Dalhousie University  
Faculty of Agriculture  
Graduate Module Course  

Aquaculture Genomics

Instructor: Dr. Sarah Stewart-Clark  
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Schedule: August 11th- August 26  
Time: 5 days from 10-4 (a mixture of lectures, discussions, readings and short assignments, dates to be decided)  
Location: Haley 116

Module Description  
This module will consist of lectures and group discussions on current biotechnology used in the aquaculture sectors. The theory behind sample preservation, extraction, amplification, sequencing, genotyping, cloning and GMO technology will be presented so that students will have a sound understanding of the theoretical basis for the genetic techniques that are being used in the aquaculture industry.

Requirements  
Graduate students with interests in genomics and aquaculture will be given a priority.

Module Content  
The module will include 5 weeks of one hour lectures and one hour discussion periods. The content will focus on the molecular structures and biochemistry of RNA, DNA and proteins. This module will focus on how we have created the techniques that we use in molecular biology by manipulating the molecular structures of RNA, DNA and protein. The lecture will convey background information and the discussion group will focus on discussing the use of these techniques in the aquaculture sector. The students will choose one technique to create a review paper on for the class.

Participation (20%), Review Paper (50%) Discussion Question Answers (30%)  
Participation is evaluated on the basis of contributions to discussions in meetings.