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SPECIAL ISSUE ON PARTNERSHIP

A model laboratory without walls: the Brazilian Labex



Together in the 'Generation Challenge Programme'



In 2001, the Consultative Group on International Agricultural Research (CGIAR) launched the 'Challenge Programme' concept consisting of broad transverse programmes that enable 15 CGIAR international research centres to work closer together on the same theme. They are also intended to strengthen partnerships between the CGIAR and research institutes in the North and South.

The 'Generation Challenge Programme' (GCP) is focused on genetic resources, the diversity of crop plants and related species. It aims at permitting the use of a larger proportion of the diversity held in ex situ collections (gene banks) by means of genomics technologies—comparative genetics in particular—and molecular biology. The GCP has chosen to devote research to abiotic stresses and especially plant tolerance to drought, a major climatic constraint for most southern agricultures.

France has mobilised efforts for the programme, with Agropolis International on the steering committee and involved in the management of two of the five subprogrammes entrusted to French researchers, and it works with its Brazilian partners.

As genomics is one of the themes chosen by Labex Europe, numerous projects (replying to bid invitations) have involved Brazilian and French laboratories together, thus contributing to an increase in Franco-Brazilian collaboration. The joint projects selected are shown in the following table.

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Head of project*	Project name	Partners*
Agropolis International-IRD Mathias Lorieux	Exploring natural genetic variation: developing genomic resources and introgression lines for four AA genome rice relatives	CIAT, Embrapa, Cornell University, ADRAO, Fedearroz
Agropolis International-Inra Jean-Benoît Morel	Functional genomics of cross species resistance to fungal diseases in rice and wheat (Cereal Immunity)	Agropolis International-CIRAD, Embrapa IAPAR, UC Davis, CIMMYT, NIAS, JIC
Embrapa José Francisco Valls	Unlocking the genetic diversity in peanut's wild relatives with genomic and genetic tools	UCB, Catholic University of Goiás, CERAAS, ICRISAT, UAS, Agropolis International –CIRAD, IBONE, Univ. Aarhus, Texas AES
Agropolis International-Cirad Marcel de Raïssac	Whole plant physiology modelling of drought tolerance in cereals	Agropolis International-Inra, IRRI, CSIRO Univ. Queensland, CIMMYT, ICRISAT, Embrapa, Pioneer Hi-Bred
NIAS	Targeted Musa genome sequencing and frame map construction	Agropolis International-CIRAD, Bioversity International, Embrapa, Univ. Leicester
IRRI	Development of an integrated GCP information platform	Agropolis International-CIRAD, CIMMY Embrapa, ICRISAT, NCGR
ISRA	Enhancing groundnut (Arachis hypogaea L.) genetic diversity and speeding its utilization in breeding for improving drought tolerance	PROINPA, USDA, Agropolis International-CIRAD, ICRISAT, Embrapa, UCB
ISRA/CERAAS	Capacity building à la carte 2007 – Application of molecular tools for controlled wild introgression into peanut cultivated germplasm in Senegal	Agropolis International-CIRAD, UCB, Embrapa, ICRISAT