

Biotechnology And business in Greece

Biotechnology areas that were covered Under Greek research programmes

Program	B 1	B 2	B 3	B 4	B 5	B 6	B 7
EKBAN	+	+	+	+		+	
RENED	+	+	+	+	+	+	+
SYN	+	+				+	
YPER	+			+		+	
DIMITRA	+			+			

Glossary:

- B1: Plant biotechnology,
- B2: Animal Biotechnology,
- B3 Environmental Biotechnology,
- B4: Industrial Biotechnology (food, paper),
- B5: Industrial Biotechnology & The cell & plant,
- B6: Human biotechnology,
- B7: Biobasic techniques

Biotechnology has had a major impact on many industries/sectors including the chemical, pharmaceutical and food industries. The Greek R&D infrastructure has responded very quickly to the scientific opportunities that biotechnology offers. More than 30 laboratories were established in Greece over 15 years and more than 300 scientists are working in the fields of plant biotechnology, molecular plant breeding, animal biotechnology, enzyme production, human and veterinary diagnostics, therapeutic system, immunology and bioinformatics.

National trend in biotechnology

Greece is committed to support research in biotechnology because it is a scientific area showing impressive results and because of the importance of biotechnology to social and economic development. Through a series of programmes Greece has funded

T/F: +30 210 778 1045 | M: +30 6974 71 80 71
E: marinos@marinos.com.gr | URL: www.marinos.com.gr

Law Offices:

Athens: 122 Vas. Sofias Ave., Athens 11526, GREECE
Prague: 19 Slavikova Street, Prague 2, 12000, THE CZECH REPUBLIC

Confidentiality Note:

This electronic message and any attachments herewith are confidential and sent for the personal attention of the addressee(s). This electronic message may contain information that is privileged and exempt from disclosure under applicable laws. If you are not the addressee(s) of this electronic message, you may not copy, forward, disclose or otherwise use it or any part of it in any form whatsoever. If you have received this electronic message in error, please forward it back to the sender by replying to this electronic message.

biotechnology research and placed emphasis on some sectors such as plant, animal, human industrial and environmental biotechnologies.

Forefront of Research – The IMBB

The Institute of Molecular Biology and Biotechnology (IMBB) is a world leading research centre IMBB was founded in 1983. It employs more than 120 people, and is active in more than 90 R&D projects (on-going). IMBB collaborates with 45 industrial enterprises and 120 research centres worldwide. In addition IMBB holds eight international patents filed in the 1990s. One characteristic achievement of the plant molecular biology group was the designing and testing of molecular tools (ribozymes) that could make plants permanently resistant to pathogen infections. The Insects Group was the first to develop transformation technology for 15 the Medfly species setting the basis for future development in other insects. Both technologies are covered by international patents.

International Industrial Cooperation

Greek research and technology institutes, have a number of impressive successes to their credit in the field of biotechnology. A large number of products have been developed in cooperation with international industrial partners. It is interesting to observe the work of the Molecular Genetics Laboratory of Hellenic Pasteur Institute that has been using transgenic and knockout mouse systems to study the role of cytokines in the molecular and cellular orchestration of immune response. The Lab focuses on the biology of one molecule known as the Tumour Necrosis Factor (TNF), which has been proven to play a pivotal role in the pathogenesis of certain diseases such as the cancer associated with cachexia and rheumatoid arthritis. The model is currently used by a number of biotechnology firms in the USA and the UK.

The Enzyme Technology group of IMBB developed the technology for large-scale purification of molecules such as DNA restriction and modification enzymes commercially known under the trade name MINOTECH. The catalogue of MINOTECH contains more than 60 products that are mainly distributed to international markets through agreements with European and American companies. The already large international market for these enzymes is continuously expanding due to their recent application in disease diagnosis. IMBB has established a series of cooperations with multinational companies such as Giba-Ciegy (Switzerland), Renner GmbH (Germany), Pharmacia (USA) and Quantum Biotechnologies (USA).

T/F: +30 210 778 1045 | M: +30 6974 71 80 71
E: marinos@marinos.com.gr | URL: www.marinos.com.gr

Law Offices:

Athens: 122 Vas. Sofias Ave., Athens 11526, GREECE
Prague: 19 Slavikova Street, Prague 2, 12000, THE CZECH REPUBLIC

Confidentiality Note:

This electronic message and any attachments herewith are confidential and sent for the personal attention of the addressee(s). This electronic message may contain information that is privileged and exempt from disclosure under applicable laws. If you are not the addressee(s) of this electronic message, you may not copy, forward, disclose or otherwise use it or any part of it in any form whatsoever. If you have received this electronic message in error, please forward it back to the sender by replying to this electronic message.

Greece at the Forefront of Agrobiotechnology

Five biotechnology laboratories of the Agricultural School of the Aristotle University of Thessaloniki have recently joined forces in a new "Institute of Agrobiotechnology" (INA). INA is part of a new research centre, the Center for Research and Technology Hellas (CERTH) based at Thessaloniki. The cumulative expertise of more than 70 research projects and 60 researchers and postgraduates has created a high level scientific team in the fields of molecular diagnostics and plant development, seed production technologies & control and exploitation of the unique and diverse Greek wild plants. Also, the Mediterranean Agronomic Institute of Chania (MAICH) is heading a study (1998-2002) on "Conservation and Management of Natural Renewable Resources". This study is funded by the European Union DGI/CIHEAM. Its aim is to assess human and material resources on plant biotechnology in the Mediterranean region, with emphasis on the non-EU countries. MAICH has formed a collaborative group composed of a number of institutes such as ICARDA from Syria, AGERI of Egypt and the University of Ege, Turkey.

T/F: +30 210 778 1045 | M: +30 6974 71 80 71
E: marinos@marinos.com.gr | URL: www.marinos.com.gr

Law Offices:

Athens: 122 Vas. Sofias Ave., Athens 11526, GREECE
Prague: 19 Slavikova Street, Prague 2, 12000, THE CZECH REPUBLIC

Confidentiality Note:

This electronic message and any attachments herewith are confidential and sent for the personal attention of the addressee(s). This electronic message may contain information that is privileged and exempt from disclosure under applicable laws. If you are not the addressee(s) of this electronic message, you may not copy, forward, disclose or otherwise use it or any part of it in any form whatsoever. If you have received this electronic message in error, please forward it back to the sender by replying to this electronic message.