

Beedie Family Fellowship in Lipidology and Cardiovascular Disease Prevention at the University of British Columbia

Purpose

The intent of this fellowship is to train experts in clinical lipidology and all aspects of cardiovascular disease prevention. The program can be tailored to the particular goals of the trainee, including becoming a preventive cardiology specialist. For trainees interested in pursuing primarily clinical training a 1-year fellowship is available. For trainees wishing to develop clinical or basic research skills with a view to pursuing an academic position, a 2-year fellowship is also available including possible enrolment in the UBC Clinical Investigator Program leading to a MSc degree. The fellow will be based at St. Paul's Hospital, a UBC-affiliated teaching hospital, and the Healthy Heart Program Prevention Clinic, one of the largest specialty lipid clinics in Canada.

The program provides training in:

Theoretical and practical aspects of clinical lipidology, including physiology, primary (genetic) and secondary dyslipidemias, pharmacological and non-pharmacological therapies, and considerations related to special lipid disorder patient populations. Theoretical and practical aspects of cardiovascular (CV) risk reduction including primary and secondary prevention, identification and management of risk factors, methods of risk assessment (clinical, laboratory, genetic, imaging and novel biomarkers), therapeutic lifestyle changes including smoking cessation, and pharmacotherapy in the management of individuals with, and those at risk for, cardiovascular disease (CVD). This includes the management of hypertension, diabetes, obesity, cardiac rehab, investigation using cardiovascular imaging, and stress testing, and other CVD prevention training that fellows may wish to pursue.

Clinical, translational and basic science research projects related to cardiovascular disease prevention, lipids, atherosclerosis, cardiovascular genetics, hypertension, cardiovascular imaging and cardiac rehab are available working with expert research mentors within the program.

Specific Aims

1. To acquire a detailed understanding of the physiology of lipid and lipoprotein metabolism.
2. To understand the primary and secondary dyslipidemias including inherited dyslipidemias and their phenotypes.
3. To understand issues specific to assessment and management of dyslipidemias in special patient populations, including patients with HIV, chronic kidney disease, and organ transplantation.
4. To develop knowledge of current theories of atherosclerosis.
5. To know the principles of assessment and management of atherosclerotic vascular disease and its underlying factors.
6. To gain an understanding of different cardiac risk factors (including but not limited to lipids, hypertension, smoking, diabetes, obesity, family history, sedentary lifestyle, diet,

alcohol, and psychosocial stress), and the role of primary and secondary prevention and cardiac rehabilitation programs in reducing these risk factors.

7. To gain an understanding of emerging cardiac risk factors (including but not limited to lipoprotein(a), inflammation, and genetics).
8. To develop an understanding of CV risk assessment and screening for subclinical atherosclerosis including through history, physical examination, laboratory testing and imaging.
9. To understand the basic laboratory assays, their significance and interpretation in evaluating patients at risk for atherosclerotic vascular disease.

Duties

1. Establish and maintain a longitudinal ambulatory clinic in the Healthy Heart Program Prevention Clinic with specific focus on inherited dyslipidemias, primary and secondary prevention and premature vascular disease. As the fellow progresses they will also take on supervision and case review with other trainees in the clinic.
2. Participate in other assigned clinics, including CardioRisk (VGH), SAVE BC (UBC), cardiac rehabilitation, hypertension, smoking cessation, obesity, diabetes and others as suitable for the fellow's career goals.
3. Participate in regular monthly academic rounds and case rounds related to the activities of the fellowship. In addition to monthly Lipid Case Rounds, this will include review of a specific topic each month including epidemiology, molecular and physiological mechanisms, clinical trials evidence, therapeutics, assessment tools, and recent publications in the field.
4. Interact with staff members (lipidologists, cardiologists, endocrinologists, internists, basic scientists, students, nurses, dietitians, exercise specialists, case managers).
5. Identify and conduct an individual research project related to prevention or lipids, under the supervision of an appropriate mentor.
6. Participate in individual assessment of dietary and exercise counseling.
7. Complete the National Lipid Association Master's Program.
8. Successfully complete the requirements and licensing examination for the American Board of Clinical Lipidology.

At the end of the fellowship the trainee will be able to:

1. Perform consultancy as a clinical lipidologist and expert in prevention of cardiovascular disease.
2. Manage patients with complex dyslipidemias.
3. Assess patients' risk for vascular disease and screen for subclinical atherosclerosis.
4. Manage CV risk factors (including diabetes, hypertension, smoking and others) with specific advice on lifestyle (diet and exercise) and drug treatment.
5. Be aware of appropriate management of other conditions with high risk of cardiovascular disease, such as chronic kidney disease, chronic inflammatory conditions, etc.
6. Be certified by the American Board of Clinical Lipidology

Letters of interest regarding application to the fellowship and other inquiries should be sent to Dr. Gordon Francis, gordon.francis@hli.ubc.ca. Tel: 604-806-9269.

Websites:

www.lipid.org

<https://www.escardio.org/>

www.athero.org

<http://globalcardiacrehab.com/>

<https://www.heartandstroke.ca/>

<https://professional.heart.org/professional/index.jsp>

<https://www.lipidboard.org/>