



## POSTDOCTORAL POSITION AVAILABLE

**Postdoctoral Research Position:** This is a funded position in the Extavour lab at Harvard University (Departments of Organismic & Evolutionary Biology/Molecular and Cellular Biology). The project aims to understand how growth and patterning of distinct cell types are coordinated during organ development, using the *Drosophila melanogaster* ovary as a model. The successful candidate will participate in and extend ongoing work on this problem using genetic, molecular genetic, and next-generation sequencing approaches. If interested, the candidate may have the opportunity to perform comparative analysis of analogous processes in additional species, including the possibility of fieldwork in Hawaii.

### Recent Relevant publications:

- Sarikaya, D. P and Extavour, C.G. 2014. The Hippo pathway regulates homeostatic growth of stem cell niche precursors in the *Drosophila* ovary (*submitted*)
- Green II, D.A. and Extavour, C.G. 2014. Insulin signalling underlies both plasticity and divergence of a reproductive trait in *Drosophila*. *Proceedings of the Royal Society B: Biological Sciences* 281(1779): 20132673 [PDF](#) Read more in the [Harvard Gazette](#)
- Green II, D.A. and Extavour, C.G. 2012. Convergent Evolution of a Reproductive Trait Through Distinct Developmental Mechanisms in *Drosophila*. *Developmental Biology* 371(1): 120-130 [PDF](#)
- Sarikaya, D.P., Assefa, A., Ahuja, A., Green II, D.A., Dorta, A. and Extavour, C.G. 2012. The roles of cell size and cell number in determining ovariole number in *Drosophila*. *Developmental Biology* 363(1): 279-289 [PDF](#)
- Green II, D.A., Sarikaya, D.P. and Extavour, C.G. 2011. Counting in oogenesis. *Cell and Tissue Research* 344 (2): 207-212 [PDF](#)

**Extavour Lab:** Our group investigates the developmental and evolutionary mechanisms that control reproduction in animals. We examine the evolution and development of germ cells and the gonad using both well established *Drosophila* genetics and non-traditional model organisms including crickets and spiders. In *Drosophila*, we have recently uncovered candidate genes that not only regulate ovarian development in *D. melanogaster*, but also may underlie evolutionary changes in ovarian development between different *Drosophila* species. Visit the [lab web page](#) to find out more.

**Qualifications:** The ideal candidate should be highly motivated with a PhD or equivalent, with demonstrated expertise in *Drosophila* developmental genetics and a strong track record. Expertise in at least one of molecular biology, cell biology or confocal imaging is essential. Previous experience in signalling pathways, hormonal signaling pathways, reproductive biology, ovarian development, molecular mechanisms of proliferation, ecology, niche construction or morphogenesis is also highly desirable.

**Application Procedure:** Submit your updated CV, brief description of scientific accomplishments and research interests, and have three references on your behalf sent to [Cassandra Extavour](mailto:Cassandra.Extavour@oeb.harvard.edu) at [extavour@oeb.harvard.edu](mailto:extavour@oeb.harvard.edu).

**Application Deadline:** Review of applications will begin **30 October 2014** and continue until the position is filled. Start date should ideally be in spring 2015, but is negotiable.

Harvard University's [OEB Department](#) is a highly diverse and interdisciplinary department whose research groups take diverse approaches to the study of evolution. The Extavour lab is one of several labs in OEB that includes developmental biology and genetics among their approaches; other groups in the department employ systematics, biomechanics, geochemistry, microbial genetics, and experimental evolution. The Extavour lab is also a member of the [Department of Molecular and Cellular Biology](#), and has close ties with the [Department of Stem Cell and Regenerative Biology](#), and the [Development and Regenerative Biology](#) graduate program of the Harvard Medical School. Harvard University is an Equal Opportunity Employer. Salary will be according to experience on the NIH scale.