University of North Carolina
Department of Obstetrics & Gynecology
Maternal Fetal Medicine
2020-2021 Fellowship Training Program

University of North Carolina
School of Medicine
Department of Obstetrics & Gynecology
Division of Maternal Fetal Medicine
3010 Old Clinic Building, CB 7516
Chapel Hill, NC 27599

Alison Stuebe, MD, MSc
Interim Director, Division of Maternal Fetal Medicine

Robert Strauss, MD
Director, Maternal Fetal Medicine Fellowship
University of North Carolina

MATERNAL FETAL MEDICINE

Faculty

Alison Stuebe
Interim Div Dir, MFM

Alice Chuang
Interim Div Dir, General OBGyn

Robert Strauss
Fellowship Director, MFM

M. Kathryn Menard
Professor

William Goodnight
Director
UNC Fetal Care Program

Neeta Vora
Director Genetic Counseling

Tracy Manuck
Director, Prematurity Prevention

Karen Dorman
Director Perinatal Research
University of North Carolina

MATERNAL FETAL MEDICINE

Fellows and Administration 2020-2021

Jasmine Johnson
3rd Year
Graduating 2021

Anne West Honart
3rd Year
Graduating 2021

Divya Mallampati
2nd Year
Graduating 2022

Asha Talati
2nd Year
Graduating 2022

Kathleen Drexler
1st Year
Graduating 2023

Nicole Teal
1st Year
Graduating 2023

Qiana Davis
Fellowship Coordinator
919-966-4103

Emily Richbourg
Assoc. Fellowship Coordinator
919-966-1998
University of North Carolina

MATERNAL FETAL MEDICINE

Genetic Counselors

Emily Hardisty
Coordinator, Genetic Counselor

Elysia Davis
Genetic Counselor

Kelly Gilmore
Genetic Counselor

Ginger Hocutt
Genetic Counselor

Diane Vargo
Genetic Counselor

Rachel Veazey
Genetic Counselor
**Introduction**

Since its beginning in 1978, the fellowship training program in Maternal Fetal Medicine at the University of North Carolina in Chapel Hill has enjoyed the reputation of being one of the finest in the country. This is reflected in the quality of both faculty and fellows who are attracted to Chapel Hill, and the number of UNC-trained clinicians and researchers who are known locally and nationally for their clinical and research accomplishments.

Our mission is to prepare highly skilled subspecialists dedicated to the care of pregnant women and their fetuses, spanning the depth and breadth of the specialty. To achieve this, the educational experiences are tailored to the fellow’s interests and needs. Acquisition and development of research skills is an important component of the educational process and critical and analytic thinking are an expectation for completion of the fellowship. The faculty of the Division of Maternal Fetal Medicine supports the clinical and research missions of the fellowship training program by mentoring fellows to achieve future successes as clinicians, academicians and as national leaders in Maternal Fetal Medicine.

Fellows are assigned 17 months of core Maternal Fetal Medicine clinical rotations, 18 months of dedicated research time (at which time fellows in MPH track complete their coursework), and one month of elective. During the second and third year of training, fellows have the option of pursuing a master’s degree in Public Health in Maternal Child Health, Epidemiology, Health Behavior, Health Policy and Administration, or Biostatistics, through the UNC School of Public Health. Fellows can also pursue a master’s in Science and Clinical Research (MSCR).

**The University of North Carolina Hospitals**

UNC Hospitals and the School of Medicine of the University of North Carolina at Chapel Hill comprise North Carolina’s most comprehensive public center for medical care, health careers education and biomedical research. UNC is one of only 4 medical centers that rank in the top 20 in both research funding and clinical care. Each year over 500,000 people from North Carolina and the Southeast come for the comprehensive medical services offered at UNC.

**Obstetrical Care Facilities**

The Women’s Hospital includes Labor and Delivery, an Obstetric Inpatient Unit, the Newborn Nursery, and Women’s Outpatient Services and represents the state of the art in facilities. The L and D unit (20,000 sq. feet) consists of five triage rooms, four LDRPs, 10 LDRs, and three operating rooms. Located one floor above L and D is the combined postpartum unit with 28 private rooms, and the
newborn nursery with 14 bassinets. Located one floor below L&D is a 13-bed antepartum unit, dedicated to high-risk obstetrical patients.

Outpatient obstetrical care is practiced within the Women’s Clinic (~23,000 sq. feet), located within the Women’s Hospital. Fellows attend their continuity clinic, consultation clinic, and High Risk Clinic under the direct supervision of a member of the Maternal Fetal Medicine faculty. The OB high-risk clinic has 4 physician modules, with a total of 8 exam rooms.

The University of North Carolina Obstetric Ultrasound Unit maintains American Institute of Ultrasound in Medicine certification and is located within the Women’s Clinic at the North Carolina Women’s Hospital. The unit is staffed by nine American Registry for Diagnostic Medical Sonography certified sonographers. There is a full time genetic counselor to assist in counseling of obstetric patients with fetal anomalies. Current equipment includes seven General Electric Voluson 730 with color and pulsed Doppler capability, and 3-D and 4-D capability (including STIC technology). Maternal Fetal Medicine faculty directly supervises fellows during their ultrasound rotation.

**Educational Curriculum**

**High-Risk Obstetrics and Maternal Physiology**
Skill in caring for the in-patient high-risk pregnancy is acquired during the Antepartum and Labor and Delivery coverage. During the Labor and Delivery coverage, the fellow manages the high-risk in-patient service, under supervision of the Maternal Fetal Medicine faculty. Also during the Labor and Delivery coverage, the fellow is responsible for coordination and execution of clinical care for all in-patient obstetrical transports, under the supervision of the faculty as back-up. The fellow acquires outpatient management skills during participation in their own weekly continuity of care clinic, and by participating in once weekly High Risk Pregnancy Clinic and once weekly High Risk Consultation Clinic, all of which are supervised by a member of the Maternal Fetal Medicine faculty.

A unique opportunity for educational experience is through the Center for Maternal Infant Health. ([https://www.mombaby.org/](https://www.mombaby.org/)) The Center for Maternal Infant Health provides a variety of services to patients and referring providers who are in need of perinatal care coordination. There is an established special program for pregnant women who have a medical emergency and need transport to UNC. The Maternal Transport Program is designed to provide pregnant women with individualized and personalized services while they are at UNC. In addition to referral services, care coordination, and multidisciplinary clinical care, the Center for Maternal Infant Health offers perinatal hospice services to those families whose infant is not expected to survive. Fellows actively participate in the services.
provided by the Center, including presentation of ongoing and new cases at the weekly Perinatal Care Conference.

**Genetics**
The Reproductive Genetics Division has five Board Certified/Eligible Genetic Counselors who provide over 2,000 preconceptional or prenatal counseling visits each year. Dr. Neeta Vora, who is board certified in both Genetics and Maternal Fetal Medicine, helps to oversee this division. During two four-week Genetics rotations, the fellow observes and then performs genetic counseling during eight half day sessions for such conditions as advanced maternal age, abnormal serum screening, personal or family history of genetic disorder, and current pregnancy with anomalous fetus, supervised by one of the genetic counselors. The fellow attends the Multidisciplinary Patient Care Conference, and two weekly clinical genetics conferences, one of which is dedicated to the discussion of perinatal patients. Time is spent rotating through the Cytogenetics Laboratory. During the second or third year the fellow completes the Society for Maternal Fetal Medicine Nuchal Translucency Certification. A didactic series specifically dedicated to Reproductive Genetics is conducted by our genetic counselors and Dr. Vora.

**Ultrasound**

The fellow is assigned to seven months of specialized ultrasound training, under the direct supervision of the Maternal Fetal Medicine faculty, where responsibilities are acquired with a graduated level of experience and skill. Over 12,000 ultrasound examinations, 200 amniocenteses, and 50 CVS procedures are performed annually. The first month is spent observing targeted ultrasounds and faculty assigned to the ultrasound unit directly supervises fellows as they gain proficiency in the ultrasound equipment and basic hands-on ultrasound experience. During the second through fifth months the fellow completes basic and targeted ultrasounds, which are then reviewed by the sonographer and the attending faculty. Fellows also perform ultrasounds on suspected anomalies, present their findings to the attending in the unit and then participate in a confirmatory ultrasound. During the last two months, the fellow interprets ultrasounds independently, and then reviews images with the faculty member for feedback. Fellows are expected to interpret ultrasound images, develop a differential diagnosis of the findings, recommend further evaluation if appropriate, and develop a management plan for the patient. During the ultrasound rotation the fellow presents fetal anomaly patients at the weekly Multidisciplinary Perinatal Care Conference, and facilitates discussion of the obstetrical and neonatal management plan.

**Other – Clinical Rotations**

During the first year, the fellow completes rotations in the following disciplines: NICU, Medical ICU, and Obstetrical Anesthesia. During these rotations the fellow acts as a member of the clinical care team, under the supervision of the faculty of
that discipline. During the third year, the fellow completes a rotation in Pediatric Cardiology, under the supervision of a Pediatric Cardiologist.

**Departmental/Divisional Educational Conferences**

There are several departmental and divisional educational conferences available to fellows. Fellows are expected to attend Departmental Grand Rounds, Morbidity and Mortality Conference, as well as the Fellow’s Journal Club, Fellow’s Research meetings, and Fellow’s Didactic Series. In addition, all fellows attend the clinical conferences, including the High Risk Obstetrical Conference, the Multidisciplinary Perinatal Care Conference, and the In-Patient Care Conference. The third year fellow is expected to present at the Departmental Grand Rounds Conference.

**Research Curriculum**

Eighteen months of dedicated research time is allotted to each fellow. Typically 4 months are scheduled during the first year of fellowship, 9 months during the second year, and 5 during the third year. Research time during the first year is used to develop research ideas, identify research project(s) and appropriate mentor(s) to perform the research. Research meetings occur on a regular basis throughout the year. Progress is then monitored on a regular basis by the primary mentor and program director on a quarterly basis. It is expected the fellow will complete at least one primary research project during the fellowship; many of our fellows complete several projects. Fellows are encouraged to explore clinical, basic, or translation science research, and there are many resources available to achieve this objective. Fellows present their research every 6 months at “Work In Progress” meetings held with division members and invited guests.

**Departmental Resources**

Members of the Department of Ob/Gyn have approximately 2000 sq. feet of dedicated laboratory space. The laboratories are fully equipped for basic and molecular laboratory analyses, and cell and tissue culture (four -80 °C freezers, four thermocyclers, a Stratagene real-time thermocycler, three CO2 incubators for cell culture, two biosafety cabinets for tissue culture, an isolation hood for RNA, and blot equipment). The laboratories are staffed by two full-time research specialists, one full-time post doctoral scientist, and one PhD scientist. Fellows have access to all of the laboratory resources. As members of the Maternal Fetal Medicine Network (MFMU), the fellows have available to them a group of obstetrical research nurses who are experienced in conducting clinical research. Ms. Karen Dorman, the Director of Perinatal Research, coordinates all clinical obstetrical research at UNC, and is available to assist fellows with the planning and conduct of clinical research projects. Fellows are also encouraged to submit ideas for secondary analyses and ancillary projects to on-going Network research.

**School of Medicine Resources**

Numerous campus-wide research resources are available to the fellow. The division employs a full-time research assistant, Karen Dorman, to aid in the execution of
clinical research. She is available to help with IRB submissions, recruitment, collection of data or samples, and subject follow up.

The North Carolina Translational and Clinical Sciences (NC TraCS) Institute is one of 60 medical research institutions working together as a national consortium to improve the way biomedical research is conducted across the country. The consortium, funded through the NIH Clinical and Translational Science Awards (CTSA), shares a common vision to facilitate laboratory discoveries and clinical research (http://tracs.unc.edu/). There are a number of resources available to all UNC investigators, including fellows. These resources include a Biostatistical/Epidemiology Consultation Service, an Informatics Core, and the Bioanalytic Core Laboratory and Mass Spectrometry Facility. There is an Investigational Drug Service (IDS), which provides comprehensive drug distribution and patient care pharmacy services for clinical trials at UNC Hospitals. IDS services include study drug randomization, blinding and protocol development for drug administration.

Many state-of-the-art core laboratory facilities are available on campus, which provide efficient use of technical staff, equipment, and facilities. Core labs have combinations of state, federal, and institutional funding support for sharing, and a mandate to assist in the career development of new investigators, which would include fellows. Core facilities are numerous and range from Animal Facilities, to Molecular Genetics, to Pathology and Microscopy.

In addition to the above resources, faculty in maternal fetal medicine collaborate across campus with numerous other investigators, which allows fellows to participate in multidisciplinary research.

**Professional Development**

The program directors meet regularly with the fellows to discuss issues germane to the fellowship. Research ideas and progress, questions and ideas to improve the fellowship, and overall progress are some of the topics covered at this meeting.

All fellows attend the annual meeting of the Society for Maternal Fetal Medicine. Attendance at other scientific meetings is encouraged. Many of the fellows attend several scientific meetings a year to present their research. Fellows are also invited to attend the NICHD Perinatal-Neonatal Fellow Conference, and the Molecular Biology Workshop, both offered annually.

**Fellows Schedule**

Fellows call schedule is 3 nights/month (1 weekend and 2 weekdays). Fellows do not round on weekends they are not on call. During 2 months each year each fellow does not take call.
### Standard Fellowship Track

<table>
<thead>
<tr>
<th>Year 1 of 3</th>
<th>Year 2 of 3</th>
<th>Year 3 of 3</th>
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<tbody>
<tr>
<td><strong>Rotation / #Months</strong></td>
<td><strong>Rotation / #Months</strong></td>
<td><strong>Rotation / #Months</strong></td>
</tr>
<tr>
<td>Antepartum/2</td>
<td>Research/9</td>
<td>Research/5</td>
</tr>
<tr>
<td>L&amp;D/1</td>
<td>Ultrasound/2</td>
<td>Ultrasound/2</td>
</tr>
<tr>
<td>Ultrasound/2</td>
<td>Antepartum/1</td>
<td>Antepartum/1</td>
</tr>
<tr>
<td>Research/4</td>
<td></td>
<td>L&amp;D/1</td>
</tr>
<tr>
<td>Genetics/1</td>
<td></td>
<td>Elective/1</td>
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<td>NICU/Anesth/1</td>
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<td>Fetal Echo/1</td>
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<tr>
<td>MICU/1</td>
<td></td>
<td>Genetics/1</td>
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### 2020-21 GME Pay and Benefits

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<th>Salary</th>
<th>Vacation</th>
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<tr>
<td><strong>1st Year</strong></td>
<td>$64,168</td>
<td>21 days</td>
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<tr>
<td><strong>2nd Year</strong></td>
<td>$66,622</td>
<td>21 days</td>
</tr>
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<td><strong>3rd Year</strong></td>
<td>$67,017</td>
<td>21 days</td>
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### Fringe Benefits

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<thead>
<tr>
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<tbody>
<tr>
<td>Health Insurance</td>
<td>Yes</td>
</tr>
<tr>
<td>Disability Insurance</td>
<td>Yes</td>
</tr>
<tr>
<td>Life Insurance</td>
<td>Yes</td>
</tr>
<tr>
<td>Dental</td>
<td>Yes</td>
</tr>
<tr>
<td>Malpractice Insurance</td>
<td>Yes</td>
</tr>
<tr>
<td>Freedom Pay for Meals</td>
<td>Monthly Allotment</td>
</tr>
<tr>
<td>Uniforms (white coats)</td>
<td>Yes</td>
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<tr>
<td>Administrative Assistant Support</td>
<td>Yes</td>
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<tr>
<td>Discretionary Fund</td>
<td>$1,875/year</td>
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<tr>
<td>Maternity/Paternity Leave</td>
<td>Yes</td>
</tr>
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</table>
GRADUATE LEVEL COURSE Requirements for UNC MFM Fellowship

Fellows are required to take a minimum of two graduate level courses, typically during the 2nd year. Unless prior graduate training, should consider taking one Epi and one Stats course.

Recommended courses include:

- **PUBH 741: Quantitative Methods for Health Care Professionals**: Offered in the fall (J Garrett or K Faurot). Learn Stata. Designed for health care professionals needing to appraise the design and analysis of health care studies and intending to pursue academic research careers. The emphasis of the course is on applied data analysis of major health-related studies. Must E-mail the course director for permission if you are not in a degree program.

And then one of the following courses:

- **EPI 711: Clinical Measurement/Evaluation**: Only offered in the fall (Dr. Narpravnik) Prerequisite, epidemiology or health care and prevention major. An introduction to the fundamental concepts of epidemiology, including clinical epidemiology, for clinicians. Emphasis is to applications in clinical research and practice. This course is a lot of work.

- **PUBH 742: Advanced Quantitative Methods for Health Care Professionals**: Offered in the spring (J Garrett). Continuation of PUBH 741 with understanding of exploratory data analysis, logistic regression, and survival analysis.


Fellow Publications & Presentations

Year 1 Fellows: (Graduating 2023)

**Kathleen Drexler**


**Elizabeth Nicole Teal**


Year 2 Fellows: (Graduating 2022)

**Divya Mallampati**


**Asha Talati**


Year 3 Fellows: (Graduating 2021)

**Anne West Honart**


**West Honart A**, Talati AN, Johnson JD, Vladutiu C, Goodnight W, Manuck TA. *Spontaneous preterm birth phenotype and initial neonatal and early childhood outcomes* Poster, February 2019, Society for Maternal-Fetal Medicine Annual Meeting, Las Vegas, NV

**Jasmine Johnson**


Johnson, JD, Stuebe, A, Asiodu, I.  
*Using the Electronic Medical Record to Identify Racial Disparities in Post-partum Pain Management.*  

Johnson, JD, Vuletich, H., Stuebe, A.  
*Associations Between Racial Bias and Adverse Perinatal Outcomes.*  
Poster presented at: ACOG Clinical and Scientific Meeting. May 2019

Johnson, JD, Talati, A, West-Honart, A, Vladutiu, C., Goodnight, WH, Manuck, TA.  
*Recurrent Preterm Birth Phenotype by Gestational Age.*  
Poster presented at: The Society for Maternal Fetal Medicine National Meeting; Las Vegas, NV, USA; February 2019

**Past Fellow Theses**

<table>
<thead>
<tr>
<th>Year</th>
<th>Fellow</th>
<th>Thesis Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>Beamon</td>
<td>Is the type of neuraxial anesthesia associated with adverse neonatal outcomes among patients with preeclampsia?</td>
</tr>
<tr>
<td>2014</td>
<td>Smith</td>
<td>Risk of uterine rupture among women attempting vaginal birth after cesarean with an unknown scar</td>
</tr>
<tr>
<td>2015</td>
<td>Wiegand</td>
<td>Buprenorphine/Naloxone versus Methadone Treatment in Pregnancy: A Comparison of Neonatal Abstinence Syndrome</td>
</tr>
<tr>
<td>2016</td>
<td>McPherson</td>
<td>Association of duration of neuroprotective magnesium sulfate on neonatal and maternal outcomes</td>
</tr>
<tr>
<td>2016</td>
<td>Smid</td>
<td>Positive feedback between soluble fms-like tyrosine kinase-1 (sFlt-1) and endothelin-1 (ET-1) in mouse endothelial and human trophoblast cells</td>
</tr>
<tr>
<td>2017</td>
<td>Dotters-Katz</td>
<td>The Effect of Blood Loss on Cefazolin Levels in Women Undergoing Cesarean Delivery</td>
</tr>
<tr>
<td>2017</td>
<td>Grace</td>
<td>Effect of high fat diet and metformin on pup weight and placental mTOR signaling in mice</td>
</tr>
<tr>
<td>2018</td>
<td>Carlson</td>
<td>Use of a Novel Decision Aid for Aneuploidy Screening: A randomized controlled trial</td>
</tr>
<tr>
<td>2018</td>
<td>Grant</td>
<td>Early Pregnancy HgbA1c Screening for Overt Type 2 Diabetes in At Risk Women</td>
</tr>
<tr>
<td>2019</td>
<td>Battarbee</td>
<td>Maternal and neonatal outcomes associated with timing of amniotomy with term labor induction</td>
</tr>
<tr>
<td>2019</td>
<td>Glover</td>
<td>Elevated mid-trimester serum cytokines are associated with PTB in women undergoing cerclage placement</td>
</tr>
</tbody>
</table>
**Faculty Bio-Summaries**

**Kim Boggess, MD, Professor**

Dr. Boggess is a Professor with the Division of Maternal Fetal Medicine with specialized training in Infectious Diseases and a Certificate in Health Disparities Research. She has a special interest and expertise in oral infections and pregnancy outcomes, and was the first investigator to report an association between maternal periodontal infection and preeclampsia. She currently is conducting studies on improving maternal oral health to benefit both mother and child. In addition she is a co-investigator of a study on optimal antibiotic use at time of cesarean section to reduce infectious morbidity. As the alternate PI for the Maternal Fetal Medicine Units Network she is also the Co-PI for a proposal on optimal treatment of type 2 Diabetes in pregnancy.

**Positions & Honors**

<table>
<thead>
<tr>
<th>Position</th>
<th>Dates</th>
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</thead>
<tbody>
<tr>
<td>Professor, Department of Obstetrics and Gynecology</td>
<td>2011–present</td>
</tr>
<tr>
<td>Program Director, Training Epidemiology and Clinical Trials (TECT) Fellowship UNC</td>
<td>2012–present</td>
</tr>
<tr>
<td>Program Director, Building Interdisciplinary Research Careers in Women’s Health (BIRCWH)</td>
<td>2012–present</td>
</tr>
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</table>

**Other Experience & Professional Memberships**

<table>
<thead>
<tr>
<th>Experience &amp; Membership</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pregnancy and Neonatology Study Section, NICHD</td>
<td>2005–present</td>
</tr>
<tr>
<td>Biomedical Institutional Review Board, University of North Carolina</td>
<td>2008–present</td>
</tr>
</tbody>
</table>

**Most Recent Peer-Reviewed Publications**


**Ongoing Research Support**

**2018-2020**
Fetal metabolic consequences of late preterm steroid exposure
NIH
Role: Co-Primary Investigator

**2014-2020**
Chronic Hypertension and Pregnancy
NIH
Role: Co-Investigator

**2019-2024**
Childhood Neurodevelopment and Obesity: C/SOAP Follow-up Study I
NIH
Role: Co-Investigator

2019-2021
Comparative safety of ondansetron versus alternative antiemetics in pregnancy
NIH
Role: Co-Investigator

2020-2025
Lifestyle behaviors and cardiometabolic disease risk in college-based young adults
NIH
Role: Co-Investigator

2019-2024
Mechanisms of altered drug metabolism in pregnancy
NIH
Role: Co-Investigator

2015-2020
UNC BIRCWH
NIH
Role: Primary Investigator

2016-2021
MOMPOD
NIH
Role: Co-Primary Investigator

2019-2024
North Carolina Collaborative to Prevent Diabetes in Pregnancy
NIH
Role: Co-Primary Investigator

2020-2022
Diagnosis and monitoring of gestational diabetes by quantitative detection of acetone in breath
NIH
Role: Primary Investigator
Nancy Chescheir, MD, Professor

Dr. Nancy Chescheir is a professor of obstetrics and gynecology and a maternal-fetal medicine specialist. Her primary interests are in global women's health, fetal disorders, and high order multiple gestations. She has served in multiple administrative roles, including the chair of obstetrics and gynecology at Vanderbilt University School of Medicine, acting chair at UNC School of Medicine, Associate Dean for the Curriculum at UNC, Chief of Staff at Bokamoso Private Hospital in Botswana and scientific program director for the NICHD Randomized Controlled Trial of in utero vs standard repair of fetal myelomeningocele. Currently she is serving as the Director of Prenatal Diagnosis with clinical and research interest in advanced obstetrical ultrasound and fetal therapy, clinical informatics, quality improvement and patient safety. Dr. Chescheir was recently appointed Editor in Chief of our specialty's leading journal, Obstetrics and Gynecology.

Positions & Honors
University of North Carolina, Chapel Hill
Chief of Staff; Director, Women’s and Children’s Services 2008–present
Editor in Chief, Obstetrics and Gynecology 2013–present
Consultant, MED-CPU OB Program 2015–present
Academy of Educators elected member, UNC 2009–present

Other Experience & Professional Memberships
University Health system Consortium Obstetrical Steering Committee 2007–present
ACOG, Committee on Obstetrics 2008–present
ACOPG, Committee to write —Pregnancy, Birth and Beyond‖ 2008–present
ACOG Precis 2008–present

Most Recent Peer-Reviewed Publications
Elizabeth Coviello, DO, Assistant Professor

Dr. Coviello earned her Bachelor of Arts in Broadcast Journalism from Pennsylvania State University in 2007 and her Doctor of Osteopathic Medicine from the University of New England in 2012. She completed her Obstetrics and Gynecology residency in 2016 at MedStar Washington Hospital Center and MedStar Georgetown University Medical Center in Washington, DC, where she was elected by her peers to serve as Administrative Chief Resident and received multiple teaching awards. Throughout her career, Dr. Coviello has been actively involved in obstetric quality improvement initiatives and committees. She has extensive experience with postpartum hemorrhage and quantifying blood loss. She serves on UNCH’s postpartum hemorrhage task force. In the clinical arena she works with management of medically complicated pregnancies, labor and delivery, and prenatal diagnosis. Her clinical interests include maternal health, preeclampsia, lupus and autoimmune diseases. Dr. Coviello’s research interests include preeclampsia, obstetrical hemorrhage and clinical blood loss.

**Professional Memberships**

- Communications Committee, Member
- Society for Maternal-Fetal Medicine
- American College of Obstetrics and Gynecology
- Director, Fourth year student Maternal-Fetal Medicine Elective

**Most Recent Peer-Reviewed Publications**


Angelica Glover, MD, Assistant Professor

Dr. Glover received her Bachelor of Science in Chemistry from Texas A&M University in 2006 and her M.D. from the University of Texas Medical Branch at Galveston in 2012. She completed her Obstetrics and Gynecology residency at the University of Alabama at Birmingham in 2016 and her Maternal-Fetal Medicine fellowship at UNC in 2019. Her clinical interests include hypertensive disorders of pregnancy, maternal cardiac disease, placenta accreta spectrum, obstetric surgical complications, and postpartum care (the “4th trimester”). Dr. Glover is actively involved in obstetric quality improvement initiatives within UNC and through the Perinatal Quality Collaborative of North Carolina. She is engaged in advocacy efforts at the state level through the Society for Maternal-Fetal Medicine State Liaison Network and the National Hispanic Medical Association.

Professional Memberships

<table>
<thead>
<tr>
<th>Organization</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Hispanic Medical Association</td>
<td>2019-Present</td>
</tr>
<tr>
<td>North Carolina Obstetrical and Gynecological Society</td>
<td>2016-Present</td>
</tr>
<tr>
<td>Society for Maternal-Fetal Medicine</td>
<td>2014-Present</td>
</tr>
<tr>
<td>American College of Obstetricians and Gynecologists</td>
<td>2012-Present</td>
</tr>
</tbody>
</table>

Most Recent Peer-Reviewed Publications


William Goodnight III, MD, MSCR, Associate Professor

William Goodnight, MD, MSCR is an Associate Professor whose current research interests include prenatal diagnosis and ultrasound with projects including evaluating the natural history of ventriculomegaly in fetuses with open neural tube defects, long term neurological outcomes of newborns following PPROM compared to PTB for other indications, creation of a database for NAFTNET for twins complicated by TTTS, and establishing a biobank at UNC for fetus with fetal anomalies. Dr. Goodnight is also interested in decision analyses, and is collaborating with the school of public health on a decision analysis evaluating the cost effectiveness of Amnisure for the diagnosis of PPROM. His current clinical activities include prenatal diagnosis and management of medical complications of pregnancy.

Positions & Honors

<table>
<thead>
<tr>
<th>Position</th>
<th>Institution</th>
<th>Years</th>
</tr>
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<tbody>
<tr>
<td>Associate Professor</td>
<td>Division of Maternal Fetal Medicine</td>
<td>2014-present</td>
</tr>
<tr>
<td>Medical Director</td>
<td>UNC Fetal Care Program, UNC Chapel Hill NC</td>
<td>2012-present</td>
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</table>

*American Journal of Perinatology* editorial board member

Most Recent Peer-Reviewed Publications


Ongoing Research Support

<table>
<thead>
<tr>
<th>Year</th>
<th>Project</th>
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</thead>
<tbody>
<tr>
<td>2015 – present</td>
<td><strong>MORE AHEC</strong></td>
</tr>
<tr>
<td>2012 – present</td>
<td><strong>Randomized trial to prevent congenital Cytomegalovirus Infection.</strong></td>
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<tr>
<td>2011 – present</td>
<td><strong>NIH – Maternal Fetal Medicine Network Units.</strong></td>
</tr>
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August 2011 – present

Early Brain Development in Twins

National Institutes of Health (NIH)

PI: John Gilmore
Dr. Herrera is the resident OB rotation director and the OB service line leader. She also runs an obstetric emergencies simulation program. She completed her OBGYN residency at UNC and her MFM fellowship at University of Utah, where she also obtained a Masters of Science in Clinical Investigation (MSCI). She is most passionate about maternal care, medical disorders and complications of pregnancy. Dr. Herrera currently runs a combined chronic kidney disease in pregnancy clinic with Dr. Monica Reynolds, a UNC nephrologist with a passion for obstetrics. She loves to teach; working with residents and fellows is one of the things that keeps her going and makes her love academic medicine.

**Most Recent Peer-Reviewed Publications**


Julie M. Johnson, MD, Clinical Assistant Professor

A graduate of the University of North Carolina at Chapel Hill with a B.S. in biology, Dr. Johnson earned her medical degree from the Wake Forest University School of Medicine. She completed a residency in obstetrics and gynecology at Palmetto-Richland Memorial Hospital/University of South Carolina School of Medicine and a fellowship in maternal-fetal medicine at Women & Infants Hospital of Rhode Island/the Warren Alpert School of Medicine at Brown University. Board certified in obstetrics & gynecology, she was previously a member of the active medical staff at Women & Infants Hospital and at Rhode Island Hospital, both in Providence, R.I., and a consulting physician for four hospitals in Massachusetts and Rhode Island. Dr. Johnson expects that most of her practice at Moore Regional will involve patients in the following three categories: women who have complicated medical problems that are not related to their pregnancy, women who have problems that are directly related to their pregnancy, and healthy women who are carrying a fetus with a medical problem or problems.

Most Recent Peer-Reviewed Publications


Tracy Manuck, MD, Assistant Professor

Dr. Manuck is an Associate Professor in the Department of Obstetrics and Gynecology in the Division of Maternal Fetal Medicine and is the Perinatal Section Head of the Institute for Environmental Health Solutions. Dr. Manuck has been at UNC for over 5 years and is committed to improving the lives of women and children through a combination of clinical care and high-quality patient-oriented research. Her research and clinical interests and expertise include preterm labor (including cervical insufficiency and preterm premature rupture of membranes), multiple gestations (including complicated twin, triplet, and higher order multiples), and caring for pregnancies complicated by fetal chromosomal or structural anomalies. She is the founder and Medical Director of the UNC Prematurity Prevention Program, which complements her ongoing research efforts. This program cares for women with the most severe, highest risk SPTB phenotypes. Dr. Manuck co-directs the MFM fellowship research education program and is privileged to advise dozens of young investigators in patient-oriented research, including students, MDs, and PhDs.

Most Recent Peer-Reviewed Publications


Sun SV, Manuck TA. Alcohol in pregnancy: not recommended at any gestational age. *BJOG.* 2019;126(12):1455.


Ongoing Research Support
8/8/17– 3/31/2022
The Pharmacogenomics of Spontaneous Preterm Birth Prevention and Treatment
University of Utah Personalized Healthcare DNA Sequencing Grant Award
Role: Principal Investigator

12/1/2018– 11/30/2022
*Perinatal PFAS Exposure and Placental Toxicity in NC*
NC PFAST Network
Role: Co-PI

12/1/18 – 11/30/20
*Children’s Environmental Solutions Study*
RTI IMPACT Seed Fund
Role: Co-PI

6/1/2019– 5/31/2020
*The Placental Exposome: a Driver of Epigenetic Regulation and Preeclampsia*
Center for Environmental Health and Susceptibility Pilot Grant Program
Role: Co-PI

Ongoing
*Prevention of Preeclampsia by Targeting Pro-inflammatory Exposures (the P3IE Study)*
Role: Co-PI

Ongoing

*Combined Environmental and Psychosocial Stress, Hurricane Florence, and Preterm Birth*

Role: Co-PI
Dr. Menard serves as an Upjohn Distinguished Professor. She is interested in the study of maternal health services delivery, preconception and interconception care, strategies to prevent preterm birth. Throughout her career, Dr. Menard has worked at the intersect between public health and the everyday challenges and joys of clinical obstetric care. In addition to her duties at UNC, she currently serves as Medical Director of the Pregnancy Medical Home model through Community Care of North Carolina. This is a state wide program designed to enhance access to high quality prenatal care and improve birth outcomes for pregnant women with Medicaid coverage.

Positions & Honors

Professor, Obstetrics and Gynecology 2006–present

American Board of Obstetrics and Gynecology, Obstetrics and Gynecology Examiner 1999–present

Maternal Fetal Medicine Subspecialty Examiner (2007 – present)

North Carolina Health and Human Services, Physician Advisory Council 2006–present

The Best Doctors in America: Maternal - Fetal Medicine, Marfeh S and Smith GW (eds) 1994–present

Woodard and White

Most Recent Peer-Reviewed Publications


Ongoing Research Support

4/2018-6/2020
Regional Perinatal Outreach to Assess Hospital Levels of Maternal Care and Increase Capacity for use of Immediate Postpartum LARC
North Carolina Department of Public Health
Role: Principle Investigator

10/2017-present
ECHO model to build capacity for treatment of substance use disorder among primary care providers
AHRQ
Role: Consultant
Robert Strauss, MD, Director of Maternal Fetal Medicine Fellowship Program

Robert Strauss, MD is a Professor in Obstetrics and Gynecology, and also serves as the Director of the Maternal-Fetal Medicine Fellowship and is a beloved teacher and mentor. His greatest interests are in medical education and clinical care. He has won numerous departmental teaching awards, including a 5-time recipient of the CREOG National Faculty award for Excellence in Resident Education. Dr. Strauss served as the Ob/Gyn Residency Program Associate Director and then Director from 2000-2008. He also served as the Director of Labor and Delivery and the OB Physician Service Line Leader for 14 years. This past year, the UNC Health Care Board of Directors awarded him the prestigious H. Fleming Fuller Award, given to the member of the medical staff who demonstrates lifelong dedication to the highest standards of patient care, teaching and community. His research interests are focused on clinical obstetrics, including preterm birth, placental abruption, gestational diabetes, and fetal lung maturity studies. He has also received grant funding for research in prevention of preterm birth, as well as having mentored several resident and fellow research projects resulting in publication.

Positions & Honors

<table>
<thead>
<tr>
<th>Position</th>
<th>Years</th>
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<tbody>
<tr>
<td>Director, MFM Fellowship</td>
<td>2019–present</td>
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<tr>
<td>Professor, Department of Obstetrics &amp; Gynecology</td>
<td>2011–present</td>
</tr>
<tr>
<td>Journal Reviewer, <em>Obstetrics and Gynecology</em></td>
<td>1999–present</td>
</tr>
</tbody>
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Most Recent Peer-Reviewed Publications


Elizabeth M Stringer, MD, MSc, Professor

Throughout her career, Dr. Stringer has conducted research at the intersection of obstetrics and public health. While in Zambia, she worked with local public health officials to implement a program to prevent mother-to-child HIV transmission which had served over 1.6 million women at the time of her return to the U.S. She also conducted clinical trials in contraception, AIDS therapeutics in women, and neonatal circumcision. Although Dr. Stringer now lives in North Carolina, she maintains strong ties to her colleagues at the University of Zambia and its affiliated University Teaching Hospital. She practices clinical Maternal-Fetal Medicine at UNC and has multiple NIH grants for studies being conducted in Zambia and Nicaragua. Dr. Stringer is the head of the Society for Maternal Fetal Medicine’s Global Health Committee and is an associate editor of the International Journal of Gynecology and Obstetrics. She also serves on the combined board of American International Schools of Tangier and Marrakesh, Morocco.

Positions & Honors

- Professor, Department of OBGYN 2019–present
- Lecturer (Honorary), University of Zambia School of Medicine 2001–present

Other Experience and Professional Memberships

- Board Member of the American School of Tangier, Morocco 2013–present
- Member, Global Health Committee, Society for Maternal Fetal Medicine 2012–present
- American College of Obstetrics and Gynecology 2003–present
- Zambian Society of Obstetrician Gynecologists 2001–present

Most Recent Peer-Reviewed Publications


Ongoing Research Support

9/2019 – 8/2020
A pilot trial of perinatal depression treatment in Zambia
NIMH
Role: PI

6/2019-5/2024
Understanding Maternal-Fetal Zika Virus Transmission and its Complications in Nicaragua
NICHD
Role: PI
Ongoing
Understanding the relationship between antiretrovirals and preterm birth among HIV infected women in Zambia
NICHD / NIAID
Role: Co-PI
Alison Stuebe, MD, MSc, Professor, Interim Director of the Division of Maternal-Fetal Medicine

Dr. Stuebe serves as Interim Director and professor of the division of Maternal Fetal Medicine and Distinguished Professor of Infant and Young Child Feeding at the Gillings School of Global Public Health. She has published more than 150 peer-reviewed articles. She is Medical Director of Lactation Services at UNC Health Care, and she works with an interdisciplinary team of faculty and staff to enable women to achieve their infant feeding goals. Her current research focuses on developing models for holistic and equitable care of families during the 4th Trimester. Dr. Stuebe is a member of the Steering Committee for Moms Rising North Carolina, as well as being president of the Academy of Breastfeeding Medicine. At the Society for Maternal-Fetal Medicine, she is a member of the SMFM Health Policy and Advocacy Committee. At the American College of Obstetricians and Gynecologists, she is a member of both the Breastfeeding Expert Work Group and the Maternal Mental Health Expert Work Group, and she chaired the Task Force on Reinventing Postpartum Care.

Positions & Honors

Professor, Department of Obstetrics and Gynecology  
2019–present

Assistant Professor, Department of Maternal and Child Health  
Gillings School of Global Public Health, University of North Carolina  
2010–present

Most Recent Peer-Reviewed Publications


Stuebe A. Does breastfeeding prevent metabolic disease or does metabolic disease prevent breastfeeding?. BJOG. 2019;126(4):535.


Ongoing Research Support

2020-2023  
First Mile to Health: Using Data Analytics to Identify and Address Transport Barriers to Care  
HRSA  
Role: Co-I

2019-2024  
Implementing Shared Decision Making Toolkit to Improve Birth Outcomes  
HRSA  
Role: Co-I

2019-2023  
Reengineering Postnatal Unit Care to Reduce Perinatal Morbidity and Mortality  
ARIHRQ  
Role: PI
2019-2023
*Safeguarding Two Lives: Expanding Early Identification & Access to Perinatal Mental Health & Substance Abuse Treatment*
Health Resources and Services Administration/U.S. Department of Health and Human Services
Role: Co-Investigator
PI: Mary Kimmel, UNC Psychiatry

2018-2023
*Mood, Mother and Child: The Psychobiology of Dyadic Resilience*
NICHD
Role: Co-PI; Roger Mills-Koonce, Frank Porter Graham Child Development Institute

2018-2023
*Scaling up psychological treatments for perinatal depression and anxiety symptoms via telemedicine*
PCORI
Role: Co-investigator
Co-PIs: Samantha Meltzer-Brody, UNC Psychiatry and Daisy Singla, University of Toronto

2018-2022
*Preconceptional health of Latinas and its association with child adiposity*
Co-PI Siega-Riz/Stores, UNC Departments of Epidemiology and Biostatistics
Role: Co-I

2016-2021
*Cocaine and Maternal Behavior: Effects on Trajectory of Infant Brain Development*
Role: Co-I
PI: Karen Grewen, UNC Department of Psychiatry
Neeta L. Vora, MD, Director of the Reproductive Genetics, Associate Professor

Dr. Vora is triple boarded in Obstetrics and Gynecology, Maternal Fetal Medicine, and Clinical Genetics. Dr. Vora has authored more than 50 articles on prenatal genetics, ranging from cell free DNA to whole exome and genome sequencing. She has a K23 from the NICHD to study use of new genomic technologies in obstetrics and an R21 to study novel genes critical to human brain development in a zebrafish model. She is a co-investigator on a multicenter prenatal whole genome sequencing grant and co-investigator on a grant which aims to understand how parents prepare for a prenatal diagnosis of a genetic condition. Dr. Vora’s research has focused on cell free fetal DNA in the maternal circulation. She is interested in obesity and has investigated the levels of cell free fetal DNA in obese versus lean patients. She also has an interest in the differences in fetal gene expression in obese versus lean mothers using cell free fetal nucleic acids in amniotic fluid.

Positions and Honors

<table>
<thead>
<tr>
<th>Position</th>
<th>Dates</th>
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<tbody>
<tr>
<td>Associate Professor, Department of Genetics</td>
<td>2019–present</td>
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<tr>
<td>Associate Professor, Division of Maternal Fetal Medicine</td>
<td>2017–present</td>
</tr>
<tr>
<td>Director of Reproductive Genetics, Department of Ob/Gyn, Division Maternal Fetal Medicine</td>
<td>2012–present</td>
</tr>
</tbody>
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Most Recent Peer-reviewed Publications


Ongoing Research Support

09/01/2018-08/31/2023
Prenatal Genetic Diagnosis by Genomic Sequencing: A Prospective Evaluation
Role: Site PI (Ronald Wapner, Columbia University Department of OB/GYN)

7/6/2017-6/30/2021
Early Genomic Diagnosis
Role: PI, Trainee. Mentors: Dr Cynthia Powell (UNC Department of Pediatrics-Genetics and Metabolism), Dr Jonathan Berg (UNC Department of Genetics), Dr Kim Boggess (UNC Department of OB/GYN)

04/01/2019-03/31/2021
Genetic and Functional Dissection of Congenital Anomalies of the Brain
Role: Co-PI
We here at the Division of Maternal Fetal Medicine hope that you enjoyed your visit. Please let us know if you have any questions about your visit, the fellowship program or the department.

Qiana Davis, Fellowship Coordinator
qiana_davis@med.unc.edu

Emily Richbourg, Associate Fellowship Coordinator
emily_richbourg@med.unc.edu

Robert Strauss, Fellowship Director
robert_strauss@med.unc.edu

919.966.1601 – MFM Front Desk

https://www.med.unc.edu/obgyn/mfm/copy_of_fellowship/