Ophthalmology offers clinical training for medical students, pediatric and family practice residents and pediatric specialty fellows. The Division is actively involved in clinical research and provides opportunities for trainees to contribute to the fields of Ophthalmology and Pediatrics.

**PUBLICATIONS**

MAJOR GOALS & PLANS

- Cement amalgamation with UCSD Department of Ophthalmology
- Develop a clinical research program when the joint Rady Children's Hospital-UCSD Ph.D. comes to fruition
- Increase clinical presence in Murrieta and Encinitas
- Rapid response to in-house consultations
- Develop appropriately reimbursed contractual arrangements with regional and local NICUs
- Clinic and OR teaching of ophthalmology residents
- Increased teaching of residents in the hospital setting
The Pediatric Orthopedic and Scoliosis Division addresses the unique musculoskeletal needs of growing children and adolescents. Childhood injuries or disease may alter or impede growth; Rady Children's Specialists of Diego (RCSSD) orthopedists work to ensure optimal lifetime function for every child. In 2011, the Pediatric Orthopedic and Scoliosis Division was ranked 4th in the nation by the U.S. News & World Report.
**FACULTY**

Scott J. Mubarak, MD, Professor of Clinical Orthopedic Surgery, Department of Orthopedic Surgery, UCSD; Vice Chief of Division of Orthopedic Surgery, Rady Children’s Hospital Medical Practice Foundation

Dennis Wenger, MD, Voluntary Clinical Professor of Orthopedic Surgery, UCSD; Director of Orthopedic Training Program, RCHSD

Henry Chambers, MD, Professor of Clinical Orthopedic Surgery, UCSD; Director of Motion Analysis Laboratory, RCHSD; Director of Southern California Cerebral Palsy Center; Co-Director of Pediatric and Adolescent Sports Medicine

Peter Newton, MD, Voluntary Clinical Professor of Orthopedic Surgery, UCSD; Chief of Division of Orthopedic Surgery, Rady Children’s Hospital Medical Practice Foundation, Director of Orthopedic Research and the Scoliosis Service, RCHSD

C. Douglas Wallace, MD, Associate Clinical Professor of Orthopedic Surgery, UCSD; Director of Orthopedic Trauma, RCHSD

Maya Pring, MD, Associate Clinical Professor of Orthopedic Surgery, UCSD

Burt Yaszay, MD, Voluntary Assistant Clinical Professor of Orthopedic Surgery, UCSD

Eric Edmonds, MD, Assistant Clinical Professor of Orthopedic Surgery, UCSD

Andrew T. Pennock, MD, Assistant Clinical Professor of Orthopedic Surgery, UCSD

**POSTDOCTORAL FELLows**

(2012-2013)

Avrum Joffe, MD

John Kempainen, MD

Brian Scannell, MD

Chris Souder, MD

(2013-2014)

Matt Hollenbeck, MD

Jonathan Peterson, MD

Lee Phillips, MD

Lissette Salgueiro-Canetti, MD

**LEFT TO RIGHT:** Maya Pring, Dennis Wegner, Salil Upasani, Eric Edmonds, Henry Chambers, Doug Wallace, Peter Newton, Burt Yaszay, Scott Mubarak, Andrew Pennock
The Division is the only comprehensive orthopedic group in San Diego and Imperial counties with specialists who practice full time pediatric orthopedics. By devoting their entire careers to the care of children, these specialists can provide individualized assessment, early diagnosis, and appropriate treatment for all pediatric and adolescent orthopedic problems, including: fracture care (casting and/or operative fixation); spine abnormalities (scoliosis, kyphosis and spondylolisthesis); foot deformities (Ponseti casting, tarsal coalition, toeing in, clubfoot, flatfoot); hip disorders (hip dysplasia and dislocation, Legg-Calve-Perthes disease); sports medicine (knee and shoulder arthroscopy) brachial plexus palsy; and cerebral palsy (gait enhancement).

The Division also works with RCHSD to provide advanced biomechanical analysis through the Motion Analysis Laboratory and low dose pediatric imaging services.

**RESEARCH ACTIVITIES**

The orthopedic research program at RCHSD is designed to keep the Division at the forefront of advances in orthopedic treatment in order to share best practices and new discoveries within the field. The program has attracted external grants from industry, professional organizations and federal sources, as well as philanthropic funding. In 2012, the department members contributed to 51 scientific presentations at national and international meetings (Annual Meetings of the American Academy of Orthopedic Surgeons, Pediatric Orthopedic Society of North America, Scoliosis Research Society, Orthopedic Research Society, and the International Meeting on Advanced Spinal Techniques).

In addition to the Division’s ten attending orthopedic surgeons, orthopedic research at RCHSD is conducted and carried out by many other physicians, research support staff, and trainees. Pediatric orthopedic fellows are actively involved in research during their fellowship training year. International fellows as well as residents from UCSD, the U.S. Navy and U.S. Air Force regularly participate in one or more research projects during their rotations. Each year, the Division hosts a resident from the UCSD orthopedic residency program for training in orthopedic research. The Orthopedic Division also has internal resources for conducting sophisticated statistical analyses, which lends enhanced scientific validity and detailed data analysis to its research studies. The Division employs administrative support for budgeting, contracting and project management.

To further its research goals in clinical, biomechanical, and in vivo research methodologies, the Orthopedic Division has established specific synergistic centers of research:

- The Center for Spinal Deformities Research
- The Center for Pediatric and Adolescent Sports Medicine Research
- The Center for Hip Research
- The Orthopedic Biomechanics Research Center
- The Motion Analysis Laboratory/Center for Human Performance

The Center for Spinal Deformities works with a very active clinical spine service under the supervision of Dr. Peter Newton. With the help of industry grants and participation in the multi-center international spinal deformity Harms Study Group, the center has added three full-time research staff and one research nurse. The center’s research has primarily focused on identifying the optimal treatment for adolescent idiopathic scoliosis (AIS) patients. Currently, all patients undergoing surgical correction of AIS are consented to participate in research and followed for a minimum of five years. The center collects pre-operative and post-operative clinical and radiographic data, and performs pulmonary function tests on each patient. A secure web-based database allows all sites to enter and query de-identified patient data, which includes digital x-rays and clinical photos. This system has proven to be successful in advancing knowledge of scoliosis treatment and help disseminate treatment information at international and national meetings, and in peer reviewed journals. The center has also launched similar prospective research studies for Scheuermann’s kyphosis and scoliosis in patients with Cerebral Palsy, and plans to continue in vivo research and its work with the Orthopedic Biomechanics Research Center. It also serves as a site for a multi-center, NIH funded study investigating the efficacy of bracing in patients with adolescent idiopathic scoliosis. All patients who visit the orthopedic department for clinical evaluation of spinal deformity undergo radiographic examination in the EOS® Imaging booth, which allows for a fast, biplanar, low-dose, standing x-ray acquisition. These images are also capable of undergoing 3D reconstruction for research purposes.

The Center for Pediatric and Adolescent Sports Medicine Research is our youngest center, established to support the efforts of the surgeons within the 360 Sports Medicine program at RCHSD. The research within this center focuses on specific sports related injuries, as well as general orthopedic trauma treatment – which quite often are a result of sporting activity. Projects within this center have examined the outcome of varying treatment approaches for skeletal injuries and predictors of treatment failures. The surgeons in this center are currently participating in prospective multi-center studies to develop registries for clavicle fractures and treatment of osteochondritis dissecans of the knee. Extensive study into shoulder injuries in children and adolescents is also a major focus and efforts are currently underway to validate a subjective shoulder outcome tool specific to this age group. Efforts to better understand
MAJOR GOALS & PLANS

The Pediatric Orthopedic Division at RCHSD and UCSD is recognized as one of the best in the world for its clinical care, innovative teaching and advanced research. The Division plans to:

• Be the top children's clinical and research orthopedic center in the United States, drawing patients from throughout the western United States, as well as Europe, Central and South America, and Asia. The quality of the Division's clinical work and outstanding research will ensure state-of-the-art methods for treating children's conditions.

• Continue its widely recognized fellowship training program in children's orthopedics while supplementing the international fellowship division to ensure that there are always two or three international fellows conducting research with the North American fellows.

• Actively raise funds for additional research and establish at least three funded, named eponymous professorships in children's orthopedics.

• Expand research and clinical assessment of 3-dimensional spinal and limb alignment with new EOS x-ray machine, which allows for up-right weight bearing exams.
## Research Support

<table>
<thead>
<tr>
<th>Grant/Contract #</th>
<th>Total Direct Dollars</th>
<th>Duration of Grant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insall vs. MPFL Reconstructive Surgery for Recurrent Patella Instability (Edmonds) UCSD (sub-award)/OREF</td>
<td>$141,865</td>
<td>Jan. 2011-Dec. 2013</td>
</tr>
<tr>
<td>St. Giles Young Investigator Award: Bar Formation in Physeal Fractures: The Utility of Interpositional Fat Graft Using Laprine Model Pediatric Orthopedic Society of North America (POSNA)</td>
<td>$7,635</td>
<td>July 2010-June 2012</td>
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<tr>
<td>Bracing in Adolescent Idiopathic Scoliosis (BrAIST) (Newton) University of Iowa (NIH SubAward)</td>
<td>$19,278</td>
<td>Sept. 2010-Aug. 2013</td>
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<tr>
<td>BrAIST II: Minimum 2-Year Follow-up of BrAIST Cohort (Newton) University of Iowa</td>
<td>$4,338</td>
<td>Jan. 2013-June 2014</td>
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<tr>
<td>Prospective Study of Scheuermann’s Kyphosis (Newton/Yaszay) SSSF/DePuy Synthes Spine</td>
<td>$18,300</td>
<td>Nov. 2010-Dec. 2013</td>
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<td>Validation of the EOS 3D Reconstruction Accuracy against CT (Glaser) EOS Imaging</td>
<td>$20,839</td>
<td>Jan. 2011-June 2011</td>
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Research Support

<table>
<thead>
<tr>
<th>Grant/Contract #</th>
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</thead>
<tbody>
<tr>
<td>Scoliosis Research Society (SRS)</td>
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<tr>
<td>Foot Drop Device (Glaser)</td>
<td>$146,625</td>
<td>Sept. 2012-Sept. 2013</td>
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<tr>
<td>US Navy Medical Center</td>
<td></td>
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<tr>
<td>Three Dimensional Analysis of the Growth Plate and Intervertebral Cellular Responses to Spinal Growth Modulation in the fusionless Treatment of Scoliosis: A Pilot Study in an Immature Porcine Model</td>
<td>$5,000</td>
<td>July 2013-June 2014</td>
</tr>
<tr>
<td>Orthopedic Education and Research Foundation (OREF)</td>
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Sports injuries radiographically have also been undertaken, in collaboration with pediatric radiologists at this institution.

The efforts of the Center for Hip Research revolve around the four major diagnoses encountered by pediatric hip surgeons: developmental dysplasia of the hip (DDH), Legg-Calve-Perthes disease (Perthes), slipped capital femoral epiphysis (SCFE), and femoroacetabular impingement (FAI). Research into these four conditions attempts to better understand the evolution of the conditions, stages of disease, and the ideal treatment outcomes. Our department is participating in a multi-center prospective study evaluating the treatment outcomes for patients with DDH, as part of the International Hip Dysplasia Institute (I HDI). A prospective registry to gather extensive data on patients with FAI was recently established and it is anticipated a similar approach to SCFE patients will be undertaken with the next year. This research center has also taken advantage of the opportunity created by the EOS® Imaging booth, which allows for standing radiographic image of the pelvis. Recent studies have evaluated pelvic parameters in this natural standing state in scoliosis patients with no hip disease as well as patients with symptomatic hip disease. Future work will explore the capabilities of the system for creating 3D reconstructions of the pelvis and femur.

The Orthopedic Biomechanics Research Center (OBRC), founded in 1998 and led by Dr. Peter Newton under the direction of Diana Glaser, PhD, applies advanced engineering tools and methods to evaluate techniques and instrumentation used to correct orthopedic problems and deformities. The lab has received several grants to evaluate current spinal devices and a new technique for fusionless scoliosis surgery. These studies, along with research presentations and publications, have made the lab a world-recognized facility in this area of orthopedic research. The lab has also made significant progress toward understanding the biomechanical effects of various surgical techniques for stabilizing adolescent fractures of the humerus, femur and tibia, and in exploring the biomechanical effects of pediatric hip deformity.

These cumulative research efforts have been accomplished by pairing orthopedic surgeons and biomedical engineers with orthopedic residents and fellows. Engineering interns and medical students are also recruited to help with each project. This multi-layered approach has yielded significant success with prolific publications appearing in Spine, the Journal of Pediatric Orthopaedics, Clinical Orthopaedics and Related Research, the American Journal of Sports Medicine, the Journal of Shoulder and Elbow Surgery, Medicine and Science in Sports and Exercise, the Journal of Foot and Ankle Surgery, Arthroscopy and the Journal of Applied Biomechanics.

The Motion Analysis Laboratory (MAL) has been utilizing and developing technological resources for the advanced diagnosis and treatment of orthopedic problems since 1974. Led by Dr. Henry Chambers, the internationally recognized MAL specializes in the diagnosis and treatment of orthopedic dysfunction in cerebral palsy. The MAL uses modern computer technology and high-speed digital cameras to obtain detailed reports of how patients move while walking compared to age-related data of normal walking patterns. By studying the differences, an orthopedic surgeon can develop an individualized treatment plan, with recommendations for orthoses, physical therapy or surgery, if necessary.

The Center for Human Performance (CHP) was established by Arnel Aguinaldo, MA in 2001. Utilizing MAL technology, the center's main objectives are studying and providing feedback on athletic performance and injury prevention in such areas as pitching, golf swing, running, and archery for children, adults and athletes of all ages and levels of competition. The MAL and CHP continue to be at the forefront in the field of human motion study.

AWARDS, HONORS AND MAJOR PRESENTATIONS

Scott J. Mubarak, MD
- Senior Achievement Award, AAOS 2013
- Elected to UCSD Academy of Clinician Scholars 2011
- Steroid Injection For Unicameral Bone Cysts Of The Proximal Humerus In
The Skeletally Immature. (Bray, Moor, Mubarak). Pediatric Orthopedic Society of North America (POSNA) Annual Meeting, Toronto, CA, May 2013

- IPOTT Annual Meeting, Sausalito, CA, October 21, 2011
  - Classification and the Need for Intra-Articular Fracture in Children
  - Septic Arthritis Associated with Closed Intra-Articular Fracture in Children
  - International Pediatric Orthopedic Symposium Annual Meeting, Orlando, FL, December 7-10, 2011
    - The Pavlik Harness remains the standard for DDH
    - Case Discussion: Solving DDH before it Needs an Operation
    - Practice Management Seminar: ARS Electronic Record, Physician Extenders, Private Practice vs. the Center, When contracts Are Bad, Partnering With The Hospital, Fracture Care (Managing The Load, Intrusion From Non-Orthopedists), Compensation Strategies, Billing
    - Growth control strategies around the ankle
    - Case Discussion: Fibular deficiency, Deformity around the Ankle
    - Breakout Session: Forefoot: Longitudinal Epiphysis Bracket
  - 4th Post-Posna Workshop. Pune, India, January 13, 2012
    - Management of the Knee and Crouch Gait in CP
    - Special Guest Lecturer. Acute Compartment Syndromes in Children: diagnosis and Treatment
    - Examination Under Anesthesia, Closed Reduction, Arthrography and Spica Application for DDH
  - Curso Internacional Pe Infantil e do Adolescente Annual Meeting, Sao Paolo, Brazil, March 16-17, 2012
    - Compartment syndrome
    - Management of CavoVarus Feet
    - Management of Tarsal Coalition
    - Management of the Foot in Cerebral Palsy
    - Management of Foot Deformities in Duchene Muscular Dystrophy
    - Bracket Epiphysis of the Metatarsal
    - Ankle Fractures: Prevention of Growth Plate Closures and Foot/Ankle Deformity
  - Osteochondritis of the Foot
  - Tib-Fib Synostosis and effects on the Foot/Ankle
  - Orthopedic Conference, Manaus, Brazil, March 19-20, 2012
    - Compartment Syndromes
    - Tarsal Coalition
    - Contemporary Imaging for Tibial Tubercle Fracture Patterns in Adolescents: Need for Intra-articular Assessment
  - POSNA Annual Meeting, Denver, CO, May 17, 2012
    - Risk Factors for Compartment Syndrome After Flexible Nailing of Pediatric Tibial Shaft Fractures
    - Lower Extremity/Neuromuscular Symposium
    - Flatfoot in Cerebral Palsy, the 3C Procedure
    - Salter-Harris II Fractures of the Distal Tibia: Does Surgical Management Reduce the Risk of Premature Physeal Closure?
    - Contemporary Imaging for Tibial Tubercle Fracture Patterns: Need for Intra-articular Assessment. e-Poster
  - IPOTT Annual Meeting, Cannes, France, September 22, 2012
    - Pathomechanics of Gowers’ Sign: A Video Analysis
  - IPOS Annual Meeting, Orlando, FL, November 29, 2012
    - My Pavlik Harness Protocol and What I do When it Fails
    - Resect a Tarsal Coalition
    - Tarsal Coalitions: Resect It & You’re Done: Leave it Flat. Adult vs. Ped. Smackdown: POV
    - Ponseti Casting: Initial Management. Breakout Session
    - Ponseti Complex Problems. Breakout Session
    - Pediatric Foot: Surgery Management of Congenital and Acquired Conditions
    - Controversies – Is there an Answer. Moderator
  - AAOS Annual Meeting, Chicago, IL, March 23, 2013
    - Pavlik Harness Treatment: What to do and what not to do?
    - Infantile DDH: Screening, Safe-swaddling, Harness Application and Follow-up Protocol. Scientific Exhibit SE42
    - Does Surgical Management Reduce the Risk of Premature Physeal Closure in Salter-Harris II Distal Tibia Fractures? Poster No. P492
  - POSNA Annual Meeting, Toronto, Ontario, Canada, May 2, 2013
    - Use of Mid-level Providers in Pediatric Orthopedics
    - Reliability of a New Radiographic Classification of Developmental Dysplasia of the Hip
    - Negotiation in Practice: How to Get Both What You Need and What You Want
    - Steroid Injection for Unicameral Bone Cysts of the Proximal Humerus in the Skeletally Immature
    - Does Portable Intraoperative CT Scan Improve the Quality of Talocalcaneal Coalitions? Paper Poster #20

Dennis R. Wenger, MD

- 2011 MacLaggan Award for International Service to Children
- Downtown San Diego Rotary Club, San Diego, CA
- Teton Valley Pediatric Orthopedic Society Meeting, Driggs, ID, September 23-24, 2011
  - The Osteochondroma Count in MHE: New Thoughts on Glycobiology, Spine Surgery and Ear Reconstruction – Strange Bedfellows
- 19th Annual Meeting of the Iranian Orthopedic Association, Tehran, Iran, October 17-21, 2011
  - Modern Management of LCPD: Advanced Containment Method-Triple Innominata Osteotomy
  - Management of SCFE In The Impingement Era
  - Management of Neuromuscular Hip
  - Approach To Re-Dislocation After DDH Treatment
  - Modern Management of LCPD
  - Surgical Management of Flat Foot Disorders & Tarsal Coalition
- International Pediatric Orthopedic Think Tank, Sausalito, CA, October 20-22, 2011
  - The Osteochondroma Count in MHE: New Thoughts on Glycobiology
  - Spine Surgery and Ear Reconstruction-
tion – Strange Bedfellows
- 8th Annual International Pediatric Orthopedic Symposium, Orlando, FL, December 7-10, 2011
  - Legg-Calve Perthes, ICL Instructor
  - Treating Severe Acetabular Dysplasia with the Triradiate Open, Invited Lecture
  - Case Discussion: Mature Perthes with Hip Pain, ICL Moderator
  - Pelvic Osteotomies – Hands On: Basic (Salter, Dega, Pemberton), ICL Instructor
  - Pelvic Osteotomies – Hands On: Advanced (Ganz, Triple, Others), ICL Instructor
  - Managing Hip Dysplasia after Triradiate Closure – Treatment for the Adolescent and Young Adult, Instructional Course Lecture
  - Surgical Management of Hip Dysplasia, Instructional Course Lecture
- AAOS – TOTBID Lectures, Antalya, Turkey, April 18-20, 2012
  - ESIN Method for Treating Childhood Femoral Fractures
  - Forearm Fractures in Children
  - Principles in the Treatment of Perthes Sequelae
- Pediatric Orthopedic Surgeons of North America (POSNA), Annual Meeting – Hip Course, Denver, CO, May 16, 2012
  - Is There a Role for Acetabular Dysplasia Correction in an Asymptomatic Patient?
- 5th Annual Kenneth G. Burton MD Visiting Professorship, University of Rochester, New York, October 16-18, 2012
  - Will Your Child Live to be 100? Orthopedic Thoughts on the Demand for Musculoskeletal Perfection
  - Understanding and Treating Tarsal Coalition in Childhood – from R.I. Harris and the Canadian Army to Advanced 3D CT Imaging
- International Pediatric Orthopedic Symposium (IPOS), Orlando, FL, November 28 - December 1, 2012
  - Perthes – When to Operate? (Paper)
  - Challenging Decisions in Pediatric Hip Surgery (Panel Moderator)
  - Pelvic Osteotomies – Hands-on: Basic, Panel Member
  - How to Perform a Triple Innominate Osteotomy, Paper
  - Pelvic Osteotomies – Hands on: Advanced, Panel Member
  - Treating Complex Hip Disorders, Moderator
  - Pelvic Osteotomies – Hands on: Advanced, Panel Member
  - ICL 365: Current Perspectives on the Diagnosis and Management of DDH through Early Adulthood, Co-Moderator
  - POSNA Specialty Day – Chicago, IL, March 23, 2013
  - Surgical Management of Hip Dislocation (DDH), Lecturer
  - Dysplasia Symposium - Case-Based Discussion (DDH), Moderator

Henry G. Chambers, MD
- Excellence in Philanthropy Award: Rady Children’s Hospital
- Best Doctors in San Diego
- Best Doctors in America
- U.S. News & World Report Top Doctors
- American Academy for Cerebral Palsy and Developmental Medicine, Las Vegas, NV, October 2011
  - Transcriptional Profile of Spastic Hamstring Muscles in Children with Cerebral Palsy
- ASAP (Alliance for Surgery and Anesthesia Presence) Global Surgery Conference, San Diego, CA, November 2011
  - Orthopedic Surgery: Lessons learned from Haiti
- AAOS/ POSNA International Pediatric Orthopedic Symposium, Orlando, FL, December 2011
  - Cerebral Palsy and Gait Analysis
  - Prevention of Infections in Pediatric Orthopedic Surgery
  - Orthopædiatrics Distal Femoral Extension Osteotomy Workshop
  - Orthopædiatrics Proximal Femoral Blade Plate and Femoral Locking Plate Workshop
  - Orthopædiatrics Miserable Malalignment Workshop
- Cerebral Palsy Session: Hip and Foot
- Treatment of Tibial Eminence Fractures
- Sports Injuries in Children: Panel
- Treatment of Spasticity in Children with Cerebral Palsy
- Treatment of Rectus Femoris Spasticity: Transfer vs Release
  - Pediatric Knee Problems
  - Moderator of Pediatric Papers
- Rocky Mountain Hospital for Children: Pediatric Sports Medicine and Trauma Symposium, Beavercreek, CO, January 2012
  - Tibial Tubercle Fractures
  - Sports Medicine Problems in Children and Adolescent
  - Osteochondritis Dissecans of the Knee
- POSNA/AOSSM Specialty Day, San Francisco, CA, February 2012
  - Treatment of Anterior Knee Pain in Children and Adolescents
- Pediatric and Adolescent Sports Medicine, San Diego, CA, March 2012 , Course Co-Director, Moderator of Orthopedic Section
  - The Knee in Pediatric and Adolescent Sports
  - Developmental and Psychological Aspects of Pediatric Sports Medicine
- Southern California Conference for Adults with Cerebral Palsy, Rancho Los Amigos National Rehabilitation Hospital, Downey, CA, March 2012
  - Bones and Groans: Aging with Cerebral Palsy
  - The Future of Pediatric Sports Medicine: Panel Member
  - Update on Patellofemoral Disorders in Children
- GCMAS Symposium: Clinical Applications and Impact of Comprehensive Motion AnalysisAmerican Academy for Cerebral Palsy and Developmental Medicine, Toronto, Ontario, Canada, September 2012
The Impact of Motion Analysis on the Treatment of Movement Disorders: The Last 30 Years

- The American Academy of Cerebral Palsy and Developmental Medicine, Toronto, Ontario, Canada, September 2012
- Orthopedic Surgery for Adults with Cerebral Palsy
- Knee and Foot/Ankle Surgery

- Pediatric Lower Extremity Problems
- Neuromuscular Diseases
- Growth Disturbances
- Panel on Pediatric Topics

- AAOS/POSNA International Pediatric Panel on Pediatric Topics
- Growth Disturbances
- Pediatric Lower Extremity Problems
- Neuromuscular Diseases
- Growth Disturbances

- American Academy of Orthopedic Surgery for Adults with Sports Injuries in Children: Panel
- Imaging and Classification of OCD
- Orthopediatrics Miserable Malalignment
- Orthopediatrics Proximal Femoral
- Orthopediatrics Distal Femoral

- American Academy for Cerebral Palsy and Developmental Medicine, Toronto, Ontario, Canada, September 2012
- The Impact of Motion Analysis on the Treatment of Movement Disorders: The Last 30 Years

- American Academy of Orthopedic Surgery
- Knee and Foot/Ankle Surgery

- Pediatric Orthopaedic Society of North America (POSNA); Newton, Doan, Glaser, Farnsworth. The Effects Of Growth Modulation. Newton, Doan, Glaser, Farnsworth.

- Pediatric Orthopedic Society of North America (POSNA) Annual Meeting, Toronto, CA, May 2013

- International Pediatric Orthopedic Symposium, Orlando, FL, December 8-10, 2011
- Surgical Treatment of High Grade Spondylolisthesis
- Surgical Site Infection Project at Rady Children’s Hospital San Diego

- Technique Update: Vertebral Column Resection

- 19th Annual Meeting of the Iranian Spinal Surgeons in India, February 24, 2012
- Early Onset Scoliosis

- 25th Annual Meeting of Association of Spinal Surgeons in India, February 24, 2012
- Early Onset Scoliosis: Surgical Treatment
- Preventing Neurologic Complication in Spondylolisthesis Surgery

- Peer to Peer Deformity: Strategy of EOS, Beijing, China, April 22, 2012
- Key Note lecture, Challenges in EOS

- Sydney Pediatric Orthopedic Review, Sydney, NSW, Australia, April 2013
- Gait Analysis for Dummies
- Aetiology and Classification of Cerebral Palsy
- Case reviews of patients with Cerebral Palsy

- Auckland Pediatric Orthopedic Surgery Symposium, Auckland, NZ, April 2013
- Update on Advances in Cerebral Palsy and Sports Medicine

- Sydney Pediatric Orthopedic Review, Sydney, NSW, Australia, April 2013
- Gait Analysis for Dummies
- Aetiology and Classification of Cerebral Palsy
- Case reviews of patients with Cerebral Palsy

- Pediatric Orthopedic Society of North America, Toronto, Ontario, Canada, May 2013

- Treatment of Patellofemoral Instability in Adolescents
- Section Director of Neuromuscular and Lower Extremity Specialty Day
- Treatment of GMFCS III Cerebral Palsy

- Peter O. Newton, MD
- President of the Pediatric Orthopedic Society of North America (POSNA); May 2012-May 2013

- Basic Science Award Paper, 3D Visualization Of The Vertebral Growth Plate: The Effects Of Growth Modulation. Newton, Doan, Glaser, Farnsworth.

- Pediatric Orthopedic Society of North America (POSNA) Annual Meeting, Toronto, CA, May 2013

- International Pediatric Orthopedic Symposium, Orlando, FL, December 8-10, 2011
- Surgical Treatment of High Grade Spondylolisthesis

- AIAS, April 24, 2013
- Surgical outcome scores are sensitive to both the occurrence and surgical treatment of AIS. SRs, September 2012 (Poster, Goldstein Award Nominee)

- Lenke 1C and 5C spinal deformities fused selectively: A natural history of uninstrumented compensatory curves. POSNA, May 2012 (Oral, Clinical Award Nominee)

- Burt Yaszay, MD

- SRS outcome scores are sensitive to both the occurrence and surgical treatment of a complication in the surgical treatment of AIS. SRS, September 2012 (Poster, Goldstein Award Nominee)

- Lenke 1C and 5C spinal deformities fused selectively: A natural history of uninstrumented compensatory curves. POSNA, May 2012 (Oral, Clinical Award Nominee)

- Determining optimal post-operative coronal parameters for selective thoracic fusion. POSNA, May 2013

- Better understanding postoperative changes in adolescent idiopathic scoliosis using 3D reconstructions. AAOS, March 2013

- What do coronal flexibility films really tell us about the treatment of idiopathic early onset scoliosis patients using growing rods? ICEOS, November 2012

- EOS Imaging is available for early-onset scoliosis patients and can reduce their ionizing radiation exposure

- Biomechanical evaluation of 4 different foundation constructs commonly used in growing spine surgery: are rib anchors comparable to spine anchors

- Limited anterior spinal fusion: an effective strategy in controlling progressive early onset scoliosis

- Recommendations for patients and families after growing rod surgery: surgeon agreement on post-operative care

- Selective thoracic fusion in adolescent idiopathic scoliosis curves with a lumbar modifier: which rules can be broken? SRS, September 2012

- The prevalence of postoperative pain in adolescent idiopathic scoliosis and the association with preoperative pain

- Wound infections after spine deformity correction cerebral palsy: risk factors

- Surgical Outcomes in Adolescent Idiopathic Scoliosis with or without spondylolisthesis

- Analyzing the relationship between apical vertebral rotation and truncal rotation in AIS using 3D reconstructions. IMAST, July 2012

- Better understanding postoperative changes in adolescent idiopathic scoliosis using 3D reconstructions of 2D radiographs

- Longitudinal analysis of radiation exposure during the course of growing rod treatment for early onset scoliosis

- Lenke 1C and 5C spinal deformities fused selectively: A natural history of uninstrumented compensatory curves. POSNA, May 2012 (Oral, Clinical Award Nominee)
of uninstrumented compensatory curves. POSNA, May 2012

• Should shoulder balance determine proximal fusion levels in patients with Lenke 5 curves? AAOS February 2012
• Are thoracic curves with a low apex (T11 or T11/12) really thoracic curves?
• Restoring thoracic kyphosis during posterior instrumentation for adolescent idiopathic scoliosis

Eric W. Edmonds, MD
• Honorary Member, A Sociedade Brasileira de Ortopedia Pediatrica, 2013
• Fellow, South America Traveling Fellowship, Pediatric Orthopaedic Society of North America, 2011
• POSNA Biomet South American Traveling Fellowship, 2011
• Honorary Member, A Sociedade Brasileira de Ortopedia Pediatrica, 2013
• Fellow, South America Traveling Fellowship, Pediatric Orthopaedic Society of North America, 2011
• POSNA Biomet South American Traveling Fellowship 2011
• 2013 Annual Meeting of the American Orthopedic Society of Sports Medicine, Chicago, IL
  - Normal Parameters of Skeletally Immature Knees: Developmental Changes on Magnetic Resonance Imaging
• 2013 Annual Meeting of the Pediatric Orthopaedic Society of North America, Toronto, Canada
  - Results Of Displaced Tibial Spine Fractures: A Comparison Between Open, Arthroscopic, And Closed Management
• 2012 American Academy of Pediatrics National Conference and Exhibition in New Orleans, LA
  - Elbow Fractures in Childhood Obesity: Lateral Condyle vs Supracondylar Humerus Fractures
• 2012 Annual Meeting of the Association of Bone and Joint Surgeons, Charleston, SC
  - Contemporary imaging for tibial tubercle fracture patterns in adolescents: Need for intra-articular assessment
• 2012 Annual Meeting of the Pediatric Orthopaedic Society of North America, Denver, CO
  - Management Of Rotator Cuff Tears In Adolescents: Factors Affecting Patient Outcomes
  - Risk Factors for Compartment Syndrome After Flexible Nailing of Pediatric Tibial Shaft Fractures
  - 2012 Annual Meeting of the American Academy of Orthopaedic Surgeons, San Francisco, CA
  - Adolescent rotator cuff tears
  - Effects Of Surgical Treatment for Recurrent Patella Instability in Adolescent Patients On Knee Extensor Mechanics
• 2011 Annual Meeting of the Pediatric Orthopaedic Society of North America, Montreal, Quebec, Canada
  - Children With Anterior Shoulder Instability: Do Not Underestimate the Extent of Labral Pathology

Andrew T. Pennock, MD
  - The Spectrum Of Hip Impingement Morphology in Adolescents and Young Adults
• International Cartilage Repair Society (ICRS) Annual Meeting Izmir, Turkey, September 16-18, 2013
  - Osteochondral Allograft Transplantation of the Knee in the Pediatric and Adolescent Population
• American Orthopaedic Society for Sports Medicine (AOSSM) 2013 Annual Meeting, Chicago, IL, July 11-14, 2013
  - Osteochondral Allografts For Knee Lesions In The Pediatric And Adolescent Population. Does one size fit all: Variation in tibial tubercle trochlear groove (TTTG) measurements as a function of age, size, and patella instability?
• Pediatric Orthopaedic Society of North America (POSNA) 2013 Annual Meeting, Toronto, Ontario, May 1-4, 2013
  - Does Portable Intraoperative Ct Scan Improve The Quality Of Talocalcaneal Coalition Resection
  - Previously Described Radiographic Parameters Of Femoracetabular Impingement Are Common In Asymptomatic Patients
  - At What Age Do Cam and Pincer Morphology Become Apparent: An Analysis of 225 Pediatric And Adolescent CT Scans?
  - Potential Causes of Loss of Reduction in Supracondylar Humerus Fractures. Arthroscopic Evaluation Of Meniscus Tear Patterns In Pediatric And Adolescent Patients
  - Functional And Radiographic Outcomes 1 After Non-Operative Treatment Of Displaced Adolescent Clavicle Fractures
  - Results Of Displaced Tibial Spine Fractures: A Comparison Between Open, Arthroscopic, And Closed Management
• 54th Annual Society of Military Orthopaedic Surgeons (SOMOS) Meeting, Naples, FL, December 10-14, 2012
  - The Hips Antero-Superior Labral Tear with Avulsion of the Rectus Femoris (HALTAR) Lesion: Does the SLAP Equivalent in the Hip Exist?
• American Academy of Orthopaedic Surgeons (AAOS) 2013 Annual Meeting, Chicago, IL, March 19-23, 2013
  - Does Surgical Management Reduce the Risk of Premature Physeal Closure in Salter-Harris II Distal Tibia Fractures?
• International Society for Hip Arthroscopy (ISHA) Annual Scientific Meeting, Boston, MA, September 24-26, 2012
  - Cam pathology in pediatric patients
  - Comprehensive Arthroscopic Management (CAM) Survivorship: Alternative to Arthroplasty in Active Patients with Advanced Shoulder Osteoarthritis
PUBLICATIONS


Edmonds E. No difference in improvement in physical function between splint and cast at 6 weeks in children with minimally angulated fractures of the distal radius. Evid Based Med, 16(2):49-50, 2011.


Samdani AF, Hwang SW, Miyani J, Lonner B, Marks MC, Sponseller PD, Newton PO, Cahill PJ, Shuflebarger HL, Betz RR. Direct vertebral body derotation, thoracoplasty, or both: which is better with respect to inclinometer and sco-


The Division of Pediatric Otolaryngology at Rady Childrens Specialists of Diego (RCSSD) manages complex tertiary care otolaryngologic disorders, including: congenital and acquired hearing loss in children; airway problems ranging from obstructive sleep apnea to complicated diseases of the laryngeal and tracheal airway requiring cutting edge surgical intervention and reconstruction; complications of acute sinusitis that involve the eye and brain; chronic sinusitis problems in children including those with cystic fibrosis; congenital abnormalities of the face and neck, including complex vascular malformations; congenital and acquired thyroid disease; and a host of communication, speech and voice disorders. The Division also leads a variety of interdisciplinary teams, including the Pediatric Airway and Aerodigestive Team, Cochlear Evaluation and Implementation Team, and Voice Disorders in Children and Thyroid Tumor Board.

All of the physicians in the Division are fellowship trained in pediatric otolaryngology, which requires completion of an otolaryngology residency, plus a minimum of one additional year of specialty training. This advanced training is focused completely on the unique diagnostic and treatment issues in children from birth to 19 years of age.

The Division of Pediatric Otolaryngology has been a source of leadership and innovation for over 30 years. With its commitment to ongoing patient care, physician education and research at the highest of levels, the Division will continue to enhance its expertise and devotion to state-of-the-art therapy for children with hearing and speech impairment, infectious diseases of the head and neck, and complex airway and head and neck abnormalities.
FACULTY

Seth M. Pransky, MD, Director, Division of Pediatric Otolaryngology; Director, Satellite Services RCHSD; Clinical Professor of Surgery, UCSD

Marcella Bothwell, MD, Director, Pediatric Airway and Aerodigestive Team, RCHSD; Clinical Professor of Surgery, UCSD

Daniela S. Carvalho, MD, Section Chief, Otolaryngology-RCHSD; Director, Hearing Program; Director, Pediatric Otolaryngology Fellowship Program; Clinical Professor of Surgery, UCSD

Wen Jiang, MD, Director, Pediatric Thyroid Clinic; Co-Director Speech and Voice Clinic; Assistant Clinical Professor of Surgery, UCSD

Donald B. Kearns, MD, Chief Medical Officer-RCHSD; Clinical Professor of Surgery, UCSD

Shelby Leuin, MD, Director, ENT Resident Training Program; Co-Director Speech and Voice Clinic; Assistant Clinical Professor of Surgery, UCSD

Anthony Magit, MD, Director, Inpatient Surgical Services, RCHSD; Director, Institutional Review Board-RCHSD; Clinical Professor of Surgery, UCSD

Denise Lago, PAC

Pam Salgado, PAC

CLINICAL ACTIVITIES

The Division’s physicians are responsible for covering the Emergency Department at RCHSD and running the Consultation Service for patients admitted to the hospital with ear, nose, throat, airway and neck abnormalities. The bulk of clinical practice is carried out on the campus of RCHSD combined with daily patient activity at satellite locations in Encinitas, Escondido Murrieta, and Oceanside. In addition, consultative services are provided to multiple regional Neonatal Intensive Care facilities including Sharp Mary Birch, Scripps La Jolla, Scripps Encinitas and UCSD Medical Center.

Patients requiring operative intervention or specialized testing are brought to RCHSD. From 2011-2013 the Division conducted over 45,000 patient visits and carried out approximately 9000 operative procedures. Procedures included:

• Placing ear tubes, removing tonsils and adenoids, restoring hearing with ossicular reconstruction, and the state of the art cochlear implant and Bone Anchored Hearing Aid program
• Diagnostic and therapeutic endoscopic airway procedures from neonates to adolescents and open surgical management of complex airway diseases
• Endoscopic sinus surgery for children with chronic sinusitis and complications of acute sinusitis; management of various intranasal abnormalities including turbinate malformations, septal deviations, bony nasal deformities, and open rhinoplasty for complex nasal obstruction and nasal tumors; management of the nasal and sinus manifestations of cystic fibrosis

LEFT TO RIGHT: Daniela Carvalho, Wen Jiang, Seth Pransky, Marcella Bothwell, Anthony Magit, Shelby Leuin
• Surgical correction of a variety of congenital head and neck malformations and management of both benign and malignant head and neck neoplasms with a focus on thyroid abnormalities and lymphatic malformations.

The Divisionrection of a variety of congenital head and neck malformations and management of both benign and malignant head and neck neoplasms with a focus on thyroid abnormalities and lymphatic malapapillomatosis attracts patients from California, Nevada, Arizona, Mexico and the Pacific Rim countries for specialized pediatric ENT care.

Marcella Bothwell, MD
Marcella joined our department in 2007. She comes from the University of Missouri, where she was there for 6 years. She is now a Clinical Professor, Department of Surgery UCSD and a student at the Rady School of Management. Biomedical research is an avid interest for Dr. Bothwell and she has collaborated with the La Jolla Allergy and Immunology Institute for research on the etiology of recurrent tonsillitis and the body’s follicular T helper cell response in hopes of vaccine development. Because of this partnership, she became very interested in the ethics of human tissue research and in 2012 wrote an article for the Rady Business Journal with her coauthor and Rady School of Management Professor Erez Yoeli, PhD, Biotechnology consult: What does economics teach us about how to assign property rights for human tissue?. At RCHSD she developed and directs the Pediatric Airway and Aero digestive Team (PAAT), a multidisciplinary group that sees about 50 new patients each year with complex airway, swallowing and feeding problems. Dr. Bothwell is also quite active in the regional and national ENT community where she is Immediate Past President of the San Diego Academy of Otolaryngology. She is also the Immediate Past Chair for the ENTPAC and travels to Washington DC at least 2 times per year to lobby Congress about concerns in patient care. Finally Marcella has made three trips to Vietnam with REI International for a medical/surgical mission trip.

Daniela Carvalho, MD
Daniela joined our department in 2003, having completed a two-year fellowship with our group from 1999-2001. She has worked as the Section Chief for Otolaryngology at RCHSD since 2009. Daniela’s clinical focus and area of interest is hearing in children including sensorineural, conductive and genetic hearing loss. As the director of the Hearing Program and lead surgeon for the RCHSD Cochlear Implant team, Daniela assesses hearing loss patients and guides the Team in management of more than 300 cochlear implant patients. This past year she successfully performed about 40 cochlear implants, including the most state of the art implants from three different implant brands. She continues to bring to our pediatric hearing-impaired patients state-of-the-art innovations in the area of implantable hearing devices, including the BAHA, Ponto-pro and Sophono devices (she performed the first pediatric Sophono implant in Southern California). Daniela has been the co-director of our Pediatric Otolaryngology Fellowship program and was responsible for successfully having our program accredited by the ACGME. She is involved in multiple international endeavors including ongoing lectures in her native Brazil through the Brazilian National ENT Association and her role as international liaison for SENTAC. She is the only female physician who is a member of the International Working Group on Endoscopic Ear Surgery. She is also very active in the American Society of Pediatric Otolaryngology as the chairperson for the Long Range Strategic Planning Committee.

Wen Jiang, MD
Wen joined our department in 2007 and was accepted this year as a member to the American Society of Pediatric Otolaryngology. She continues her head and neck oncology practice with a special interest in thyroid neoplasms in children. Together with the department of Endocrinology, she has created a multi-disciplinary thyroid tumor board to discuss the management of patients with thyroid pathology. She has been twice awarded the RCHMF physician development grant to attend the international American Thyroid Association meeting and was recently accepted as a member to the American Thyroid Association. Her listing on the ATA website for patient referral has put Rady Children’s hospital on the national map for thyroid disorders. Currently Wen is finishing an IRB approved retrospective review of our institutional experience in thyroidectomy patients over the last 10 years. A second specialized focus for Dr. Jiang is in voice disorders in children. She currently co-directs the Speech and Voice Endoscopy Clinic, a multi-disciplinary voice and speech team working closely with the Speech Pathology department at RCHSD. This team continues to provide comprehensive service to children with speech related disorders such as hypernasality and/or velopharyngeal incompetence, and other voice disorders. Wen has partnered with the emergency department to prospectively study the accuracy of metal detectors in detection and localization of metallic esophageal foreign bodies. The goal is to utilize metal detectors to minimize radiation exposure and to expedite the triage of these patients in the emergency room.

Donald B. Kearns, MD
Donald has practiced Pediatric Otolaryngology at RCHSD for 25 years. He completed the Master of Medical Management program at the Marshall School of Business at the University of Southern California in 2008. His primary interest is in administrative medicine. He currently serves as the Interim Surgeon in Chief for RCSSD and is the Chief Medical Officer and Senior Vice President for Health Affairs for Rady Children’s Hospital San Diego.

Shelby Leuin, MD
Shelby is the newest addition to the Pediatric Otolaryngology group at RCHSD, joining the practice in January 2011. She did her residency training at the Harvard Combined Otolaryngology Program and
her pediatric otolaryngology fellowship training at the University of Colorado, Denver Children's Hospital. Her clinical interests focus on midfacial abnormalities including congenital and acquired nasal deformities, cleft palate and velopharyngeal insufficiency, as well as airway anomalies and reconstruction. She adds a unique skill set to our group with her training and interest in functional rhinoplasty. She has been awarded two Physician Development Grants to attend courses and symposia on rhinoplasty and has been actively building her practice in this area. Shelby is co–director of the Speech and Voice Endoscopy Clinic and participates actively in the Cleft Palate and Craniofacial clinics. In this capacity, she provides the unique ability to provide continuity of care for these patients by both performing the office nasal endoscopy in collaboration with the speech language pathologists as well as performing the speech surgery for velopharyngeal insufficiency.

On a national level Dr. Leuin has been selected to be a member of the American Academy of Otolaryngology Pediatric Otolaryngology Education Committee and as such has published education materials on pediatric sinusitis. Locally, she is collaborating with Jane Burns, M.D. on a study evaluating the laryngeal findings associated with hoarseness in children with Kawasaki disease. The findings have been presented at both national and international meetings and have also recently been published.

Dr. Leuin is also the Director of the Pediatric Otolaryngology residency-training program. She has presented at Grand Rounds and multiple CME courses, as well as at morning conference for the otolaryngology residents. She actively mentors the group’s Physician Assistant in publishing and presenting at several national meetings.

Anthony E. Magit, MD

Anthony has been a part of our group for 19 years. He is currently serving as the immediate past chief of staff of RCHSD and is the Chairman of the RCHSD Institutional Review Board. Anthony’s ongoing areas of clinical and research interests include lymphatic malformations, cystic fibrosis and obstructive sleep disorders in infants and children. He continues to collaborate with the Pulmonary Division and has been involved in investigating a novel approach for treating patients with lymphatic malformations as well has having treated more than 160 patients with lymphatic malformations from the Southwestern region of the United States and Northern Mexico. Superimposed on a full clinical practice and his administrative duties, Anthony is President of the Society for Ear, Nose and Throat Advances in Children and earned his Masters in Public Health from the Johns Hopkins Bloomberg School of Public Health in May, 2012. Anthony’s involvement with representing RCHSD and pediatric medicine include membership on the Board of the San Diego County Medical Society and the Children’s Specialty Care Coalition.

Seth M. Pransky, MD

Seth began practice at RCHSD in 1985 and became the Division Director for Pediatric Otolaryngology in 1997. At RCHSD he is the Director of Satellite Services and chairs the Clinical Practice Committee and is the CME Director for the Regional Practical Pediatrics courses. His ongoing areas of clinical interest include issues related to airway diseases and endoscopic management of these problems, operative management of nasal and sinus disease in children and issues related to tympanostomy tube utilization. He lectures extensively throughout the United States and internationally on these and other topics. In 2008 Seth received the Gabriel F. Tucker Award from the American Laryngological Association for outstanding contributions to Pediatric Laryngology. In 2011 he was awarded the prestigious Ray Skoglund Excellence in Teaching Award from RCHSD. In 2013 he received the Chevalier Jackson award from the American Bronchoscopic Association for Outstanding Achievement and Accomplishment in Bronchoscopicology. In addition to his local responsibilities, Seth has been involved nationally with board positions in the American Society of Pediatric Otolaryngology and the American Academy of Pediatrics ENT Section and was recently the President of the Society of Ear, Nose and Throat Advances in Children.

RESEARCH ACTIVITIES

For the past 28 years, the Division has been recognized around the world for innovative research and advancements in managing a variety of pediatric airway abnormalities. Procedures include corrective open laryngotracheal reconstruction and therapeutic endoscopic management of airway abnormalities using innovative lasers, debriders and injectable medications. Current research projects involve all aspects of pediatric otolaryngology including cochlear implant issues, head trauma, head and neck tumor management in children, lymphatic malformations treatment, acute and chronic sinusitis research and outcomes of sinus surgery, and more unusual problems such as lack of sense of smell in children, hoarseness in patients with Kawasaki’s Disease and resolution of recurrent fever after tonsillectomy in patients with Periodic Fever, Aphthous stomatitis, Pharyngitis, Adenitis (PFAPA) Syndrome. The active research projects are:

- Oral Language Capabilities of Monolingual and Bilingual Spanish and English Speaking Children with Cochlear Implants
- Epidemiology of skull base fractures in San Diego County
- Management of lymphatic malformations: A database protocol
- Multi-Institutional study of Picibanil for Lymphatic Malformations
- Systematic Review of sinus surgery in patients with Cystic Fibrosis
- Anosmia in the pediatric population
- Salivary gland tumors in the pediatric populations
- Hoarseness in Kawasaki Patients
- Cellular Immunity in Periodic Fever, Aphthous stomatitis, Pharyngitis, Adenitis (PFAPA) Syndrome
- Ten year retrospective review of orbital complications of acute sinusitis at RCHSD
- Pharyngeal probe for Extra esophageal reflux
- Prospective assessment of Ankyloglossia and response to Frenulotomy
- Comparison of non-verbal cognitive function in patients with hearing loss of various etiologies
The Respective Contributions of Computed Tomography and Magnetic Resonance Imaging in Cochlear Implant Pre-Operative Planning in Academic Institutions

Ten year retrospective review of thyroid neoplasms in the pediatric population

The role of metal detectors in the ED for esophageal foreign bodies detection and expedited management

TEACHING ACTIVITIES
Superimposed on clinical care is the Division of acute sinusitis at RCHSD-FAPA) S two fellows in our clinical Pediatric Otolaryngology fellowship program. Since 1990, we have graduated 29 fully-trained pediatric otolaryngologists who have gone on to productive careers in academic institutions throughout the United States. In addition, the Division is responsible for educating ENT residents from the UCSD and the Naval Medical Center San Diego programs in pediatric otolaryngology. Pediatric residents, family medicine residents and medical students and nurse practitioner students also rotate through the clinic and receive didactic lectures from our staff as part of their pediatric specialty education program. The Division actively participates in community outreach programs through involvement with the health professionals mentor program at UCSD and through its involvement with the otology and hearing clinic for San Diego City Schools. Physicians from around the world enjoy the opportunity for observational preceptorships with physicians from Brazil, Peru, Mexico, Chile, Venezuela, Vietnam and Iraq having spent time at RCHSD in recent years. Throughout the year, members of the Division give Grand Rounds lectures and CME programs to community-based physicians in multiple specialties to ensure state-of-the-art practice for primary care physicians.

On a national level, the Division provides extensive update meetings drawing primary care physicians from around the country to review management issues for a wide range of pediatric ENT problems. In addition, members of the department give Instructional Courses each year at the American Academy of Otolaryngology Annual and at the American Academy of Pediatrics national meetings.

In 1992, the Division created International Endoscopy Days at RCHSD, a world class meeting for pediatric otolaryngologists from around the world. The otolaryngologists participate in a day of live operative endoscopy followed by lectures, panels and open discussion on cutting-edge management of pediatric airway abnormalities. In April 2012 over 125 physicians from around the world attended the 15th International Endoscopy day at RCHSD. Four very challenging live airway endoscopy cases were performed by our group, observed by the attendees and spirited discussion, debate and audience interaction followed. Once again comments from the attendees such as “The best conference all year” earned the meeting high praise.

The Cochlear Implant Program at RCHSD
The Cochlear Implant (CI) team at RCHSD began in 2004 under the directorship of Daniela Carvalho, MD. This program has been critical in providing hearing restoration for children with profound hearing loss that do not benefit from hearing aids. This mode of hearing rehabilitation permits these children to enter into the mainstream community and achieve their full educational and communicative potential. Our multidisciplinary team includes hearing and speech specialists, an auditory verbal therapist, developmental psychologists and social workers from RCHSD. The program has grown steadily and there are more than 450 CI patients followed by our group and has been a dramatic success as shown by the growth and accomplishment of the team listed below.

CI Team Accomplishments/CI Growth
• 2004: 10 CI surgeries/year 2010: 52 CI surgeries/year
• 2007: 238 CI’s programmed/year 2011: 420 CI’s programmed/year 2012: 440 CI’s programmed
• 2004: <100 patients
• 2011: >300 patients
• FY2012: >400 patients

Aural Rehabilitation Services/Providers
• 2004: 2 Speech Language pathologists
• 2005: 3 Speech Language pathologists
• 2008: 4 Speech Language pathologists
• 2010: 7 Speech Language pathologists
• 2011: 9 Speech Language pathologists, including auditory verbal therapist FY2012: 9 Speech Language pathologists, including auditory verbal therapist

Audiology Services/Providers
• 2004: 1 Cochlear Implant audiologist
• 2005: 3 Cochlear Implant audiologists
• 2009: 4 Cochlear Implant audiologists
• 2011: 5 Cochlear Implant audiologists, one of whom is bilingual and one who has a cochlear implant
• FY2012: 4 Cochlear Implant audiologists, one who has bilateral cochlear implants

PRESENTATIONS/RESEARCH
• Poster–Unresponsiveness to bilateral cochlear implantation on an otherwise healthy deaf child. SENTAC 2005
• Poster–Possible hormonal-induced auditory symptoms in pediatric cochlear implant patients. ASPO 2007
• Poster–How do electrical stapedial reflexes compare with neural response telemetry? International Pediatric Cochlear Implant Meeting 2007
• Poster–Comparison of pediatric cochlear implant patients from a developed and a developing country. International Pediatric Cochlear Implant Meeting 2009
• Poster–Routine assessment indicates appropriate hearing aid benefit. Can we do better? International Pediatric Cochlear Implant Meeting 2008
• Poster–Bimodalism: Does frequency transposition technology have a role? International Pediatric Cochlear Implant Meeting 2009
• Poster–The fine line for indication of hearing aids versus cochlear implants: Can we do better? ASPO 2009
• Poster–Distortions in pubescent cochlear implant patients: Real or phenomenon? AAA 2010

Pediatric Otolaryngology
• IRB approval: Oral Language Capabilities of Monolingual and Bilingual Spanish and English Speaking Children with Cochlear Implants (Carvalho D. principal investigator), 2011
• Listening and Spoken Language Techniques: From Birth to High School. Full day conference put on by RCHSD focusing on listening and spoken language techniques for working with children with cochlear implants. San Diego, CA, 2013

Community/Family Outreach
• Joy of sound
• Parent workshops
  2009: 4 parent workshops
  2010: 3 parent workshops
• Teen group
• Spanish toddler group
• 2009: Cochlear implant team logo created
• 2009: cochlear implant program brochure
• 2010: Cochlear implant video created
• 2012: Development of Audiologist & Speech Pathologist sessions for co-treating children who are not progressing as expected with their cochlear implants. The collaboration between speech pathologists and audiologists is resulting in more accurate program maps in the speech processors, leading to better functional hearing, and ultimately improved speech and language development
• 2012: Trained the Cajon Valley early intervention, pre-school and elementary public school teachers of the deaf, and speech pathologists, in the Auditory Verbal approach to intervention.
• 2013: Music & Literacy Room created

Community Education and Training
• Speech Language Pathology Mentor Program: 3-4x/year
• Educational site visits, 2x/year: Deaf and hard of hearing center based programs
  - Lafayette Elementary
  - Whitman Elementary
  - Reidy Creek Elementary
  - Davila Day School
  - Magnolia Elementary
• February 2008: Educators Workshop—Connecting care for children with cochlear implants: From the clinic to the classroom
• 2009: RCHSD Workshop—Improving early identification of hearing loss
• May 2011: El Centro Workshop—Cochlear implants and outcomes
• August 2011: El Centro Outreach—Best practices in cochlear implants
• 2012: Began parent education series that Heather Rose (AVT) presents monthly at the Ora Lingua School for children with hearing impairments

Community Philanthropic Support
• 2010: Auxiliary–Fuerte Hills Unit Sweet Charity Event: $36,395 to support comprehensive developmental evaluations, multidisciplinary case conferences, post implant therapies (AVT), and speech and language evaluations
• June 2010: $500,000.00 gift pledge from Shirley and Sam Richter to support the Cochlear Implant Program

AWARDS, HONORS AND MAJOR PRESENTATIONS
Marcella Bothwell, MD
• The International Women’s Leadership Association Woman of Outstanding Leadership Award 2013
• Rady School of Management Fellowship Award
• National Practitioner Excellence Award from Board of Governors American Academy of Otolaryngology 2011
• Physician Development Award, Rady Children’s Foundation, 2010

National/Regional Society Activities
• San Diego Academy of Otolaryngology HNS– Immediate Past President
• California Otolaryngology Society–Board of Directors
• American Academy of Otolaryngology–ENTPAC Board of Directors
• Public Relations committee of the American Academy of Otolaryngology Head and Neck Surgery
• American Academy of Otolaryngology/Head and Neck Surgery (AAO.HNS) Millennium Society Life Member
• Rady School of Management Wireless Health Club Chief Operating Officer 2013 – present

Rady Childrens ENTPAC Committee
• Pediatric Airway and Aerodigestive Team, Chair, RCHSD
• Indications and Techniques for Pediatric Tracheostomy. Tracheostomy Day, RCHSD, San Diego, CA, August 2009

Television, Radio and Newspaper
• Hearing loss / Noise Exposure, Women’s Health July, 2013
• Ear Wax is nature’s Defense against Objects and Infections, Union Tribune, May 15, 2012
• San Diego Union Tribune UTTV Internet Addiction Fact or Fiction? September 3, 2013
• San Diego Union Tribune UTTV Autism the Real Story August 27, 2013
• San Diego Union Tribune UTTV Vaccines Save Lives August 20, 2013
• San Diego Union Tribune UTTV Summer Sunscreen Advice July 2, 2013
• San Diego Union Tribune UTTV Hearing 2013 June 25, 2013
• San Diego Union Tribune UTTV HPV Vaccine June 20,2013
• San Diego Union Tribune UTTV Kids Access to Marijuana, June 4, 2013
• San Diego Union Tribune UTTV Oral Cancer HPV Risks Parts One and Two, June 3, 2013
• San Diego Union Tribune UTTV Sports Fractures, April 9, 2013
• San Diego Union Tribune UTTV Scary Food Additives, March 5, 2013
• San Diego Union Tribune UTTV Sports Fractures, April 9, 2013
Women Versus Men in Sports, February 26, 2013
• San Diego Union Tribune UTTV Probing 'Roid' Rage, February 19, 2013
• San Diego Union Tribune UTTV Obesity Myth February 5, 2013
• San Diego Union Tribune UTTV Essence of Anti Oxidants January 29, 2013
• San Diego Union Tribune UTTV Doctor weighs in on Lance Armstrong, January 17, 2013
• San Diego Channel 6, “Before and after you have the flu” what are the best tips to getting better?, January 15, 2013
• San Diego Union Tribune UTTV Danger of Energy Drinks, January 8, 2013
• San Diego Union Tribune UTTV Truth About Blood Clots, January 1, 2013
• San Diego Union Tribune UTTV Chronic Traumatic Encephalopathy in Football players December 4, 2012
• San Diego Union Tribune UTTV 2012 Influenza Season, December 2, 2012
• Dangerous Toys of Store Shelves Press Conference at Rady Children’s Hospital Multiple Local stations and Interview Channel 10, November 26, 2012
• San Diego CW, Personal Music Players and Hearing Loss
• San Diego New 7 NBC, Personal Music Players and Hearing Loss
• Choking and Local Child’s Death, San Diego NBC News, August, 2011
• Choking and Children, San Diego KIUS News, February 22-23, 2010
• Bucky Balls and Ingestion Risk, San Diego CW News, Spring 2011
• Button Battery Ingestion Risk, San Diego Telemundo News, 2010

Daniela Carvalho, MD
• America’s Top Physicians 2013
• Best Doctors in America 2009, 2011
• RCHSD Best to Listen To Award 2009
• San Diego Super Doctors, 2011
• Second place, Clinical category, for the Poster: Survey of thyroglossal duct cyst in a subspecialty referral practice. 24th Annual ASPO (American Society of Pediatric Otolaryngology) Meeting, Seattle, WA, May 2009
• Third place for the poster “The Parental Perception Of Vestibular Impairments In Pediatric Cochlear Implant Patients”, SENTAC (Society for Ear, Nose and Throat Advances in Children) 39th Annual Meeting, Kansas City, MO, December, 2011

National/International Society Activities
American Academy of Otolaryngology Head and Neck Surgery Implantable Hearing Aid Devices Committee, 2009-current
American Society of Pediatric Otolaryngology Chairperson: Long Range/Strategic Planning Committee, 2012-2015 Society for Ear, Nose and Throat Advances in Children Member: Liaison Committee, 2009-2010; Chairperson, Liaison Committee, 2010-current
• Brazilian Association of Otolaryngology, Head-Neck-Facial Surgery - Member, International Committee, 2009-2010
• Member, Educational Committee, 2009-2010
• International Working Group on Endoscopic Ear Surgery Corresponding member, 2010

Rady Children’s Hospital-San Diego
• Section Chief of Otolaryngology, 2009-2010

Rady Children’s Specialists of San Diego, A Medical Foundation
• Contracts Committee
• Physician Retention Committee

Community
JCC Nierman Preschool Health & Safety Committee (2009-2010)

Scientific Presentations
Pediatric caudal septal deviation and the Guillon suture technique: Does it provide better results? Pellman L, Carvalho D, Society of Ear, Nose and Throat Advances in Children 38th Annual Meeting, Cincinnati, OH, December 2010


Hearing Loss in Newborns and Infants, Pediatric Update, Vol. 32, Moderator: Seth Pransky; Discussants: Daniela Carvalho and Natalie Loundon, March 1, 2012


Poster Presentations
Cerebral magnetic resonance imaging and white matter changes in pediatric cochlear implant recipient. Society for Ear, Nose and Throat Advances in Children 37th Annual Meeting, Salt Lake City, UT, December 2009
Bilateral severe inner ear abnormalities in profoundly deaf non-twin siblings. Society for Ear, Nose and Throat Advances in Children 37th Annual Meeting, Salt Lake City, UT, December 2009
High-riding jugular bulb resulting in conductive hearing loss. Society for Ear, Nose and Throat Advances in Children 38th Annual Meeting, Cincinnati, OH, December, 2010

Invited Lectures International:
Sinusitis en niños: Cirugia endoscopica ¿Sí o no? (Sinusitis in Children: Endoscopic surgery, yes or no?). XVI Congreso Estatal de Pediatria, XIX
Jornadas Pediatricas del Colegio de Pediatrias Capitulo Ensenada y Primer Encuentro Internacional de Pediatria, Ensenada, Mexico, June 27 2009
Atualização em otorinopediatria (Update on pediatric otology), International Grand Rounds of the Otolaryngology, Head and Neck Surgery department, UNICAMP (State University of Campinas), Campinas, Brazil, July 2, 2010
International Guest Faculty of the 40th Brazilian Congress of Otorhinolaryngology and Cervico-Facial Surgery, Natal, Brazil, November 23, 2010
- Síndrome de Down e otorrinolaringologia (Down Syndrome and otolaryngology)
- Síndromes genéticas em otorrinolaringologia (Genetic syndromes in otolaryngology)
- Otologia pediátrica (Pediatric otology)
- Avanços em estridor na infância (Advances in stridor)
International Guest Faculty of the I Pediatric Otolaryngology Meeting/ IV Pediatric Airway Meeting of the HCPA, Porto Alegre, RS, Brazil, June 24-26, 2011
- Ruido respiratório: Diagnóstico diferencial (Differential diagnosis in upper respiratory sounds)
- Hemangiomas em via aérea (Airway hemangiomas)
- Painel: Tratamento da surdez neurossensorial (Panel: Treatment of sensorineural), Síndromes genéticas em otorrinolaringologia (Genetic syndromes in otolaryngology)
- Avanços em massas cervicais na infância (Advances in pediatric neck masses)
Imaging and Genetics in Auditory Neuropathy Spectrum Disorder: Is it just a wiring problem? San Diego Sound Wave Symposium, San Diego, CA, October 13, 2012
Update on Pediatric Hearing Loss, Practical Pediatrics, Escondido, CA, October 27, 2012
Lots of Snot and Cough: Is it a Sinus Infection? 15th Annual School Health Leadership Conference (AAP Chapter 3 CA), San Diego, CA, November 3, 2012
Hearing Loss in Children, Early Start Parent group meeting, Lafayette School, San Diego, CA, February 27, 2013

Television, Radio, Newspaper and Web
Rady’s Celebrates Kids with Cochlear Implants, interview by Katie Orr, KPBS, June 15, 2009
Music for Her Ears, Kids News Day San Diego Union Tribune, October 20, 2009
Entrevista Dra. Carvalho, Ipod afecta jovenes (Interview with Dr. Carvalho: Ipod affects teenagers). Interview in Spanish for the TV channel Univision, August 23, 2010
Teens and hearing loss, Interview for Channel 6 San Diego, September 2, 2010
Aumentan casos de sordera en jovenes (Increase in the number of teenagers with hearing loss). Diario San Diego, September 9, 2010
“A criança ruidosa” (The noisy child), lecture given online for the Brazilian Academy of Otolaryngology (ABORL-CCP) “Otorweb”, with live transmission to all Brazil, May 29, 2012
Surge nueva condición médica conocida como ‘sordera del iPod’ (A new medical condition arises known as “iPod deafness”), interview for the program Primer Impacto, Channel Univision, September 5, 2012
“Rady Children’s Hospital Joy of Sound,” interview for the program Good Morning San Diego, TV Channel KUSI, June 20, 2013

Wen Jiang, MD
- Physician Development Award, Rady Children’s Foundation, 2011

Rady Children’s Specialists of San Diego, A Medical Foundation
- IT Committee-Member
- Division of Pediatric Otolaryngology
- Director of Thyroid Disease Center
- Director of Speech Endoscopy Program
- Director of IT
- Director of Invited Lecture Series

Poster Presentations
Radiation exposure in pediatric cystic fibrosis patients with chronic sinusosal disease: a 10 year review. Topp SG, Donaldson C, Jiang W, Carvalho D. American Society of Pediatric Otolaryngology Annual meeting, Chicago, April 30, 2011

Donald B. Kearns, MD
San Diego Super Doctors, 2011
Super Doctors 2012, 2013
Founder’s Award Fresh Start Surgical Gifts, San Diego, CA 2011
U.S. News & World Report Top Doctor 2012-2013
Castle Connolly Top Doctors 2012-2013
Rady Children’s Hospital-San Diego
- Chief Chief Medical Officer
- Board of Trustees (ex-officio)
- Senior Vice president Health Affairs
- Supply and Equipment Task Force, co-chairman
- Co-Chairman, RCHSD Supply and Equipment Task Force 2011-current
- Surgeon in Chief

Other Institutions
- National Association of Children’s Hospitals and Related Institutions
- Hospital De Las Californias Bina- tional Committee
- Organization of Children’s Hospitals Surgeons in Chiefs
- Make a Wish, Medical Advisory Board

University Committees
University of California San Diego:
- Joint Risk Management Committee, Chairman
Department of Surgery Credentials ad hoc Committee, Chairman
Academic Advisory Committee
Neonatology Search Committee, Chairman
Skaggs School of Pharmacy Dean Search Committee
Neonatology Chief Search Committee
Pediatrie Hepatology Search Committee
Quality and Innovation Chief Search Committee
Cardiac Surgery Search Committee
Transplant Cardiology Search Committee
Pedia trie GI Chief Search Committee
Surgeon in Chief Search Committee
Transplant Cardiology Search Committee
Pediatric GI Chief Search Committee
Cardiac Surgery Search Committee
Pediatric Hepatology Search Committee
Neonatology Chief Search Committee
Skaggs School of Pharmacy Dean Search Committee

Presentations
Medical Practice Foundation Update. UCSD Department of Surgery, La Jolla, CA, 2010
The Medical Practice Foundation: A new model for pediatric healthcare.
Leadership Development Institute, RCHSD, San Diego, CA, 2010
An ergonomics survey study of the American Society of Pediatric Otolaryngology Members. Cavanagh J, Hong P, Kearns D. Canadian Society of Otolaryngology, Victoria, British Columbia, Canada, May 2011
Discovery at RCHSD. Leadership Development Institute, RCHSD, San Diego, CA, 2011
Pediatric disaster surge training, San Diego County Healthcare Disaster Council, San Diego, CA, 2011

Business Domain Curriculum. UCSD Pediatric Hospital Medicine Fellowship Course, UCSD Department of Pediatrics, San Diego, CA, 2011
Physician/Hospital Alignment in Pediatrics, Panelist for Webinar in Conjunction with ECG Management Consultants, 2012
Pediatric Airway Obstruction, Scripps Mercy Pediatric Grand Rounds, San Diego, CA, 2012
Stridor in Children, Scripps Mercy Pediatric Grand Rounds, San Diego, CA, 2012
Medical Practice Foundation Update. Leadership Development Institute, Rady Children’s Hospital and Health Center. San Diego, CA, 2012

Shelby Leuin, MD
National Society Activities
American Academy of Otolaryngology 10/2012-9/14 Member, Pediatric Otolaryngology Education Committee

Presentations
Pediatric Salivary Gland Tumors. Lago D, Leuin SC, Pransky S. Poster presenta-
tion at the Society of Ear, Nose, and Throat Advances in Children Annual Meeting Charleston, SC on November 30-December 2, 2012
Anosmia in the Pediatric Population. Lago D, Leuin SC, Pransky S. Poster presenta-
tion at the American Society of Pediatric Otolaryngology Annual Meeting San Diego, CA, April 20-22, 2012
Hoarseness as a Presenting Sign of Kawasaki Disease. Shanbhag S, Burns JC, Tremoulet AH, Sato YZ, Lago D, Leuin SC. Poster presentation at the 10th International Kawasaki Disease Symposium in Kyoto, Japan, February 7-10, 2012

Invited Lectures
Pediatric Neck Masses. Presented at the Invited Speaker Conference at Rady Children’s Hospital, September 21, 2012
Pediatric Neck Masses: The good, the bad, and the ugly. Invited Lecture Pediatric Grand Rounds, Rady Children’s Hospital, August 24, 2012

Anthony Magit, MD
• Physician Development Award, Rady Children’s Foundation, 2010
• Received MPH from Johns Hopkins Bloomberg School of Public Health May, 2012. Master’s thesis: Basilar Skull Fractures in Infants and Children

Shelby Leuin, MD
National Society Activities
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Poster Presentations
Pediatric Salivary Gland Tumors. Lago D, Leuin SC, Pransky S. Poster presenta-
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Hoarseness as a Presenting Sign of Kawasaki Disease. Shanbhag S, Burns JC, Tremoulet AH, Sato YZ, Lago D, Leuin SC. Poster presentation at the 10th International Kawasaki Disease Symposium in Kyoto, Japan, February 7-10, 2012

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Shelby Leuin, MD
National Society Activities
American Academy of Otolaryngology 10/2012-9/14 Member, Pediatric Otolaryngology Education Committee

Poster Presentations
Pediatric Salivary Gland Tumors. Lago D, Leuin SC, Pransky S. Poster presenta-
• American Society of Pediatric Otolaryngology: Member Vascular Malformations Task Force
• American Academy of Otolaryngology-Head and Neck Surgery: Member Guidelines Panel
• American Academy of Otolaryngology-Head and Neck Surgery, Member Clinical Guideline Development Project

**Rady Children’s Hospital-San Diego**
- Immediate past Chief of Staff
- Medical Staff Executive Board
- Chairman, Credentials Committee (2010)
- Chairman, Institutional Review Board
- Co-Chairperson Quality, Safety and Medical Affairs Committee
- Chairman, Bylaws Committee
- Member, Board of Governors Medical Practice Foundation
- Member, Vascular Lesions Clinic

**Rady Children’s Specialists of San Diego, A Medical Foundation**
- Member, Clinical Research Advisory Committee
- Vice-Chairman, Academic Affairs and Research Committee

University of California San Diego
- Member, UCSD Department of Surgery Research Advisory Committee
- Member, UCSD Pediatric Human Subjects Protection Program
- Co-director, UCSD medical school medical student mentor program
- Member, UCSD pediatric Human Subjects Protection Program (IRB) committee
- Mentor, UCSD Health Mentors Program

**San Diego County/Regional Service**
- Elected San Diego County Medical Society Board of Directors
- Volunteer, San Diego City Schools Hearing Program
- Volunteer, Fresh Start Surgical Gifts

**State of California Service**
- Member, Board of Directors Children’s Specialty Care Coalition

**Scientific Presentations**
- Chronic sinusitis in children.
- Stridor in infants and children.
- Castle Connolly Top Doctors 2012-2013
- Ray Skoglund Excellence in Teaching Award RCHSD 2011
- Chevalier Jackson Award, for Outstanding Achievement and accomplishment in Bronchoesophagology, from The American Broncho-Esophagological Association 2013

**National/Regional Society Activities**
- Society of Ear, Nose and Throat Advances in Children, Member Program Committee for National Annual Meeting 2011
- Recurrent Respiratory Papillomatosis Task Force, Member, American Society Pediatric Otolaryngology

**Rady Children’s Hospital-San Diego**
- Director, Satellite Services
- RCHSD CME Director Practical Pediatrics 2001-present
- Member, Marketing Committee
- Member, Regional Task Force Committee
- Member, Children Health Network Marketing Committee
- Surgeon in Chief, Search Committee 2013-
- Network Governance Committee 2013-
- Service Line Development Committee 2013-

**Rady Children’s Specialists of San Diego, A Medical Foundation**
- Director, Pediatric Otolaryngology Department
- Member, Executive Board of Directors
- Director, Clinical Practice Committee
- Director, Clinical Operations Committee
- Vice Chair, Marketing Committee
- Pulmonary Division Physician Search committee 2012-
- Space Planning Committee 2013-

**Scientific Presentations**


- Trying to understand PFAPA and its management: Preliminary results of a prospective clinicopathologic study. Society for Ear, Nose and Throat Advances in Children 37th Annual Meeting, Salt Lake City, UT December 6, 2009


Poster Presentations
Button battery ingestion in the pediatric population. American Academy of Otolaryngology Annual Meeting, San Diego, CA, October 4-7, 2009
Management of ankyloglossia in infants with compromised feeding. Society for Ear, Nose and Throat Advances in Children 37th Annual Meeting, Salt Lake City, UT, December 3-6, 2009
Vocal cord paralysis in infants with tracheoesophageal fistulas. Society for Ear, Nose and Throat Advances in Children 38th Annual Meeting, Cincinnati, OH December 2, 2010

Invited Lectures
International
Visiting Professor, LXIV Annual Mexican Congress of Otolaryngology, Veracruz, Mexico, July 22-25, 2009
- Rhinosinusitis in Children: Diagnosis and Management
- The Draining Ear in Children
- Round table: Management of Surgical Complications in Pediatric Otolaryngology
- Human Papilloma Virus: Present and Future
- Stridor in Infancy: Diagnosis and Management
Invited Lecture, Human papilloma virus, present and future management issues. University of Montreal, Montreal, Canada, August 3, 2009
3rd Annual McGill Auditory Sciences Laboratory Guest Lectureship, Montreal Children's Hospital, Montreal, Canada, August 4, 2009
Invited Professor, X European Society of Pediatric Otolaryngology. Pamplona, Spain, June 5-8, 2010 Round table: Voice Disorders: Papillomatosis
Panel Instructor/Moderator, European Society of Pediatric Otolaryngology 11th International Congress. Handling the Patient Load in Different Societies. Amsterdam, Netherlands, May 20-23, 2012
Panel Chairman, European Society of Pediatric Otolaryngology 11th International Congress. Effective Teaching in Pediatric Otorhinolaryngology. Amsterdam, Netherlands, May 20-23, 2012
Guest Professor, LXIX Chilean Congress of Otorhinolaryngology, Concepcion, Chile November 7-10, 2012. Presentations:
1) Chronic Sinusitis in Children: Role of the Turbinates
2) Management of Nasal Obstruction of the Newborn
3) Update in Otitis Media 2012
4) Update in the Treatment of Subglottic Hemangiomata 2012
5) Alternatives in Management of Airway Endoscopy
6) State of the Art Treatment of Recurrent Respiratory Papillomatosis 2012
7) Round table: Gliotic and Subglottic Stenosis in Children
Guest Professor, Controversies in Pediatric Otolaryngology. Department of Otolaryngology Tel Aviv Sourasky Medical Center, Dana Children's Hospital. January 18, 2013
1) Aerodigestive Tract Foreign Bodies: The New and the Old
2) Panel Moderator-presentation: The Legacy of Tympanostomy Tubes
3) Pediatric Airway Panel; Case Management
Faculty, 34th National Primary Care Nurse Practitioner Symposium Copper Mountain, CO, July 16-19, 2009
Foreign Bodies of the Ear, Nose and Throat.
Faculty, Ultimate Colorado Mid-Winter Meeting: An Otolaryngology Update. Finesse in pediatric bronchoesophagology for the general otolaryngologist. Vail, CO, Jan 24-28, 2010
Faculty, Western Section of Pediatric Otolaryngology (WESPO) Annual Meeting. Alternatives in endoscopic airway management. UCLA Medical Center Los Angeles, CA, March 13, 2010
Faculty, 67th Annual Brennemann Memorial Lectures; Los Angeles Pediatric Society, Anaheim, CA, October 7-10, 2010
- The Green Runny Nose-Is It Really Sinusitis
- Hearing Loss in Infants and Newborns
- Neck Masses-Differentiating Horses From Zebras
- Round Table sessions: Stridor: Assessing the Airway from the Nose to the Lung
Faculty, Pediatric Potpourri State of the Art 2011. AAP, California District IX, Chapter 2, Children’s Hospital Los Angeles Meeting, Maui, HI, February 12-18, 2011
- Neck Masses-Horses and Zebras
- The Runny Nose-Chronic Sinusitis and Beyond
- Foreign Bodies of the Aerodigestive Tract- What Must I Discuss with Parents
- Update on Otorrhea-2011
- Update on Otitis media-2011
- Stridor: From the nose to the lung (Lunchtime Seminar, repeated three times)
Panel Moderator, Pediatric Airway Nightmares. American Society of Pediatric Otolaryngology 26th Annual Meeting, Chicago, IL, April 29, 2011
1) Pediatric Stridor and Airway Management
2) Chronic Sinusitis in Children
3) Update of recurrent respiratory Papillomatosis 2013
4) Update on Otitis Media and Thoughts on Tympanostomy Tubes 2013

PUBLICATIONS


Kearns DB, Corsten G. Tracheostomy procedure. *Pediatric Otolaryngology Education Committee, American Academy of Otolaryngology*

**Publications in Press**


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**Books and Book Chapters**


**Publications and Book Chapters**


**Editor, Springer-Verlag, Berlin Heidelberg, 2012.**

**Publications in Press**


Ennisman L, Philippon MJ, Lertwanich P, Pennock AT, Herzog MM, Briggs KK,


Ho CP. Relationship between femoral anteversion and findings in hips with femoroacetabular impingement. Orthopedics, 2013 March; 36 (3): e293-300.


The Pathology Division is responsible for all anatomic and clinical pathology diagnostic services and the educational programs in pediatric pathology for medical students, residents, and fellows. Additionally, the pathology staff contributes to and supports an array of activities including professional societies, public service agencies, and media productions. The pathologists are actively engaged in collaborative research occurring within the institution, at the University of California, San Diego (UC San Diego) School of Medicine, and with investigators from other institutions around the country. The pathologists are also intimately involved in the day-to-day administrative management of the laboratories.
FACULTY
Robert O. Newbury, MD, Director,
Clinical Professor of Pathology
Henry F. Krous, MD, Director of
Pathology Research, Clinical
Professor of Pathology
Eric Breisch, PhD, Associate Clinical
Professor of Surgery
Denise Malicki, MD, PhD, Clinical
Professor of Pathology
Katayoon Shayan, MD, Associate
Clinical Professor of Pathology
Linda Ellis, MD, Associate Clinical
Professor of Pathology

POSTDOCTORAL FELLOWS AND RESIDENTS
Shouying Du
Don Xu
Parham Minoo
Nilesh Dharajiya
Alison Carrigg
Mariah Baughn
Michele McElroy
Maria Canepa
Karra Muller
Boris Shlopov
David Li
John Nguyen
Hyun Chung
Nicole Saviano
Patrick Sweet
Rebecca Johnson
Dorothy Wong
Fang Wen
Peter Kolbalka
Jim Valentine
Evelyn Potochny

CLINICAL ACTIVITIES
INPATIENT/OUTPATIENT
• The Pathology Division successfully
maintained licensure by the State of
California and Federal Drug Admin-
istration (FDA), is certified by CLIA,
and maintained accreditations from
the College of American Patholo-
gists, American Association of Blood
Banks, and the Joint Commission on
Accreditation of Hospital Organiza-
tions (JCAHO).
• The pathologists serve as CAP inspec-
tors of pathology departments at other
children’s hospitals in the U.S.
• Annually, the clinical laboratory per-
forms more than 1,500,000 tests, and
transfuses over approximately 8700
blood products to approximately 2200
patients.
• Diagnostic services include bacterial and fungal cultures, molecular diagnostic testing for infectious diseases, routine chemistry, sweat chloride testing, glucose tolerance testing, serology, urinalysis, hematology, selected coagulation studies, toxicology, and blood banking.

• The Division uses polymerase chain reaction (PCR) to identify enteroviruses, HSV, CMV, and Bordetella pertussis, which serves not only Rady Children’s Hospital-San Diego (RCHSD), but other community hospitals including Naval Medical Center San Diego, Paradise Valley, Sharp Memorial, UC San Diego, Tri-City, Palomar/Pomerado, Alvarado, Grossmont, and Naval Hospital Camp Pendleton.

• The Division also participates in the Drug Endangered Children (DEC) Forensic Pathology Program for detecting drug exposure in children.

• The Division provided diagnostic services on approximately 55,000 separate surgical specimens from approximately 13,000 accessioned cases.

• Greater than 100 new malignancies were identified annually.

• The pathologists performed approximately 300 frozen section diagnoses from over 200 patients.

• Approximately 20 postmortem examinations are performed annually and the findings of many of them are presented at various medical staff conferences.

• Electron microscopy was performed on approximately 200 specimens.

• The Division continues to provide electron microscopy services to Naval Medical Center San Diego.

• The Division also provides renal biopsy consultations and interpretations and technical support to some hospitals in San Diego County.

RESEARCH ACTIVITIES

Robert O. Newbury, MD
Eosinophilic esophagitis
Tufting enteropathy

Hart Isaacs, Jr., MD
Neoplasia of the fetus and early childhood

Eric Breisch, PhD
Morphometry of infant cranium and dura
Foreign body response to spinal implants

Henry F. Krous, MD
Sudden infant death syndrome (SIDS)
Sudden unexplained death in childhood (SUDC)
Sudden death in infancy and childhood

TEACHING ACTIVITIES

The pathologists participate in numerous educational activities including conferences and lectures within and across departments and institutions. They are:

• Tumor Board
• Neuro-Oncology Tumor Board
• Neuropathology Conference
• Otolaryngology Conference
• Urology Conference
• Orthopedics Conference
• Gastrointestinal Pathology and Hepatic Pathology Conference
• Renal Pathology Conference
• UC San Diego Pediatric Department CPCs
• Morbidity and Mortality Conferences
• UC San Diego SOM 208 Human Disease Course
• UC San Diego SOM 213 Histology Course
• UC San Diego SOM first year problem based learning curriculum
• UC San Diego Clinical Laboratory Scientist program lectures
• CME course for Dermatologic Surgeons
• Superficial Anatomy and Surgery of the Head and Neck
• UC San Diego SOM medical students Gross Anatomy
• Head and Neck Anatomy Course, Otolaryngology and Oral and Maxillofacial Surgery Residents
• Surgery/Radiology/Pathology Conference
• Neuromuscular Pathology Conference

The pathologists also teach UC San Diego surgical pathology fellows, residents, medical students and Naval Medical Center pathology residents who rotate through the department.

AWARDS, HONORS AND MAJOR PRESENTATIONS

Henry F. Krous, MD
SIDS and Kids (Australia) Award, Baltimore, MD, October 5, 2012
California Sudden Infant Death Council Syndrome Advisory Council SIDS Lifetime Achievement Award. October 30, 2012, Los Angeles, CA
The Soria Moria Conference Senior Investigator Award. Oslo, Norway, May 28, 2012
Star of the Decade Award, The SUDC Program. New York, NY, April 14, 2012
Guild for Infant Survival Orange County (CA) Achievement Award, Santa Ana, CA, 2012
Rady Children’s Hospital Pediatric Pathology Lifetime Achievement Award, San Diego, CA, 2012

Eric Breisch, PhD
AAD Annual Meeting 2012 San Diego Anatomist of the Head and Neck for Dermatologic Surgeons
AAD Annual Meeting 2013 Miami Anatomist of the Head and Neck for Dermatologic Surgeons
UCSD SOM Human Anatomy 2012. Superficial Anatomy of the Head and Neck

Robert O. Newbury, MD
Eosinophilic Esophagitis, an Update. UCSD School of Medicine, Pathology Research Lecture Series, December 5, 2011
MAJOR GOALS & PLANS

- Provide anatomic and clinical pathology consultations and services to all of the clinical programs at RCHSD
- Continue to moderate and/or support medical staff educational, clinicopathologic, and quality assurance conferences
- Continue to serve as the pediatric pathology training experience for medical students, pathology residents, and surgical pathology fellows
- Continue to support extramural and community activities involving professional societies and governmental agencies
- Continue collaborative efforts with investigators, particularly in dermatology, gastroenterology, and hematology/oncology
Denise Malicki, MD, PhD
Pediatric Pathology Osler Pathology Board Review Course, Long Beach, CA, February 26, 2013
Hart Isaacs, Jr., MD
Elected Fellow, Royal Society of Medicine, London, July 1, 2011

PUBLICATIONS

BOOKS
Wenger DR. Is there a role for acetabular
Vitale MG, Riedel MD, Glotzbecker MP, Pennock AT, Steadman JR. Outcomes
Forensic Science, Medicine and Pathology-
Pediatric and Developmental Pathology
Indian Journal of Pathology
World Journal of Pediatrics
Acta Paediatrica
Ultrasound in Obstetrics and Gynecology
Journal of Pediatric Hematology
Pediatric Dermatology
Obstetrics and Gynecology
American Journal of Perinatology
Journal of Pediatric Surgery
JOURNAL REVIEW
Monazzam S, Bomar JD, Cidambi K, Kruk
Monazzam S, Bomar JD, Dwek JR, Ho -
Chambers HG. CORR Insights: Does
Proximal Rectus Femoris Release In-
fluence Kinematics In Patients With
Cerebral Palsy and Stiff Knee Gait? 
Chambers HG. Toxins for toe-walking: 
should they be used? J Bone Joint Surg 
Demura S, Yaszay B, Bastrom TP, Carreau 
J, Newton PO. Is decomposition pre-
operatively a risk in Lenke 1C curves?
Spine (Phil Pa 1976), 2013 May 15; 38 
Edmonds EW, Polouisky J. A review of 
knowledge in osteochondritis disse-
cans: 123 years of minimal evolution 
from Konig to the ROCK study group.
Clin Orthop Relat Res, 2013 Apr; 471 
Edmonds EW, Shea KG. Osteochondrit-
dis dissecan: editorial comment. Clin 
Orthop Relat Res, 2013 Apr; 471 (4): 
1105-6.
Edmonds EW, Templeton KJ. Childhood 
obesity and musculoskeletal problems: 
editorial comment. Clin Orthop Relat 
Eisner EA, Roocroft JH, Moor MA, Ed-
monds EW. Partial rotator cuff tears in 
adolescents: factors affecting outcomes. 
Ejnisman L, Philippin MJ, Lertwanich P, 
Pennock AT, Herzog MM, Briggs KK, 
Ho CP. Relationship between femoral 
anteversion and findings in hips with 
 femoracetabular impingement. Ortho-
pedics, 2013 March; 36 (3): e293-300.
Fornari ED, Suszter M, Roocroft J, Bastrom 
T, Edmonds EW, Schlechter J. Childhood 
obesity as a risk factor for lateral 
condyle fractures over supracondylar 
humerus fractures. Clin Orthop Relat 
Gargas J, Yaszay B, Kruk P, Bastrom T, 
Shelldington D, Khanna S. An analysis 
of cervical spine magnetic resonance 
 imaging findings after normal com-
puted tomographic imaging findings 
in pediatric trauma patients: ten-year 
experience of a level I pediatric trauma 
center. J Trauma Acute Care Surg, 
Gottschalk HP, Bastrom TP, Edmonds EW. 
Reliability of internal oblique elbow ra-
diographs for measuring displacement 
of medial epicondyle humerus frac-
tures: a cadaveric study. J Pediatr Or-
Hosalkar HS, Pandya NK, Wenger DR. 
What’s new in pediatric orthopaedics. 
J Bone Joint Surg Am, 2013 Feb; 95 (4): 
377-83.
Ilgenfritz RM, Yaszay B, Bastrom TP, 
Newton, PO. Lenke 1C and 5C spinal 
deforome fused selectively: 5-year 
outcomes of the uninstrumented 
compensatory curves. Spine (Phil Pa 
Lark RK, Yaszay B, Bastrom TP, Newton 
PO. Adding thoracic fusion levels in 
Lenke 5 curves: risks and benefits. 
Spine (Phil Pa 1976), 2013 Jan 15; 38 
Millett PJ, Horan MP, Pennock AT, Rios 
D. Comprehensive Arthroscopic 
Management (CAM) procedure: clinical 
results of a joint-preserving ar-
throscopic treatment for young, active 
patients with advanced shoulder os-
teoarthritis. Arthroscopy, 2013 March; 
Monazazz S, Bomar JD, Dwek JR, Ho-
salkar HS, Pennock AT. Development 
and prevalence of femoracetabular 
impingement-associated morphology 
in a paediatric and adolescent popula-
tion: a CT study of 225 patients. Bone 
Newton PO, Marks MC, Bastrom TP, 
Betz R, Clements D, Lonner B, Craw-
ford A, Shuffelarger H, O’Brien M, 
Yaszay B. Surgical treatment of Lenke 
1 main thoracic idiopathic scoliosis: 
results of a prospective, multicenter 
study. Spine (Phil Pa 1976), 2013 Feb 
The Division of Pediatric Surgery at Rady Children’s Specialists of San Diego (RCSSD) provides care to infants, children and adolescents with surgical diagnoses. These diagnoses include congenital anomalies, abdominal and thoracic surgical diseases, solid tumors, organ transplantation and trauma. The Division provides surgical operative care for approximately 3,000 patients a year. The Division provides hospital and office consultations and prenatal consultations for congenital disorders. All members of our board are certified in Pediatric and General Surgery. The Division of Pediatric Surgery continues to be a leader in minimally invasive procedures for children. Greater than ninety-eight percent of appendectomies are performed laparoscopically.

Dr. Timothy J. Fairbanks, has continued to emphasize single site and minimally invasive procedures which result in essentially scarless operations. Advanced minimally invasive procedures are routinely performed in the chest and abdominal cavities on patients of all sizes. Difficult surgical procedures such as partial splenectomies, adrenalectomies and ovarian procedures can be performed with the benefits of less scarring, less pain and quicker return to full activities. Dr. Fairbanks has also helped organize the Division’s efforts to initiate a Pediatric Surgical fellowship training program. He is the Program Director for the training program.
Dr. Nicholas Saenz has special expertise and interest in Pediatric Surgical Oncology. He is a member of the Society of Surgical Oncology. He is the representative for the American College of Surgeons, and a member of the Emergency Medical Services for Children Trauma Advisory Committee for California.

Dr. Karen Kling has been instrumental in designing, developing and implementing surgical applications for EPIC, the electronic health record at RCHSD.

Dr. Stephen Bickler is an international expert in establishing pediatric surgical care in developing nations. He is a leader for the multi-center NIH grant supporting these efforts.

Dr. Julia Grabowski joined the Division in September 2012. She is a skilled pediatric surgeon and is collaborating with Dr. Chiang on an EPIC-based research project regarding appendicitis & regarding ovarian cysts. She is the Assistant Training Program Director.

Dr. Mary Hilfiker is the Trauma Medical Director & Division Director.

RCHSD is the only American College of Surgeons nationally designated Level 1 pediatric trauma center in San Diego and Imperial counties. The hospital and division also receive injured children from the surrounding areas including Riverside County.

The trauma center cares for over 1000 patients a year who have been designated as trauma patients. Since the inception of the trauma system in San Diego in 1984, the trauma service at RCHSD has cared for approximately 30,000 children.

The trauma service is nationally recognized for disaster preparedness and planning and is working with the CDC on disaster plans.

**FACULTY**

Stephen W. Bickler, MD, Clinical Professor of Surgery and Pediatrics, UCSD

Timothy Fairbanks, MD, Assistant Professor of Surgery, UCSD

Julia E. Grabowski, MD, Assistant Professor of Surgery, UCSD

Mary L. Hilfiker, PhD, MD, MMM, Clinical Professor of Surgery, UCSD, Division Director, Trauma Medical Director

Karen M. Kling, MD, Associate Professor of Surgery, UCSD

Nicholas C. Saenz, MD, Clinical Professor of Surgery, UCSD

Janelle De la Vina, NP
CLINICAL ACTIVITIES

INPATIENT/OUTPATIENT

Trauma
The top three causes of serious injury to children seen in San Diego are falls, motor vehicle crashes and pedestrian versus motor vehicle injuries.
In addition to clinical care, the trauma service members work to help families prevent injuries by sharing current trends via the RCHSD website, participating in media events and distributing educational materials such as one-page information sheets on a variety of injury prevention topics. Areas of special concern and focus for the past few years include of pedestrians struck by motor vehicles, drowning and children injured by falling televisions.
The trauma center was re-certified by the American College of Surgeons as a Level 1 Pediatric Trauma Center in 2012.

Pediatric Surgery
The Division work closely with the oncologists in the care of children with cancer and with the neonatologists and perinatologists in the care of newborns with congenital anomalies.
Division members are always available to provide immediate care for trauma patients and any urgent or emergent surgical problems. They are also involved in teaching the surgical residents, pediatric residents, medical students and nurses. We are actively involved in establishing an ACGME accredited pediatric surgery training program. In addition, general surgery residents from UCSD and The Naval Medical center are joining us to provide immediate care for trauma patients and any urgent or emergent surgical procedures.

RESEARCH ACTIVITIES

Dr. Bickler does research involving disease patterns developed and developing countries.
The Trauma Service conducts multiple epidemiologic studies and is actively involved in research projects with the Intensive Care and Emergency Medicine Fellows. These include research regarding the value of repeat imaging for head injuries, frequency of repeat imaging and use of hypertonic saline in concussion and complications of hypertonic saline use.

TEACHING ACTIVITIES

The Division of Pediatric Surgery has initiated a Pediatric Surgery fellowship training program through the UCSD Graduate Medical Education office. This program has begun training our first fellow, Katherine P. Davenport, MD. The training program is in the process of obtaining ACGME approval and hopes to train one fellow per year. The process of becoming a Pediatric Surgeon is one of the most rigorous in all of medical training. We look forward to training future pediatric surgeons.
The educational program within the Division of Pediatric Surgery has been enhanced over the last few years. General Surgery Residents from both the UCSD and Navy General Surgery departments rotate on service for a full year. There is a regular basic science conference weekly. The general surgery service has at least one case conference per week and occasionally more. Multidisciplinary conferences with specialties such as Neonatology, Pathology and Radiology now occur and allow organized communication about mutual patients. Dr. Nicholas Saenz is a site clerkship mentor for 3rd year medical students.
All of the Surgery Division members participate in teaching residents and students from UCSD in addition to providing education for nursing and staff at RCHSD. All are members of RCSSD with faculty appointments at UCSD.
All of the Surgery Division members are trauma surgeons also and involved in ongoing education and performance improvement. They also collaborate with adult trauma centers in San Diego and the County of San Diego Emergency Medical Services in these endeavors.
Dr. Stephen Bickler is a consultant for the World Health Organization and travels internationally to teach and care for children with surgical disorders.

AWARDS, HONORS AND MAJOR PRESENTATIONS

Stephen W. Bickler, MD
Kieswetter Lectureship, University of Pittsburgh Children’s Hospital, 2011
Oregon Health Science University, Department of Surgery, Alumnus of the Year, 2012
Invited Speaker Royal Australasian College of Surgeons, Melbourne 2012
Fulbright Scholarship, Mozambique, 2013
Invited Speaker International Surgical Society, Helsinki, Finland, August 2013
Election to American Surgical Association

Nicholas C. Saenz, MD
Oncology Fellow Lecture Series, 2009
ALS graduate training class, 2009, 2010, 2011
Best Doctor in San Diego, 2011, 2013
EMS-C California Trauma Advisory Committee

Karen M. Kling, MD
American’s Top Surgeons 2008, 2010
Cares Award, 2011
Course Director Pediatric Surgery Sub-Internship 2007-present
Champion–Pediatric Surgery block 2006-present (core medical school surgical clerkship)
Champion–Pediatric Surgery resident education 2006-present
Pediatric IBD Consortium 2009-present
EPIC/Information Technology Committee 2008-present
Pediatric IBD (inflammatory bowel disease) Consortium to address and evaluate potential avenues for investigation
Abdominal Solid Organ Transplant Committee 2006-present

Mary L. Hilfiker, MD
Board of Directors, Trauma Center Association of America
Board of Directors, ACS-PA, PAC Board
Timothy J. Fairbanks, MD
Top Docs San Diego Magazine 2012, 2013
Best Doctor 2013
Pediatric Surgery Fellowship Program
Director 2012 - Current
Penetrating Neck Trauma, San Diego Pediatric Emergency Medicine Regional Conference, February 14, 2013
Surgical Repair of Chest and Abdominal Abnormalities, Perinatal Diagnosis Conference 2013

PUBLICATIONS


Books:
The Division of Pediatric Urology focuses on all aspects of genitourinary disorders encountered in children from birth through young adulthood. These varied conditions encompass treatment with both medical and surgical regimens.

The Division has been honored since 2009 by being ranked in Pediatric Urology care by U.S. News & World Report’s “America’s Best Children’s Hospital.” Its most recent ranking in 2013 was #10 and continues to be the highest ranked program in the state of California; thus, reinforcing the world class care our patients are receiving at Rady Children’s Hospital-San Diego (RCHSD) in conjunction with Rady Children’s Specialists of San Diego (RCSSD).
FACULTY
Nicholas M. Holmes, MD, MBA Chief, Division of Pediatric Urology, Clinical Professor of Surgery, UCSD
George W. Kaplan, MD, MS, FAAP, FACS, Distinguished Clinical Professor of Surgery and Pediatrics, UCSD
Madhu Alagiri, MD, Clinical Professor of Surgery, UCSD
George Chiang, MD, Associate Clinical Professor of Surgery, UCSD
Sarah Marietti, MD, Assistant Clinical Professor of Surgery, UCSD

FELLOWS
Puneeta Ramachandra, MD, Fellow, Pediatric Urology (2011-2013)
Gina Cambareri, MD, Fellow Pediatric Urology (2013-2015)

NURSE PRACTITIONERS
Ann Marie Berger Finley, MSN, FNP
Queyn Nguyen, CPNP

CLINICAL ACTIVITIES
INPATIENT/OUTPATIENT
Over 9,000 patient visits per year were conducted in the Pediatric Urology Clinic in its main office on the campus of RCHSD and at its satellite clinics in Encinitas, Escondido, North County Coastal and Murrieta during 2011-2013. We have expanded our multi-disciplinary clinics besides the Spinal Defects Clinic which has been in existent for many years. In addition, we have created a Stone Clinic with our Nephrology colleagues which focus on the medical and surgical management of urinary stone disease. During the same time frame, over 3,000 surgical procedures per year were performed.

RESEARCH ACTIVITIES
Dr. Chiang is leading the way for clinical research in our Division. As part of our commitment to investigating cutting edge therapeutics and improving the quality of care for our patients, we are actively involved in several clinical trials. By partnering with the biomedical industry, we are investigating novel forms of medications for children with neurogenic bladder. Two clinical trials involving new medical therapy to treat neurogenic detrusor overactivity in children performing intermittent catheterization were completed in 2013. He served as the principal Investigator in a study entitled, "A Multi-Center, Double-Blind, Place-
bo-Controlled, Dose-Titration Study Evaluating the Efficacy, Safety, Pharmacodynamics and Pharmacokinetics of Oxybutynin Chloride Topical Gel for the Treatment of Detrusor Overactivity Associated with a Neurological Condition in Pediatric.

Also, Dr. Chiang received UCSD Academic Senate Research Grant of $10,000 for basic science project involving the development of minimally invasive micturition animal model. He also received additional grant funding of $10,000 from RCSSD Physician’s Development Fund for research relating to strategic collaboration project for inquiry of pediatric electronic health information systems.

Dr. Marietti in conjunction with Dr. Holmes are creating and designing a database to retrospectively and prospectively categorize patients who have vesicoureteral reflux. Specifically, they hope to address issues concerning surgical outcomes and quality indicators in the treatment of this disease.

TEACHING ACTIVITIES
The Division of Pediatric Urology continues our commitment to graduate medical education training with its ACGME accredited fellowship. Since its inception in 1985, Dr. George Kaplan has been and continues to act as program director. Dr. Puneeta Ramachandra has completed her fellowship in June 2013 and has joined the faculty at Children’s Hospital Central California. Dr. Gina Cambareri is our current clinical fellow who began the fellowship in July 2013.

The Division of Urology participates in the following teaching activities:

- Urology residents for the Naval Medical Center San Diego (NMCSD) and UCSD rotate on the service throughout the academic year
- Monthly Clinical Case Grand Rounds held jointly with NMCSD, UCSD and RCHSD
- Biweekly Uroradiology conference with radiology, pediatric urology and pediatric nephrology faculty
- Biweekly tutorial sessions for residents, fellows and faculty in pediatric urology
- Monthly Uropathology conference with pathology and pediatric urology faculty
- Monthly journal club with review of the pediatric urology literature
- Annual Grand Rounds held by the UCSD Division of Urology for the greater San Diego urologic community
- Participation in the "Noon Lecture Series" for UCSD Department of Pediatric residents and trainees

In addition, Drs. Holmes and Chiang have continued to support undergraduate and medical students via Dr. Holmes’ participation in the Health Professionals Mentor Program and Dr. Chiang’s participation in Project Nicaragua.

AWARDS, HONORS AND MAJOR PRESENTATIONS
Nicholas M. Holmes, MD, MBA
Reviewer for the Journal of Urology, Section of Pediatric Urology
Member, Quality Improvement Committee, RCHSD
Member, Medical Staff Executive Committee, RCHSD
Member, Kidney Transplant Committee, RCHSD
Member, Surgery Executive Committee, RCHSD
Member, Foundation Board of Trustees, RCHSD
Member, Quality, Safety and Medical Affairs Committee, RCHSD
Member, Clinical Information Advisory Council, RCHSD
Chair, Department of Surgery, RCHSD
Chief, Section of Urology, RCHSD
Medical Director, Clinical Documentation Improvement and ICD-10 Transition, RCHSD
Medical Director, Surgical Services, RCHSD
Chair, Joint Quality/Credentialing Committee RCSSD
Member, Board of Governance Committee, RCSSD
Member, Board of Directors, YMCA-Youth and Family Services
American Health Information Management Association (AHIMA) ICD-10 Summit Assuring a Solid ICD-10 Foundation through a Physician Engagement in Clinical Documentation, April 16, 2012, Baltimore, MD
George W. Kaplan, MD, MS, FAAP, FACS
Reviewer for the Journal of Urology, Pediatrics, and Journal of Pediatric Surgery
Chair, Transplant Committee, RCHSD
Examiner, American Board of Urology
Selected for inclusion in Who’s Who in America (68th Edition)
Honorable Mention in an article Who’s Who in Health and Medicine by J Bozanek, in News Digest International
Health and Medical Merit Award from News Digest International, 2013
Included in Guide to America’s Top Physicians
Selected for inclusion in podium presentation, Society of Urologic Nurses and Associates Annual Meeting, Chair of Special Interest Group Bladder and Bowel Dysfunction Education May 2013

George Chiang, MD
Member, Special Emphasis Panel for the CDC regarding funding for National Spina Bifida Registry
Moderator and Presenter for Hispanic Educational Forum: Spina Bifida Association
National Meeting Anaheim, CA, 2011
Member, Board of Director San Diego Spina Bifida
UCSD Urology Faculty Educator Award, 2013
Clinical Research Finalist, 2 Sessions of Behavioral Urotherapy, Society of Pediatric Urology World Congress Meeting, San Diego, CA, May 2013
Moderator, Spina Bifida: Urology Physiology and Treatment, Spanish Language Lecture Series 38th Spina Bifida Association Annual Meeting Anaheim, CA, June 2011

Ann Marie Berger Finley, MSN, FNP
Member-at-Large, Society of Urologic Nursing and Associates Catheterization task Force for Pediatric Protocol Development
Faculty Presenter, Update on Bladder and Bowel Dysfunction, (BBD), and Education Special Interest Group, Pediatric Urology Nurse Specialists, American Academy of Pediatrics Annual Conference, New Orleans, LA, October 12, 2012
UCSD Pediatric Grand Rounds, Bladder and Bowel Dysfunction in Children, February 2013
Podium Presentation, Society of Urologic Nurses and Associates Annual Conference, Bladder and Bowel Dysfunction in the Pediatric Population, March 2013
American Urological Association, Pediatric Urology Nurse Specialists Annual Meeting, Chair of Special Interest Group Bowel Bladder Dysfunction Education May 2013

PUBLICATIONS

FLIP BOOK TO READ
THE DEPARTMENT OF PEDIATRICS BIENNIAL REPORT