Mini-Sabbatical or Visiting Scientist
(Harnessing crop genetic resources for sustainable agriculture)

The International Maize and Wheat Improvement Center, known by its Spanish acronym, CIMMYT®, is a not-for-profit agricultural research for development organization with partners in over 100 countries. Please refer to our website for more information: www.cimmyt.org

CIMMYT is seeking an experienced scientist to review options and propose priority traits for breeding into novel maize or wheat varieties to significantly enhance the sustainability, or reduce environmental footprint of their cropping systems.

CIMMYT is committed to sustainably increasing agricultural productivity. Our greatest historical and current strength is our breeding work, which focuses on risk-reducing stress tolerances, and improved yield potential. Increasingly, we have also built innovative research for development initiatives in sustainable intensification, embracing on multi-disciplinary systems approaches and focusing on resources use (water, nutrient, energy labor) efficiencies, productivity, profitability and sustainability. We know that synergies occur between crop genotypes and crop management, and we are now interested in exploring crop biodiversity upstream of the breeding pipeline, to harness genetic resources to feed novel trait diversity into breeding programs that address challenges of environmental sustainability and climate change. Because genetic diversity is the starting point, or raw material for all breeding work, our germplasm bank may provide previously untapped, valuable trait diversity that prioritizes these goals.

Evaluation and use of genotype by environment/management interactions (GxE) is not new, but aggressive discovery and pursuit of genetic traits that contribute to cropping system sustainability or “eco-friendliness” - both through G and GxE (or GxExM) – is largely an unexplored opportunity.

The mini-sabbatical or visiting scientist will be based at CIMMYT’s campus in Texcoco, State of Mexico, located 45 km northeast of Mexico City, Mexico, where she or he will be able to interact with CIMMYT scientists of diverse disciplinary expertise. We envision a mini-sabbatical of 3 to 6 months’ duration for work on the described topic; however, we welcome alternative suggestions.

Specific duties:
→ Discuss with a wide range of CIMMYT and other pertinent scientists about opportunities to use genetic resources in the context described above.
→ Write a review article, suitable for publication in a refereed journal, examining and prioritizing genetic traits that could be bred into maize or wheat cultivars considering the hypothesis and goal described above. Include co-authors, as appropriate.

Required qualifications, skills and attitudes:
→ Enthusiasm and ‘open mind’ to explore, research and rigorously document scientific considerations prioritizing candidate traits.
→ Recognized expertise in a pertinent research discipline, e.g. agroecology, crop genetics, agronomy and openness/experience in multi-disciplinary approaches.
→ Experience with, and desire to contribute options that improve productivity, profitability and sustainability of agriculture in developing countries and resource-poor farming systems.
→ Preference will be given to candidates/institutions interested in establishing a longer-term research collaboration with CIMMYT.

CIMMYT offers a collegial, multi-cultural, stimulating environment for this work, initial and final travel, housing assistance, office space (may be shared), and access to modern communications facilities.

Candidates must apply here for IRS17124 Mini-Sabbatical or Visiting Scientist. Screening and follow up will begin in mid September 2017. For further information, please contact Kevin Pixley (k.pixley@cgiar.org).

CIMMYT is an equal opportunity employer. It fosters a multicultural work environment that values gender equality, teamwork, and respect for diversity. Women are encouraged to apply.