Krista Mehlhaff, DO, FACOG

Assistant Professor, Obstetrics and Gynecology University of Maryland, School of Medicine

<u>Date:</u> November 12, 2023 April 25, 2024

Contact Information

University of Maryland Medical Center

Department of Obstetrics, Gynecology and Reproductive Sciences

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Foreign Language: Spanish (working knowledge), American Sign Language (working

knowledge)

Education

1999- 2003	Bachelors of Sciences, Exercise Biology, University of California, Davis
2004- 2008	Doctor of Osteopathic Medicine, Touro University College of Osteopathic

Medicine, California

Post Graduate Education and Training

2008-2009	Internship, Traditional, Riverside County Regional Medical Center
2009 -2013	Residency, OB/Gyn, WPAFB/Wright State University (WSU)
2016 2010	Followship MEM Valo Cabaal of Madisine (VCOM)

Fellowship, MFM, Yale School of Medicine (YSOM)

Certifications

2015 Diplomate in Obstetrics and Gynecology, American Board of Obstetrics and Gynecology
2021 Diplomate in Maternal Fetal Medicine, American Board of Obstetrics and Gynecology

Medical Licensure

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2010 (active):	Ohio Medical License
2016 (inactive):	Connecticut Medical License
2022 (active):	Virginia Medical License
2023 (active):	Maryland Medical License

Military Service

Lieutenant Colonel in the United States Air Force (USAF), Medical Corps

2009 - 2013	Air Force Institute of Technology
2013 - 2016	88 th Surgical Support Squadron, Wright Patterson AFB
2016 - 2019	Air Force Institute of Technology
2019 – Present	316th Surgical Support Squadron, Joint Base Andrews AFB
2005	Commission, Second Lieutenant, USAF Medical Corps
2008	Promotion to Captain (O-3)
2014	Promotion to Major (O-4)

Employment History:

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2013-2016	Instructor, Department of Obstetrics and Gynecology
	Wright State University (WSU) School of Medicine
2016 - 2019	Instructor, Department of Obstetrics, Gynecology and Reproductive
	Sciences, Yale School of Medicine (YSOM)
2019- 2023	Assistant Professor, Department of Gynecologic Surgery & Obstetrics
	Uniformed Services University of the Health Sciences
2023- Present	Assistant Professor, Department of Gynecologic Surgery & Obstetrics
	University of Maryland School of Medicine

Other Employment:

2013-2016	Gynecologic Surgeon and Obstetrician, Wright Patterson Medical Center
2019-2023	Maternal Fetal Medicine Physician, Walter Reed National Military
	Medical Center (WRNMMC)
2021-2023	Division Chief, Maternal Fetal Medicine, WRNMMC
2022-2022	Maternal Fetal Medicine Physician, Miami Valley Hospital, Dayton Ohio
2023- Present	Maternal Fetal Medicine Physician, University Maryland Medical Center

Professional Society Memberships:

2015- Present	Fellow, American College of Obstetricians and Gynecologists (ACOG)
2016- Present	Member, Society of Maternal Fetal Medicine
2019 - 2021	Member, International Society of Ultrasound in Obstetrics, Gynecology
2019 - 2021	Member, American Institute of Ultrasound Medicine
2023 - Present	-Member, Voluntary Review of Quality of Care, ACOG

Honors and	onors and Awards:		
Attending:			
2023	Master Clinician, Walter Reed National Military Medical Center Recognition by medical staff for longevity (8 years minimum) in proven excellent outcomes, superior patient satisfaction, high clinical volume, and contributions to training, education, and research		
2021	Associate Master Clinician, Walter Reed National Military Medical Center Recognition by medical staff of new faculty for superior patient satisfaction, high clinical volume, and contributions to training, education, and research		
Fellowship:			
2018	Resident/Fellow and Nurse Collaboration Award, Yale New Haven Hospital		
Residency :			
2013	Administrative Chief Resident Award, WSU/Wright Patterson AFB		
2013	———Dennis D. Barber Academic Achievement Award, WSU/Wright Patterson		
AFB			
2011	——Ultrasound Award, ACOG Armed Forces District Meeting		
2011	Humanism and Excellence in Teaching Award, Arnold P. Gold Foundation		

Military Service Awards:

2023	Merritorius Service Award
2021	Humanitarian Service Award
2021	Joint Service Achievement Medal
2016	Air and Space Commendation Medal
2014	Air and Space Outstanding Unit Award
2006	National Defense Service Medal
2013	Global War on Terrorism Service Medal
2005	Armed Forces Service Medal
2010	Air Force Longevity Service
2006	Air and Space Training Ribbon

Clinical Activities:

2013 – 2016 Gynecologic Surgeon and Obstetrician, Wright Patterson Medical Center

30 major GYN surgeries/year, 75 minor GYN procedures/year

600 deliveries/year

250 clinical encounters per month

70% clinical, 30% teaching and administrative

2019 – 2021 Maternal Fetal Medicine Physician, WRNMMC

1400 referrals per year

500 clinical encounters per month

30 inpatient consults/month

1200 deliveries/year

15 cerclage/year, 30 amniocentesis/year

80% clinical, 20% teaching and administrative

2021 – 2023 Division Chief, Maternal Fetal Medicine, WRNMMC

Supervisor: 4 MFM physicians, 1 Genetic counselor, 3 RN's, 3 sonographers, 2

administrative staff, 1 US Navy, health care corpsman

1400 referrals per year

500 clinical encounters per month

30 inpatient consults/month

1200 deliveries/year

15 cerclage/year, 30 amniocentesis/year

70% clinical, 30% teaching and administrative

2023 Maternal Fetal Medicine Physician, University of Maryland Medical Center

Clinical Expertise

Patient safety and quality improvement

Forceps assisted vaginal delivery.

Perinatal palliative care

Administrative Service:

Institutional Institutionnel Service:

Wright Patterson Medical Center

Wilgin I am	Wright I atterson Medical Center		
2013- 2016	Director of Simulation for Family Birthing Unit		
	Provides ongoing simulation drills, assuring readiness to respond to obstetric		
	emergencies for 25 RN's, 10 OB GYN's and 25 resident physicians.		
2013- 2016	Medical Director, Family Birthing Unit		
	Provides oversight of quality of care, delivering 600 patients per year.		
2013- 2016	Site Director for USHSU, Wright State and visiting medical students		
	Oversee educational experience of 2 students per month		
2013-2016	Interviewer, OB GYN Residency Admissions Committee		
2013-2016	OB GYN Clinical Competency Committee Member, OB GYN Residency		
2013-2016	Patient safety committee member		

Walter Reed National Military Medical Center

2019- 2023	Severe Maternal Morbidity and Mortality review committee
2019- 2023	Perinatal Palliative Care Collaborative, MFM Lead
2019- 2023	Fetal to Neonatal Care Collaborative, MFM Lead
2020- 2023	Perinatal Advisory Board, Co-Chair
2020-2021	DHA, Postpartum Hemorrhage Bundle implementation team
2021-2023	Peer Support Counselor
2021-2023	Leapfrog Reporting Group, Obstetrics Lead
2020-2023	Interviewer, National Capital Consortium, OB GYN Residency
2022-2023	Interviewer, National Capital Consortium Neonatology
	Fellowship
2019-2023	MFM Core Clinical Director
	Oversee educational experience of 4 OB GYN residents per month
2021-2021	Obstetrics team leader, Operation Allies Welcome
	OB team leader for mission to coordinate complex short suspense medical care f
	or 277 Afghan patients and nonmedical attendants for resettlement.

University of Maryland Medical Center

2023	Medical Director of the Obstetric Care Unit
2023	Director, Patient Safety Risk Management and Care Enhancement for Obstetrics

Maryland Medicine Comprehensive Insurance Program (MMCIP)

2023 Member, Obstetrics Council

National Service:

2023	Member, Voluntary Review Quality Committee, ACOG
2020	Medical Reviewer, Defense Health Agency (DHA)
2019	Severe Maternal Morbidity and Mortality Committee, Co-Chair, DHA
2018	Peer Reviewer, American Journal of Obstetrics and Gynecology

Local Service:

2020	Medical Reviewer, US Air Force Medical Corp
2015	Scientific Committee Member, Armed Forces District, ACOG

Teaching Service:

2013-2016	Attending Physician In-patient Service, 2 residents, 2 students, 8 hours/day, 3
	days/month
2013-2016	Attending Physician OB GYN Clinic, 2 residents, 2 students, 8 hours/day, 2
	days/week
2019-2023	Attending Physician In-patient service, 4 residents, 2 students, 8 hours/day, 3 days
	per month
2019-2023	Attending Physician MFM Clinic, 1 resident, 1 student, 8 hours/day, 2 days/week

Medical Student Teaching

2013-2016	Core OB GYN Lectures, WSU 3rd and 4th year medical students, 3-4 contact hours
	per year
2014- 2016	Reproductive Medicine, WSU 1st and 2nd year medical students, 3-4 contact hours
	per year
2018-2019	Workshop, Substance Abuse in Pregnancy, 3rd and 4th year YSOM students, 3-4
	contact hours per year
2019- 2023	Problem Based Learning Facilitator, 2 nd and 3 rd year medical students USU, 5-6
	contact hours per year

Resident and Fellow Teaching

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2013	Contraceptive options in OB/Gyn, OB GYN, 1 contact hour/year
2014	Vulvar Diseases, OB GYN, 1 contact hour/year
2013-2015	Antepartum Care, OB GYN, 1 contact hour/year
2013-2015	Normal Labor and Delivery, OB GYN, 1 contact hour/year
2017-2019	Operative Vaginal Delivery Lecture and Simulation teaching OB GYN, 4-5
	contact hour/year
2020	Patient Safety and Obstetrics, OB GYN, 1 contact hour/year
2021-2022	CREOG Review- Obstetrics, OB GYN, 1 contact hour/year
2021	Preterm Birth, OB GYN, 1 contact hour/year
2021-2023	Ultrasound for OB GYN, 12-contact hour/year, created curriculum for residency

Mentorship:

2019-2023	Class of 2023 faculty mentor, 5 OB Gyn Residents, meetings monthly.
2020-2022	Faculty mentor for Department Morbidity and Mortality Conference, 16 OB Gyn
	residents, 2 contact hours monthly.
2020-2022	Faculty mentor for Journal Club, 16 OB Gyn residents, 2 contact hours every
	other month.

Multidisciplinary Teaching

2013	Grand Rounds, Depression and Pregnancy, Department of Obstetrics and
	Gynecology, Miami Valley Hospital, Dayton OH
2018	Lecture, Obstetric concerns in the ICU, Pulm/Critical Care Fellows, Residents
	and Medical Students, Yale New Haven Hospital
2019	Obstetrics for the First Responder, Emergency Medical Response Team
	Yale New Haven Hospital

- 2020 Grand Rounds, Collaborative Obstetrics, Department of Obstetrics and Gynecology, Miami Valley Hospital, Dayton OH
- 2021-2022 Fundamentals of Critical Care Support: Obstetrics course, ER and ICU Staff (physicians, nurses), WRNMMC
- Fundamentals of Critical Care Support: Obstetrics course, ER and ICU Staff (physicians, nurses), Baltimore Washington Memorial Hospital (BWMC)

Publications

Peer-reviewed journal articles

- 1. A. Gugliucci, **K. Mehlhaff**, E. Kinugasa, H. Ogata, R. Hermo, J. Schulze, S. Kimura, Paraoxonase-1 concentrations in end-stage renal disease patients increase after hemodialysis: correlation with low molecular AGE adduct clearance., Clin Chim Acta. 2007 Feb;377 (1-2):213-20. PMID: 17118352
- 2. **K.Mehlhaff**, C. Baxter, K. Rudinsky, D. McKenna, Lethal neonatal coagulopathy following maternal ingestion of superwarfarin, Obstetrics & Gynecology, 2013 Aug, 122 (2): 500
- 3. J. Levine, A. Bukowinski, C. Sevick, **K. Mehlhaff**, A. Conlin, Postpartum depression, and timing of spousal military deployment relative to pregnancy and delivery. Arh Gyecol Obstet, Published online: 03 Mar 2015, DOI 10.1007/s00404-015-3672-7
- 4. K. Kohari, **K. Mehlhaff**, A. Merriam, S Abdel-Razeq, O. Grechukhina, D. Leon-Martinez, M. Bahtiyar, A Novel Approach to Serial Amnioinfusion in a Case of Prematrue Rupture of Membranes Near the Limit of Viability. Am J Perinatol Rep 2018;8e180-183
- 5. **Mehlhaff KM**, Pettker CM. Establishing and Maintaining a Quality and Safety Program on Labor and Delivery. Clinical obstetrics and gynecology. 2019 Jun. PMID 31169555
- 6. Hehir M, Berkowitz R, Pettker C, Seligman N, DAlton M, Andrikopoulou M, Havens S, Huang Y, Jain J, **Mehlhaff K**, Friedman A. Characteristics of Deliveries Resulting in Neonatal Hypoxic Ischemic Encephalopathy: A Multi-Centred Retrospective Case Series. Authorea. March 21, 2022, DOI 10.22541/au.164787842.28626246/v1
- 7. Irani R, Shank J, Gill L, **Mehlhaff K**, Pilliod R, Tureson J, Holliman K, Iyer C, Debink C, Han C, Complete molar pregnancies with a coexisting fetus: Pregnancy outcomes and review of the literature, Am J Perinatol Rep 2022;12e96-e107
- 8. Purmalek, M, Kopelman, Z, Griffis, J, **Mehlhaff, K**, Gonzalez-Brown, V, Mediastinal Mass Discovered in the Second Trimester, a Rare Presentation of Hodgkin's Lymphoma in Pregnancy, *Military Medicine*, 2022;usac346, https://doi.org/10.1093/milmed/usac346
- 9. Robinson SL, Campbell WR, Patel LR, Blickle JG, Goetzman HJ, Hemphill A, **Mehlhaff KM**, Farren KC, Valdez AD, Khan J, Sessom EA, Blaylock JM, Lee RU. Humanitarian Mission at Home: Walter Reed National Military Medical Center's Experience in Operation Allies Refuge and Operation Allies Welcome. Mil Med. 2023 Jan 4;188(1-2):25-29. doi: 10.1093/milmed/usac281. PMID: 36208154.

Published Abstracts

1. R. Hermo, T. Menini, C. Hathuc, **K. Makins**, A. Gugliucci, S. Kimura, Increased levels of ischemia-modified albumin in type 2 diabetic patients Diabetes, 2005, May; 54(A537):2231.

- 2. **K. Makins**, A. Hermo, C. Monroy, K. Satoshi, A. Gugliucci, Ischemia Modified Albumin Levels in Type 2 Diabetic Patients May Be Affected by Short Term Changes In Glycemic Control: A need for Special Reference Range? JAOA, 2005 Aug; 106(C06):323
- 3. **K. Makins**, R. Hermo, C. Monroy, S. Kimura, A. Gugliucci, Paraoxonase 1 and HDL metabolism in neonates. JAOA, 2005, Aug; 105(C05):322
- 4. A. Gugliucci, **K. Mehlhaff**, S. Kimura, H. Ogata. Beneficial and Detrimental Effects of Hemodialysis: a Study on Oxidative Stress and Fibrinolysis Biomarkers JAOA 2006, Aug; 106(8):492
- 5. **K. Mehlhaff**, S. Kimura, H. Ogata, A. Gugliucci. Efficiency of Low Molecular Weight AGE Clearance During Hemodialysis Predicts Increases in Paraoxonase Activity in Chronic Renal Failure Patients, JAOA 2006, Aug; 106(8):482
- 6. Hehir MP, Friedman AM, Andrikopoulou M, D'Alton ME, DiVito M, Havens S, Huang Y, Jain JA, **Mehlhaff KM**, Pettker CM, Seligman NS. 156: Clinical management of deliveries resulting in hypoxic ischemic encephalopathy. American Journal of Obstetrics & Gynecology. 2020 Jan 1;222(1):S113-4.
- 7. **Mehlhaff KM**, Pettker CM, Hosier H, Lipkind HS, Reddy UM, Tomlinson M, Ball BR, Lundsberg LS, Raab C. 545: Putting teamwork to the test: a randomized trial of collaboration in electronic fetal monitoring (EFM). American Journal of Obstetrics & Gynecology. 2020 Jan 1;222(1):S351.

Editorials:

1. Schulz EV, Zven SE, Dukes SC, Flemming B, Bennett WC, Weber Z, Hemphill AM, Groomes CL, Stammler S, **Mehlhaff KM**. *Mission Essential: Refugee Mission Reflections*. AAP Uniformed Services Section Newsletter. Winter 2022; 37-40.

Book Chapters:

1. Pettker, C, **Mehlhaff, K**, Quality and Safety in Labor and Delivery, Evidence Based Labor and Delivery Management, Edited by Berghella, V, Saccone, G, Ghi, T, Roman, A, Jaypee Brothers Medical Publishers, 2019

Invited Presentations and Webinars

- 1. March 2005, Touro University Research Day, Ischemia Modified Albumin: A New Biomarker of Fetal-Neonatal Hypoxic Stress?
- 2. March 2006, Touro University Research Day, Efficiency of Low Molecular Weight AGE Clearance During Hemodialysis Predicts Increases in Paraoxonase Activity in Chronic Renal Failure Patients
- 3. October 2011, ACOG Armed Forces District Meeting
 - PMD vs. GTD: Antenatally diagnosed placental mesenchymal dysplasia (PMD) coexisting with a di-zygotic twin pregnancy presenting with high-risk metastatic gestational trophoblastic disease (GTD) at fetal viability.
- 4. June 2013, Wright State University/Wright Patterson Air Force Base Residency Research Day, Postpartum Depression and Timing of Spousal Military Deployment Relative to Pregnancy and Delivery

- November 2014, ACOG Armed Forces District
 Meeting Postpartum Depression and Timing of
 Spousal Military Deployment Relative to Pregnancy and Delivery
- 6. May 2019, Yale Department of Obstetrics, Gynecology and Reproductive Sciences Yale Collaborative Fetal Monitoring Study: A Randomized Control Trial
- 7. October 2019, MCIC Obstetrics Leadership Committee Meeting, Yale Collaborative Fetal Monitoring Study: A Randomized Control Trial
- 8. February 2021, Clinical Communities Speaker Series; Emerging Priorities in Women's Health, Defense Health Agency
- 9. October 2022, Keynote Speaker, Pregnancy and Infant Loss Awareness Ceremony, WRNMMC
- 10. January 2023, Perinatal Mental Health, Panelist, ACOG Armed Forces District, 123 Moms, www.acog.org/education-and-events/webinars/armed-forces-district-123-moms

Poster Presentations

- 1. March 2005, **Mehlhaff, K**, Presenter, HDL in early life: a study of HDL subclasses, lecithin cholesterol acyl transferase and paraoxonase in neonates. Touro University Research Day
- 2. June 2005, **Mehlhaff**, **K**, Presenter, Ischemia Modified Albumin Levels in Type 2 Diabetic Patients May Be Affected by Short Term Changes in Glycemic Control: A Need for Special Reference Range? Drug Information Association Annual Conference, February 2020, Yale Collaborative Fetal Monitoring Study: A Randomized Control Trial Society for Maternal Fetal Medicine, Annual Pregnancy Meeting, Presenter
- 3. October 2005, **Mehlhaff, K**, Presenter, Ischemia Modified Albumin Levels in Type 2 Diabetic Patients May Be Affected by Short Term Changes in Glycemic Control: A Need for Special Reference Range? AOA Annual Student Research Poster Competition, Presenter
- 4. March 2006, **Mehlhaff**, **K**, Presenter, Low molecular weight fractions in uremic plasma produce a time and dose dependent inhibition of paraoxonase-1: hemodialysis increases activity of this antioxidant enzyme. Touro University Research Day, Presenter
- 5. October 2012, **Mehlhaff, K**, Presenter, Lethal neonatal coagulopathy following maternal ingestion of superwarfarin, ACOG Armed Forces District Meeting, Presenter
- 6. September 2017, **Mehlhaff, K,** Presenter, Postpartum Depression and Timing of Spousal Military Deployment Relative to Pregnancy and Delivery, 91st Perinatal & Developmental Medicine Symposium, Presenter
- 7. May 2019, **Mehlhaff, K**, Presenter, Multidisciplinary Severe Maternal Morbidity Review Committee: from creation to practice change, Yale New Haven Hospital: Safety, Quality and Experience Conference
- 8. May 2019, **Mehlhaff, K,** Presenter, Improvement of Operative Vaginal Delivery Training in Residency: A Single Institution Experience, Medical Education Day at Yale
- 9. February 2020, **Mehlhaff, K**, Presenter, Clinical Management of deliveries resulting in hypoxic ischemic encephalopathy, Society for Maternal Fetal Medicine, Annual Pregnancy Meeting
- 10. October 2020, **Mehlhaff, K**, Presenter, Surgical Management of Obstetric Hemorrhage: A feasibility study using the Emergency Obstetrics Surgery Simulator, Armed Forces District, ACOG

- 11. October 2021, Borham, K (presenter), author, Promoting breast milk expression to improve lactation among mothers of infants admitted to the neonatal intensive care unit: Quality Improvement Project, Armed Forces District, ACOG, 10/10/2021; 338970;6
- 12. October 2021, Chatfield, L (presenter), author, Provider Adherence to Aspirin Prophylaxis Recommendations in Pregnancy at a Single Military Treatment Facility: A Quality Improvement Project, Armed Forces District, ACOG, 10/10/2021; 338975; 11
- 13. October 2021, Benz, A (presenter), senior author, Severe Maternal Morbidity Review Feasibility and Potential Benefit for the Military Health System, Armed Forces District, ACOG, 10/10/2021; 338965; 1
- 14. October 2022, Chop, G (presenter), senior author, Transient Non-Immune Hydrops Fetalis Following Indomethacin Tocolysis, Armed Forces District, ACOG, 10/10/2021; 338977; 13