Post doc position in Population Genomics Bordeaux, France

Job description:

A two years post doc position is available at UMR BIOGECO. Starting date as soon as possible or as agreed upon.

The general goal of the research will be to conduct genome wide exploration of evolutionary changes that occurred in recent times in European white oaks. Investigations will be conducted on whole genome resequencing data of extant populations sampled along geographic gradients or known historical trajectories. The aim will be to disentangle changes associated to demographic events, admixture with other related species, and natural selection. Special emphasis will be given to the detection of evolutionary changes over short time scales (last 3-4 centuries). This research is part of a larger ERC project investigating rates of genomic and approaches phenotypic changes based on allochronic and synchronic (http://www.treepeace.fr/).

Scientific environment:

The working location will be at the BIOGECO research unit (20 km south-west of Bordeaux, France (https://www4.bordeaux-aquitaine.inra.fr/biogeco eng/). BIOGECO is a joint research unit between INRA and the University of Bordeaux and has long standing experience in studying evolution and genetic variation of forest trees. The research group is multidisciplinary with competences in population and quantitative genetics, ecology, evolution, genomics and ancient DNA. The research environment is international and offers opportunities for interactions with other postdocs and researchers working on similar projects. Pool-seq data, access to the annotated oak genome sequence and access to supercomputation facilities are available to carry out the work.

Required Qualifications:

The ideal candidate will have a strong expertise in population genomics and genetics, as well as strong programming, bioinformatics and statistical skills. Previous experience working with genome wide data or whole genome resequencing data is a requirement. Candidates should be fluent in English.

Application:

Application with CV, a brief statement of research interests, contact information for two professional references and publication list should be submitted in an electronic form to Dr. Antoine Kremer (<u>antoine.kremer@inra.fr</u>).

Review of applications will begin on January 1st. Applications can be accepted until the position is filled. Do not hesitate to contact us for further details or questions. Salary will be determined according to the pay system of INRA, considering qualification and experience.

Examples of recent publications:

Plomion C, Aury JM, Amselem J, Alaeitabar T, Barbe V, Belser C, Berges H, Bodénès C, Boudet N, Boury C, Canaguier A, Couloux A, Da Silva C, Duplessis S, Ehrenmann F, Estrada-Mairey B, Fouteau S, Francillonne N, Gaspin C, Guichard C, Klopp C, Labadie K, Lalanne C, Le Clainche I, Leplé JC, Le Provost G, Leroy T, Lesur I, Martin F, Mercier J, Michotey C, Murat F, Salin F, Steinbach D, Faivre-Rampant P, Wincker P, Salse J, Quesneville H, Kremer A. 2016. Decoding the oak genome: public release of sequence data, assembly, annotation and publication strategies. *Molecular Ecology Resources 16: 254-265*

Leroy T, Roux C, Villate L, Bodénès C, Romiguier J, Paiva JAP, Dossat C, Aury JM, Plomion C, Kremer A. 2016. Extensive recent secondary contacts between four European white oak species. *New Phytologist* (*In press*)

Rellstab C, Zoller S, Walthert L, Lesur I, Bodénès C, Pluess AR, Sperisen C, Kremer A, Gugerli F. 2016. Signatures of local adaptation in candidate genes of oaks (*Quercus* spp.) in respect to present and future climatic conditions. *Molecular Ecology* (doi: 10.1111/mec.13889)

See also:

http://www.oakgenome.fr/?page_id=22