

Module 1

Dalhousie University
Faculty of Agriculture
AGRI5710 - Molecular Basis of Health and Diseases
Fall 2013
Schedule: Wed., Oct 2-30, 2013 (5 meetings)
Time/Location: TBD

Instructor

Dr. Chibuike C. Udenigwe
Office: Cox 124
cudenigwe@dal.ca, Phone: 902 893-6625

Module Description

This module will involve discussions, presentations and critical reviews on the molecular basis of human diseases. Module activities will be based on literature information focused on aetiology and progression of metabolic diseases in human (or animal models of human diseases) related to the student's thesis research, including inflammation, obesity, diabetes, hypertension, cancer, dyslipidemia, liver diseases, etc.

Requirements

This module is available to graduate students working on projects related to human and animal health, with strong academic background in biochemistry and molecular biology. **Capacity: Five (5) graduate students – email Instructor by Tues Sept. 31, 2013.**

Module Content

Weekly meetings will involve discussions led by the instructor and students. Students are required to choose a human or animal metabolic disease or health condition related to their graduate research topic. The final topic must be discussed with the instructor during the first day of class (Wed Oct. 2, 2013). The student will conduct a thorough study on the selected disease or health condition (focused on prevalence, current knowledge in the field on signalling pathways related to aetiology and progression, and future direction) and lead a 30-minute class discussion on the topic. The presentations will be evaluated by the instructor and peers. Students are required to write a mini-review to summarize their study focusing mainly on information reported in peer-reviewed original journal articles published after 2005. The paper should be written following a manuscript format of a particular journal chosen by the student in consultation with the instructor. The paper must be 10-15 pages in length (excluding cover page, references, figures, tables), double line spaced with 12-pt Times New Roman font and 1-inch page margins.

Evaluation

Participation* (15%), Paper (60%) and Presentation (25%)

*Based on contributions during in-class discussions

Materials

There is no required textbook for this module. Topics for class discussions will be derived from peer-reviewed scientific journals, and any other relevant materials will be distributed before or during the class meetings.