

## MAIZE Association Mapping Post-Doctoral Research Fellow

The International Maize and Wheat Improvement Center (CIMMYT), is seeking an innovative, self-motivated, scientifically outstanding candidate for a post-doctoral scientist to drive the validation of candidate genes for drought tolerance in maize. The position is available for one year, renewable for another year depending on performance, and with an opportunity for continuation as a permanent staff position for an outstanding scientist. The position will be based at Cornell University's Institute for Genomic Diversity in Ithaca, New York, and CIMMYT's Main Campus located 45 km northeast of Mexico City, Mexico.

The Maize Association Mapping post-doctoral scientist will focus on the use of association mapping based analyses to find and validate candidate genes for drought tolerance. This will include SNP detection, gene sequencing, and quantitative genetic analysis. Proven experience with PCR and other molecular tools, and experience with statistical analysis and bioinformatics tools for sequence data is necessary. Association mapping of the wide range of drought tolerant germplasm developed by CIMMYT and its partners may provide a wealth of information and new genes to aid in the development of new maize varieties for drier areas of the world.

The Genetic Resources and Enhancement Unit comprises 18 scientists from a range of disciplines including germplasm conservation, genomics, transgenics, bioinformatics, interspecific hybridization, biometrics and germplasm enhancement who work in holistic trait-targeted teams including specialists in physiology, pathology, entomology, biotechnology and plant breeding based in Mexico and in regional programs across the world. Primary trait priorities in the regional maize breeding programs include drought tolerance, pest and disease resistance, grain quality and agronomic traits. The successful candidate will work in close coordination with other maize genomics scientists, computational biology specialists and the maize physiologist. For further information on this position, please contact: [m.warburton@cgiar.org](mailto:m.warburton@cgiar.org) or [j.crouch@cgiar.org](mailto:j.crouch@cgiar.org)

***We are seeking candidates with the following qualifications:***

- Ph.D. degree in genetics or related field
- Knowledge of quantitative genetics and statistical approaches
- Knowledge of SNP and gene-based marker development, validation and application
- Database development and management systems for molecular genetic data
- Demonstrated ability to publish articles in international journals
- Ability to work well as part of multidisciplinary decentralized teams
- Proficiency in spoken and written English language

***Experience in any of the following areas would be considered an asset:***

- Knowledge of drought tolerance physiology and component trait analysis of other complex agronomic traits
- Familiarity with QTL mapping, functional genomics and diversity analysis techniques
- Applying biotechnologies in developing countries
- Biometric and bioinformatics analyses
- Field experience, especially with development of planting plans and field books.
- Interest in international agricultural research and development
- Proficiency in Spanish

CIMMYT ([www.cimmyt.cgiar.org](http://www.cimmyt.cgiar.org)) is an internationally funded, non-profit research and training organization affiliated with the Consultative Group on International Agricultural Research (CGIAR, [www.cgiar.org](http://www.cgiar.org)) and has an annual budget of nearly US\$40 million. CIMMYT's mission is to help the poor in the developing world by increasing the productivity, profitability, and sustainability of maize- and wheat-based cropping systems while protecting natural resources. The Center is a global leader in scientific research and training related to maize and wheat, and in biotechnology, economics, and natural resource management research. These activities are conducted in partnership with national agricultural research systems, non-governmental organizations, and advanced research institutions, both public and private, in globally- and regionally-focused programs. CIMMYT employs a staff of 700 and operates in a decentralized, partnership mode, having staff in 14 countries, projects and partnership networks in many more.

Salaries of internationally recruited staff are paid in US dollars. Benefits include housing allowance, life and health insurance package, education allowance (from KG to Grade 12), annual medical examination, and shipping allowance. CIMMYT is an equal-opportunity employer and strives for staff diversity in gender and nationality. The CIMMYT campus has recreational and sports facilities and offers transportation to international schools in Mexico City. Good housing is available on and off campus.

Please send via e-mail your letter of application, CV/Resume (including full contact information), and names and contact information of three references to:

Human Resources Manager, (Reference 2006/01) CIMMYT

Email: [jobs-cimmyt@cgiar.org](mailto:jobs-cimmyt@cgiar.org)

We will accept applications until May 30, 2006

For technical information regarding this position, please contact:

Dr John Dodds, Deputy Director General Research, [j.dodds@cgiar.org](mailto:j.dodds@cgiar.org)

Dr. Jonathan Crouch, Genetic Resources and enhancement Unit, [j.crouch@cgiar.org](mailto:j.crouch@cgiar.org)