M.Sc., Ph.D. and Post-Doctoral Opportunities in Salmon Aquaculture, Genomics and Physiology

We are anticipating that a large-scale research program titled ‘Mitigating the Impact of Climate-Related Challenges on Salmon Aquaculture’ (MICCSA) will be funded in the coming weeks. This is a multi-institutional (Memorial, UPEI and University of Waterloo) program that will look at the effects of environmental conditions (e.g. high temperatures and hypoxia) on the physiology, behavior and immunology of farmed salmon, with the goals of developing mitigation strategies and tools for better assessing fish health, for improving vaccine formulations, and for selecting broodstock that are more resistant to both pathogens and environmental extremes.

We will have openings for two M.Sc. students, a Ph.D. student and two post-doctoral fellows in this exciting project. Although the specific research programs of these individuals will depend on interests, work will be conducted in the following areas:

1. Cage-site performance, including behavioural and physiological studies using telemetry.
2. Thermal tolerance and metabolic capacity, assessed using a variety of approaches including respirometry, cardiac function, biochemical assays and functional genomics.
3. Stress and immune responses, assessed using various approaches including functional genomics (i.e. RNA-seq; qPCR etc.).

Funding should be available as early as April 1, 2016, with all positions to be filled between April 1, 2016 and March 31, 2017. Experience in fish research, husbandry and/or some of the areas listed above would be an asset. However, training will be provided in the techniques required for particular projects.

These positions will be with Memorial University of Newfoundland (MUN). Principal investigators involved in this research are Drs. Kurt Gamperl (MUN) and Matthew Rise (MUN), but successful applicants will also have the opportunity to participate in other project collaborators, including Dr. Mark Fast (UPEI), Dr. Brian Dixon (U. Waterloo), and industry collaborators.

Interested persons should send a cover letter, resume, academic transcript(s) from previous degree(s) (unofficial copies are acceptable; NOT required for PDFs), and the names and contact details for 3 referees who can comment on the applicant’s research experience/potential to kgamperl@mun.ca. For further information about MICCSA, or aspects of the research program/positions, please contact Dr. Kurt Gamperl (709-737-2692; kgamperl@mun.ca) or Dr. Matt Rise (709-864-2692; mrise@mun.ca).