

From: Jedediah Brodie
Subject: Funded PhD positions in Ecology

I am looking for enthusiastic and talented students for up to 3 PhD positions to start in September 2018. The projects are flexible, with the students expected to help develop the conceptual background and the research methods, but will be roughly along these lines:

1) Plant-animal interactions in Gabon. Will use existing camera trap and plant phenology data, potentially combined with new field- and drone-based data collection, to assess how primates, ungulates, and other mammals respond to shifting patterns of fruit production in a pristine tropical rainforest. Substantial experience in international field work required. French language skills highly desired.

2) Climate change in Alaska. High latitude regions are changing rapidly, and not always in predictable ways. The project will likely include some or all of the following factors: (i) experiments to assess the impacts of animal herbivores on tree- and shrub-line change, (ii) drone-based surveys of plant and animal community changes, (iii) modelling of large mammal responses to climate and habitat changes using existing data from federal collaborators, and (iv) resurveys of an old small mammal trapping study. Substantial field work and camping experience (ideally from Alaska or other northern sites) is required for this position.

3) Pan-tropical assessment of bushmeat hunting and forest carbon. A handful of new studies have suggested that widespread, unsustainable hunting in tropical forests could be inducing shifts in tree species composition that lead to lower overall forest biomass. This could, in turn, be a major (and hitherto unappreciated) source of human carbon emissions. This project will use large-scale meta-analysis, potentially combined with field work, to address the ecological mechanisms (species interactions), geographic scope, and climatic implications of this issue.

These positions will be based in the Division of Biological Sciences (DBS; https://urldefense.proofpoint.com/v2/url?u=http-3A__hs.umt.edu_dbs_&d=DwIF-g&c=Ngd-ta5yRYsqeUsEDgxhcqsYYY1Xs5ogLxWPA_2W1c4&r=e2OJ1azRFn8ihJzb2HxZT0AqoiqLvxfeeATyN59ZLoI&m=wCqgvc0aU-3w4MIy6TbtJd-0nVD33EKKRkf8F6yxTaI&s=mws1Rj4cpjr2TxVEyA3GpcXDJKg_Xm_DrWjHyZYLnQ&e=) and affiliated with the Wildlife Biology Program (https://urldefense.proofpoint.com/v2/url?u=http-3A__www.cfc.umt.edu_wbio_&d=DwIF-g&c=Ngd-ta5yRYsqeUsEDgxhcqsYYY1Xs5ogLxWPA_2W1c4&r=e2OJ1azRFn8ihJzb2HxZT0AqoiqLvxfeeATyN59ZLoI&m=wCqgvc0aU-3w4MIy6TbtJd-0nVD33EKKRkf8F6yxTaI&s=hGskCIBFiv8duEnW2P5ivCcoX99g7ZEgkLucpkZcPi0&e=). The positions include 5 years of guaranteed TA support. TA salaries in DBS are nationally competitive, while the cost of living in Missoula is relatively low.

Other requirements for the positions

- 1) Exceptional self-motivation
- 2) Master's degree strongly desired
- 3) Familiarity with the concepts of ecology
- 4) Field work experience (for positions 1 & 2)
- 5) Quantitative skills (potentially including statistics, GIS, or computer modeling)
- 6) Excellent writing skills

How to apply

Send an email to jedediah [dot] brodie [at] mso [dot] umt [dot] edu, with "PhD position application" (no quotes) in the subject line, by 10 November 2017. Include as attachments: (1) A 1-2 page cover letter stating which project you're interested in, explaining why you're

interested in and prepared for that position, and listing the names & contact info for 3 references, (2) your GRE scores and GPA from your MSc or undergrad institution, and your TOEFL score if applicable, and (3) your CV. Do not send transcripts, reference letters, or other materials at this time.

About the program

The University of Montana (UM) is a top research university set amidst the wilderness and wildlife of the Northern Rocky Mountains. Both the Organismal Biology, Ecology, and Evolution Program (within the Division of Biological Sciences) and the Wildlife Biology Program have been recognized as Programs of National Distinction. The Wildlife Biology Program was recently ranked the Number 1 wildlife program in North America by Academic Analytics. When normalized for faculty size, UM was ranked Number 1 in the field of Ecology out of 300 North American research universities last year. UM has an extremely collegial and collaborative research atmosphere. Students at UM are also exposed to collaborations with numerous federal and state resource agencies, NGOs, and other researchers across the region and around the world.

Thanks!

Jedediah Brodie