

# READY FOR A SUMMER OF SCIENCE?

Barcelona, 3rd - 14th July 2023

## Barcelona International Youth Science Challenge

### BIYSC 2023

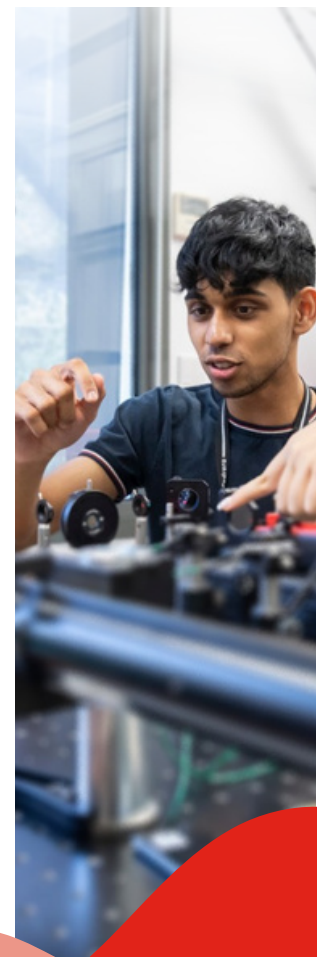
BIYSC is a life-changing experience for talented young people from all over the world with a genuine interest in science and technology. This two-week residential program is held annually in Barcelona and welcomes an **international group of more than 100 brilliant young scientists** aged between 16 and 18 years old.

The program aims to stimulate scientific talent among high school students and encourage their enthusiasm to conduct scientific research and pursue a career in science and technology. BIYSC covers a broad range of subjects across STEM fields. Different scientific and technological challenges are posed by **top international research centres** based in Catalonia. Participants will have the chance to choose a project that suits their interest and **carry out hands-on cutting-edge research**.

### Highlights of BIYSC Program

During this intensive summer program participants will be living together with **like-minded colleagues from more than 30 different countries**, making the most out of the experience by:

- Attending the **Opening Ceremony** at the UNESCO World Heritage Site La Pedrera (Casa Milà).
- **Working hands-on in a project** of their choice within a Research Centre and alongside researchers and scientists.
- Attending lectures from leading scientists and **participating in debates and discussions** on the scientific and technologic challenges of today and the future.
- Visiting some of the **top international research centres** in Catalonia.
- **Making friends, sharing experiences**, and being part of a **multicultural group** with similar interests.
- Participating in a **sightseeing activity in Barcelona** and taking part in social and networking sessions.
- **Presenting their projects in a symposium** with researchers and colleagues in the **Closing Ceremony** at La Pedrera (Casa Milà).



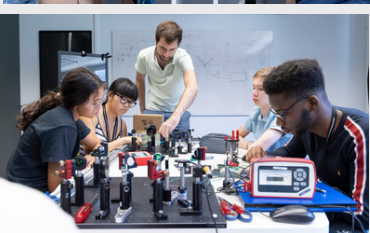
**BIYSC**

Barcelona International  
Youth Science Challenge

Agrigenomics  
Architecture  
Astrophysics  
Biochemistry  
Biomedicine  
Biology

Chemistry  
Computer Science  
Engineering  
Genetics  
Medicine  
Physics

# RESEARCH PROJECTS



**NEW! Multi-omics in the fight against leukaemia**  
Josep Carreras Leukaemia Research Institute

**NEW! The medicine of tomorrow: transforming the future of healthcare through innovation**  
Germans Trias i Pujol Research Institute and Hospital

**Broadening medical expertise: from the clinic to the lab bench and back.**  
Clinic University Hospital (HClínic)

**Cosmic ray's detection, astrophysics at your fingertips.**  
Institute of High Energy Physics (IFAE)

**Drosophila as a model organism to study the intricate paths of tumorigenesis.**  
Institute for Research in Biomedicine (IRB Barcelona)

**Feeding the world in a changing climate: Molecular breeding & Gene Editing.**  
Centre for Research in Agricultural Genomics (CRAG)

**Inhabiting Gaudí: an architecture and engineering approach to human health and buildings of the future.**  
La Salle R&D

**Photochemistry: hands-on training in molecular spectroscopy.**  
Institute of Chemical Research of Catalonia (ICIQ)

**Planarian stem cells: the genetics of immortality.**  
Department of Genetics, Microbiology and Statistics at University of Barcelona (UB)

**Protein engineering to improve plastic-degrading enzymes.**  
Barcelona Supercomputing Center (BSC)

**Quantum physics: a tool for new upcoming technologies.**  
Institute of Photonic Sciences (ICFO)

**Synthetic biology: engineering life for new social and medical challenges.**  
Department of Medicine and Life Sciences at University Pompeu Fabra (UPF MELIS)

**The medicine behind organ transplantation.**  
Bellvitge University Hospital (HUB)

**The neurobiology of trauma: effects on behaviour and brain function.**  
Institute of Neurosciences (INc)



**Barcelona International  
Youth Science Challenge**

**1st Application Call:** January 12th - February 22nd, 2023

**2nd Application Call:** February 23rd - April 12th, 2023

**Applications and more  
information at:  
[www.biyisc.org](http://www.biyisc.org)**



✉ [contact@biyisc.org](mailto:contact@biyisc.org)

Hosting research centres:



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Fundació Catalunya La Pedrera is a reference for the promotion of talent and of the scientific, technological and environmental vocations as well as in educational support to expand opportunities. Science Academy is the Foundation's training proposal with a wide variety of scientific programs designed to meet the challenges of a new era. We work with excellence, rigor and passion to promote the critical spirit, curiosity, creativity, innovation and empowerment of thousands of children, young people and professionals in Catalonia and around the world.