Graduate assistantship in fish conservation genomics

The Mandeville Lab in the University of Guelph Department of Integrative Biology is recruiting a MSc student (preferred start date September 2020) to study hybridization in *Catostomus* suckers in the Gunnison River Basin, Colorado, USA.

Hybridization following species introductions or disturbance can pose a threat to imperiled native species and presents a challenge for conservation and management. The student recruited for this MSc position will use genomic data to evaluate the efficacy of a fisheries management intervention designed by Colorado fisheries biologists to prevent hybridization of threatened native species with introduced species by excluding non-native species from important spawning habitat. Work will involve generating and analyzing genomic data for adult spawners and larval fish, and identifying the extent of hybridization in larval fish cohorts from before and after the intervention.

Research in the Mandeville lab focuses generally on describing evolutionary processes using computational approaches and large genomic datasets. Understanding evolutionary processes is essential for understanding how biodiversity arises and is maintained, and is also crucial for conservation of threatened species. We work primarily on fish and in aquatic systems, and many of our projects (including this one) feature collaboration with conservation and management agencies.

Applicants with interests in fisheries genetics, conservation, evolutionary biology, ecology, or related fields are encouraged to apply. Desired qualifications include the ability to balance working independently and collaboratively, excellent work habits, and strong writing skills. This project will involve extensive work with large genomic datasets and high performance computing. No prior computational experience is required, but applicants must be willing to learn and excited about building their computational skills. Due to fiscal constraints, Canadian students (including permanent residents) will be given priority.

To apply, please send a letter of interest, CV/resume, transcript (unofficial is fine), and contact information for three references to Dr. Liz Mandeville, emandevi@uoguelph.ca. The Mandeville lab is committed to increasing and supporting diversity in STEM, and members of underrepresented groups are especially encouraged to apply. Review of applications will begin immediately and continue until the position is filled. Preferred start date is fall 2020, but some flexibility is possible in terms of start date or initial remote work. For more information about the lab, please see https://sites.uoguelph.ca/mandevillelab/.