

A fully-funded **PhD position** is available at the Department of Ecology and Evolution (U Lausanne) and the Museum of Zoology in Lausanne to work on the evolutionary ecology of reproductive modes in mayflies, co-supervised by Michel Sartori and Tanja Schwander. Start in January 2015 or soon thereafter. The evolution and maintenance of sexual reproduction has been one of the major questions in evolutionary biology for the last decades: although biparental sex entails many costs, asexuality is rare among metazoans. The PhD candidate will assess the contribution of various factors to the maintenance of sex and parthenogenesis in natural populations of mayflies (Ephemeroptera). Facultative parthenogenesis is known to occur in many species, with a high level of variation: some species are characterized by very efficient parthenogenesis with high egg hatching success whereas virgin females in other species produce hardly any offspring. Such variation allows testing various costs and benefits of sexual reproduction and parthenogenesis, depending on different ecological contexts in a comparative framework. We are looking for outstanding candidates with a background in ecology, evolutionary biology or equivalent (note that a master degree is required by the doctoral school to enter the PhD program). In addition to academic qualifications, a certain practical flair is necessary for surveying natural populations (field work) and possibly optimize/ develop rearing conditions. Interested candidates should send a motivation letter, cv (including contacts for references) and diplomas as a single pdf file to tanja.schwander@unil.ch **no later than October 10**. For additional information about the topic, contact

michel.sartori@vd.ch

or

tanja.schwander@unil.ch

. Tanja Schwander Department of Ecology and Evolution University of Lausanne Le Biophore CH-1015 Lausanne Switzerland Office:

[+41 \(0\)21 692 4151](tel:+41216924151)

Secretary:

[+41 \(0\)21 692 4160](tel:+41216924160)

Fax:

[+41 \(0\)21 692 4165](tel:+41216924165)

lab website:

<http://www.unil.ch/dee/en/home/menuinst/research/group-schwander.html>

theme issue on reproductive system evolution:

<http://onlinelibrary.wiley.com/doi/10.1111/jeb.2014.27.issue-7/issueto>