



Maternal-Fetal Medicine

ANNUAL RESEARCH UPDATE

January 2022 - December 2022

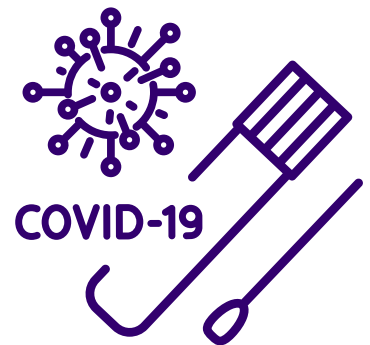
OVERVIEW

2022 was an exciting and productive year for MFM research, with several grant & training awards and a broad portfolio of publications in basic, translational, and clinical research. In addition, national and international collaborations with multiple national and international universities, the National Institutes of Health, and the Maternal Fetal Medicine Network Units have strengthened our research portfolio and impact. In addition to ongoing grant awards, there were new awards granted in 2022, and several grant proposals submitted for 2023.



Academic productivity was excellent, with 54 publications and 30 scientific & educational presentations at local and international meetings. Drs. Burns, Fay, and Stephenson-Famy have been at the national forefront in educational research and had a remarkable 7 oral presentations and will lead 2 break-out sessions at the 2022 Association of Professors in Gynecology and Obstetrics/Council on Resident Education in Obstetrics and Gynecology Annual Meeting. Dr. Burns received the prestigious Best Oral Abstract Award at the CREOG & APGO Annual Meeting in Orlando, Florida.

The MFM division continued in cutting-edge COVID-19 related research, led by Dr. Kachikis, with 8 publications in high impact journals, with extensive coverage by national and regional media.



The MFM division continued its global presence, with several multinational collaborations resulting in several publications. Dr. Albright gave oral presentations at the 11th International Symposium on Marfan, Loeys-Dietz, and Related Conditions in Paris, and Dr. Shree and Dr. Albright gave oral presentations at the International Society for the Study of Hypertension in Pregnancy Annual Meeting in Montpellier, France.

A continued strength of MFM research is in its collaborative nature and breadth of research. Our current research portfolio at UWMC includes:

>20 COLLABORATIONS WITH OVER 20 OTHER UW DEPARTMENTS

>50 COLLABORATIONS WITH OVER 50 OTHER NATIONAL & INTERNATIONAL INSTITUTIONS

In addition, national and international collaborations with universities, foundations, World Health Organization, the National Institutes of Health, and the Centers for Disease Control have strengthened the MFM research portfolio and impact.

The renovation of the MFM Research Lab for processing and storage (RR 536 & RR540) continues to be upgraded. We have added a refrigerated centrifuge, have upgraded FreezerWorks, and now have a liquid nitrogen tank/freezer for storage.

RESEARCH AWARDS 2022

Current

1. **Gravett MG**. NIH R01 HD 0896679. Placentomics using a novel method to isolate circulating placental derivatives.06/2021. No-cost extension to 07/31/2022
2. **Kachikis A**. Thrasher Research Fund. Protection of high-risk infants via maternal antibody: the impact of fetal growth restriction. 07/2019 – 06/2022
3. **R. Swati Shree**. NIH 5 K08 HL 150169-02. Cardiovascular disease, preeclampsia, and microchimerism. 07/20 – 06/25
4. **R. Swati Shree**. NIH R21AI144677. Single-cell analysis to define protective and tolerating immune cell populations in the human placenta. PI: Prlic/Shree; 2/7/20-1/31/22
5. **R. Swati Shree**. NIH R01 AI 174006-01: Education of the fetal immune system by inherited maternal cells. PI Harrington 2022 – 2027
6. **R Swati Shree**.UW CoMotion. Detection of Clinically-Relevant Molecular Conditions from Liquid Biopsy. PI Shree/Co-I Reichel
7. **Vojtech L**. NIH 1R01AI153342-01A1 REV. The role of semen in induction of paternal-specific tolerance during pregnancy.02/2021. New award 02/2021 – 01/2026
8. **Vojtech L**. Royalty Grant. Investigating the non-neutralizing functions of anti-Chlamydia antibodies. New award 07/2021 – 06/2022
9. **Kachikis A**. NIH 1K23AI153390-01A1. Protection of at-risk low birth weight infants against influenza via maternal antibody. New award 03/2021 – 02/2026
10. **McCartney S**. NIH K12HD000849. Integration of Cytokine and Metabolic Signals by Innate Lymphoid Cells at the Maternal-Fetal Interface in Chorioamnionitis. New Award 07/2021 – 06/30/2023
11. **Kachikis A**. Royalty Research Fund. Presence and neutralization activity of maternally-derived antibodies in infants after SARS-CoV-2 vaccination in pregnancy in interval follow up after delivery. New Award 01/2022 – 12/2022
12. **Shree R**, Kolarova T. Brotman Baty Institute of Precision Medicine: Low pass whole genome sequencing of amniotic fluid cell-free DNA (Shree/Lockwood/Kolarova)
13. **Kolarova T, Shree S**. Brotman Baty Institute of Precision Medicine: Alterations in cell-free DNA metrics following betamethasone administration in preeclampsia
14. **Albright C, Shree R**. Seattle Medical Foundation Pilot Project: Enhanced Postpartum Hypertension Monitoring

Submitted

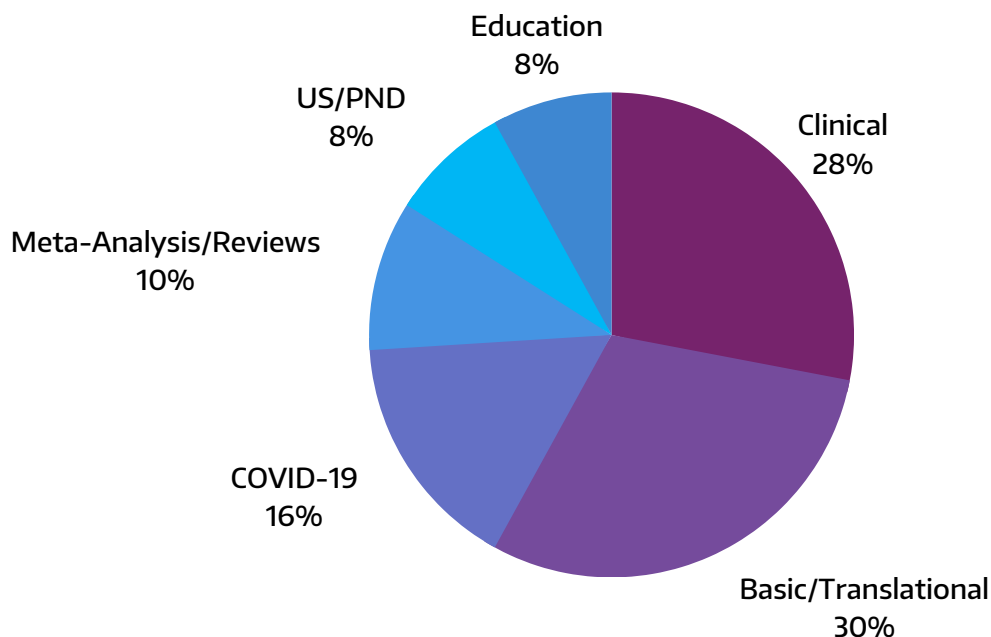
1. Chiu D, **Vojtech L, Gravett M**, Katz R, Puia-Dumitrescu M. Assessment of fetal brain health via circulating exRNA carriers for opioid use disorder in pregnancy. NIH/NIAID
2. Vojtech L (MPI), Chiu DT (MPI), **Gravett MG**, Katz R, Puia-Dumitrescu M. Predicting neonatal health outcomes from placental and fetal brain extracellular vesicles in pregnant opioid users. NIH/NICHD
3. McCartney S, Shree R Swati, Kachikis A, Ha G. Identification of Markers of Placenta Dysfunction in Fetal Growth Restriction. Burroughs Wellcome Fund
4. **McCartney S**. Investigation of Metabolic Factors on Innate Lymphoid Cell Function in Preeclampsia. Doris Duke Clinical Science Fellowship

PUBLICATIONS

2022 continued to be a productive year, with 54 publications, many in high impact journals and OB/GYN specialty journals. A broad range of clinical and scientific interests were reported, with clinical publications and laboratory/translational publications (below):

A continuing unique strength of MFM research was in the multidisciplinary, collaborative nature of MFM research. These collaborative efforts in 2022 involved:

- 21 University of Washington Departments
- > 50 National or International Universities
- Maternal-Fetal Medicine Network
- Private Foundations



Publications 2022

1. [Optic nerve sheath diameter in severe preeclampsia with neurologic features versus controls.](#) **Sterrett ME**, Austin B, Barnes RM, Chang EY. BMC Pregnancy Childbirth. 2022 Mar 19;22(1):224. doi: 10.1186/s12884-022-04548-8.
2. [Cardiac and Pregnancy Outcomes of Pregnant Patients With Congenital Heart Disease According to Risk Classification System.](#) Steiner JM, Lokken E, Bayley E, Pechan J, Curtin A, Buber J, **Albright C**. Am J Cardiol. 2021 Dec 15;161:95-101. doi: 10.1016/j.amjcard.2021.08.037. Epub 2021 Oct 8. PMID: 34635313
3. [Aortic dissection in pregnancy and the postpartum period.](#) Russo M, Boehler-Tatman M, **Albright C**, David C, Kennedy L, Roberts AW, Shalhub S, Afifi R; Aortic Dissection Collaborative. Semin Vasc Surg. 2022 Mar;35(1):60-68. doi: 10.1053/j.semvascsurg.2022.02.010. Epub 2022 Feb 23. PMID: 35501042
4. [Phenotype-Directed Management of Hypertension in Pregnancy.](#) McLaughlin K, Snelgrove JW, **Sienas LE, Easterling TR**, Kingdom JC, **Albright CM**. J Am Heart Assoc. 2022 Apr 5;11(7):e023694. doi: 10.1161/JAHA.121.023694. Epub 2022 Mar 14.
5. [Maternal and neonatal outcomes of antihypertensive treatment in pregnancy: A retrospective cohort study.](#) Dublin S, Idu A, Avalos LA, Cheetham TC, **Easterling TR**, Chen L, Holt VL, Nance N, Bider-Canfield Z, Neugebauer RS, Reynolds K, Badon SE, Shortreed SM.
6. [Complete Molar Pregnancies with a Coexisting Fetus: Pregnancy Outcomes and Review of Literature.](#) Irani RA, Holliman K, Debbink M, Day L, Mehlhaff K, Gill L, Heuser C, **Kachikis A**, Strickland K, Tureson J, Shank J, Pilliod R, Iyer C, Han CS. AJP Rep. 2021 Oct 25;12(1):e96-e107. doi: 10.1055/a-1678-3563. eCollection 2022 Jan

PUBLICATIONS

Publications 2022 (continued)

7. [Amniocentesis to diagnose congenital cytomegalovirus infection following maternal primary infection.](#) Dinsmoor MJ, Fette LM, Hughes BL, Rouse DJ, Saade GR, Reddy UM, Allard D, Mallett G, Thom EA, Gyamfi-Bannerman C, Varner MW, Goodnight WH, Tita ATN, Costantine MM, Swamy GK, Heyborne KD, Chien EK, Chauhan SP, El-Sayed YY, Casey BM, Parry S, Simhan HN, **Napolitano PG**, Macones GA; Eunice Kennedy Shriver National Institute of Child Health and Human Development Maternal-Fetal Medicine Units (MFMU) Network. Am J Obstet Gynecol MFM. 2022 Jul;4(4):100641. doi: 10.1016/j.ajogmf.2022.100641. Epub 2022 May 6.
8. [ZIKV can infect human term placentas in the absence of maternal factors.](#) Villazana-Kretzer DL, Wuertz KM, Newhouse D, Damicis JR, Dornisch EM, Voss KM, Muruato AE, Paymaster JA, Schmiedecke SS, Edwards SM, **Napolitano PG**, Tisoncik-Go J, Ieronimakis N, Gale M Jr. Commun Biol. 2022 Mar 18;5(1):243. doi: 10.1038/s42003-022-03158-6.
9. [Noninvasive Prediction of Congenital Cytomegalovirus Infection After Maternal Primary Infection.](#) Rouse DJ, Fette LM, Hughes BL, Saade GR, Dinsmoor MJ, Reddy UM, Pass R, Allard D, Mallett G, Clifton RG, Saccoccio FM, Permar SR, Gyamfi-Bannerman C, Varner MW, Goodnight WH, Tita ATN, Costantine MM, Swamy GK, Heyborne KD, Chien EK, Chauhan SP, El-Sayed YY, Casey BM, Parry S, Simhan HN, **Napolitano PG**, Macones GA; Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) Maternal-Fetal Medicine Units (MFMU) Network. Obstet Gynecol. 2022 Mar 1;139(3):400-406. doi: 10.1097/AOG.0000000000004691.
10. [Ascending Reproductive Tract Infection in Pig-Tailed Macaques Inoculated with Mycoplasma genitalium.](#) Aguila LKT, Patton DL, Gornalusse GG, **Vojtech LN**, Murnane RD, Wood GE. Infect Immun. 2022 Jun 16;90(6):e0013122. doi: 10.1128/iai.00131-22. Epub 2022 May 18.
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14. [Plasma Retinoid Concentrations Are Altered in Pregnant Women.](#) Czuba LC, **Fay EE**, LaFrance J, Smith CK, Shum S, Moreni SL, Mao J, Isoherranen N, Hebert MF. Nutrients. 2022 Mar 25;14(7):1365. doi: 10.3390/nu14071365.

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15. [Infant Dextromethorphan and Dextrorphan Exposure via Breast Milk From Mothers Who Are CYP2D6 Extensive Metabolizers.](#) Shum S, Yadav A, **Fay E**, Moreni S, Mao J, Czuba L, Wang C, Isoherranen N, Hebert MF. *J Clin Pharmacol.* 2022 Jun;62(6):747-755. doi: 10.1002/jcph.2012. Epub 2022 Jan 8.
16. [Customized GROW vs INTERGROWTH-21st birthweight standards to identify small for gestational age associated perinatal outcomes at term.](#) **Fay E**, Hugh O, Francis A, Katz R, Sitcov K, Souter V, Gardosi J. *Am J Obstet Gynecol MFM.* 2022 Mar;4(2):100545. doi: 10.1016/j.ajogmf.2021.100545. Epub 2021 Dec 4.
17. [Effects of prenatal exposure to maternal COVID-19 and perinatal care on neonatal outcome: results from the INTERCOVID Multinational Cohort Study.](#) Giuliani F, Oros D, Gunier RB, Deantoni S, Rauch S, Casale R, Nieto R, Bertino E, Rego A, Menis C, **Gravett MG**, Candiani M, Deruelle P, García-May PK, Mhatre M, Usman MA, Abd-Elsalam S, Etuk S, Napolitano R, Liu B, Prefumo F, Savasi V, Do Vale MS, Baafi E, Ariff S, Maiz N, Aminu MB, Cardona-Perez JA, Craik R, Tavchioska G, Bako B, Benski C, Hassan-Hanga F, Savorani M, Sentilhes L, Carola Capelli M, Takahashi K, Vecchiarelli C, Ikenoue S, Thiruvengadam R, Soto Conti CP, Cetin I, Nachinab VB, Ernawati E, Duro EA, Kholin A, Teji JS, Easter SR, Salomon LJ, Ayede AI, Cerbo RM, Agyeman-Duah J, Roggero P, Eskenazi B, Langer A, Bhutta ZA, Kennedy SH, Papageorghiou AT, Villar J. *Am J Obstet Gynecol.* 2022 Sep;227(3):488.e1-488.e17. doi: 10.1016/j.ajog.2022.04.019.
18. [Association of fetal fraction with hypertensive disorders of pregnancy incidence and disease severity.](#) **Shree R, Kolarova TR, MacKinnon HJ**, Lockwood CM, Chandrasekaran S. *Am J Obstet Gynecol MFM.* 2022 May 27;4(5):100671. doi: 10.1016/j.ajogmf.2022.100671. Online ahead of print.
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20. [Am I Really Qualified To Be Here: Exploring The Impact Of Impostor Phenomenon On Training And Careers In OB/GYN Medical Education.](#) Addae-Konadu K, Carlson S, Janes J, Gecki K, **Stephenson-Famy AB**. *J Surg Educ.* 2022 Jan-Feb;79(1):102-106. doi: 10.1016/j.jsurg.2021.08.013. Epub 2021 Sep
21. [JTH in Clinic - Obstetric bleeding: VWD and other inherited bleeding disorders.](#) Johnsen JM, **MacKinnon HJ**. *J Thromb Haemost.* 2022 Jul;20(7):1568-1575. doi: 10.1111/jth.15770. Epub 2022 Jun 8.
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24. [Placental transcriptomic signatures of spontaneous preterm birth.](#) Paquette AG, MacDonald J, Bammler T, Day DB, Loftus CT, Buth E, Mason WA, Bush NR, Lewinn KZ, Marsit C, Litch JA, **Gravett M**, Enquobahrie DA, Sathyanarayana S. Am J Obstet Gynecol. 2022 Jul 19;S0002-9378(22)00569-5. doi: 10.1016/j.ajog.2022.07.015. Online ahead of print.PMID: 35868418
25. [Diabetes mellitus, maternal adiposity, and insulin-dependent gestational diabetes are associated with COVID-19 in pregnancy: the INTERCOVID study.](#) Eskenazi B, Rauch S, Iurlaro E, Gunier RB, Rego A, **Gravett MG**, Cavoretto PI, Deruelle P, García-May PK, Mhatre M, Usman MA, Elbahnasawy M, Etuk S, Napolitano R, Deantoni S, Liu B, Prefumo F, Savasi V, Marques PF, Baafi E, Zainab G, Nieto R, Serrano B, Aminu MB, Cardona-Perez JA, Craik R, Winsey A, Tavchioska G, Bako B, Oros D, Benski C, Galadanci H, Savorani M, Oberto M, Sentilhes L, Risso M, Takahashi K, Vecciarelli C, Ikenoue S, Pandey AK, Soto Conti CP, Cetin I, Nachinab VB, Ernawati E, Duro EA, Kholin A, Firlit ML, Easter SR, Sichitiu J, John-Akinola Y, Casale R, Cena H, Agyeman-Duah J, Roggero P, Langer A, Bhutta ZA, Kennedy SH, Villar J, Papageorghiou AT. Am J Obstet Gynecol. 2022 Jul;227(1):74.e1-74.e16. doi: 10.1016/j.ajog.2021.12.032. Epub 2021 Dec 20.PMID: 34942154
26. [Cabergoline for postpartum lactation suppression: Effect on blood pressure and pulse.](#) Humphrey S, Baechler M, Schiff M, **Hitti J**. Int J Gynaecol Obstet. 2022 Mar 19. doi: 10.1002/ijgo.14184. Online ahead of print.PMID: 35304744
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28. [Universal Severe Acute Respiratory Syndrome Coronavirus 2 \(SARS-CoV-2\) Testing for Obstetric Inpatient Units Across the United States.](#) Gilner J, Kansal N, Biggio JR, **Delaney S**, Grotegut CA, Hardy E, Hirshberg A, **Kachikis A**, LaCourse SM, Martin J, Metz TD, Miller ES, Norton ME, Sinkey R, Sobhani NC, Son SL, Srinivas S, Tita A, Werner EF, Hughes BL. Clin Infect Dis. 2022 Aug 24;75(1):e322-e328. doi: 10.1093/cid/ciab955.PMID: 34791093
29. [Multiple Copy Number Variants Detected by Noninvasive Prenatal Testing.](#) Paolucci SA, **Ma KK**, Paulson V, Gadi VK, Lockwood CM. Clin Chem. 2022 May 18;68(5):627-632. doi: 10.1093/clinchem/hvac040.PMID: 35584795
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Publications 2022 (continued)

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33. [The Association between Prenatal Nicotine Exposure and Offspring's Hearing Impairment.](#) Cleary EM, Kniss DA, Fette LM, Hughes BL, Saade GR, Dinsmoor MJ, Reddy UM, Gyamfi-Bannerman C, Varner MW, Goodnight WH, Tita ATN, Swamy GK, Heyborne KD, Chien EK, Chauhan SP, El-Sayed YY, Casey BM, Parry S, Simhan HN, **Napolitano P**; Eunice Kennedy Shriver National Institute of Child Health Human Development Maternal-Fetal Medicine Units (MFMU) Network. Am J Perinatol. 2022 Aug 25. doi: 10.1055/s-0042-1750407. Online ahead of print. PMID: 36007918
34. [Longitudinal Proteomic Analysis of Plasma across Healthy Pregnancies Reveals Indicators of Gestational Age.](#) Yohannes E, Ippolito DL, Damicis JR, Dornisch EM, Leonard KM, **Napolitano PG**, Ieronimakis N. Int J Mol Sci. 2022 Jun 25;23(13):7076. doi:10.3390/ijms23137076. PMID: 35806078
35. [Amniocentesis to diagnose congenital cytomegalovirus infection following maternal primary infection.](#) Dinsmoor MJ, Fette LM, Hughes BL, Rouse DJ, Saade GR, Reddy UM, Allard D, Mallett G, Thom EA, Gyamfi-Bannerman C, Varner MW, Goodnight WH, Tita ATN, Costantine MM, Swamy GK, Heyborne KD, Chien EK, Chauhan SP, El-Sayed YY, Casey BM, Parry S, Simhan HN, **Napolitano PG**, Macones GA; Eunice Kennedy Shriver National Institute of Child Health and Human Development Maternal-Fetal Medicine Units (MFMU) Network. Am J Obstet Gynecol MFM. 2022 Jul;4(4):100641. doi: 10.1016/j.ajogmf.2022.100641. Epub 2022 May 6. PMID: 35526782
36. [Association of fetal fraction with hypertensive disorders of pregnancy incidence and disease severity.](#) **Shree R, Kolarova TR, MacKinnon HJ**, Lockwood CM, Chandrasekaran S. Am J Obstet Gynecol MFM. 2022 Sep;4(5):100671. doi: 10.1016/j.ajogmf.2022.100671. Epub 2022 May 27. PMID: 35644526
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PUBLICATIONS

Publications 2022 (continued)

47. [A review of ex vivo placental perfusion models: an underutilized but promising method to study maternal-fetal interactions.](#) Calis P, **Vojtech L**, Hladik F, **Gravett MG**. J Matern Fetal Neonatal Med. 2022 Dec;35(25):8823-8835. doi: 10.1080/14767058.2021.2005565. Epub 2021 Nov 24. PMID: 34818981
48. [Analysis of Vaccine Reactions After COVID-19 Vaccine Booster Doses Among Pregnant and Lactating Individuals.](#) **Kachikis A**, Englund JA, Covelli I, Frank Y, Haghghi C, Singleton M, Drake AL, Eckert LO. JAMA Netw Open. 2022 Sep 1;5(9):e2230495. doi: 10.1001/jamanetworkopen.2022.30495. PMID: 36074467
49. [Spike-specific T cells are enriched in breastmilk following SARS-CoV-2 mRNA vaccination.](#) Armistead B, Jiang Y, Carlson M, Ford ES, Jani S, Houck J, Wu X, Jing L, Pecor T, **Kachikis A**, Yeung W, Nguyen T, Minkah N, Larsen SE, Coler RN, Koelle DM, Harrington WE. medRxiv. 2022 Sep 28:2021.12.03.21267036. doi: 10.1101/2021.12.03.21267036. Preprint. PMID: 36203549
50. [Umbilical Cord Maternal Microchimerism in Normal and Preeclampsia Pregnancies.](#) **Shree R, McCartney S**, Cousin E, Chae A, Gammill HS, Nelson JL, Kanaan SB. Reprod Sci. 2022 Sep 27. doi: 10.1007/s43032-022-01080-0. Online ahead of print. PMID: 36168088
51. [The Dobbs Decision and Undergraduate Medical Education: The Unintended Consequences and Strategies to Optimize Reproductive Health and a Competent Workforce for the Future.](#) **Stephenson-Famy A**, Sonn T, Baecher-Lind L, Bhargava R, Chen KT, Fleming A, Morgan HK, Morosky CM, Schaffir JA, Sims SM, Sutton JM, Royce CS; Undergraduate Medicine Education Committee of the Association of Professors and Gynecology and Obstetrics. Acad Med. 2022 Nov 8. doi: 10.1097/ACM.0000000000005083. Online ahead of print. PMID: 36347017
52. [Increased fetal microchimerism in immune and stem cell subsets in preeclampsia.](#) **McCartney SA, Kolarova T**, Kanaan SB, Chae A, Laughney CI, Nelson JL, Gammill HS, **Shree R**. Am J Reprod Immunol. 2022 Dec 8:e13666. doi: 10.1111/aji.13666. Online ahead of print. PMID: 36482289

Articles in press

1. Re-evaluating race adjustments in prenatal AFP screening. **Burns RN, Kolarova T**, Katz R, **Ma KK, Delaney S**. Accepted to Obstetrics and Gynecology, October 2022
2. Pregnancy outcomes and vaccine effectiveness during the period of Omicron as the variant of concern: the INTERCOVID-2022 multinational study. Villar J, Soto Conti CP, Gunier R... **Gravett MG**, et al. Accepted to Lancet November 2022

NATIONAL & INTERNATIONAL PRESENTATIONS

January 2022 – June 2022

2022 Society for Maternal-Fetal Medicine Annual Meeting

1. Dugoff L, Koelper N, Chasen S, ... **Shree RS**, et al. Cell-free DNA screening for trisomy 21 in twin pregnancy: a large multicenter cohort study. Oral
2. Leonard KM, Damicis JR, Dornisch EM, Rebecca TL, Burd I, Pates JA, **Napolitano PG**, Ieronimakis N. Maternal obesity impacts fetal neuroinflammation in a murine model of preterm birth. (Oral Session #1, Talk #1) Oral
3. Lutgendorf MA, McCormick S, Deering S, **Napolitano PG**, Pates J, Ieronimakis NM. Posttraumatic Stress Disorder and Pregnancy Outcomes: A Prospective Cohort Study. Oral
4. **Olerich K**, Katz R, Silver R, Chandrasekaran S. Quality vs quantity? The role of visceral adiposity in gestational insulin resistance. Oral
5. Sheikh E, Kuma A, Leonard KM, Monson J, McCormick SM, Pates JA, **Napolitano PG**, Ieronimakis N. Assessing cannabinoid THC passage and the impact in human perfused placenta cotyledons. Oral
6. Dugoff L, Koelper N, Chasen S, ... **Shree RS**, et al. Factors that affect cell-free DNA fetal fraction in twin gestations. Poster
7. **Burns RN, Kolarova T**, Katz R, **Ma KK, Delaney S**. Re-Evaluating Race Adjustment in Prenatal AFP Screening. Poster
8. Monson JW, Damicis JR, Dornisch EM, Rebecca TL, McCormick SM, Pates JA, **Napolitano PG**, Ieronimakis N. Gestational diabetes is associated with changes in inflammatory gene expression in human placental. Poster
9. **Olerich K**, Katz R, Silver R, Chandrasekaran S. First trimester waist-hip ratio and adverse metabolic outcomes in pregnancy. Poster
10. **Olerich K**, Sewaybricker L, Chandrasekaran S, Melhorn S, Kee S, Schur E. Association of maternal diabetes with offspring childhood hypothalamic gliosis. Poster

2023 Accepted SMFM

1. Hamilton M, Cho H, Englund JA, Eckert LO, **Kachikis A**. Social media use among pregnant and non-pregnant people based on healthcare worker status. 43rd Annual Society for Maternal-Fetal Medicine San Francisco February 2023. Poster.
2. Monson J, Ligon S, Howitz K, Damicis J, Domisch E, Talley R, Burd I, **Napolitano PG**, Pates J, Ieronimakis N. Neuroinflammation leads to axon loss in a murine model of preterm birth. Poster 43rd Annual Society for Maternal-Fetal Medicine San Francisco February 2023. Poster.
3. Ligon S, Monson J, Howitz K, Damicis J, Domisch E, Talley R, **Napolitano PG**, Pates J, Ieronimakis N. The influence of fetal sex on antepartum treatments for preterm birth in a murine model. Poster at 43rd Annual Society for Maternal-Fetal Medicine San Francisco February 2023. Poster.

NATIONAL & INTERNATIONAL PRESENTATIONS

January 2022 – June 2022

2022 Society for Reproductive Investigation Annual Meeting

1. Paquette A, MacDonald J, Bammler T, Day D, Loftus C, Buth E, Prasad B, Mason A, Bush N, Lewinn K, Marsit C, Litch J, **Gravett M**, Enquobahrie D, Karr C, Sathyanarayana S. A Placental Atlas of Parturition: Transcriptomic Signatures of Spontaneous Preterm Birth and Labor and Delivery Status in Two Birth Cohorts. Oral
2. Mitra A, **Kolarova T**, **Mackinnon HJ**, Lockwood CM, **Shree R**. The effects of self-reported race on non-invasive prenatal screening test characteristics. Poster

2022 CREOG & APGO

1. Santiago SA, Southworth EA, Cai F, **Fay E**, **Stephenson-Famy A**, **Burns RN**. (2022). Getting My Share: Disparities in Pre-Residency Experience Between Allopathic and Osteopathic Medical Students. CREOG & APGO Annual Meeting; Orlando, FL. Oral
2. **Burns RN**, Southworth EA, Santiago SA, Cai F, **Fay EE**, **Stephenson-Famy A** (2022). Bring the Whole Extended Family! Feasibility of a Residency Preparatory Course Delivered via SMS. Oral presentation at the CREOG & APGO Annual Meeting; Orlando, FL. Oral
3. Burns RN, Cai F, Southworth EA, Santiago SA, Fay EE, Stephenson-Famy A. (2022). The Room Where It Happens: Racial Disparities in Confidence and Pre-Residency Experience. Oral presentation at the CREOG & APGO Annual Meeting; Orlando, FL. (Oral - Awarded Best Oral Abstract)
4. **Burns RN**, Southworth EA, Santiago SA, Cai F, **Stephenson-Famy A**, **Fay EE**. (2022). One Byte at a Time: Eating the Elephant of Poor Engagement Using Microlearning/Nanolearning. Oral presentation at the CREOG & APGO Annual Meeting; Orlando, FL. Oral

2023 Accepted CREOG & APGO

1. **Burns RN**, Cai F, Southworth EA, Santiago SA, Wang E, **Fay EE**, **Stephenson-Famy A**. "Filling Potholes: Student Attitudes Towards Individualized Learning Plans at Graduation"
2. **Burns RN**, Cai F, Southworth EA, Santiago SA, Wang E, **Fay EE**, **Stephenson-Famy A**. "The Value of Scenic Detours: Away Rotations for MS4s"
3. **Burns RN**, Cai F, Southworth EA, Santiago SA, Wang E, **Fay EE**, **Stephenson-Famy A**. "Unpaved Road Ahead: Intent Towards Abortion Provision Amongst Matched 4th Year Medical Students"
4. **Burns RN**, Cai F, Southworth EA, Santiago SA, Wang E, **Fay EE**, **Stephenson-Famy A**. "Taking the Express Lane? Student Attitude Toward Tracking in OB/GYN Residency"

NATIONAL & INTERNATIONAL PRESENTATIONS

January 2022 – June 2022

Other Presentations

1. Russo M, **Albright CM**, Toscano M, Al-Kouatly HB, Florio K, Cleary E and PROWGAD Investigators Group. Obstetric and Neonatal Outcomes in Women with Marfan, Loeys-Dietz and Vascular Ehlers Danlos Syndromes: Results from PROWGAD (Pregnancy and Reproductive Outcomes in Women with Genetic-Predisposition for Aortic Dissection). 11th International Symposium on Marfan, Loeys-Dietz, and Related Conditions. Paris, France, August 2022. Oral
2. Russo M, Cleary E, **Albright CM**, Shalhub S, French K, Braverman A, Yetman A, Morris S and PROWGAD Investigators Group. Aortic Dissection and Cardiovascular Outcomes in Women with Marfan, Loeys-Dietz and Vascular Ehlers Danlos Syndromes: Results from PROWGAD (Pregnancy and Reproductive Outcomes in Women with Genetic-Predisposition for Aortic Dissection). 11th International Symposium on Marfan, Loeys-Dietz, and Related Conditions. Paris, France, August 2022.
3. **Shree R, Albright CM**. Changes in Early Pregnancy Blood Pressure among Nulliparas that Developed a Hypertensive Disorder of Pregnancy. International Society for the Study of Hypertension in Pregnancy Annual Meeting, August 2022, Montpellier, FR.
4. **Shree R, Albright CM**. Midtrimester Drop in Blood Pressure is Not Associated with a Decreased Risk for Hypertensive Disorder of Pregnancy in a Nulliparous Cohort. International Society for the Study of Hypertension in Pregnancy Annual Meeting, August 2022, Montpellier, FR.
5. LaCourse SL, Aurelio MC, Escudero JN, Ellington SR, Zapata LB, Snead MC, Yamamoto K, Salerno C, Greninger AL, **Kachikis A**, Englund JA, Drake AL. Longitudinal SARS-COV-2 anti-spike antibody response in pregnant people with natural infection and variable vaccine uptake. Infect Dis Society America Annual Meeting, 2022. Poster
6. Haghighi C, Eckert LO, Covelli I, Frank Y, Lee SD, Clark-Snustad K, **Cheng EY**, Englund JA, **Kachikis A**. COVID-19 Vaccine Response Among Pregnant and Not Pregnant People with Inflammatory Bowel Disease. Infect Dis Society America Annual Meeting, 2022. Poster
7. Frank Y, Haghighi C, Covelli I, Eckert LO, Englund JA, **Kachikis A**. Symptoms Associate with Severe Acute Respiratory Syndrome Coronavirus-2 Infection in Pregnant and Non-pregnant Individuals during the Omicron Surge. Infect Dis Society for OB/GYN, August 2022. Poster
8. Covelli I, Haghighi C, Frank Y, Eckert LO, Englund JA, **Kachikis A**. Short-term Breastfeeding and Breastmilk Supply Changes Associated with Presence of Systemic Symptoms Following COVID-19 Vaccination Among Lactating Individuals. Infect Dis Society America Annual Meeting, 2022. Oral
9. **Kachikis A**, Eckert LO, Jones CL, **Shree RS**, Cho H, Englund JA. RSV vaccine acceptability among pregnant and lactating individuals in the wake of the COVID-19 vaccine experience. ISIRV, 2022. Poster
10. Atwell JE, Hubler R, Anderson E, Anderson L, Asturias E, Barrientos D, Bont L, Eberhardt C, Englund JA, Ha B, Hussaini L, **Kachikis A**, Liu K, Martin C, Sun H, Tipett A, Quinn A, Agosti Y. A Multisite Initiative to Assess Transplacental Transfer of Naturally-Acquired RSV Maternal Antibodies in Preterm and Full Term Infants. ISIRV, 2022. Poster

NATIONAL & INTERNATIONAL PRESENTATIONS

January 2022 – June 2022

Other Presentations

11. **Burns RN**, Santiago SA, Soutworth EA, Cai F, Wang E, **Fay EE**, **Stephenson-Famy A**. Serving Up Learning Engagement, One Byte at a Time: Microlearning for the M4 to PGY-1 Transition. 2022 National Resident Matching Program Transition to Residency Conference. Oct 2022, San Diego, CA.
12. **McCartney SA**, Maurice N, Frutoso M, Mair F, **Shree R**, Prlic M. Alterations in Innate Lymphoid Cell Subsets During Parturition at the Maternal-Fetal Interface. ILC4 2022 Conference September 20-23, 2022. Big Island, HI.
13. **McCartney SA**, Maurice N, Frutoso M, Mair F, Shree R, Prlic M. Alterations in Innate Lymphoid Cell Subsets at the Maternal-Fetal Interface in Parturition. Western Conference on Perinatal Research January 11-13, 2022. Palm Springs, CA. (accepted for oral presentation, unable to attend due to COVID-19)
14. McCartney SA. "Integration of Cytokine and Metabolic Signals by Innate Lymphoid Cells in Parturition". RSDP Annual Retreat, Chicago, IL October 2022