

Maize Molecular Breeding - Postdoctoral Fellow

The International Maize and Wheat Improvement Center (CIMMYT), is seeking an innovative, self-motivated, scientifically outstanding candidate for a postdoctoral position to assist with molecular breeding applications in maize. The position will be based at CIMMYT's Main Campus located 45 km northeast of Mexico City, Mexico. The position is initially available for one year, with an opportunity for an extension, but may lead to a career path position for an outstanding scientist.

The Maize Molecular Breeding post-doctoral scientist will focus on marker-assisted germplasm enhancement applications in maize drought tolerance breeding. This includes genetic mapping and marker validation plus the refinement and application of high-throughput MAS genotyping systems. Low cost, high throughput, rapid turnaround genotyping systems and other molecular breeding tools are essential for our breeding programs to make rapid progress in generating improved germplasm for water limited environments. Proven experience with PCR-based markers, high-throughput genotyping technologies and other molecular tools is necessary. Practical insight into MAS pipelines, knowledge of quantitative genetics, and experience in field breeding programs is highly desired.

The Genetic Resources and Enhancement Unit is comprised of around 20 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. 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 the Maize Molecular Breeder.

We are seeking candidates with the following qualifications:

- ✓ PhD. degree in plant genetics, molecular biology and/or plant breeding.
- ✓ Familiarity with large-scale germplasm collections and field breeding programs and a strong background in quantitative genetics.
- ✓ Experience in high throughput genotyping system.
- ✓ Knowledge of SSR, SNP and gene-based marker development, validation and application.
- ✓ Knowledge of drought tolerance physiology and component trait analysis.
- ✓ Interest in international agricultural research and development.
- ✓ 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:

- ✓ Maize and/or other cereal breeding.
- ✓ Application of MAS in plant breeding.
- ✓ Molecular breeding simulation and decision support tools.
- ✓ Decentralization and out-sourcing strategies.
- ✓ Double haploid and other rapid crop improvement technologies.
- ✓ Applying biotechnologies in developing countries.
- ✓ Quantitative phenotyping of a range of agronomic traits.
- ✓ Biometric and bioinformatics analyses.
- ✓ Private sector plant breeding and/or product development.
- ✓ Proficiency in Spanish.

CIMMYT (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) 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 focused projects and programs. CIMMYT employs a staff of around 700 and operates in a decentralized, partnership mode, having staff in 14 countries, projects and partnership networks in many more.

CIMMYT salaries for internationally recruited staff are highly competitive, with a range of benefits including 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.

Please send via e-mail your letter of application, **no later than October 15, 2006**. CV/Resume (including full contact information) with names and contact information of three references to:

Human Resources Manager, (**Reference 20006/04**),
Phone: (+52) 55-5804-2004 Fax: (+52) 55-5804-7558
Email: jobs-cimmyt@cgiar.org

For further information contact Dr Yunbi Xu, Maize Molecular Breeder, y.xu@cgiar.org or Dr. Jonathan Crouch, Germplasm Resources & Enhancement Unit Director, j.crouch@cgiar.org