

PhD or MS Research Assistantship (start date: Summer 2019)

Project Title: Behavioral science and data analytics for targeted conservation

Location: University of Montana, W.A. Franke College of Forestry and Conservation, Missoula, MT

Position:The Human Dimensions Lab, in the W.A. Franke College of Forestry & Conservation at the University of Montana in Missoula, MT, seeks applicants for a two-year Research Assistantship focused on behavioral science and data analytics to promote water quality conservation in agricultural systems. The assistantship will begin as soon as possible and provides a 12-month per year stipend while covering graduate school tuition, health insurance, and fees. The successful applicant will conduct relevant literature reviews, design and evaluate randomized controlled behavioral intervention trials and microtargeting analyses, and deploy interventions across wide extents. Primary research duties will focus on the targeted behavior change goals of a National Fish and Wildlife Foundation-funded project (see below), but the successful applicant will also work more broadly as part of an transdisciplinary team of scientists and graduate students associated with the Human Dimensions Lab. The successful applicant could pursue a graduate degree through the Resource Conservation (M.S.), System Ecology (M.S. or Ph.D.), Wildlife Biology (M.S. or Ph.D.), or Forestry and Conservation Sciences (Ph.D.) graduate program.

Project description: This NFWF-funded project seeks to accelerate implementation of water quality improvements in the Chesapeake Bay Watershed (CBW) by leveraging and cultivating existing partnership networks to design, test, and implement tailored applications of behavioral science and microtargeting. Through collaborative efforts, we seek to (i) locally adapt behavior change strategies to agricultural practices affecting water quality in the CBW, (ii) rigorously test and quantify efficacy of these strategies, (iii) improve efficiency of outreach efforts with microtargeting analysis, (iv) deploy proven interventions at multiple scales toward water quality improvements, and (v) disseminate project outputs to accelerate the implementation of water quality improvement practices beyond our project end-date and geographies of focus. We orient these objectives around three water quality improvement practices: soil health management systems including cover crops and no till, barnyard manure and nutrient management infrastructure, and restoration of riparian forested buffers.

Qualifications: Applicants should have a BS (or MS for PhD applicants) in a data analytics, social-science, marketing, or natural-science related field, and a strong interest in the human dimensions of watershed restoration. To be successful, applicants should demonstrate their expertise in behavior science, agricultural behavior change, and/or machine learning or statistics. Applicants must have well-developed communication, writing, and quantitative skills, a strong work ethic, and a desire to work with transdisciplinary researchers, conservation practitioners, and agricultural producers in the CBW. Programming experience strongly preferred (e.g., R, python).

Application Information: Applicants should send a single PDF with the following to Dr. Alexander L. Metcalf (alex.metcalf@umontana.edu): (1) a brief cover letter that includes a well-articulated statement of research interests, goals, and relevant experiences, (2) a resume, (3) unofficial transcripts, (4) unofficial GRE scores (including percentiles), and (5) contact information for three references. The selected candidate will apply to the University of Montana for admission. Graduate degree program requirements can be found at <a href="http://www.cfc.umt.edu/grad/">http://www.cfc.umt.edu/grad/</a> and <a href="http://www.umt.edu/grad/Apply/">http://www.umt.edu/grad/Apply/</a>. NOTE: Please ignore all posted deadlines. Applications will be reviewed beginning April 1 and until the position is filled.

For more information please see: http://www.cfc.umt.edu/research/humandimensions/