Fellowship in Reproductive Endocrinology and Infertility
Oregon Health & Science University is the state’s only academic health center. It offers an uncommon array of services from providing the state’s most comprehensive health care, to educating the next generation of clinicians and biomedical researchers, to achieving breakthroughs and innovations.

OHSU has the academic richness and scientific depth to support a successful Reproductive Endocrinology and Infertility (REI) Fellowship. Historically, OHSU has had a large footprint in the reproductive medicine world.

The REI Fellowship program at OHSU started in 2018 after a history of clinical, academic and research advancements. Leon Speroff, M.D., a previous chairman of Ob/Gyn at OHSU, wrote the definitive textbook in Reproductive Endocrinology that residents and fellows have used for the past 30 years. OHSU has also made fundamental advances in basic reproductive science through collaborations with the Oregon National Primate Research Center (ONPRC). Richard Stouffer, Ph.D., Reproductive Sciences Division Director at ONPRC, has performed research that has led to discoveries in contraception, follicular maturation, ovulation, and corpus luteum formation, function, and demise during the menstrual cycle and early pregnancy. The first IVF case in Oregon was performed at OHSU in the 1980s. Most recently, the REI faculty have published sentinel papers in journals such as *Nature* and *Cell* involving micro-manipulation of gametes and embryonic stem cells.

The overall educational objective for the REI Fellowship is to train outstanding leaders in Reproductive Endocrinology and Infertility, capable of contributing to the field and continuing OHSU’s legacy. Given the breadth of unique research experiences and robust clinical training at OHSU, upon completion of fellowship we will have trained exceptionally well-rounded REI physicians.
Clinical Training

Fellows will train in an environment that has a rich history in treating patients with reproductive endocrinopathies; those requiring complex reproductive surgeries and treatment of infertility. With our active IVF program, fellows will be exposed to cutting-edge assisted reproductive techniques while having access to a large number of IVF cycles.

IVF Training

During the first year, the REI fellow will be learning IVF related procedures including ultrasound, egg retrievals, and embryo transfers on call with the IVF attending physician of the week.

Surgical Training

REI fellows will participate in sub-specialty specific, complicated surgeries, including laparoscopies, hysteroscopies, laparatomies, and robotics for tubal disease, endometriosis, asherman’s syndrome, leiomyoma, polyps, mullierian variants, and pediatric gynecology. Laparoscopic training laboratory and robot-training facilities are also available. The uro-gynecology division also sponsors a gynecologic cadaver surgery lab, which is available to REI faculty.
Subspecialty Care Training

During the third year, fellows will participate in subspecialty care in the following areas:

**Pediatric Endocrinology:** Exposure to delayed and precocious puberty, premature ovarian dysfunction, PCOS, diabetes, transgender care in the adolescent, and disorders of sexual development

**Medical Endocrinology:** Exposure to thyroid and adrenal diseases, pan-hypopituitarism, osteoporosis, diabetes, and obesity

**Male Fertility:** A Fertility Urologist will teach fellows about medical and surgical treatment of male infertility

**Genetics:** A Genetic Counselor will educate fellows about pre-conception screening and pre-implantation genetic screening and diagnosis

Research Opportunities and Resources

OHSU has a long history of fundamental basic research in reproductive science. There is a collegial relationship with other departments and institutes at OHSU and unique resources to ensure that fellows will complete a clinically professional and defensible thesis.

**Oregon National Primate Research Center**

The ONPRC is one of only seven NIH-supported primate research centers in the United States conducting basic science and translational research, and is the premier reproductive center with over 50 years of continuous center funding. The Division of Reproductive and Developmental Sciences at the ONPRC conducts basic and applied research on aspects of reproductive biology that are particularly relevant to understanding human reproduction and to controlling reproductive disorders and fertility, and is responsible for a number of recent advances in reproductive biology and other technologies—notably stem cell biology.

Twelve veterinarians and over 100 technicians care for a colony of 4,200 non-human primates on the 350-acre campus. An Assisted Reproductive Core Laboratory has full capabilities for Monkey IVF, including incubators and microscopes for micromanipulation. There are four surgical suites available, and core laboratories include endocrine assays, imaging and morphology, histology, flow cytometry, molecular biology, virology, and genetics. The ONPRC Isabel McDonald Library, located at the West Campus, houses a collection of journals, books, and reference materials to support the research needs of the ONPRC scientific community.
Stem OHSU Center for Embryonic Cell and Gene Therapy Laboratories

OHSU has invested more than $3 million in establishing the Center for Embryonic Cell and Gene Therapy to study biology of gametes, preimplantation embryos, and totipotent and pluripotent stem cells. The Center provides a unique opportunity to do basic research involving human embryonic stem cells under the tutelage of Dr. Shoukhrat Mitalipov. The Center consists of a stem cell culture lab, embryo manipulation and culture, molecular biology epifluorescent microscopy cryostorage, and tissue dissection.

The Women's Health Research Unit (WHRU)

WHRU is a unit within the department of Ob/Gyn that is also available to fellows for clinical research projects. Several WHRU members have both their MD and MPH and are available to mentor fellows in their clinical projects.

Additional Resources

Oregon Clinical and Translational Research Institute

Building Interdisciplinary Research Careers in Women's Health

Women's Reproductive Health Research K12 Program

Curriculum

Research is a significant strength of the fellowship and training should adequately prepare trainees to pursue careers in academic medicine. Eighteen months of protected research time are provided in the beginning of the second year of fellowship. It is expected that during this period of time the fellow will pursue mentorship in a basic science lab and complete a substantial research project that will serve as the basis of their thesis and publication. It is also expected that the fellow will undertake at least one clinical research project or write a clinical review. The fellow will complete a biostatistics course offered through OHSU's Human Investigations Program, with the option to complete either a Certificate of Training in Human Investigations, or a Master of Clinical Research.
Mentorship

Core Faculty

David Lee, M.D.
PROGRAM DIRECTOR
ASSOCIATE PROFESSOR OF OBSTETRICS AND GYNECOLOGY
DIVISION OF REPRODUCTIVE ENDOCRINOLOGY AND INFERTILITY

Sacha Krieg, M.D., Ph.D.
ASSOCIATE DIRECTOR
ASSISTANT PROFESSOR OF OBSTETRICS AND GYNECOLOGY
DIVISION OF REPRODUCTIVE ENDOCRINOLOGY AND INFERTILITY

Paula Amato, M.D.
PROFESSOR OF OBSTETRICS AND GYNECOLOGY
DIVISION OF REPRODUCTIVE ENDOCRINOLOGY AND INFERTILITY

Diana Wu, M.D.
ASSOCIATE PROFESSOR OF OBSTETRICS AND GYNECOLOGY
DIVISION OF REPRODUCTIVE ENDOCRINOLOGY AND INFERTILITY

Thomas O'Leary, Ph.D.
DIRECTOR, FERTILITY LABORATORY
ANDROLOGY DIVISION
Other Faculty

Karen Adams, M.D.
PROFESSOR OF OBSTETRICS AND GYNECOLOGY, OHSU

Maureen Baldwin, M.D., M.P.H.
ASSISTANT PROFESSOR OF OBSTETRICS AND GYNECOLOGY, OHSU

Lisa Bayer, M.D., M.P.H.
ASSISTANT PROFESSOR OF OBSTETRICS AND GYNECOLOGY, OHSU
ASSISTANT FELLOWSHIP DIRECTOR, FAMILY PLANNING

Bruce Boston, M.D.
PROFESSOR OF PEDIATRICS, OHSU
DIVISION OF ENDOCRINOLOGY

Alison Edelman, M.D., M.P.H.
PROFESSOR OF OBSTETRICS AND GYNECOLOGY, OHSU
FELLOWSHIP DIRECTOR, FAMILY PLANNING

Jason Hedges, M.D., Ph.D.
ASSOCIATE PROFESSOR OF UROLOGY, OHSU

Jeffrey Jensen, M.D., M.P.H.
PROFESSOR OF OBSTETRICS AND GYNECOLOGY, OHSU

Robert Klein, M.D.
PROFESSOR OF MEDICINE, OHSU
DIVISION OF ENDOCRINOLOGY, DIABETES AND CLINICAL NUTRITION

Lisa Madison, M.D.
CLINICAL ASSOCIATE PROFESSOR OF PEDIATRICS, OHSU
DIVISION OF ENDOCRINOLOGY

Chaim Vanek, M.D.
ASSOCIATE PROFESSOR OF MEDICINE, OHSU
DIVISION OF ENDOCRINOLOGY, DIABETES AND CLINICAL NUTRITION

Amy Thurmond, M.D.
CLINICAL ASSOCIATE PROFESSOR OF OBSTETRICS AND GYNECOLOGY