

Post-Doctoral Quantitative Geneticist

The International Maize and Wheat Improvement Center (CIMMYT) is seeking to appoint a Post Doctoral Fellow in quantitative genetics to develop quantitative methods to handle high-volume next-generation molecular marker data with a view to implementing them in plant breeding programs. The position is funded by several initiatives that aim to molecularly characterize maize and wheat genetic resources. You will work within a dynamic team of statisticians, quantitative geneticists and informaticians to provide solutions to crop scientists.

The primary objectives of this position are to:

- Develop imputation methods for DNA-sequencing datasets from genetically diverse materials.
- Use statistical and quantitative-genetic models to investigate allele-mining and breeding strategies based on genomic selection, in order to make use of beneficial genetic variation from diverse germplasm sources.

The job will require that you:

- Develop new imputation algorithms and/or apply/adapt existing methods to large genome-profile datasets generated by "genotyping-by-sequencing" platforms.
- Develop breeding program designs, in collaboration with other quantitative geneticists and plant breeders.
- Collaborate with bioinformaticians and database experts to define user requirements for databases and tools for data capture and analysis.
- Work with a team of statisticians, quantitative geneticists, breeders and physiologists.
- Publish results in scientific literature.

We are seeking candidates with the following qualifications:

- A PhD in quantitative genetics, plant/animal breeding, statistics, biometrics, or mathematics, or a demonstrably high level of quantitative skills in a relevant scientific discipline.
- Good statistical computing skills in any of the following software: R, SAS, ASReml, or GenStat. Some computer programming experience (e.g. C, C++, and Fortran) would be advantageous.
- Experience in a multi-disciplinary, collaborative team environment.
- Excellent written and verbal communication skills in English. Some knowledge of Spanish is advantageous.

The International Maize and Wheat Improvement Center, known by its Spanish acronym, CIMMYT® (www.cimmyt.org), is a not-for-profit research and training organization with partners in over 100 countries. The center works to sustainably increase the productivity of maize and wheat systems and thus ensure global food security and reduce poverty. The center's outputs and services include improved maize and wheat varieties and cropping systems, the conservation of maize and wheat genetic resources, and capacity building. CIMMYT belongs to and is funded by the Consultative Group on International Agricultural Research (CGIAR) (www.cgiar.org) and also receives support from national governments, foundations, development banks, and other public and private agencies.

CIMMYT has had enormous impact in the developing world. It is the center of excellence for work on two of the three most important food crops in the developing world. Its most famous employee, Dr. Norman Borlaug, is credited by many with saving more lives than any other individual in the history of the world. Borlaug's work dramatically increased yields of wheat in the Indo-Gangetic plains in the 1960s and 1970s, staving off starvation for hundreds of millions. For this work, Borlaug received the Nobel Prize in 1970. Scores of other CIMMYT efforts have saved or enriched millions of lives, from releasing disease-resistant varieties and varieties resistant to drought and heat and soil deficiencies, to dispersing techniques to reduce farmer costs and post-harvest losses. In developing countries, wheat varieties developed by CIMMYT and its partners cover 75% of the area planted to modern wheat varieties.

CIMMYT offers an attractive remuneration package paid in US dollars, with a range of benefits including housing allowance, life and health insurance, education allowance (for pre-school, elementary, secondary, and other pre-university grade levels), home leave, retirement fund, and relocation shipping assistance.

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

[Apply online](#) no later than April 15th, 2012.

At www.cimmyt.org, click on "About us – Job Opportunities- Position" -2012-09. Please complete the online application, including your cover letter, competencies and experience for the position, and a detailed CV/resume.

For further information, contact Dr. KY L Mathews, Senior Scientist-Biometrics, K.Mathews@cgiar.org or the Human Resources Office, jobs-cimmyt@cgiar.org.

Please note that only short-listed candidates will be contacted.