CONGRESO AQUATROP
Ecosistemas acuáticos tropicales en el antropoceno

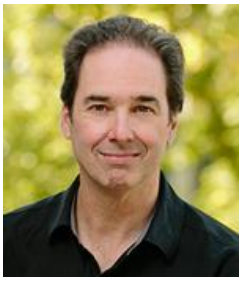
PRE-MEETING COURSE

INTRODUCTION TO STABLE ISOTOPES IN AQUATIC SYSTEMS

DESCRIPCIÓN DEL CURSO

1. **Duration:** 14 hours
2. **Dates:** July 21st and 22nd, 2018
3. **Place:** Universidad de las Américas (Quito)
4. **Schedule:** 9:00 - 13:00 and 14:30 - 17:30
5. **Capacity:** 30 students
6. **Instructors:**

Dr. Timothy D. Jardine: Assistant Professor, University of Saskatchewan



Dr. Jeffrey McDonnell: Professor and Associate Director, University of Saskatchewan

Dr. Francisco Villamarín: Researcher and Lecturer, Universidad Regional Amazónica (Ikiam)

SUMMARY AND OBJECTIVES

This course will introduce students to the use of stable isotopes in hydrology and ecology. First, we will focus on the measurement, tracing, and linkage of water isotopes in and among hydrologic components of the earth system at the catchment scale. This will be followed by examination of isotopes in aquatic food webs, considering aspects of organic matter sources in the diets of organisms and their trophic positions. **The course is given in English.**

TOPICS

1. Welcome and introductions
2. Stable isotope notation and measurement of the light elements (C, N, S; Dr. Jardine)
3. Stable isotope notation and measurement of water (Via WebEx; Dr. McDonnell)
4. Isotope tracers in catchment hydrology (Via WebEx; Dr. McDonnell)
5. Isotope tracers in catchment hydrology (continued; Via WebEx; Dr. McDonnell)
6. Isotopes in aquatic food webs (Dr. Jardine)
7. Isotopes in aquatic food webs (continued; Dr. Jardine)
8. Isotope mixing models (SIAR and MixSIAR; Dr. Villamarín)
9. Isotope turnover in tissues (Dr. Jardine)
10. Isotope turnover in tissues (Dr. Jardine)