# CGEB International Centre for Genetic Developing Knowledge

### Who we are

ICGEB is an **international organisation** operating since 1987 within the **United Nations** Common System. Established as a Centre of excellence for **research** and **training** in molecular biology and genetics for the benefit of developing countries and economies in transition, it contributes to solving some of the major problems affecting health, nutrition, agriculture and industrial development in the field of biotechnology.

ICGEB is supported by **over 60 Member States** (shown in blue on the map). Its main laboratories are located in **Trieste** (Italy), **New Delhi** (India), **Cape Town**, (South Africa) with a network of over 40 Affiliated Centres in its Member States. The Headquarters of the Centre is in Trieste, Italy.

#### Governance

The activities of ICGEB are headed by a **Board** of representatives of its Member States. An international **Scientific Council**, comprising fifteen acclaimed scientists including Nobel Prize laureates, sustains its scientific activities.

#### How we operate

According to its mandate, the ICGEB:

- Conducts advanced research in the laboratories in Trieste, New Delhi, and Cape Town
- Awards Fellowships for PhD students and researchers to participate in research activities
- Organises over 20 annual meetings and workshops on cutting-edge topics
- Supports research in Member States by **funding** projects of excellence
- Transfers technology and know-how to biotech companies
- Cooperates with governments to define policies for the regulation of genetically modified organisms





## Some results in numbers

Some of the results of its activities are:

- >2700 publications in highly acclaimed scientific journals, including Nature, Science,
- Cell, Nature Reviews Cancer, Nature Medicine, to name a few
- >800 fellowships of 3-4 years' duration to young scientists
- >1200 participants in meetings and courses each year
- >420 research projects funded in developing countries (for over 17 million Euro)
- >70 active patents
- Solution >80 technology transfer agreements to industry

## Areas of research

The ICGEB laboratories offer a scientific environment of the **highest international standard** and are equipped to carry out the most advanced experimental research in molecular and cellular biology.

In **Trieste** 18 research groups, 200 people representing over 25 nationalities, pursue biomedical research including projects on **cardiovascular**, **neurodegenerative** and infectious diseases, **immunology** and **human genetics**, and the development of new treatments based on **gene** and **stem cell therapy** and the production of **biopharmaceuticals**. In *New Delhi*, 25 research groups conduct research in mammalian and plant biology, focusing on the development of diagnostic and vaccine candidates for malaria, **hepatitis** and **dengue**, along with advanced research on **plant biotechnology** and **biofuels**. In *Cape Town*, more than 60 researchers investigate infectious (**HIV/AIDS** and **malaria**) and non communicable diseases (**cancer**).



Developing Knowledge www.icgeb.org



#### Funding

The Centre is funded by the governments of **over 60 countries**. The main contribution is provided by the Government of **Italy** through the Ministry of Foreign Affairs, followed by the Governments of **India** and **South Africa**, the three countries that host the Centre's laboratories.

Other Member countries include the BRICS group and the majority of countries with economies in transition in Asia, South America and Africa.

Besides the core budget for institutional activities, the ICGEB receives **additional funding for research** through grants from government agencies, charities, non-profit foundations and the private sector.

The Bill & Melinda Gates Foundation has funded research activities at ICGEB Trieste, New Delhi and Cape Town, as well as a major ICGEB project on GMOs in Africa.

At all three ICGEB locations **specific research projects** have been awarded funding from the European Commission (including the European Research Council); the Wellcome Trust, the Royal Society and the AICR, UK; the JDRF, the NIH, and the Leukemia & Lymphoma Society, USA; the Canadian Grand Challenges Scheme, Canada, the AXA Foundation and AFM, France.

Funds for the ICGEB laboratories are also provided by **national government bodies**, **charities** and **foundations**, including the MIUR, Telethon, AIRC, ISS and various banking Foundations in Trieste; the Department of Biotechnology of the Indian Government in New Delhi, and the National Research Foundation and Medical Research Council of South Africa in Cape Town.

Addional information ICGEB Office of the Director-General Padriciano 99, 34149 Trieste

Tel +39 040 3757374/3757377 Fax +39 040 3757380 Email: Director.General@icgeb.org

# Technology Transfer

One of the key objectives of ICGEB is the international **transfer of technologies to biotech companies**. Two research groups, one in Trieste and one in New Delhi, are specifically dedicated to these activities. To date, the Centre has concluded over **80 agreements** with **industrial partners** in Argentina, Brazil, China, Cuba, Egypt, UAE, India, Iran, Pakistan, South Africa, Sri Lanka, Turkey, Uruguay, USA and Venezuela, predominantly to produce **pharmaceuticals obtained through genetic engineering** (insulin, erythropoietin, interferon and different growth factors), diagnostic kits (celiac disease) and biopesticides.



## **Biosafety**

The Centre is active in providing Member States with services related to the **safe and sustainable use of biotechnology** in agriculture. In particular, it carries out a project funded by the Bill & Melinda Gates Foundation aimed at building the technical and scientific capabilities of administrators and **legislators of sub-Saharan Africa**, towards the effective regulation of biotechnology applications.

## Fellowships, Meetings and Courses

ICGEB offers postgraduate and postdoctoral **Fellowships** to scientists from its Member States; **an international PhD Course** is run by all three ICGEB Components in collaboration with prestigious academic institutions. Over 20 practical and theoretical **Courses** are organized every year on subjects at the forefront of biomedical research and biotechnology applications, with over **1200 researchers** participating in the ICGEB Meetings and Courses programme each year.

# Outreach

Lessons, meetings, courses and seminars organised by ICGEB are distributed freely through podcasts and on **iTunes U**, Apple's digital platform. Collections cover topics from research on cancer to stem cells, from basic molecular biology to cardiovascular diseases.

**Each month, over 11,000 users** preview and download ICGEB's scientific Films in over 80 countries worldwide. Scientists in all the ICGEB laboratories are actively involved in scientific dissemination events for the lay public.



Developing Knowledge www.icgeb.org