

Fellowship Training Program in Endocrinology and Metabolism

University of Washington Affiliated Medical Centers

Seattle, Washington

Overview

The University of Washington [Department of Medicine](#) traditionally has maintained strong research training programs in endocrinology, metabolism and nutrition at each of the three teaching medical centers affiliated with the Medical School: The University of Washington Medical Center, Harborview Medical Center, and the Veterans Affairs/Puget Sound Health Care System.

The wide variety of opportunities at the University of Washington provides each fellow with a unique program appropriate for his/her development. Traditionally, the division has accepted postdoctoral trainees (Ph.D.s or M.D.s) who have a strong interest in basic and/or clinical research and who plan full-time academic careers. In their three years here, M.D. fellows acquire experience in clinical endocrinology, as well as research training.

The major objective of this research fellowship program is to prepare talented M.D.s or Ph.D.s for full-time academic careers in endocrinology, metabolism and nutrition. Fellows are given the opportunity to work with faculty members in a clinical setting, in laboratory research and in the basic sciences at the School of Medicine. The [Diabetes Endocrinology Research Center](#) includes all the affiliated medical centers and provides core facilities for diabetes research. In addition, the [Clinical Research Center](#) provides an opportunity for controlled metabolic studies, and the [Diabetes Care Center](#) provides in-depth experience in diabetes management. A lipid research program makes possible the study of patients with lipid disorders, and a Regional Primate Center, located on campus, facilitates studies in nonhuman primates. The [Center for Research in Reproduction and Contraception](#) facilitates research in reproductive endocrinology; the [Clinical Nutrition Research Unit](#) provides opportunities for nutrition-related research and training, and the metabolic bone disease research program provides additional specialized experience.

Each Center has a unique orientation which is described briefly in the following sections.

University of Washington Medical Center (UWMC)

The Division at the UWMC comprises 16 faculty members with varied research interests involved in both basic and clinical research in the areas of diabetes mellitus, obesity and disorders of lipid metabolism. Ongoing research includes:

- Genetics and pathophysiology of lipids and lipoproteins in diabetic and hyperlipidemic states
- Metabolic abnormalities associated with obesity and body weight regulation
- Interaction with lipoproteins with the artery wall in the pathogenesis of atherosclerosis
- Atherosclerosis in diabetes
- Lipoprotein oxidation and its consequences
- Many facets of the secretion and action of insulin, glucagon, somatostatin, and other glucoregulatory hormones
- Population studies of Asian and U.S. diabetic people
- Osteoporosis and metabolic bone disease
- Immune mechanisms in the etiology of Type 1 diabetes
- The relationship between metabolic control and diabetic complications (DCCT/EDIC)
- Effect of androgens on behavior, lipids, bone and body composition in men and women
- Changes in androgen levels and physiology during aging in men
- Control of gonadal function in adults
- Use of gonadotropin-releasing hormone (GnRH) analogues in contraceptive development and the treatment of prostatic carcinoma
- Human male infertility and the development of effective, reversible male contraceptive agents

Harborview Medical Center (HMC)

The Division at HMC, with three faculty members, offers opportunities for training in basic and clinical endocrinology and the management of metabolic disorders. The major areas of research interest include:

- Identification and regulation of the key neuro-hormonal components of weight control, food intake and energy expenditure and their regulation of leptin
- New strategies for the treatment of obesity
- Metabolic syndrome induced by protease inhibitor therapy for HIV infection
- Prevention of coronary heart disease in hyperlipidemic and diabetic subjects and in postmenopausal women

Veterans Affairs/Puget Sound Health Care System (VA/PSHCS)

The Division at the VA/PSHCS comprises five faculty members focused on the following areas of research.

The first is diabetes mellitus with emphases on islet function, immunology and body weight regulation. Ongoing research programs include:

- Pathophysiology and etiology of type 2 diabetes
- Regulation of pancreatic insulin, glucagon, and somatostatin secretion
- Role of neural gut peptides in the regulation of feeding and in body weight
- Catecholamines and stress hyperglycemia
- Immune mechanisms in the etiology of human type 1 diabetes

Clinical Fellowships in Nutrition for Physicians

The Division of Metabolism, Endocrinology and Nutrition has a Section of Clinical Nutrition, through which training is offered in the principles and practice of clinical nutrition, and opportunities are available to perform both clinical and basic research related to nutrition. The clinical component of this training program consists of participation in the General Metabolism and Endocrinology Continuity Clinic and the rotating clinics in Nutrition and Lipid Disorders; experience with inpatient consultations on

disorders of clinical nutrition; and experience with nutritional support. Ongoing research includes aspects of lipid and lipoprotein metabolism, obesity, energy balance, parenteral nutrition and metabolic bone disease.



Seattle and the Surrounding Area

The University of Washington School of Medicine is located in Seattle, Washington, an area known for its beauty and diversity. The metropolitan area offers a spectrum of cultural opportunities that includes music, dance, theater, and film festivals, art museums and galleries, book stores and restaurants. Within a short distance are national parks and forests, mountains, lakes, rivers and the ocean, offering opportunities for hiking, skiing, camping, boating and many other outdoor activities.

For more information on this program, please email the Fellowship Coordinator at metab@u.washington.edu Division of Metabolism, Endocrinology and Nutrition, Box 356426, University of Washington, Seattle, WA 98195-6426.

The Division of Metabolism, Endocrinology and Nutrition is strongly committed to increasing the number of women and ethnic minorities entering careers in academic medicine, and to this end encourages application by women and ethnic minority candidates to our program.