

**Fourth Year Fellows**



**Nathanya Baez Hernandez, MD**  
**Pediatric Cardiology Advanced 4<sup>th</sup> Year Program – Heart Failure and Transplant**

**Education:**

MD, Technological University of Santiago (UTESA), Santiago, Dominican Republic; 1998-2003

**Post-doctoral Training:**

Pediatric Cardiology Fellowship – Advocate Children’s Hospital; Oak Lawn, Illinois; 2015-2018

Residency in Pediatrics – Marshfield Clinic; Marshfield, Wisconsin; 2012-2015

Residency in Pediatrics – Regional University Infantile Hospital Dr. Arturo Grullon; Santiago, Dominican Republic; 2004-2007

**Publications:**

**Baez N**, Sharma C, Okorie U, McPherson E. Catecholaminergic Polymorphic Ventricular Tachycardia (CPVT) due to Ryanodine Receptor 2 (RYR2) Mutation presenting as recurrent apparent life threatening event (ALTE) followed by sudden death. *Congenital Cardiology Today*. 2016 July; 14 (7): 1-4.

**Baez N**, Urena A, Contreras J, Perez MN, Cruz A. “Therapeutic approach of acute diarrheal disease complicated by dysnatremic dehydration in children under age five.” *Regional University Infantile Hospital Dr. Arturo Grullon* May – July 2006. *Dominican College Journal* 2006 Jun; 8(2): 116-119

**Baez N**, Vasquez Lf, Cepeda R, Abreu WA, Coronado RE. “Predisposing factors which interfere in the management of acute lymphoblastic leukemia.” *University Hospital Jose Maria Cabral y Baez* 1996-2001. *Medical Unit Journal*. 2004 Jan; 11(1): 61-63.

**Baez N**, Urena A, Vasquez LF, Cepeda R, Saldiva NJ. “Stage of chronic renal failure in patients referred to the nephrology service of University Hospital Jose Maria Cabral y Baez during June-December period.” *South Regional Medical Journal*. 2003 Jun; 11(1).



**Vasu D. Gooty, MD**  
**Pediatric Cardiology Advanced 4<sup>th</sup> Year Program - MRI**

**Education:**

MD, S.V.S. Medical College, Mahaboobnagar, India; 2000-2006

**Post-doctoral Training:**

University of Minnesota Masonic Children’s Hospital, MN – Pediatric Cardiology Fellowship; 2015-2018

Virginia Tech Carilion School of Medicine, Roanoke, VA – Pediatric Residency; 2012-2015

**Publications:**

**Gooty VD**, Sinaiko AR, Ryder JR, Dengel DR, Jacobs DR Jr., Steinberger J. Association Between Carotid Intima Media Thickness, Age, and Cardiovascular Risk Factors in Children and Adolescents. *Metab Syndr Relat Disord*. 2018 Feb 7. doi:10.1089/met.2017.0149. [Epub ahead of print] PMID: 29412763

**Vasu D. Gooty**, Justin R. Ryder, Alan R. Sinaiko, Donald R. Dengel, David R. Jacobs Jr., Ronald J. Prineas, Julia Steinberger. Vascular changes associated with cardiovascular risk factors in children. *Pediatric Cardiology* – August, 2017 – Submitted

Ryder JR, Pankratz ND, Dengel DR, Pankow JS, Jacobs DR Jr, Sinaiko AR, **Gooty V**, Steinberger J. Heritability of vascular structure and function: A parent-Child Study. *J Am Heart Assoc.* 2017 Feb 2;6(2).

Dalin Tang, Pedro J. del Nido, Chun Yang, Heng Zuo, Xueying Huang, Rahul H. Rathod, **Vasu Gooty**, Alexander Tang, Zheyang Wu, Kristen L. Billiar, Tal Geva. Patient-Specific MRI based right ventricle models using different zero-load diastole and systole geometrics for better cardiac stress and strain calculation and pulmonary valve replacement surgical outcome predictors *PLoS One.* 2016 Sept 14;11(9):e0162986.

Tang D, Yang C, del Nido PJ, Zuo H, Rathod RH, Huang X, **Gooty V**, Tang A, Billiar KL, Wu Z, Geva T. Mechanical stress is associated with right ventricular response to pulmonary valve replacement in patients with repaired tetralogy of Fallot. *J Thorac Cardiovasc Surg.* 2016 Mar;151(3):687-94.e1-3.

**Vasu Gooty**, Charles Harris, Andre Muelenaer, Brian Watson, Shawn D. Safford, A rare case of pulmonary hyalinizing granuloma with calcification in a 5-year-old boy, *Journal of Pediatric Surgery Case Reports*, Volume 3, Issue 3, March 2015, Pages 123-126, ISSN 2213-5766

Tang D, Yang C, Geva T, Rathod R, Yamauchi H, **Gooty V**, Tang A, Kural MH, Billiar KL, Gaudette G, Del Nido PJ. A Multiphysics modeling Approach to Develop Right Ventricle Pulmonary Valve Replacement Surgical Procedures with a Contracting Band to Improve ventricle Ejection Fraction. *Computers and Structures.* 2013 Jun; 1(122): 78-87.

Yang C, Tang D, Geva T, Rathod R, Yamauchi H, **Gooty V**, Tang A, Gaudette G, Billiar KL, Kural MH, del Nido PJ. Using contracting band to improve right ventricle ejection fraction for patients with repaired tetralogy of Fallot: a modeling study using patient-specific CMR-based 2-layer anisotropic models of human right and left ventricles. *The Journal of Thoracic and Cardiovascular Surgery.* 2013 Jan; 1(145): 285-93.

Fernández, S., Iván, Vendrame, M., Kapur, K., Klehm, J., Uysal, S., Gedik, M., An, S., Jillella, D., Zelener, J., Syed, S., **Gooty, V.**, Rotenberg, A., Loddenkemper, T. Comparison of pediatric patients with status epilepticus lasting 5–29 min versus  $\geq 30$  min', *Epilepsy & Behavior*, 37p. 1. doi: 10.1016/j.yebeh.2014.05.018.

Olson HE, Lechpammer M, Prabhu SP, Ciarlini PD, Poduri A, **Gooty VD**, Anjum MW, Gorman MP, Loddenkemper T. Clinical application and evaluation of the Bien diagnostic criteria for Rasmussen encephalitis. *Epilepsia.* 2013 Aug; 23(10.1111/epi.12334): 1-8.

Guilhoto LM, Loddenkemper T, **Gooty VD**, Rotenberg A, Takeoka M, Duffy FH, Coulter D, Urion D, Bourgeois BF, Kothare SV. Experience with lacosamide in a series of children with drug-resistant focal epilepsy. *Pediatric Neurology.* 2011 Jun; 6(44): 414-9.

Vendrame M, Loddenkemper T, **Gooty VD**, Takeoka M, Rotenberg A, Bergin AM, Eksioglu YZ, Poduri A, Duffy FH, Libenson M, Bourgeois BF, Kothare SV.. Experience with Rufinamide in a pediatric population: a single center's experience. *Pediatric Neurology.* 2010 Sep; 3(43): 155-8.



**Tarah Popp, MD**  
**Pediatric Cardiology Advanced 4<sup>th</sup> Year Program - Imaging**

**Education:**

MD, Rheinisch-Westfälische Technische Hochschule (RWTH) Aachen; Aachen, Germany; 2005-2011

**Post-doctoral Training:**

Medical University of South Carolina- Charleston, SC; Pediatric Cardiology Fellow; 2015-2018  
University of Tennessee, College of Medicine- Chattanooga, TN; Pediatric Resident; 2012-2015

### **Publications:**

**Kuschel TJ**, Gruszka A, Hermanns-Sachweh B, Elyakoubi J, Sachweh JS, Vázquez-Jiménez JF, Schnoering H. Prevention of postoperative pericardial adhesions with TachoSil. The Annals of Thoracic Surgery. 2013 Jan; 95(1): 183-188. PMID: 23084416.

Schnoering H, Arens J, Detering SM, Stopinski T, **Kuschel TJ**, Tolba R, Steinseifer U, Vazquez-Jimenez JF. Development of a rabbit animal model for miniaturized heart-lung machines. ASAIO Journal (American Society for Artificial Internal Organs). 2013 Mar; 59(2): 152-156. PMID: 23438778.

Tewarie L, Goetzenich A, Hatam N, Holtmannspötter O, **Kuschel T**, Autschbach R, Menon AK. Ultrasonic debridement of deep surgical wound infection and Mediastinitis after sternotomy. The Thoracic and Cardiovascular Surgeon. 2013 Jan; 61(SO1): OP242.

### **Third Year Fellows**



#### **Silvestre Duran, MD**

##### **Education:**

BA, Ohio State University, Columbus, OH, 2009

MD, Ohio State University College of Medicine, Columbus, OH, 2013

##### **Postdoctoral Training:**

Children's Hospital of Michigan, Detroit, MI, Pediatric Residency, 2013-2016

### **Publications:**

**Duran S**. A 7-Year-Old with 1 Month of Ear Pain and 1 Day of Facial Weakness. Pediatrics in Review Vol. 37 No. 6 June 01, 2016 pp. 259-261

**Duran SR**, Aggarwal S, Natarajan G. The effect of transport on the physiologic stability of neonates with ductal-dependent single-ventricle lesions. J Matern Fetal Neonatal Med. 2017 Apr 10:1-6.. [Epub ahead of print]

### **Research:**

Myocardial Perfusion Reserve as a Marker for Transplant Coronary Vasculopathy.



#### **Richard Markus, MD**

##### **Education:**

BA, University of Texas, Austin, TX 2008

MD, Texas A&M Health Science Center College of Medicine, Round Rock, TX 2013

##### **Post-doctoral Training:**

St. Louis Children's Hospital Washington University, Pediatric Residency, 2013-2016

### **Publications:**

Arguello AA, Schonborn JR, **Markus RW**, Brekken RA, Eisch AJ. Effect of Chronic Morphine on the Dentate Gyrus Neurogenic Microenvironment. Neuroscience. 2009, Mar; 159(3): 1003-1010. Pub Status: Published.

## **Research:**

Impact of Dexrazoxane on diffuse myocardial fibrosis in children who received anthracycline chemotherapy,

Rockefeller T, Markus R, Balzer D, Murphy J, Nicolas R, Egtesady P, Manning P, Shahanavaz S. Ten year experience of ductus arteriosus stenting versus surgical systemic to pulmonary arterial shunting for ductal dependent pulmonary blood flow at a single United States center, manuscript submitted to Catheterization and Cardiovascular Interventions.

Srinivasan M, Pruitt C, Casey E, Dhaliwal K, DeSanto C, **Markus R**, Rosen A. Quality Improvement Initiative to Increase the Use of Nasogastric Hydration in Infants With Bronchiolitis. *Hosp Pediatr*. 2017 Aug;7(8):436-443.

## **Second Year Fellow**



### **Yousef Arar, MD**

#### **Education:**

BA, University of Texas, Austin, TX, 2007-2010

MD, University of Texas School of Medicine at San Antonio, 2010-2014

#### **Post-doctoral Training:**

University of Texas Health Science Center at San Antonio, Pediatric Residency, 2014-2017

#### **Publications:**

**Arar, YM**, Andrews, TG, and Aune, GJ. Cardiotoxic Equivalence Amongst Anthracyclines. *The World Journal for Pediatric and Congenital Heart Surgery (WJPCHS)*. Feb 2017.

Furmaga, Wieslaw & Cohn, Stephen & Prihoda, Thomas & Muir, Mark & Valery, Mikhailov & McCarthy, Janet & **Arar, Yousef**. Novel markers predict death and organ failure following hemorrhagic shock. *Elsevier – Clinica Chimica Acta*. 2015, Jan; 440 (2015) 87–92(0009-8981): 87-92.

Hassan, Saif & Cohn, Stephen & Admire, John & Nunez-Cantu, Olliver & **Arar, Yousef**. Natural history and clinical implications of non-depressed skull fracture in young children. *J Trauma Acute Care Surg*. 2014, Jul; 10.1097(77): 166-169.

#### **Research Projects:**

Radiation-Free Heart Catheterization using MRI

A Staged Neonatal Hybrid Approach for Coarctation of the Aorta

3D Advanced Imaging Overlay for Congenital Heart Disease Intervention with Rapid Registration

Effects of Chronically Elevated Fibroblast Growth Factor 23 on the Heart

## **First Year Fellows**



### **Mehar Hoda, MBBS**

#### **Education:**

MBBS, Aga Khan University Medical College; 2008-2013

#### **Post-doctoral Training:**

Texas Tech University Health Sciences Center, Amarillo, Texas: Pediatric Residency, 2015-2018

## Publications:

**Hoda M**, Verma A, Alapati S, Alapati S, Yarrabolu TR. Diagnostic paradox: Ruptured aneurysm of sinus of Valsalva simulating tricuspid valve endocarditis. *Echocardiography*. 2017 Mar;34(3):465-467

**Hoda M**, Abuhantesh A, Alapati S. Infective endocarditis in two patients with congenital heart disease: A review of guidelines for prophylaxis. *Panhandle Health*. Winter 2017.

**Hoda M**, Haque A, Aijaz F, Akhtar MI, Rehmat A, Amanullah M, Hasan BS. On table extubation after open heart surgery in children: an experience from a tertiary care hospital in a developing country. *Congenital Heart Disease*. 2016, Jan; 11(1): 58-62.

Salam RA, **Hoda M**, Das JK, Arshad A, Lassi ZS, Middleton P, Bhutta ZA. Interventions to improve adolescent nutrition: a systematic review and meta-analysis. *Journal of Adolescent Health*. 2016, Oct; 59(4 Suppl): S29-S39.

Das JK, Salam RA, **Hoda M**, Lassi ZS, Bhutta ZA. Interventions to control flies for preventing diarrhoea in children under five years of age. *Cochrane Database of Systematic Reviews* 2015, Issue 4. Art. No.: CD011654.

Haque A, Siddiqui NU, Kumar R, **Hoda M**, Lakhani G, Hooda K. Cost of care in a pediatric intensive care unit of a tertiary care university hospital of Pakistan. *Journal of Pakistan Medical Association*. 2015, Jun; 65(6): 651-654.

Haque A, Siddiqui NR, Jafri SK, **Hoda M**, Bano S, Mian A. Clinical profiles and outcomes of children admitted to the pediatric intensive care unit from the emergency department. *Journal of the College of Physicians and Surgeons Pakistan*. 2015, Apr; 25(4): 301-303.

Haque A, Sher G, **Hoda M**, Moiz B. Feasibility of Pediatric Plasma Apheresis in Intensive Care Settings. *Therapeutic Apheresis and Dialysis*. 2014, Oct; 18(5): 497-501.

Atiq M, **Hoda M**, Aslam, N. Effect of intravenous gamma globulin on short- and mid-term clinical outcome in acute viral myocarditis in children. *World Journal of Cardiovascular Diseases*. 2014, Feb; 4(2): 39-44.

Fatimi SH, Khawaja A, Ali Khawaja RD, **Hoda M**, Bhimani SA. Benign granulomatous polyp obstructing the bronchus. *Journal of the College of Physicians and Surgeons Pakistan*. 2013, Jul; 23(7): 519-521.

## Book Chapter:

Das JK, Lassi ZS, **Hoda M**, Salam RA, Bhutta ZA. (2015). Feasible, acceptable and cost-effective models of service delivery for neonates and young infants aged 0-59 days with possible serious bacterial infections: a systematic review. In MK Bhan (Ed.), *Guideline: Managing Possible Serious Bacterial Infection in Young Infants When Referral Is Not Feasible* (pp. 1-28). Geneva: World Health Organization.

## Research Projects (Residency):

Establishing a baseline measurement in a sample population and assessing the sensitivity of critical congenital heart disease screening when measuring the peripheral perfusion index in addition to pulse oximetry. Principal Investigator – Dr. Mubariz Naqvi



## Ravi Vamsee, MBBS

### Education:

MBBS, Kasturba Medical College Manipal, India; 2003-2009

### Post-doctoral Training:

Oregon Health and Sciences University, Portland, OR: Pediatric Residency, 2016-2018  
St. Peter's University Hospital, New Brunswick, NJ; Pediatric Residency, 2015-2016  
Sri Ramachandra Medical University, Chennai, India; 2011-2013

**Research Projects (Residency):**

"Does the Sano modification predispose to dyssynchrony in children with hypoplastic left heart syndrome?"  
- a prospective study using Speckle echocardiography.

"Early onset and predominant hematological presentation of PI3KCD mutation"