Advanced Wheat Improvement Course

The Advanced Wheat Improvement training course targets mid-career scientists who are expected to use the information and knowledge about wheat germplasm and new techniques in their own wheat breeding programs, and also gain an understanding of the interdisciplinary nature of CIMMYT’s Global Wheat Program (GWP) and roles of support disciplines such as agronomy, pathology, quality, statistics, physiology, biotechnology, GIS and social sciences.

Participants

The Advanced Wheat Improvement training program is a unique professional development opportunity for mid-career scientists who work in the public, private or non-governmental sectors. Scientists working in National Agricultural Research System (NARS) organizations, particularly in the area of wheat breeding, may find this program useful. Participants must fulfill the following requirements:

- English proficiency to allow for full participation in the course program and discussions.
- PhD or MSc with experience in field breeding or pathology.
- Active involvement in research in the area of wheat research (pathology, breeding, biotechnology).
- Good health, as the course includes hands-on field and laboratory activities.
- Willing and able to work in cross-cultural and diverse gender environments.

Costs and logistics

The course fee* includes accommodation, living allowance (US$30/day), local travel, training materials, study tours, major expense medical insurance, and Mexican visa. The fee does NOT include international airfare, travel incidentals and the deductible for medical insurance (US$350).

The training cost shown for each module/modules is to be provided by participants (sponsorship/self-support). Invitation letter will be sent upon confirmation of payment.

<table>
<thead>
<tr>
<th>Module</th>
<th>Cost</th>
<th>Period</th>
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<tbody>
<tr>
<td>Module 1 (Pathology)</td>
<td>$2,000.00</td>
<td>August 1-13, 2016</td>
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<tr>
<td>Module 2 (Wheat breeding)</td>
<td>$2,500.00</td>
<td>August 15-September 3, 2016</td>
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<tr>
<td>Module 3 (Biotechnology):</td>
<td>$3,500.00</td>
<td>September 16-30, 2016</td>
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<tr>
<td>Cost for participation on more than one Module</td>
<td></td>
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<tr>
<td>Module 1+2</td>
<td>$4,000.00</td>
<td>August 1-September 3, 2016</td>
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<tr>
<td>Module 2+3</td>
<td>$5,000.00</td>
<td>August 15-September 23, 2016</td>
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<tr>
<td>Module 1+2+3</td>
<td>$6,000.00</td>
<td>August 1-September 23, 2016</td>
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**Eventual charges to join CIMMYT's 50th. Anniversary not included, could be waved.
**Training program structure**

Based on individual requests, needs and clearly defined learning objectives, participants will select specific training modules amongst those offered in 2016. For each module we accommodate 7-15 participants. We allow more 15/module to accommodate those among participants who register for more than ONE module.

**Module I: Wheat Pathology (August 1-13, 2016)**

This module will focus on wheat pathology, including: (1) Epidemiological study of fungal pathogens; (2) Characterization of fungal pathogens (to exclude rusts, which will be covered in module 2); and (3) Screening for resistance to Fusarium head blight and wheat blight diseases.

**Module II: Wheat breeding (August 15-Sept.3, 2016):**

Participants will be integrated with breeding activities carried out by CIMMYT scientists at El Batan (CIMMYT's headquarters) and Toluca. This modules emphasizes (1) Breeding bread wheat for increased yield potential, quality and durable disease resistance in irrigated & high and low/marginal production areas; (2) Durum wheat breeding for increased yield potential, quality and durable disease resistance; and (3) pre-breeding activities.

**Module III: Biotechnology/molecular breeding (September 5-23, 2016)**

This module target scientists involved in biotechnology research in their home institution and who are looking for further experience in molecular breeding. The module will cover: (1) Overview of molecular breeding; (2) Application of molecular markers for gene identification and introgression; (3) Molecular markers, genotyping systems, genetic maps, and mapping populations; (4) Molecular data analysis, dealing with different types of data, data storage, and management of data as valuable resources; and (5) Gene introgression using molecular markers and cytogenetics.

The International Maize and Wheat Improvement Center (CIMMYT) strives for quality wheat improvement research through acquiring and sharing knowledge and information, identifying promising technologies, establishing standards of scientific excellence, building capacity, and nourishing links with counterparts worldwide.

**For more information:**
Amor Yahyaoui (ah.yahyaoui@cgiar.org) or J.nelson@cgiar.org
To submit application form, go to the following link:

**Application dead line June 30, 2014**

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 is particularly grateful for the generous, unrestricted funding that has kept the center strong and effective over many years.