

Carolina Valduga de Alencastro Guimaraes MD

Clinical Associate Professor of Radiology
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ACADEMIC HISTORY:

Combined University / Medical School (6 year program):

02/1997 - 12/ 2002 **Fundacao Universidade de Caxias do Sul**
Caxias do Sul, Rio Grande do Sul, Brazil

Radiology Residency:

02/2003 - 12/ 2005 Department of Radiology
Hospital Mae de Deus
Porto Alegre, Rio Grande do Sul, Brazil

Elective Rotation:

10/2005- 11/ 2005 Musculoskeletal Imaging
Beth Israel / Deaconess Medical Center
Boston, Mass

Fellowship:

06/2006 – 12/ 2006 **Pediatric Radiology Research Fellow**
Department of Radiology
Cincinnati Children’s Medical Center
Cincinnati , OH, USA.

01/ 2007 – 01/2008 **Pediatric Radiology Fellow**
Department of Radiology
Cincinnati Children’s Hospital Medical Center
Cincinnati. OH, USA

01/2008 – 02/ 2009 **Pediatric Neuroradiology Fellow**
Department of Radiology
Cincinnati Children’s Hospital Medical Center
Cincinnati. OH, USA

U.S. Medical Licensure: ECFMG # 0-696-277-3
09/2006 USMLE Step 1
04/2006 USMLE Step 2 CK
05/2006 USMLE Step 2 CS
09/2007 USMLE Step 3

Board Certification:

07/2011 Diagnostic Radiology - American Board of Radiology
03/2018 Pediatric Radiology Subspecialty Certification

EMPLOYMENT / ACADEMIC APPOINTMENTS:

- 02/2009 – 06/2011 Cincinnati Children’s Hospital Medical Center – Department of Radiology
Clinical Instructor of Radiology
University of Cincinnati College of Medicine
Cincinnati, OH, USA
- 01/2012 – 01/2015 Nemours Children’s Hospital – Department of Radiology
05/2012 – 02/2015 **Assistant Professor of Radiology**
University of Central Florida College of Medicine
07/2012 – 02/2015 **Clinical Assistant Professor of Radiology**
Florida State University College of Medicine
Orlando - FL, USA
- 04/2015 – 12/2017 Texas Children’s Hospital – Department of Radiology
Assistant Professor of Radiology
Baylor College of Medicine
Houston, TX, USA
- 01/2018 – 03/2020 Lucile Packard Children’s Hospital – Department of Radiology
Clinical Assistant Professor of Radiology
Stanford University, School of Medicine
Stanford, CA, USA
- 04/2020 - present Lucile Packard Children’s Hospital – Department of Radiology
Clinical Associate Professor of Radiology
Stanford University, School of Medicine
Stanford, CA, USA

- State Licensure:** California (C157896) - active
Texas (# R1380) - active
Ohio (# 35.092831) – not active
Kentucky (# 42893) – not active
Delaware (# C1-0009950) – not active
Florida (# ME 110859) – active

TEACHING AND CLINICAL CARE:

Clinical Teaching Responsibilities:

- 2009-2011 **Pediatric Radiology and Neuroradiology Fellows - teaching and supervision**
Cincinnati Children’s Hospital Medical Center
- 2012-2015 **Medical Student – teaching**
Florida State University College of Medicine
University of Central Florida College of Medicine
- 2015-2017 **Pediatric Radiology and Neuroradiology Fellows - teaching and supervision**
Texas Children’s Hospital
- 2015-2017 **Radiology Resident – teaching and supervision**
Baylor College of Medicine

2018 – present **Pediatric Radiology Fellows, Neuroradiology Fellows and Radiology Residents – Teaching and supervision**
Stanford University, School of Medicine

Educational Roles / Initiatives:

2012-2014 **Director, Medical Student Rotation in Pediatric Radiology**
Florida State University College of Medicine

2012-2014 **Director, Medical Student Rotation in Pediatric Radiology**
University of Central Florida College of Medicine

2018 **Pediatric Radiology Educational Curriculum for Rotating Radiology Residents**
Stanford School of Medicine

2019- present **Pediatric Neuroradiology Case of the Week Initiative**
Stanford School of Medicine

Student Mentorship:

2016 **Mentee: Katie Heaphy-Henault MD – Radiology Resident**
Research supervision – Congenital Aqueduct Stenosis
Paper presentation – IFMSS, Botswana, 09/ 2016
Aqueduct Stenosis: Which fetal MRI findings accurately predict a postnatal diagnosis?
IFMSS Young Investigator Travel Award
Article - AJNR: *Congenital Aqueduct Stenosis: Findings at Fetal MRI that Accurately Predict a Postnatal Diagnosis*

2017 **Mentee : Lorena Vidal MD – Pediatric Neuroradiology Fellow**
Research supervision - Fetal Neural Tube defect
Educational exhibit - American Society for Neuroradiology Annual Meeting 2017
Fetal MRI Before and After In Utero Repair of Myelomeningocele: What the Neuroradiologists Should Know

2017 **Mentee : Lorena Vidal MD – Pediatric Neuroradiology Fellow**
Research supervision – Congenital Aqueduct Stenosis
Educational exhibit - Society for Pediatric Radiology Annual Meeting 2017
Diagnosing Cerebral Aqueduct Stenosis. What Pediatric Radiologists Should Look for on Fetal and Postnatal MRI

2017 -2018 **Mentee: Fernanda DC Braojos MD – International Fetal Research Fellow**
Research supervision – Fetal Brain Malformations
Paper presentation - Society for Pediatric Radiology Annual Meeting 2017
Posterior Fossa Findings in Prenatal Diagnosis of Dystroglycanopathy - Extending Beyond Brainstem Kinking
Article - Pediatric Radiology Journal - *Dysplastic Megalencephaly Phenotype Presenting with Prenatal High Output Cardiac Failure*
Manuscript in process – *Posterior Fossa Findings in Prenatal Diagnosis of Dystroglycanopathy - Extending Beyond Brainstem Kinking*

Interdepartmental Educational Lectures:

- 2016 ***Fetal MRI – How Do I do It***
Texas Children’s Maternal Fetal Care Center
- 2017 ***Basic Neuroimaging Interpretation***
Texas Children’s NICU
- 2018 ***Imaging Findings in HIE***
LPCH NeuroNICU webinar / Grupo Santa Joana in Sao Paulo and Rio de Janeiro, Brazil
- 2018 ***Basic Neuroradiology Imaging Interpretation***
LPCH PICU Annual Lecture Series
- 2019 ***Fetal Ventriculomegaly***
LPCH Genetics Annual Lecture Series
- 2019 ***Fetal Neuroimaging Research***
LPCH Cardiology Research series
- 2019 ***Basic Head Ultrasound Interpretation***
LPCH Neurology
- 2020 ***Basic Neuroradiology Imaging Interpretation***
LPCH PICU Annual Lecture Series
- 2020 ***Neuroimaging Interpretation***
Neurology Lecture Series

Trainee Educational Lectures:

- 2010 Pediatric Neuroimaging Emergencies- Fellow lecture (45min)
- 2011 Pediatric Neuroimaging Emergencies- Fellow lecture (45min)
- 2012 Fetal Neuro Cases – Fellow lecture (45min)
- 2013 Ultrasound Imaging of Appendicitis - Technologists lecture (45min)
- 2015 Pediatric Neuroimaging Emergencies- Fellow lecture (45min)
- 2016 Fetal Neuroimaging - Pediatric Radiology Fellow lecture (45min)
- 2016 Pediatric Neuroimaging Emergencies- Resident lecture (45min)
- 2017 CNS Infection - Pediatric Radiology Fellow lecture (45min)
- 2018- 2021 Pediatric Head Trauma (30 min bi-monthly to residents – 14 hrs to date)
- 2018- 2021 Pediatric ED Head and Neck Imaging (30 min bi-monthly to residents-14 hrs to date)
- 2018- 2021 Pediatric Brain Tumors (30 min bi-monthly to rotating residents - 14 hrs to date)
- 2018 Pediatric Head Trauma – Neuroradiology Fellow lecture (45min)

- 2018 Pediatric Neuroimaging Emergencies- Resident lecture (45min)
- 2019 Pediatric ED Head and Neck Imaging - Neuroradiology Fellow lecture (45min)
- 2019 Normal, Variants and Common Abnormal Findings in Pediatric Brain Imaging- (45min)
- 2019 Imaging of Sensorineural Hearing Loss in Pediatrics - Resident lecture (45min)
- 2019 Brain Malformations – Resident lecture (45min)
- 2019 Brain Malformations – Pediatric Radiology Fellow lecture (45min)
- 2019 Fetal Neuroimaging - Resident lecture (45min)
- 2019 Fetal Neuroimaging - Pediatric Radiology Fellow lecture (45min)
- 2019 CNS Infection - Pediatric Radiology Fellow lecture (45min)
- 2020 Journal Club – Pediatric Radiology Fellows (45min)
- 2020 Interesting case conference – Extra-fetal findings on fetal MRI (1h)
- 2020 Fetal Brain Imaging - Neuroradiology Fellows (1h)
- 2020 Neonatal Brain Imaging - Neuroradiology Fellows (1h)
- 2020 Fetal Neuroimaging – Pediatric Radiology Fellows (1h)
- 2020 Hypoxic Ischemic Insult – Pediatric Radiology Fellows (1h)

Lectures in National and Regional Meetings:

- 09/2008 *Prenatal Diagnosis of CNS Abnormalities: Ultrasound and MRI Correlation Case Based*
Maternal Fetal Medicine Regional Meeting, Cincinnati, OH
- 09/2014 *Head and Neck Imaging for Orlando APNs*
Annual Congress and Nursing Symposium – Orlando
- 04/2016 *Head Ultrasound – just images*
American Institute For Ultrasound in Medicine (AIUM) Annual Meeting - New York
- 11/2017 *Prenatal Imaging Evaluation of Anorectal Malformations*
Hendren Project – Web based lecture – International Colorectal Surgeons
- 09/2019 *Name That Syndrome*
Society for Pediatric Radiology – Fetal Imaging Meeting – Philadelphia
- 09/2019 *Genotype-Phenotype Correlation in Fetal Brain Malformations*
Society for Pediatric Radiology – Fetal Imaging Meeting – Philadelphia
- 01/2020 *Name That Syndrome*
American Society for Pediatric Neuroradiology – Miami

- 03/2020 ***Neuro-Imaging – What the clinician needs to know about MRI and Head US?***
 Canceled due to COVID -19
 Lucille Packard Children’s Hospital Stanford – Innovative Care of The Newborn Brain
- 03/2020 ***Neuroimaging, Cooling Cases and Clinical QI Measures for Neuroprotection Workshop***
 Canceled due to COVID -19
 Lucille Packard Children’s Hospital Stanford – Innovative Care of The Newborn Brain
- 05/2020 **Neuroradiology Interesting Cases**
 Canceled due to COVID -19
 Society for Pediatric Radiology Annual Meeting – SPR – Miami
- 11/2020 ***CNS: disorders of neuronal migration and proliferation***
 Advanced Fetal Imaging: Ultrasound and MRI - Scottsdale, AZ, 2020
- 11/2020 ***CNS: fetal stroke***
 Advanced Fetal Imaging: Ultrasound and MRI - Scottsdale, AZ, 2020

Lectures in International Meetings:

- 10/2008 ***Neuro Fetal MRI***
 Sociedad Latinoamericana de Radiologia Pediatrica. Guadalajara – Mexico
- 07/2009 ***Neuro Fetal MRI***
 International Symposium on Pediatric Radiology. Rio de Janeiro – Brazil
- 10/2009 ***Cervical Lymphadenitis and Retropharyngeal Abscess***
 Sociedad Latinoamericana de Radiologia Pediatrica. Santiago – Chile
- 09/2011 ***Neonatal MRI Evaluation of the Preterm Brain***
 Advances in Fetal and Neonatal Imaging. Sao Paulo – Brazil
- 09/2011 ***Supratentorial Fetal Brain***
 Advances in Fetal and Neonatal Imaging. Sao Paulo – Brazil
- 10/2015 ***Traumatic Brain Injury***
 Child 2015, Curitiba – Brazil
- 10/2015 ***CNS Infection***
 Child 2015, Curitiba – Brazil
- 10/2015 ***Head and Neck Inflammatory / Infectious Processes***
 Child 2015, Curitiba – Brazil
- 04/2016 ***Traumatic Brain Injury***
 JPR, Sao Paulo – Brazil
- 04/2016 ***Fetal CNS evaluation with post-natal correlation***
 JPR, Sao Paulo – Brazil
- 04/2016 ***Effects of Congenital Heart Disease in The Brain***
 JPR, Sao Paulo – Brazil

- 07/2020 ***Neonatal Hypoxic Ischemic Injury: The Typical and Atypical Cases***
Cancelled due to COVID - Asian and Oceanic Congress of Radiology – Kuala Lumpur
- 07/2020 ***Updates in Fetal MRI***
Cancelled due to COVID - Asian and Oceanic Congress of Radiology – Kuala Lumpur
- 07/2021 ***Neonatal Hypoxic Ischemic Injury: The Typical and Atypical Cases***
Cancelled due to COVID - Asian and Oceanic Congress of Radiology – Virtual

QUALITY IMPROVEMENT PROJECTS AND OPERATIONAL ROLES:

- 10/2012 – 12/2015 **Project Leader – Standard Report Committee**
Standard Report Implementation for Nemours- Radiology
- 01/ 2013 – 12/ 2015 **CPT code optimization for Nemours-wide Radiology**
Nemours-wide Radiology
- 01/2016 - 12/2017 **Project Leader – Standard Report Committee**
Standard Report Implementation for Texas Children Hospital Radiology
- 03/2016 - 12/2017 **Project Leader – IMG (imaging code optimization)**
Texas Children’s Hospital Radiology
- 2018 **Improving Onboarding Process for Radiology Faculty**
RITE Project, Stanford School of Medicine
- 2018 **Creation and Implementation of Pediatric Radiology Intranet Page**
Lucile Packard Children’s Hospital
- 2018 **Project Leader - Procedure Code Optimization for Pediatric Neuroradiology**
Lucile Packard Children’s Hospital
- 02/2018 - present **Standard Report Leader**
Lucile Packard Children’s Hospital
- 03/2019 – 2020 **Re-Structured MRI Scheduling Process for Pediatric Neuroradiology**
Lucile Packard Children’s Hospital
- 2019 **Workflow Management of Fail Exams and Linking Reports**
Lucile Packard Children’s Hospital

PUBLIC AND PROFESSIONAL SERVICE:

Active Professional Societies Membership:

- Radiologic Society of North America
- American Society of Pediatric Neuroradiology
- American Society of Neuroradiology
- Society for Pediatric Radiology
- American Roentgen Ray Society

Ad Hoc Reviewer:

Pediatric Radiology Journal
American Journal of Neuroradiology
Journal of Ultrasound in Medicine
Chinese Journal of Academic Radiology

Committee Service:

2015-present Neuroradiology Committee - Society for Pediatric Radiology
2017- 2020 Fetal Imaging Committee – Society for Pediatric Radiology
2017 Caffey Committee – Society for Pediatric Radiology Annual Meeting
2018- present RAPNO (response assessment for pediatric neuro-oncology tumors) Committee
2018- present Interesting Case Committee – American Society of Pediatric Neuroradiology
2021- present Fundraising Committee – American Society of Pediatric Neuroradiology
2021- present News and Updates Committee – American Society of Pediatric Neuroradiology
2019- present Neuroradiology Twitter account co-leader - Society for Pediatric Radiology
2019 ACR – SPR Collaborative Committee – Practice Parameters for the Safe and Optimal
Performance of Fetal Magnetic Resonance Imaging (MRI)
2020 Society for Pediatric Radiology– Judge Best Interesting Case Contest Annual Meeting
2020 Society for Pediatric Radiology 2020 Annual Meeting – abstract reviewer
2020 American Society of Neuroradiology 2020 Annual Meeting – abstract reviewer
2020 American Society of Neuroradiology 2020 Annual Meeting – abstract section moderator

Public Service:

2001 *Evaluation of Employees of Universidade de Caxias do Sul for Obesity Related Risk Factors*
2017-present Outreach Volunteer Reader – World Federation of Pediatric Radiology

RESEARCH:

Grants:

1. Neonatal Research Network Clinical Trial - Optimizing Cooling MRI Working Group – (NCT01192776) - Co-investigator

Submitted Grants:

1. Chronic Maternal Hyperoxygenation for Left-Heart Growth and Brain Development in Left Heart Hypoplasia – Co-investigator

Non-funded Research:

1. Neonatal North American Fetal Network (NAFTNet) - Prenatal Diagnosis of Aqueductal Stenosis
2. Postnatal Outcome of Prenatally Diagnosed Aqueductal Stenosis

HONORS AND AWARDS:

- 2002 **2nd Place – Best Poster**
Focal Fatty Infiltration of the Liver
Dellamea LT, Giovanardi R, **Guimaraes CVA**, Paganella VC, Pessoa
Jornada Gaucha de Radiologia, Gramado, Rio Grande do Sul, Brazil, August 2002
- 2003 **Outstanding Resident Presentation**
Clube Hugolino Andrade, Sociedade Gaucha de Radiologia
Carolina Guimaraes - Porto Alegre, Rio Grande do Sul, Brazil, March 2003
- 2010 **Magna Cum Laude**
Trainee Misinterpretations on Pediatric Neuroimaging Studies: Classification, Imaging Analysis, and Outcome Assessment. James Leach, **Carolina Guimaraes**, Blaise Jones.
American Society of Neuroradiology (ASNR), Boston, May 2010
- 2011 **Caffey Award Best Case Report Exhibit - IPR 2011**
Easily Missed Sonographic MR Imaging features of Fetal Mediastinal and Intrapericardial Teratoma. Eva I Rubio, MD; Maria A Calvo-Garcia MD; **Carolina V.A Guimaraes MD**;
Constance Bitters; Beth Kline-Fath, MD
- 2012 **Magna Cum Laude**
Easily Missed Sonographic Findings in the Diagnosis of Hypoxic-Ischemic Injuries.
Carolina Guimaraes; Alan Daneman; Susan I. Blaser; Monica Epelman.
Radiological Society of North America, Chicago
- 2014 **Certificate of Merit award**
The “DWIBSlight” Saga: Breaking Dawn - Shedding Light on DWIBS Imaging in Pediatric Patients. Epelman M, **Guimaraes C**, Dinan D, Johson C, Donnelly L.
Radiological Society of North America, Chicago
- 2016 **Best Paper Presentation**
Prediction of need for postnatal treatment of Hydrocephalus based on fetal MRI and ultrasound brain assessment? Magda Sanz, Mayel Yeez, Alexander Zarutskie, Nicola Park, Lauren Mack, Ani Shetty, **Carolina Guimaraes**, Haleh Sangi, Wesley Lee, Michael Belfort, William Whitehead - 26 World Congress on Ultrasound in Obstetrics and Gynecology, Rome
- 2016 **IFMSS Young Investigator Travel Award**
Aqueduct Stenosis: Which fetal MRI findings accurately predict a postnatal diagnosis?
Henault K., **Guimaraes CV**, Meholin-ray A, Paldino- IFMSS, Botswana
- 2020 **2020 Anne G. Osborn ASNR International Outreach Professor**

BIBLIOGRAPHY

Book Chapters (#3):

1. **Guimaraes CV.** Neuroradiology. In: " Pediatric Radiology: The Fundamentals" Donnelly LF, ed. 11/ 2016
2. **Guimaraes CV.** Neuroradiology. In: " Pediatric Radiology: The Fundamentals" Donnelly LF, ed. 2020 – in press
3. Hisham M. Dahmouh, **Carolina V. Guimaraes.** Fetal Ventriculomegaly. In: Evidence-Based Imaging in Pediatrics" ed. 2020 - in press

Peer Review Publications / Original Research (#36):

1. Santos R, Frigeri L, Ordovas C, Frigeri M, Bertuol I, **Guimaraes CVA**, Mendoca CMF. *Epidemiologia dos tumores do sistema nervoso central – Hospital Nossa Senhora de Pompeia – Servico de Neurocirurgia – A Proposito de 100 casos estudados.* Revista Cientifica Da AMECS 2001;10:24-32
2. Dellamea LT, **Guimaraes CVA**, Paganella VC, Pessoa DB. *Massa Cistica Complexa Cervical – Suspeita Diagnostica de Carcinoma Papilar por Meio de Ultra-sonografia.* Revista de Ciencias Medicas 2003;1
3. Girardi MA, Hennemann AS, Fenner A, **Guimaraes CVA**, Leonel IM, Stein HE, Costi KL, Karcher P, Giovanella RG. *Comparacao Entre Antiinflamatorios Inibidores Da COX 1 e 2 e Inibidores Seletivos Da COX 2 Em Relacao a Funcao Renal.* Revista de Ciencias Medicas 2003;1
4. **Guimaraes CVA** , Donnelly LF, Warner, BW *CT Findings for Blebs & Bullae in Children with Spontaneous Pneumothorax as Compared with Normal Controls.* Pediatric Radiology 2007;37:879-884
5. **Guimaraes CVA**, Kalra M, Donnelly LF, Shott SR, Fritz K, Singla S, Amin RS. *The Frequency of Lingual Tonsil Enlargement in Obese Children.* American Journal of Roentgenology 2008; 190: 973-975.
6. **Guimaraes CVA**, Donnelly LF, Shott SR, Amin RS, Kalra M. *Children with Down Syndrome Relative Rather than Absolute Macroglossia.* Pediatric Radiology - 2008; 38: 1062 -1067.
7. **Guimaraes CVA**, Linam LE, Kline-Fath BM, Donnelly LF, et al *Prenatal MRI Findings of Fetuses with Congenital High Airway Obstruction Sequence.* Korean Journal of Radiology 2009; 10 (2): 129-134.
8. Bischoff A, Levitt M, Lim FY, **Guimaraes C**, Pena A. *Prenatal Diagnosis of Cloacal Malformation.* Pediatr Surg Int 2010 Nov; 26(11):1071-5.
9. **Guimaraes CVA**, Kline-Fath BM, Linam LE, Calvo Garcia MA, Rubio EI, Lim FY. *MRI Findings in Multifetal Pregnancies Complicated by Twin Reversed Arterial Perfusion Sequence (TRAP).–* Pediatr Radiol. 2011 Jun;41(6):694-701.
10. **Guimaraes CVA**, Leach J, Jones BV, *Trainee Misinterpretations on Pediatric Neuroimaging Studies: Classification, Imaging Analysis, and Outcome Assessment.* American Journal of Neuroradiology, 2011;32(9):1591-9.
11. Neuman J, Calvo-Garcia MA, Kline-Fath BM, Bitters C, Merrow AC, **Guimaraes CVA**, Lim FY. *Prenatal Imaging of Amniotic Band Sequence: Utility and Role of Fetal MRI As An Adjunct To Prenatal Ultrasound -* Pediatric Radiology 2012;42(5):544-51.
12. Maria A. Calvo-Garcia; Beth M. Kline-Fath; Eva I. Rubio; Arnold C. Merrow; **Carolina V. Guimaraes**; Foong-Yen Lim. *Fetal MRI of Cloacal Exstrophy.* Pediatric Radiology 201;43(5):593-604

13. Dinan D, Epelman M, **Guimaraes CV**, Burns RC, Donnelly LF. *Proximal Duodenal Obstruction Associated with a Replaced Right Hepatic Artery*. Pediatric Radiology, Feb;44(2):226-9, 2014
14. Dinan D, Epelman M, **Guimaraes CV**, Donnelly LF, Nagasubramanian R, Chauvin NA. *The Current State of Imaging Pediatric Hemoglobinopathies*. Seminars in Ultrasound CT and MRI. Vol 34 (6): 493-515, 2014
15. Hall MB, **Guimaraes CV**, Nardone HC. *Facial mass in an infant*. JAMA Otolaryngol Headand Neck Surg. May 140(5):475-6 2014.
16. Dinan D, Daneman A, **Guimaraes CV**, Chauvin NA, Victoria T, Epelman M. *Easily Overlooked Sonographic Findings in the Evaluation of Neonatal Encephalopathy: Lessons Learned From Magnetic Resonance Imaging*. Seminars in Ultrasound CT and MRI. Vol 36(6):627-651. 2014.
17. Karen Lyons, Christopher Cassady, Jeremy Jones, Michael Paldino, Amy Mehollin-Ray, **Carolina Guimaraes**, Rajesh Krishnamurthy. *Current Role of Fetal Magnetic Resonance Imaging in Neurologic Anomalies*. Seminars in Ultrasound, Ct and MRI Articles - Aug. 2015.
18. Monica Epelman, Arnold C. Merrow, **Carolina V. Guimaraes**, Teresa Victoria, Maria A. Calvo-Garcia, Beth M. Kline-Fath. *Extrafetal Findings on Fetal Magnetic Resonance Imaging: A Pictorial Essay*. Seminars in Ultrasound, Ct and MRI Articles - Dec. 2015.
19. **Carolina V. Guimaraes**, MD; Robert M. DeFlorio, MD; Lauren W. Averill, MD Kathlene E. Walters, BS; Ramona A. Beasley, BS, RT; and Lane F. Donnelly, MD. *Implementation of Standardized Reports within a Pediatric Healthcare System With Geographically Dispersed Sites*. JACR – Dec. 2015.
20. Sandi Lam, **Carolina Guimaraes**, Jeremy Y. Jones. *Congenital Mydriasis with Aortic and Cerebrovascular Disease*. Pediatric Neurology 2017 Sept; 74:100-101.
21. **Carolina V. Guimaraes**, Laura A Smith, Jo A Garza, Maria E Blado, Crystal S Lokey, Lane F Donnelly. *Implementing a Systematic Approach to Improve Governance and Deployment of Imaging Codes in Radiology*. Curr Probl Diagn Radiol. 2017 Jun 06.
22. **Guimaraes CV**, Grzeszczuk R, Bisset GS 3rd, Donnelly LF. *Comparison Between Manual Auditing and a Natural Language Process With Machine Learning Algorithm to Evaluate Faculty Use of Standardized Reports in Radiology*. J Am Coll Radiol. 2017 Dec 18.
23. Sanz Cortes M, Rivera AM, Yopez M, **Guimaraes CV**, Diaz Yunes I, Zarutskie A, Davila I, Shetty A, Mahadev A, Serrano SM, Castillo N, Lee W, Valentine G, Belfort M, Parra G, Mohila C, Aagaard K, Parra M. *Clinical Assessment and Brain Findings in a Cohort of mothers, Fetuses and Infants with Zika Virus*. Am J Obstet Gynecol. 2018 Jan 15.
24. Fernanda Del Campos Braojo, **Carolina V. Guimaraes** . *Dysplastic Megalencephaly Phenotype Presenting with Prenatal High Output Cardiac Failure*. Pediatric Radiology – March 2018.
25. Kathryn J. Heaphy-Henault; **Carolina V. Guimaraes**; Amy R. Mehollin-Ray; Christopher I. Cassady; Wei Zhang; Nilesh K. Desai; Michael J. Paldino. *Congenital Aqueduct Stenosis: Findings at Fetal MRI that Accurately Predict a Postnatal Diagnosis*. American Journal of Neuroradiology– March 2018.
26. Donnelly LF, Grzeszczuk R, **Guimaraes CV**, Zhang W, Bisset Iii GS. *Using a Natural Language Processing and Machine Learning Algorithm Program to Analyze Inter-Radiologist Report Style Variation and Compare Variation Between Radiologists When Using Highly Structured Versus More Free Text Reporting*. Curr Probl Diagn Radiol. 2018 Oct 9.

27. Sanz Cortes M, Davila I, Torres P, Yopez M, Lee W, **Guimaraes CV**, Sangi-Haghpeykar H, Whitehead WE, Castillo J, Nassr AA, Espinoza J, Shamshirsaz AA, Belfort MA. *Does Fetoscopic or Open Repair for Spina Bifida Affect Fetal and Postnatal Growth?* Ultrasound Obstet Gynecol. 2019 Mar;53(3):314-323. doi: 10.1002/uog.20220
28. Zarutskie A, **Guimaraes C**, Yopez M, Torres P, Shetty A, Sangi-Haghpeykar H, Lee W, Espinoza J, Shamshirsaz AA, Nassr A, Belfort MA, Whitehead WE, Sanz Cortes M. *Prenatal brain imaging for predicting need for postnatal hydrocephalus treatment in fetuses that had neural tube defect repair in utero.* Ultrasound Obstet Gynecol. 2019 Mar;53(3):324-334. doi: 10.1002/uog.20212
29. Cortes MS, Torres P, Yopez M, **Guimaraes C**, Zarutskie A, Shetty A, Hsiao A, Pyarali, Davila I, Espinosa J, Shamshirsaz AA, Nassr A, Whitehead W, Lee W, Belfort MA. *Comparison of brain microstructure after prenatal spina bifida repair by either laparotomy assisted fetoscopic or open approach.* Ultrasound Obstet Gynecol. 2019 Jun 20. doi: 10.1002/uog.20373
30. Tabitha Cooney, Kenneth J. Cohen, **Carolina V. Guimaraes**, Girish Dhall, James Leach, Maura Massimino, Alessandra Erbetta, Luisa Chiapparini, Fatema Malbari, Kim Kramer, Ian F. Pollack, Patricia Baxter, Suzanne Laughlin, Zoltan Patay, Tina Young Poussaint, Katherine E. Warren. *Response assessment in diffuse intrinsic pontine glioma (DIPG): recommendations from the Response Assessment in Pediatric Neuro-Oncology committee.* 2020 Lancet Oncology – Jun;21(6):330-336.
31. **Carolina V. Guimaraes**, Hisham M. Dahmouh. *Imaging Phenotype Correlation with Molecular and Molecular Pathway Defects in Malformations of Cortical Development - Pediatric Radiology – 2020 Dec;50(13):1974-1987*
32. Liyue Shen, Jimmy Zheng, Edward H. Lee, Michelle Han, Katie Shpanskaya, Emily McKenna, Dinko Plasto, Lily Kim, Mahesh Atluri, **Carolina V. Guimaraes**, Corie Mitchell, Lillian M. Lai, Jane Chueh, Safwan Halabi, Quin Lu, John Pauly, Lei Xing, Beth M. Kline-Fath, Kristen W. Yeom. *Fetal Brain Age Prediction Using Attention-Guided Deep Learning - submitted*
33. Rebecca Levy, **Carolina V. Guimaraes**, Sonia Partap. *Acute Hyperextension "Surfer's" Myelopathy in a Gymnast: Bending over Backwards for Diagnosis . Neurology April 14, 2020; 94*
34. Susan L. Kinnebrew, Carrie G. Dove, Carrie M. Midwin, Teresa M. Olson, **Carolina V. A. Guimaraes**. *The role of child life in pediatric radiology . Pediatric Radiology (2020) 50:1509–1513*
35. Gabriel Altit, Sonia L. Bonifacio, **Carolina V. Guimaraes**, Ganesh Sivakumar, Beth Yan, Valerie Chock, Krisa Van Meurs. *Cardiac dysfunction in hypoxic ischemic encephalopathy is associated with increased mortality and brain injury by MRI – submitted to Neonatology*
36. R. Corroenne, A. Zarutskie, **C. Guimaraes**, M. Yopez, P. Torres, A.N. Shetty, W. Lee, J. Espinoza, A. Shamshirsaz, A. Nassr, M.A. Belfort, M. Sanz-Cortes. *Is ventriculomegaly and hindbrain herniation seen before and after prenatal neural tube defect repair associated with a worse functional level than anatomical level at birth - Prenatal Diagnosis – in press*

Paper Presentations in National and International Meetings (#29):

1. *Brodies Abscess in a child.* **Guimaraes CVA (presente).** Clube Hugolino Andrade Sociedade Gaucha de Radiologia. Porto Alegre, Rio Grande do Sul, Brazil, March 2003.
2. *MR Evaluation of Reconstruction of the Anterior Cruciate Ligament.* **Guimaraes CVA (presenter)** , Serra JL, Souto SL, Nitz PG, Abreu M, Genro CH, Abreu A. Jornada Gaucha de Radiologia, August 2004 Gramado, Rio Grande do Sul, Brazil.
3. *Prevalence of Findings in MRI of the Knee.* **Guimaraes CVA (presenter)** , Maia PT, Souto SL, Nitz PG, Abreu M, Genro CH, Abreu A. Jornada Gaucha de Radiologia, August 2004. Gramado, Rio Grande do Sul, Brazil.
4. *CT Findings for Blebs & Bullae in Children with Spontaneous Pneumothorax as Compared with Normal Controls.* **Guimaraes CVA (presenter)**, Donnelly LF, Warner, BW. SPR, April 2007. Miami – FL- USA.
5. *Is Adenoid Size Associated with Development of Obstructive Sleep Apnea in Obese Children?* **Guimaraes CVA (presenter)**, Kalra M, Donnelly LF, Shott SR, Fritz SS, Amin RS. SPR, April 2007, Miami – FL- USA.
6. *The Frequency of Lingual Tonsil Enlargement in Obese Children.* **Guimaraes CVA (presenter)**, Kalra M, Donnelly LF, Shott SR, Fritz SS, Amin RS. SPR, April 2007, Miami – FL- USA
7. *CT Findings for Blebs & Bullae in Children with Spontaneous Pneumothorax as Compared with Normal Controls.* **Guimaraes CVA (presenter)**, Donnelly LF, Warner, BW. ESPR, Jun 2007, Barcelona, Spain
8. *CT Findings for Blebs & Bullae in Children with Spontaneous Pneumothorax as Compared with Normal Controls.* **Guimaraes CVA (presenter)**, Donnelly LF, Warner, BW. Midwest Society for pediatric radiology. September 2007, Cincinnati, Ohio.
9. *Do Children with Down Syndrome Have true or Relative Macroglossia?* **Guimaraes CVA (presenter)**, Kalra M, Donnelly LF, Shott SR, Chini BA, Amin RS. RSNA, November 2007, Chicago, IL.
10. *Prenatal MRI Findings in Congenital High Airway Syndrome (CHAOS)* **Guimaraes CVA (presenter)**, Linam, LE, Kline-Fath BM, Donnelly LF, Lim FY, Hopkin RJ, Calvo-Garcia MA, Rubio EI, Livingston JC, Crombleholme TM. Annual Regional Genetics Conference Cincinnati – OH, April 2008.
11. *Cervical Lymphadenitis and Retropharyngeal Abscess Evaluation with Airway Radiographs and CT.* **Guimaraes CVA (presenter)**, Radhakrishnan R, Ying J, Jones BV. SPR, Scottsdale – AZ, May 2008.
12. *Prenatal MRI Findings in Congenital High Airway Syndrome (CHAOS).* **Guimaraes CVA (presenter)** , Linam, LE, Kline-Fath BM, Donnelly LF, Lim FY, Hopkin RJ, Calvo-Garcia MA, Rubio EI, Livingston JC, Crombleholme TM. SPR, Scottsdale – AZ, May 2008
13. *Pediatric Neuroradiology Case.* **Guimaraes CVA (presenter).** John Caffey Society Meeting. Ashville NC, June 2008.
14. *The Many Faces of TRAP on Fetal MRI.* **Guimaraes CVA (presenter)** , Kline-Fath BM, Linam, LE, Calvo-Garcia MA, Rubio EI, Crombleholme TM. SPR, Carlsbad – CA, April – 2009.
15. *Is Prenatal Sonography Accurate in identification of Congenital Lung Lesions?* Beth M. Kline-Fath, Preeyacha Pacharn, Constance Bitters, Maria A. Calvo-Garcia, **Carolina Guimaraes**, Eva Rubio, Steve Imhoff, William Polzin, Alan Brody. SPR, Boston – MA, April 2010.

16. *Late Gestation Fetal MRI-Derived Total Lung Volume (TLV) Predicts Postnatal Survival and Need for ECMO Support in Isolated Congenital Diaphragmatic Hernia.* Timothy C. Lee, Foong Y. Lim, Sundeep G. Keswani, Jason S. Frischer, Beth E. Haberman, Paul S. Kingma, Mounira Habli, Ronald K. Jaekle, Beth M. Kline-Fath, Eva I. Rubio, Maria A. Calvo, **Carolina V. A. Guimaraes** and Timothy M. Crombleholme
American Academy of Pediatrics National Conference & Exhibition San Francisco – CA, October - 2010
17. *Fetal MRI Findings in Cloacal Extrophy / OIES Complex.* Maria A. Calvo, Beth M. Kline-Fath, Eva I. Rubio, **Carolina V. A. Guimaraes.** RSNA, Chicago – IL, December 2011
18. **IFMSS Young Investigator Travel Award**
Aqueduct Stenosis: Which fetal MRI findings accurately predict a postnatal diagnosis? Henault K., **Guimaraes CV**, Mehlin-ray A, Paldino M. Botswana, International Fetal Medicine and Surgery Society (IFMSS)- 2016.
19. *Clinical Assessment and Brain Findings in a Cohort of mothers, Fetuses and Infants with Zika Virus.* Sanz Cortes M, Rivera AM, Yepez M, **Guimaraes CV**, Diaz Yunes I, Zarutskie A, Davila I, Shetty A, Mahadev A, Serrano SM, Castillo N, Lee W, Valentine G, Belfort M, Parra G, Mohila C, Aagaard K, Parra M. 37th Annual Pregnancy Meeting, Las Vegas, NV, January 23-28, 2017
20. *“A tool to Analyze Radiologists” Reporting Styles and provide Feedback as a Means for Self-Improvement.* Grzeszczuk R, Donnelly LF, **Guimaraes CV**, Bisset GS III. Vancouver, Canada, May 2017. *Pediatr Radiol* 2017;47:S95-96 – SPR 2017.
21. *Comparison between manual Auditing and an Automated Auditing Software Program to Evaluate Use of Standardized Reports in Radiology.* **Guimaraes CV (presenter)**, Grzeszczuk R, Donnelly LF, Bisset GS III. Vancouver, Canada, May 2017. *Pediatr Radiol* 2017;47:S95 – SPR 2017.
22. *Implementing a System Approach to Improve Governance and Deployment of Imaging (IMG) Codes in Pediatric Radiology.* **Guimaraes CV (presenter)**, Millecker L, Garza JA, Blado M, Lokey C, Donnelly LF. Vancouver, Canada, May 2017. *Pediatr Radiol* 2017;47:S94-95 – SPR 2017.
23. *Does the Severity of Hindbrain Herniation in Fetuses with Chiari II Malformation Predict the Need for Postnatal Hydrocephalus Treatment After In Utero Intervention?* **Guimaraes CV (presenter)**, Vidal LM, Desai N, Sanz-Cortes M, Zarutskie A, Lee W, Belfort M, Whitehead W. *Pediatr Radiol* 2017; 47:S94 – SPR 2017.
24. *Characterization of Cortical Brain Malformations During Development of Fetuses with Spina Bifida Undergoing in Utero Neural Tube Defect Repair.* Monika Pyarali, BS; Magda Sanz Cortes, MD, PhD; **Carolina Guimaraes, MD**; Annie Hsiao, MD; Mayel Yepez, MD; Paola Torres, MD; Anil Shetty, PhD; Ivan Davila, MD; Alexander Zarutskie, BS; Dina Sharham, BS; Ahmed A. Nassr, MD; Jimmy Espinoza, MD; Alireza Shamsheersaz, MD; Wesley Lee, MD; William Whitehead, MD; Michael A Belfort, MD, PhD. ISFB, Washington DC, 2018
25. *Fetal Neuroradiologic Phenotyping May Lead to Earlier Diagnosis in Conditions Impacting the Midbrain-Hindbrain.* Ryan Gates, **Carolina V. Guimaraes**, Hisham Dahmouh, Heater Byers. WSPR, Carmel 2019 *Journal of Investigative Medicine*, 2019 Vol. 67 (1), 239 (abstract #406)
26. *Cardiac dysfunction in hypoxic ischemic encephalopathy is associated with increase rate of death and brain injury.* Gabriel Altit, MD, Sonia Bonifacio, MD, **Carolina V. Guimaraes, MD**, Shazia Bhombal, MD, Ganesh Sivakumar, BSc, Beth Yan, BS, Valerie Chock, MD, Krisa Van Meurs, MD. Pediatric Academic Societies Meeting (PAS), Philadelphia, 2020
27. *Acute Hyperextension "Surfer's" Myelopathy in a Gymnast: Bending over Backwards for Diagnosis* Rebecca Levy, Carolina V. Guimaraes, Sonia Partap. American Academy of Neurology Annual Meeting., 2020, Toronto

28. *Is ventriculomegaly and hindbrain herniation seen before and after prenatal neural tube defect repair associated with a worse functional level than anatomical level at birth* – R. Corroenne, A. Zarutskie, **C. Guimaraes**, M. Yepez, P. Torres, A.N. Shetty, W. Lee, J. Espinoza, A. Shamshirsaz, A. Nassr, M.A. Belfort, M. Sanz-Cortes, *ISUOG 2020*
29. *“Ataxia in Chronic Granulomatous Disease Due to Metronidazole Toxicity.”* World Congress for Pediatric Gastroenterology, Hepatology and Nutrition this year in Vienna, Austria titled

Posters / Educational Exhibits (#22):

1. *Comparacao Entre Antiinflamatorios Inibidores Da COX 1 e 2 e Inibidores Seletivos Da COX 2 Em Relacao a Funcao Renal.* Girardi MA, Hennemann AS, Fenner A, **Guimaraes CVA**, Leonel IM, Stein HE, Costi KL, Karcher P, Giovanella RG . Congresso Comemorativo Do Cinquentenario AMRIGS October 2001, Porto Alegre, Rio Grande do Sul, Brazil
2. *MR Evaluation of Pituitary Adenoma.* Rocha PR, Mattana PR, Ferri A, Garcia CBA, **Guimaraes CVA**, Giovanella RG. Jornada Gaucha de Radiologia, August 2001, Brazil
3. *Focal Fatty Infiltration of the Liver.* Dellamea LT, Giovanardi R, **Guimaraes CVA**, Paganella VC, Pessoa DB. Jornada Gaucha de Radiologia, August 2002, Brazil
4. *Ultrasound Evaluation of Papillary Carcinoma of the Thyroid.* Dellamea LT, **Guimaraes CVA**, Paganella VC, Pessoa DB. Jornada Gaucha de Radiologia, August 2002, Brazil
5. *Pseudomyxoma Peritoneum.* **Guimaraes CVA**, Rodrigues MP, Genro CH, Abreu . Jornada Gaucha de Radiology. August 2003, Gramado, Rio Grande do Sul, Brazil
6. *Fetal MRI in the Comprehensive Assessment of Down Syndrome.* Eva Rubio, Rupa Radhakrishnan, Leann Linam, Maria Calvo- Garcia. **Carolina Guimaraes**, and Beth Kline-Fath. SPR, Carlsbad - CA - April 2009
7. *Fetal MRI Characterization of Genetic Syndromes.* Rupa Radhakrishnan, Eva Rubio, Leann Linam, Maria Calvo-Garcia, **Carolina Guimaraes**, and Beth Kline-Fath. SPR, Carlsbad – CA - April – 2009
8. *Prenatal Diagnosis of Vascular Birthmarks.* Maria A Calvo-Garcia, Beth Kline-Fath, Tal Laor, Denise Adams, Anita Gupta, Bernadette L Koch, Eva I Rubio, **Carolina Guimaraes**, Foong-Yen Lim, Constance Bitters, Timothy M Crombleholme. SPR, Boston – MA - April 2010
9. Magna Cum Laude award
Trainee Misinterpretations on Pediatric Neuroimaging Studies: Classification, Imaging Analysis, and Outcome Assessment. James Leach, **Carolina Guimaraes**, Blaise Jones. ASNR -Boston, May 2010
10. *Prenatal Imaging of Amniotic Band Syndrome.* Jeremy Neuman MD, Maria A. Calvo-Garcia MD, Constance Bitters RN RDMS, Beth M. Kline-Fath MD, Arnold C. Merrow MD, **Carolina V. A. Guimaraes MD**, Foong-Yen Lim MD. IPR 2011
11. *Caffey Award for Best Case Report Exhibit - IPR 2011*
MR Imaging Features of Fetal Mediastinal and Intrapericardial Teratomas. Eva I Rubio, MD; Maria Calvo-Garcia MD; **Carolina V.A Guimaraes MD**; Constance Bitters; Beth Kline-Fath, IPR 2011
12. *Distinguishing Imaging Features of Fetal Cervical Teratomas: The Utility of Fetal Magnetic Resonance Imaging and Ultrasound* Eva I Rubio, MD; Maria A Calvo-Garcia MD; **Carolina V.A Guimaraes MD**; Constance Bitters; Beth Kline-Fath, MD

13. Magna Cum Laude
Easily Missed Sonographic Findings in the Diagnosis of Hypoxic-Ischemic Injuries. **Carolina Guimaraes**; Alan Daneman; Susan I. Blaser; Monica Epelman. RSNA, Chicago, 2012
14. *Implementation of Standardized Reports within a Pediatric Health Care System with Locations across Multiple States.* **Carolina V.A. Guimaraes**, Lane F. Donnelly, Lauren Averill, Robert DeFlorio. RSNA 2013
15. Certificate of Merit award. *The "DWIBSlight" Saga: Breaking Dawn - Shedding Light on DWIBS Imaging in Pediatric Patient.* Epelman M; **Guimaraes C**, Dinan D. Johson C, Donnelly L. RSNA- 2014
16. *Differentiating Prominent Subarachnoid Spaces from Isodense Subdural Collections seen on CT in Infants* **Carolina V. Guimaraes**, Lane F. Donnelly. SPR – 2014
17. *Unknown case – Coats Plus Syndrome.* **Carolina V. Guimaraes**, Tushar Chandra, Thang Ngo
ASNR – 2017
18. *Fetal MRI Before and After In Utero Repair of Myelomeningocele: What the Neuroradiologists Should Know.* Lorena Vidal, **Carolina V. Guimaraes**, Amy Mehollin-Ray. ASNR – 2017
19. *Diagnosing Cerebral Aqueduct Stenosis. What Pediatric Radiologists Should Look for on Fetal and Postnatal MRI.* Lorena Vidal, **Carolina V. Guimaraes**. SPR – 2017
20. *Posterior Fossa Findings in Prenatal Diagnosis of Dystroglycanopathy - Extending Beyond Brainstem Kinking.* **Carolina V. Guimaraes**, Fernanda D.C. Braojos, Wei Zhang, Christopher I. Cassady D, Amy R. Meholling-Ray, Nilesh K. Desai – SPR 2018
21. *The Many Faces of Brainstem Anomalies.* Sean Creedon, **Carolina V. Guimaraes**, Hisham Dahmouh. SPR 2019
22. *Acute Hyperextension "Surfer's" Myelopathy in a Gymnast: Bending over Backwards for Diagnosis"* Rebecca Levy, Carolina V. Guimaraes, Sonia Partap. American Academy of Neurology Annual Meeting, April 25 to May 1, 2020, Toronto - accepted