

OBSTETRICS AND GYNECOLOGY

# Fellowship in Maternal-Fetal Medicine



## Overview

Oregon Health & Science University (OHSU) is the state's only academic health center, providing the state's most comprehensive health care, educating the next generation of clinicians and biomedical researchers and discovering breakthroughs and innovations.

The Maternal-Fetal Medicine (MFM) Fellowship program at OHSU started in 1982 and a combined MFM-Medical Genetics and Genomics Fellowship began in 2018. We seek fellows dedicated to a career in academics who have the potential for substantial contributions to MFM through research, leadership and/or education. This program strives to position fellows for career success through a balanced mix of extensive clinical and research training, professionalism and cultural competency.

Our specific AIM: The OHSU MFM Fellowship desires to create leaders and innovators in the field of maternal-fetal medicine. We provide a vast array of research (e.g., basic, translational and clinical approaches), clinical (e.g., maternal, fetal, ultrasound, combined MFM-MGG), leadership and educational opportunities (e.g., teaching residents and students) so that our fellows may reach their individual career goals and be provided a solid foundation to achieve board certification and thrive as an exemplary MFM.

## Clinical Training

A focal point of the fellowship is our strong clinical training program that provides ample training in ultrasound, inpatient and outpatient obstetric care for medically complicated and critically ill patients, genetics education, and ultrasound-guided in-utero procedures. Fellows will graduate as maternal-fetal medicine experts and consultants.

OHSU performs approximately 2,500 deliveries annually, of which about 800 are high risk. The hospital accepts transfers from all of Oregon and parts of Southern Washington, Northern California and Western Idaho.



### Ultrasound training

Hands-on ultrasound training is provided by the MFM faculty and Women's Imaging Specialist group. Fellows also have the opportunity for additional training in fetal echocardiogram through the Pediatric Cardiology division.

### Genetics training

Fellows will work closely with five board-certified genetic counselors and one board-certified MFM/Genetics faculty.

### Intensive care training

Fellows will finish the program with experience in critical care obstetrics by rotating through the cardiovascular intensive care unit, which accepts all critically ill obstetric patients. Didactics on critical care management are provided by multidisciplinary faculty. Sophisticated obstetric critical care simulations at the state-of-the-art Mark Richardson Interprofessional Simulation Center provide health education through interprofessional collaboration and new simulation technologies.

### Fetal procedures training

Fellows learn amniocentesis and chorionic villus sampling through simulation, didactics and hands-on experience. Amnioreduction, fetal blood sampling, intrauterine transfusions and fetal shunts are performed by fellows with appropriate supervision. Complex deliveries for fetal anomalies include fellows and we anticipate fellow involvement in our in-utero neural tube defect repairs and twin-to-twin transfusion laser treatment.



### Fetal Therapy Program

Fetal Therapy Program director Stephanie Dukhovny, M.D., leads the program in conjunction with Doernbecher Children's Hospital. The program provides coordinated care to women with complex fetal anomalies throughout Oregon and Southwest Washington. The program provides:

- MFM consultation and advanced prenatal diagnostic imaging including ultrasound, echocardiography and fetal MRI.
- Genetic counseling, testing, support and behavioral counseling services for patients, siblings and families.
- In-utero procedure training and practice as well as thoracentesis, vesicocentesis, thoraco-amniotic and bladder shunt placement, and intrauterine transfusions. In 2022, we will begin fetal surgery for neural tube defects and fetoscopic laser surgery for twin-to-twin transfusion syndrome.
- Pediatric subspecialty consultation (i.e., cardiology, general pediatric surgery, pediatric CT surgery, urology, neurology, ENT, endocrine, nephrology, hematology, GI, palliative care, etc.).
- Coordination of complex deliveries and postnatal follow-up and testing.
- Opportunity for outcomes-based fetal anomaly clinical research.

A weekly multidisciplinary conference is held to review imaging and diagnostic testing and coordinate ongoing antenatal and postnatal care.

### MFM/Adult Congenital Heart Disease Program

A multidisciplinary program directed by Emmanuelle Paré, M.D. (MFM), and Abigail Khan, M.D. (Cardiology), designed to provide care for the increasing volume of women referred to OHSU with complex congenital heart disease. The program includes:

- A weekly multidisciplinary clinic including MFM, adult congenital heart disease cardiologists, cardiac disease geneticists and anesthesiologists.
- A monthly multidisciplinary conference to coordinate antenatal, intrapartum and postnatal care.

### Diabetes and Pregnancy Program

Amy M. Valent, D.O., leads the comprehensive program, providing inclusive preconception, pregnancy and postpartum consultative, co-management and continuity of care for persons with gestational diabetes, type 1 and type 2 diabetes, inherited or autoimmune-mediated diabetes, pre-/post-bariatric surgery, obesity, dyslipidemia and PCOS.

- The DAPP team includes a perinatal dietitian, advanced practice providers and behavioral health and social support professionals.
- A weekly clinic is preceded by a journal and education review conference.

OHSU has the infrastructure in place to perform clinical, translational and basic science projects. Collaborative relationships with other departments and institutes at OHSU have been developed:

Oregon National Primate Research Center (ONPRC)

- One of seven NIH-supported primate research centers in the United States conducting basic science and translational research.
- Allows utilization of noninvasive imaging to understand reproductive health in utero and during the neonatal period.
- Prior MFM and neonatology fellows have completed their fellowship thesis projects at this site.

Oregon Clinical and Translational Research Institute

Alaska Native Health and Wellness Research Center

Knight Cardiovascular Institute

Center for Developmental Health

Bob and Charlee Moore Institute for Nutrition and Wellness

International MFM research opportunities in South America

## Research Opportunities

The goal of our fellowship is to produce academic scientists with strong clinical aptitude. The division is committed to excellence in research and adequate time and mentorship necessary for fellows to embark on a successful academic career.

- OHSU is an international leader in multidisciplinary collaboration on perinatal health and the developmental origins of human adult disease.
- The OB/GYN department was ranked #20 in 2020 by the NIH Blueridge rankings.
  - The department promotes early-career investigators and OHSU currently awards Women’s Reproductive Health Research (WRHR) Career Development Program and Building Interdisciplinary Research Careers in Women’s Health (BIRCWH) NIH training scholars.
  - The division is supported by NIH, Foundation, industry and institutional funding.
- Up to 18 months are devoted to protected fellow research training.
- Clinical and basic science research opportunities and mentors are readily available to fellows.
- All prior fellows have successfully completed and published their thesis project by the third year of fellowship.
  - Fellows graduate with multiple first authorship manuscripts and opportunities for presenting their work at national and international conferences.

## Human Investigations Program (HIP)

Fellows are required to complete a two-year graduate certificate program that fulfills ABOG requirements for epidemiology and biostatistics. The HIP offers an integrated clinical and translational research education curriculum to:

- Enhance your career in clinical and translational research.
- Gain practical skills in conducting successful research studies.
- Connect with faculty who share a commitment to translational research.
- Acquire knowledge that directly supports your research and expands your collaboration opportunities.
- Increase the number and level of competency of patient-oriented clinical investigators.

There are two tracks within the HIP:

- Certificate of Training in Human Investigations: Free, two-year coursework-based program specifically directed toward creating clinician-researchers. It is an integrated clinical and translational research education curriculum.
- Master of Clinical Research (M.C.R.): A three-year program for clinicians who desire to make clinical and translational research a prominent part of their long-term career goals.

## Scholarship & Development Committee

- In addition to a primary research mentor, the Scholarship & Development Committee (SDC) is a core group of faculty who have fellows’ best interests in mind to ensure they are staying on track academically and clinically for graduation. The SDC provides fellows with beneficial career opportunities and support for their personal and professional growth.
- SDC members are individualized to the fellow’s research, clinical and career interests.
- The SDC meets twice a year during fellowship.
- Fellows begin to create pathways and take advantage of opportunities for not only developing MFM competencies but also professional and career development.

## FELLOWSHIP EDUCATION

As education is a top priority, fellows have protected time for all educational activities.

Fellows are also drivers of their career interests and educational goals. The program supports facilitating individualized opportunities to help fellows thrive.

## CONFERENCES

Fellow education is highly important; fellows are expected to participate in:

SMFM, SRI or other research-specific annual conferences.

Weekly Departmental Grand Rounds and M&M, MFM division meeting, fellow didactics and multidisciplinary Fetal Therapy Conference.

Monthly perinatal ultrasound conference, Oregon Perinatal and Neonatal Network conference, and division research meetings.

Monthly MFM journal club and joint neonatology-MFM, pediatric cardiology and joint MFM-adult congenital heart disease conferences.



### Chorionic Villus Sampling (CVS)

Training is available, which is tailored to prepare the fellow, if interested, to be proficient in both transcervical and transabdominal CVS techniques.

### Mentorship

- Mentorship is critical for promoting success.
- The program promotes multiple mentoring models that are individualized to each fellow.
- Fellows benefit from MFM faculty, faculty from other disciplines/departments and advisors outside of the institution.

### Additional Program Highlights

- Fellows teach residents and health professional students and have the opportunity to develop and strengthen mentorship skills.
- Fellows take calls from home but are expected to be first call when on-call with the support of attending backup to serve as MFM consultants to OHSU and the greater medical community.
- The OHSU MFM faculty is dedicated to providing strong mentorship for the fellow.
- Fellows are offered opportunities to further develop as academic clinicians, including lecturing, acting as manuscript reviewers and pursuing either a master’s degree or a certificate in research.
- Fellows enjoy protected time to attend conferences, sit for the general OB/GYN oral board exam and other opportunities for professional development in MFM, such as the Perinatal Research Society Young Investigators Workshop and NICHD Young Investigators Conference.
- The opportunity to see how accurate “Portlandia” actually is while living in one of the most beautiful parts of the country.



**Amy M. Valent, D.O.**  
Fellowship Program Director



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