

Mary Ashley Cain, M.D.

University of South Florida, Morsani College of Medicine, Tampa, Florida

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Citizenship

United States

Education

Medical School Medical College of Georgia, MD, 2004-2008 2004-2008

Undergraduate Davidson College, BS Biology, 2004 2000-2004

Postgraduate Training

Fellowship Maternal Fetal Medicine 2012-2015
University of South Florida

Residency Obstetrics and Gynecology 2008-2012
University of South Florida

Awards, Honors, Honorary Society Memberships

Obstetrics and Gynecology top 10% reviewer 2019

Obstetrics and Gynecology top 10% reviewer 2015

Excellent resident teacher in Obstetrics and Gynecology, 2008-2012
University of South Florida Morsani College of Medicine.

Developmental Biology Award 2004
Medical College of Georgia School of Medicine

Beta Beta Beta Biology Honor Society 2004

Alpha Epsilon Delta Honor Society 2004

Captain Women's Swimming and Diving Team,
 Davidson College, Davidson, NC

Varsity Swimming Letter Award Winner,
 Davidson College Davidson NC

2000-2004

Academic Appointments

Associate Professor
 Division of Maternal Fetal Medicine
 Department of Obstetrics and Gynecology
 University of South Florida Morsani College of Medicine

2022-
 current

Assistant Professor
 Division of Maternal Fetal Medicine
 Department of Obstetrics and Gynecology
 University of South Florida Morsani College of Medicine

2015-2022

Clinical Instructor
 Department of Obstetrics and Gynecology Morsani College of Medicine
 University of South Florida; Tampa, FL

2013-2015

Teaching, Lecture

Undergraduate Medical

BCC 7185 Maternal-Newborn Peds Clerkship

2015-current

Graduate Medical

Faculty member,
 Obstetrics and Gynecology Residency, USF

2015-current

Core Faculty member
 Maternal Fetal Medicine Fellowship, USF

2015- current

Fellowship Program Director
 Maternal Fetal Medicine Fellowship, USF

2020-current

Innovations in Education:

Invasive Procedures in MFM simulation modules
 Multidisciplinary subspecialty OBGYN fellowship research bootcamp
 Program
 Multidisciplinary subspecialty OBGYN fellowship wellness retreat

2018-current
 2019-current
 2021-curent

Mentorship

Emma Hale Morsani COM class of 2023-RISE mentor

Peeraya Sawangkum MD- USF OBGYN residency research mentor

Brittany Manobianco MD- USF OBGYN residency research mentor

Elizabeth Hoover MD- Postpartum follow up quality improvement mentor

Rachelle Price MD- High-Risk Postpartum clinic quality improvement mentor

Bradley Sipe MD- Treatment of Sepsis in pregnancy-quality improvement mentor

Zailing Xing – Dissertation Committee Member

Claudio Schenone, MD – USF OBGYN, Maternal-Fetal Medicine Fellowship Mentor

Viviana De Assis, DO – USF OBGYN, Maternal-Fetal Medicine Fellowship Mentor

Lectures by Invitation

National

“Sleep in Pregnancy” Emory University School of Medicine Obstetrics and Gynecology Grand Rounds virtual 2021

“Sleep in Pregnancy” Brigham and Women’s Perinatal Conference, virtual 2021

“Hypertension its not just for breakfast anymore” Cutting Edge Conference, Monmouth, New Jersey 2018

Breaking bad news simulation instructor” ACOG Obstetrical Emergencies and Catastrophes course 2018
Tampa, FL

“Documentation in Obstetrics” 2016,
ACOG Obstetrical emergencies and catastrophes course 2017,
Tampa, FL 2018

Maternal Code simulation” 2018
ACOG Obstetrical emergencies and catastrophes course
Tampa, FL

“Severe Hypertriglyceridemia and Pregnancy: Implications for Care” 2014
Pregnancy as a Window to Future Health, Scientific Forum.
34th Annual Meeting of the Society for Maternal Fetal Medicine
New Orleans, LA

Regional

“HIV in Pregnancy” 2021
American College of Obstetricians and Gynecologist
District IIX Annual Meeting
Virtual

2018
“Pregnancy as a Window to Future Health”
Florida Academy of CNM, annual state conference

2014
“ Sleep in Pregnancy” 14th annual Conference on Obesity, Orlando, FL

Local

2022
“Hypertension in Pregnancy – Choose your own adventure” USF OBGYN
Department Grand Rounds

2021
“Umbilical Vein Varix” Tampa General Hospital and USF quarterly
ultrasound conference, Tampa FL

2020
“Where you deliver matters” Tampa General Hospital community medical
education, Tampa Fl

2018
“HIV in Pregnancy” Department of Obstetrics and Gynecology Grand
Rounds University of South Florida, Tampa Fl

2017
Chest masses” Tampa General Hospital and USF quarterly ultrasound
conference, Tampa FL

“Pregnancy as a Window to Future Health” Tampa General Hospital community medical education, Tampa FL	2016,2017
“Pregnancy as a Window to Future Health” Department of Obstetrics and Gynecology Grand Rounds University of South Florida, Tampa FL	2015
“Maternal Wolff-Parkinson-White and Ebstein’s Anomaly” Complex Obstetrical Patient Review University of South Florida, Tampa FL	2014
“Type One Diabetes and Pregnancy” Students with Diabetes National Conference, Annually Tampa, FL	2013-2015 2013
“Investigating Neonatal Outcomes of Pregnancies Complicated by Gastroschisis and Optimal Delivery Timing” Perinatal Research Seminar, University of South Florida, Tampa FL	

Clinical Activities or Innovations

<u>Specialty certifications</u> Subspecialty certification: Maternal Fetal Medicine Specialty certification: Obstetrics and Gynecology	2015- 2012
<u>Medical licensure</u> State of Florida Medical License	2012-
<u>Clinical innovation</u> High-risk postpartum care clinic	2019-

Scholarly Activity

B) Past Grants

Agency: University of South Florida
 I.D.# Women’s Health Collaborative Seed Grant -10009 612200
 Title: “A Pilot Study of postpartum weight loss in obese women using a
 sleep intervention in a group prenatal care setting” P.I.: Jessica Brumley
 PhD, CNM
 Total costs for project period: \$ 10,696

Project period: 03/2014-05/2016

Published Bibliography

Peer-reviewed

Cain MA, Bornick P, Whiteman V. The Maternal, Fetal, and Neonatal Effects of Cocaine Exposure in Pregnancy. *Clin Obstet Gynecol*. 2013 Mar; 56(1):124-32.

Cain MA, Guidi C, Steffensen T, Whiteman VE, Gilbert-Barness E, Johnson DR. Postmortem ultrasonography of the macerated fetus complements autopsy following in utero fetal demise. *Pediatr Dev Pathol*. 2014 Mar 11.

Cain MA, Whiteman VE, Buhari MA, Louis JM. Positive Interferon-Gamma Release Assay Leading to a Diagnosis of *Mycobacterium tuberculosis* Pericarditis in Pregnancy. *Obstetrics and Gynecology*. 2014

Cain, MA; Salemi JL; Tanner, JP; Mogos, M; Kirby, RS; Whiteman, VE; Salihu, HM. Timing of delivery of a gastroschisis affected pregnancy and its impact on perinatal outcomes and hospital costs. *Obstetrics and Gynecology*. 2014 September

Whiteman VE, Salemi JL, Mogos M, **Cain MA**, Aliyu MH, Salihu HM. Maternal opioid drug use during pregnancy and its impact on perinatal morbidity, mortality and the costs of medical care in the United States. *Journal of Pregnancy* 2014;2014:906723. doi: 10.1155/2014/906723. Epub 2014 Aug 28.

Whiteman VE, Zweibel B, Amand A, **Cain MA**, Stickles X, Hoffman M. Staged management of placenta accreta in a hybrid operating room suite. *Obstetrics and Gynaecology Cases-Reviews*.

Cain, MA, Ricciuti, J, Louis JM. Sleep-disordered breathing in pregnancy and future cardiovascular disease risk. *Seminars in Perinatology*. 2015 Jun;39(4):304-9

Whiteman, VE; Salemi JS; Mejia De Grubb, MC; **Cain MA**; Mogos MF; Zoorob RJ; Salihu HM. The additive effects of pre-pregnancy body mass index and gestational diabetes on pregnancy outcomes and healthcare costs. *Obesity*. 2015 Nov;23(11):2299-308.

Cain MA; Ellis J; Vengrove MA; Wilcox B; Yankowitz J; Smulian JC. Gallstone and severe hypertriglyceride-induced pancreatitis in pregnancy. *Obstetrical and Gynecological Survey*. 2015 70 (9) 577-83.

Mikhail, E. **Cain MA**, Shah M, Solnik MJ, Sobolewski CJ, Hart S. Does laparoscopic hysterectomy increase the risk of vaginal cuff dehiscence? An analysis of outcomes from multiple academic centers and a review of the

literature. *Surg Technol Int* 2015 Nov;27: 157-62.

Omar HR, Sprenker C, Alvey E, Hoffman M, Karlnoski R, Ching YH **Cain MA**, Mangar D, Camporesi EM. The value of occlusive balloons in the management of abnormal placentation: a retrospective study. *Journal of Obstetrics and Gynaecology*. 2015 Oct 22:1-4

Mogos M, Salemi J, **Cain MA**, Whiteman VE, Salihu HM. Recent trends in placenta accreta in the United States and its impact on maternal-fetal morbidity and healthcare-associated costs, 1998-2011. *Journal of Maternal, Fetal and Neonatal Medicine*. 2016 Apr;29(7): 1077-1082.

Brumley J, **Cain MA**, Stern M, Louis JM. Gestational Weight Gain and Breastfeeding Outcomes in Group Prenatal Care. *J Midwifery Womens Health*. 2016 Sep;61(5):557-562. doi: 10.1111/jmwh.12484. Epub 2016 Jul 18.

Cain MA, Louis JM. Sleep disordered breathing in pregnancy. *Clinics in Laboratory Medicine*. *Clin Lab Med*. 2016 Jun;36(2):435-46. doi: 10.1016/j.cl.2016.01.001. Epub 2016 Mar 4. Review.

Cain MA, Salemi JL, Tanner JP, Kirby RS, Salihu HM, Louis JM. Pregnancy as a window to future health: maternal placental syndromes and short-term cardiovascular outcomes. *Am J Obstet Gynecol*. 2016 Oct;215(4):484.e1-484.e14. doi: 10.1016/j.ajog.2016.05.047. Epub 2016 Jun 2.

Mcdowell, M, **Cain MA**, Brumley J. Excessive Gestational Weight Gain. *Journal of Midwifery and Womens Health*. 2019 Jan; 64(1): 46-54

Cain, MA , Brumley J, Louis-Jacques A, Drerup M, Stern M, Louis JM. A Pilot Study of a Sleep Intervention Delivered through Group Prenatal Care to Overweight and Obese Women. [Behav Sleep Med](#). 2019 May 25:1-11. doi: 10.1080/15402002.2019.1613995

Kendle AM, Roekner JT, Santillana EC, Kis LE, **Cain MA**. Cystic Fibrosis Transmembrane Conductance Regulator Modulators During Pregnancy: A Case Series. *Cureus*. 2021 Aug 25;13(8):e17427. doi: 10.7759/cureus.17427. PMID: 34589336; PMCID: PMC8460487.

Müller R, Steffensen T, Krstić N, **Cain MA**. Report of a novel variant in the FAM111A gene in a fetus with multiple anomalies including gracile bones, hypoplastic spleen, and hypomineralized skull. *Am J Med Genet A*. 2021 Jun;185(6):1903-1907. doi: 10.1002/ajmg.a.62182. Epub 2021 Mar 22. PMID: 33750016.

Published Abstracts

Cain, MA; Shah M; Downes, K; Bassaly, R; Mehta, S; Glazerman, L; Hoyte, L; Sobolewski, J; Solnik, MJ; Hart, S; Incidence of vaginal cuff dehiscence and urinary tract injury after total laparoscopic hysterectomy. Journal of Minimally Invasive Gynecology 2012:19 (6) S55

Cain, MA; Salemi JL; Tanner, JP; Mogos, M; Kirby, RS; Whiteman, VE; Salihu, HM. Timing of delivery of a gastroschisis affected pregnancy and its impact on perinatal outcomes and hospital costs. American Journal of Obstetrics & Gynecology 2014: 210 (1) S97

Cain, MA; Louis, JM; Whiteman, VE: Maternal methadone dose and neonatal outcomes. American Journal of Obstetrics & Gynecology 2014: 210 (1) S296

Cain, MA; Salemi JL; Tanner, JP; Whiteman, VE; Kirby, RS. Gastroschisis Delivery after 37 weeks is Associated with Improved Neonatal Respiratory Function and Outcomes. Reproductive Sciences March 2014; vol. 21, 3 suppl: T120.

Cain, MA; Salemi JL, Tanner JP, Kirby RS, Salihu HM, Louis JM. Pregnancy as a window to future health: maternal placental syndromes and short term cardiovascular disease risk. American Journal of Obstetrics & Gynecology 2015: 195

Cain, MA; Brumley J; Beauchamp W; Louis-Jacques A; Drerup M; Louis JM. A pilot study of cognitive behavioral therapy for insomnia delivered in pregnancy. Sleep 2016; 39. Abstract supplement.

Hoffman MS, Louis-Jacques A, Xiong Y, Camporesi E, Mangar D, **Cain M.** Experience with Nonemergent hysterectomy for placenta accreta. Proceedings of the 81st Annual Meeting of the SAAOG. January, 2019.

Hale, E; **Cain, MA:** COVID-19 and Sleep in Pregnancy. 2021 Annual Clinical and Scientific Meeting of American College of Obstetrics and Gynecology.

Pressman, K., Pooran, C., Wellcome, J. L., Crousillat, D., **Cain, M.**, & Louis, J. M. (2023). Blood pressure thresholds associated with postpartum preeclampsia readmissions. American Journal of Obstetrics and Gynecology, 228(1, Supplement), S672.

<https://doi.org/https://doi.org/10.1016/j.ajog.2022.11.1129>

Schenone, C., **Cain, A.**, Tsalatsanis, A., Kumar, A., Louis, JM., Crousillat, D. Differences In Myocardial Oxygen Consumption in Pregnancies Complicated by Chronic Hypertension and Hypertensive Disorders of Pregnancy. J Am Coll Cardiol. 2023 Mar, 81 (8_Supplement) 2227.

[https://doi.org/10.1016/S0735-1097\(23\)02671-2](https://doi.org/10.1016/S0735-1097(23)02671-2)

de Assis V, **Cain M**, Louis JM, Kendle A, Crousillat D. Effects of galactopoieses on post-partum dyslipidemia among obese women. American Journal of Obstetrics and Gynecology. 2023;228(1, Supplement):S760-S1.

<https://doi.org/https://doi.org/10.1016/j.ajog.2022.11.1266>

de Assis, V., **Cain, M., Louis, J. M.**, Kendle, A., & Crousillat, D. (2023). Effects of galactopoieses on post-partum dyslipidemia among obese women. American Journal of Obstetrics and Gynecology, 228(1, Supplement), S760-S761.

<https://doi.org/https://doi.org/10.1016/j.ajog.2022.11.1266>

Schenone, C., **Cain, A.**, Edghill, J., Louis, J., Tanner, J., Crousillat, D., (2024). Preconception and early pregnancy rate-pressure product as predictors of hypertensive disorders of pregnancy.

Schenone CV, **Ashley Cain M**, Schenone AL, Smith T, Tsalatsanis A, Louis JM, Crousillat DR. Changes in rate-pressure product associated with pregnancy. Am J Obstet Gynecol MFM. 2024 Mar 5;6(4):101338. doi: 10.1016/j.ajogmf.2024.101338. Epub ahead of print. PMID: 38453019.

Case Reports, Technical Notes, Letters

Cain MA, Whiteman VE, Buhari MA, Louis JM. Positive Interferon-Gamma Release Assay Leading to a Diagnosis of *Mycobacterium tuberculosis* Pericarditis in Pregnancy. Obstetrics and Gynecology. 2014

Müller R, Steffensen T, Krstić N, **Cain MA**. Report of a novel variant in the FAM111A gene in a fetus with multiple anomalies including gracile bones, hypoplastic spleen and hypomineralized skull. Am J Med Genet A. 2021 Mar 22. doi: 10.1002/ajmg.a.62182. Online ahead of print. PMID: 33750016

Akers, A., De Assis, V., Scoma, C., **Cain, M. A.**, & Crousillat, D. R. (2023). Patient-Prosthesis Mismatch in Pregnancy. *JACC.*, 27.

<https://doi.org/10.1016/j.jaccas.2023.102073>

Non peer reviewed

Louis, JM and **Cain, MA**. Sleep pregnancy and your future health.

<https://www.healthywomen.org/content/article/sleep-pregnancy-and-your-future-health>. 24 May 2017

Service

National Committee
Online Abstract Reviewer

2023

2024 CREOG & APGO Annual Meeting

Committee member 2021
ABOG Committee on standard setting in Maternal Fetal
Medicine written examination

Committee member 2021
ACGME maternal fetal medicine milestones committee

Director 2021-
Resident forum
Society for Maternal Fetal Medicine Annual meeting

Committee member 2016-
Society for Maternal Fetal Medicine Communications committee 2019

ACGME Milestones – Focus Group Member 2023

2020-
Hospital Committees

Co-Chair
Maternal Morbidities review committee 2021
Tampa General Hospital

Committee member
RVU reallocation working group
University of South Florida 2018-
2020

Committee member
Maternal Morbidities review committee 2018-
Tampa General Hospital 2020

Committee member
Sepsis Committee
Tampa General Hospital 2015-
2018

Committee member and physician representative
Florida Perinatal Quality Collaborative
Hypertension in pregnancy initiate committee 2015-
Tampa General Hospital 2018

Committee member
Normal Birth Task Force 2005-
Tampa General Hospital 2006

President
Pediatric interest group

Medical College of Georgia School of Medicine
Augusta, Ga

2021-

Editorial Board Positions

Member, Editorial Board "Obstetrics and Gynecology"

Journal reviewer positions

Reviewer "Obstetrics and Gynecology"	2015-2020-
Invited reviewer- "Journal of Perinatology"	2020-
Invited reviewer- "Journal of Gynecologic surgery"	2019-
Invited reviewer- "International Journal of Behavioral Medicine"	2020-
Invited Reviewer- "Behavioral Sleep Medicine"	2020-
Invited Reviewer- "Journal of Maternal Fetal and Neonatal Medicine"	2019-2015
Invited Reviewer "Sleep Medicine"	
Reviewer "Ultrasound in Obstetrics and Gynecology"	

Society Memberships

Fellow, American Congress of Obstetricians and Gynecologists	2012-
Society for Maternal Fetal Medicine	

Media Appearances:

"Zika virus in pregnancy" WFLA Tampa News Channel 8	2016
"Zika virus in pregnancy" WTSP Tampa News Channel 10	2016
"Zika virus in pregnancy" NBC National Nightly News	2016
"Increasing cases of congenital Syphilis" WTSP Tampa News Channel 10	2020
"Covid-19 in pregnancy" WFLA Tampa News Channel 8	2020
"Covid-19 vaccines in pregnancy" WFLA Tampa News Channel 8	2021
"Covid-19 vaccines in pregnancy" Bay News 9 Tampa	2021
"Covid-19 vaccine safety in pregnancy" WTSP Tampa News Channel 10	2021
"Telehealth Postpartum Care"	2021

WFLA Tampa News Channel 8

Community Involvement

Tampa General Hospital White Coat Program

2019-

2015

Co-president Davidson in Tampa Alumni Chapter

2004-

Students for Community Involvement,
Medical College of Georgia, Augusta GA

2008

2005

Volunteer Counselor, Camp Rainbow,
summer camp for pediatric cancer patients,
Camp Twin Lakes, Rutledge GA

2004

Publicity Chair, United Community Action,
Davidson College, Davidson NC