

Consultancy announcement

Development of Molecular Breeding Support Software

The International Maize and Wheat Improvement Center (CIMMYT), is seeking a dynamic, innovative and self-motivated consultant to develop Molecular Breeding Support software. CIMMYT and its partners are engaged in Molecular Breeding programs worldwide. Essential to this work are software tools that aid plant breeders in deciding which parental lines are to be included in crosses and what subsequent selections are to be made based on all available data. The software will use the GCP Pantheon Platform (<http://pantheon.generationcp.org>) to query and integrate pedigree, phenotyping and genotyping data and where necessary will incorporate and employ R, C++ and Java libraries to analyze and visualize these data. The position is based at the Center's headquarters near Texcoco, Mexico; about 45 minutes drive from Mexico City's airport. The initial appointment is for six months after which the contact may be renewed on a yearly basis, when opportunity to work remotely from CIMMYT HQ will be possible.

Deliverables

- Improve existing use cases and develop new querying and analysis use cases in consultation with plant breeders
- Develop Graphical User Interfaces in SWT and JFace for querying, analysing and visualising molecular breeding data
- Integrate existing R, C++ and Java libraries for molecular breeding decision support in Eclipse RCP and the Bioclipse (<http://bioclipse.net>) framework
- Further development of visualisation tools for pedigree, phenotyping and genotyping data

We are seeking candidates with the following qualifications

- University degree (or equivalent experience) in computer science, biological sciences or related field
- At least two years full time experience in Java Programming
- Documented experience in developing SWT, JFace and Eclipse RCP applications
- Experience in database management and SQL queries
- Knowledge of open source APIs, such as Apache Commons and Hibernate, is desirable
- Experience in C++ and/or R programming would also be desirable
- Proficiency in written and verbal English
- Knowledge of Spanish would be advantageous

CIMMYT (www.cimmyt.org) is an internationally funded, nonprofit, scientific research, training and development organization dedicated to improving the nutrition, food security and livelihoods of the world's poor. CIMMYT is a global leader in maize and wheat germplasm preservation, trait discovery, crop variety enhancement, cropping systems improvement and socio-economic analysis for the developing world. The Center has an annual budget of US\$45 million and a staff of 600, including 80 internationally recruited staff. Our headquarters and four research stations are located in Mexico and we have regional centers and offices in 12 other countries, especially in eastern and southern Africa. Rapid growth is occurring in South and East Asia.

CIMMYT is an equal-opportunity employer and strives for staff diversity in gender and ethnicity.

Please send via e-mail/fax your letter of application and CV/Resume (including full contact information and relevant examples of your work) to:

Dr. Guy Davenport
(Reference 2009/CON 01)
Email: g.davenport@cqi.org

We will accept applications until April 17, 2009 or until the consultancy position is filled.

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