M.SC. GRADUATE OPPORTUNITY IN HYDRO-ACOUSTIC HABITAT ASSESSMENT

The M.Sc. candidate will compare aquatic habitat data (bathymetry, bottom/substrate type and aquatic vegetation coverage and biovolume) to be collected in a large, hydro-power regulated river using two different echosounder methods (Biosonics with Visual Habitat vs Lowrance with ciBiobase). Data collected using different echosounder methods will be compared and validated against ground-truthed data that is collected by direct underwater observation (skin-diving, SCUBA and/or video-methods); grab-sampling, and direct surveying. Project will also involve assessment of the effects of using different deterministic and geostatistical spatial methods on the resulting habitat data output, and help determining the best automated methods for cost-efficient but robust aquatic habitat data collection in large rivers. Field data collection will start in the summer of 2015, with entry to UNB School of Graduate Studies by September 2015.

The position is a part of Mactaquac Aquatic Ecosystem Study (MAES) research consortium and will be situated in Canadian Rivers Institute, University of New Brunswick on Fredericton campus. For more information about MAES, visit http://canadianriversinstitute.com/research/mactaquac-aquatic-ecosystem-study/

Suitable candidate will be motivated, mature and self-driven individual with preferably previous experience in aquatic research (e.g. in form of an Honours thesis or a Senior Project). Previous experience in hydro-acoustics, aquatic habitat mapping and GIS is desirable.

To apply, send your cover letter, CV, and unofficial copies of all university transcripts (clearly indicating cumulative GPA higher than 3.2 on a 4.0 scale) to tommi.linnansaari@unb.ca by 31 January, 2015 for full consideration. Please refer to [MAES Project 1A.1.2] in the subject field of the email submission.