



Graduate Student and Postdoctoral Fellow Opportunities – Genomic Modeling and Population Genomics of Honey Bees

Dear colleagues,

The labs of Drs. Brock Harpur and Luiz Brito at Purdue University and Dr. Gregor Gorjanc at The Roslin Institute are recruiting PhD (3-5 years) and postdoctoral fellows (1-3 years) in the areas of genomic modelling and population genomics of honey bees. The successful applicants will work under the supervision of Drs. Harpur and Luiz Brito (Purdue University) and Dr Gregor Gorjanc. Support comes in part from a recently funded USDA AFRI project “*How to breed the best bees: Optimizing genomic studies, selection, and management of genetic diversity*”. The researchers will be based at the Department of Entomology (Harpur Lab).

Candidates should have experience in Animal Breeding, Plant Breeding, Quantitative Genetics, Genomics, Statistics, or another related field. Experience in R, Python, Fortran, or C/C++ and genetic/genomic packages (e.g., BLUPF90, GCTA, PLINK, ASREML, AlphaSimR) are needed. Experience with data analytics of high-throughput phenotypes and genomic prediction of breeding values is preferred. Preference will be given to candidates with a strong publication record and good scientific communication skills.

The successful candidates will be responsible for: development and implementation of analytical pipelines for quantitative genomic analyses of social phenotypes; genomic prediction of breeding values based on single-step GBLUP and Bayesian approaches; analyses of country-wide population genomics data sets; open-access sharing of tools – curation of code and tools; and interpretation of research results and preparation of extension articles and scientific papers. The researchers will be expected to contribute to new research directions and drafting research proposals, and training of Undergraduate and Graduate students.

For post-doctoral positions, the initial appointment will be for one year, and extension for the second year will depend on their research performance. Salary and benefits are competitive and commensurate with qualifications. For further information about the research projects or the positions, please contact us at harpur@purdue.edu (Brock Harpur), britol@purdue.edu (Luiz Brito), or Gregor.Gorjanc@roslin.ed.ac.uk (Gregor Gorjanc). Applicants should submit a cover letter, CV, and contact information of three references that may be contacted later.