



Inserm IBENS



Département de Biologie

Two PhD positions: Evolutionary Genetics of Development

Second call: April 6, 2018

Two PhD positions are available in the context of a research project between the laboratories of Henrique Teotonio (Institut de Biologie, Ecole Normale Supérieure, Paris; <http://www.ibens.ens.fr/spip.php?rubrique28&lang=en>) and Christian Braendle (Institut de Biologie Valrose, Nice; <http://www.braendlelab.net>).

The project will characterize the effects of different breeding systems on the evolution of *C. elegans* hermaphrodite germline development. The key objectives are (1) to perform experimental evolution under different sex ratios of males, females and hermaphrodites; (2) to characterize the genetic basis of hermaphrodite germline traits through genetic transformation methods and a genome-wide association study; and (3) to determine how natural selection at candidate loci depends on hermaphrodite germline developmental evolution.

Candidates are expected to have a master's degree in evolutionary biology and an understanding of the fundamental problems of quantitative genetics, population genetics and developmental genetics, including QTL and GWAS mapping. Candidates with experience in computer programming, experimental evolution, developmental phenotyping and statistical analysis of large data sets are preferred. The PhD students will be expected to conduct full-time independent research in both the Teotonio and Braendle labs.

The PhD positions are funded by the National Agency of French Research (ANR) for three years, subject to an initial evaluation after 6 months, with a potential one-year extension. Successful applicants can start their PhD in summer-fall 2018.

To apply, send a CV, a letter of motivation, and the contact information for two referees as a single PDF file to Henrique Teotonio (teotonio@biologie.ens.fr) and Christian Braendle (braendle@unice.fr), with subject PhD_ANR. Informal inquiries are welcome.

For relevant background information see:

Carvalho et al. 2014. <http://doi.org/10.1186/1471-2148-14-117>

Pouillet et al. 2016. <http://doi.org/10.1111/evo.13032>

Noble et al. 2017. <http://doi.org/10.1534/genetics.117.300406>

Teotonio et al. 2017. <http://doi.org/10.1534/genetics.115.186288>