



Hellenic Bio Cluster

HBio Fact-sheet



- The first ever life sciences business cluster in Greece. Created in 2004

Regular Members

companies with R&D activities and international collaborations/ exports

Associate Members

non-corporate entities /research centers

- HELP-FORWARD Network/ Δίκτυο ΠΡΑΞΗ:

Driving force for HBio establishment

- 9 → 15 members → 17 members, and growing...

History- (It all started in 2004!)



Summer
2007

General Assembly.
New Board Elected.
6 new members entered the cluster.

June 2008

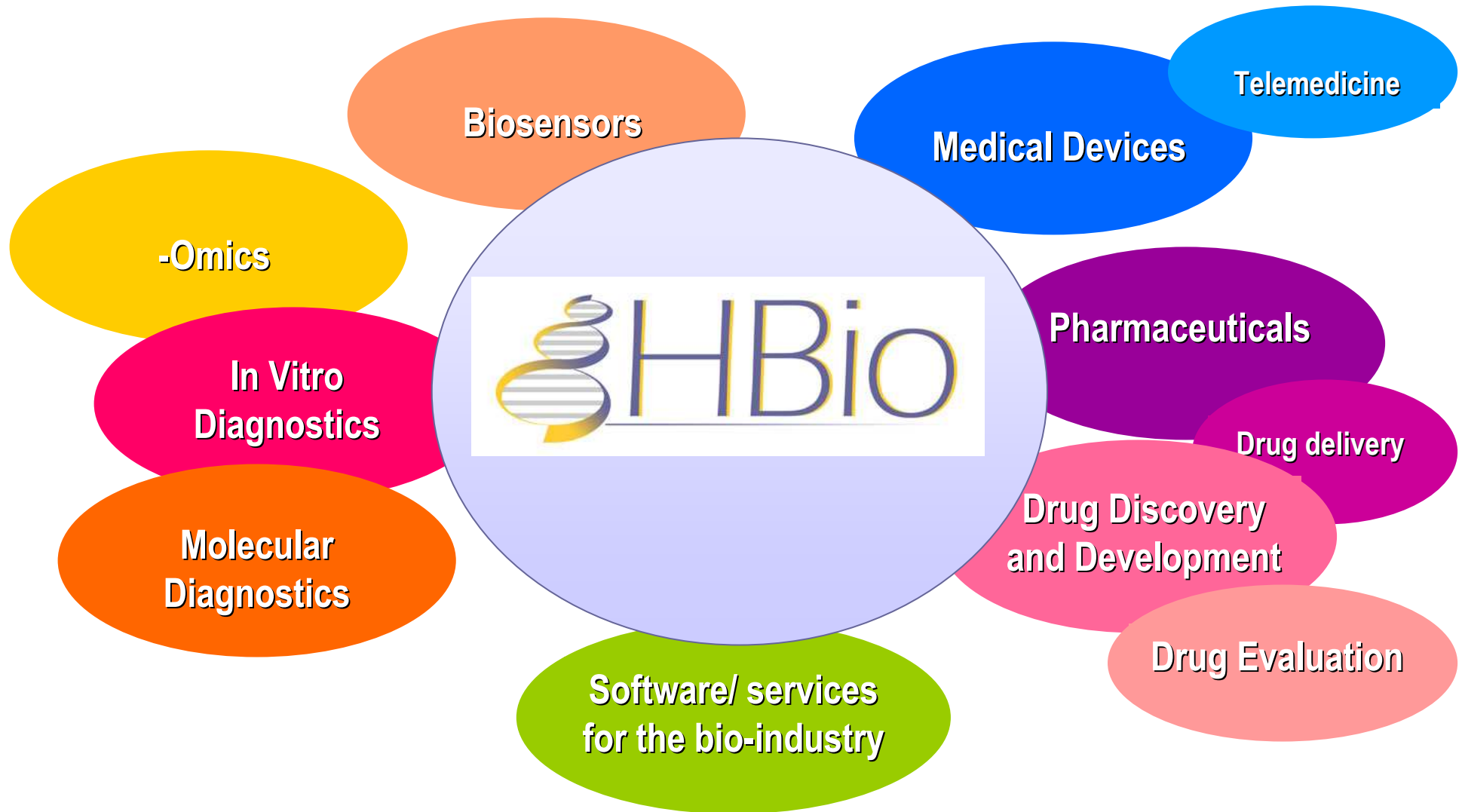
2 more members added → 17 members.

ACTIVITY
HIGHLIGHTS
2004-2008

Promotional material (website, brochure),
participation in international events, stands at
exhibitions, networking at national and national
level, participation of member companies in
european research programmes

RESULT

HBio: Greek Life Sciences Business cluster



HBio's mission



To boost the development of the Life Sciences industry in Greece, to increase its visibility and impact outside Greece and to facilitate business and research collaborations between Greek and foreign companies and research groups as well.

Joining HBio – Criteria (I)

□ Regular (full) membership

For Greek companies and Greek-owned companies based outside Greece, active in the fields of biotech, biomedical technology, pharmaceuticals (generally in the life sciences sector).

□ Associate membership

Non-corporate entities, such as Research Centres, Universities and other Organisations, may be eligible with a view to create a synergistic environment within the cluster.

Having only corporate entities (companies/industries) as regular members, was crucial for maintaining the business-orientation character of the cluster.

Joining HBio – Criteria (II)

Research and/ or Development activities

Solely commercial companies were/are not accepted

- *The above criteria are crucial for maintaining the technology intensive and extrovert nature of HBio*
- *On-line application form available in HBio website*
- *Applications are examined by the HBio Board and if not approved unanimously by the General Assembly.*

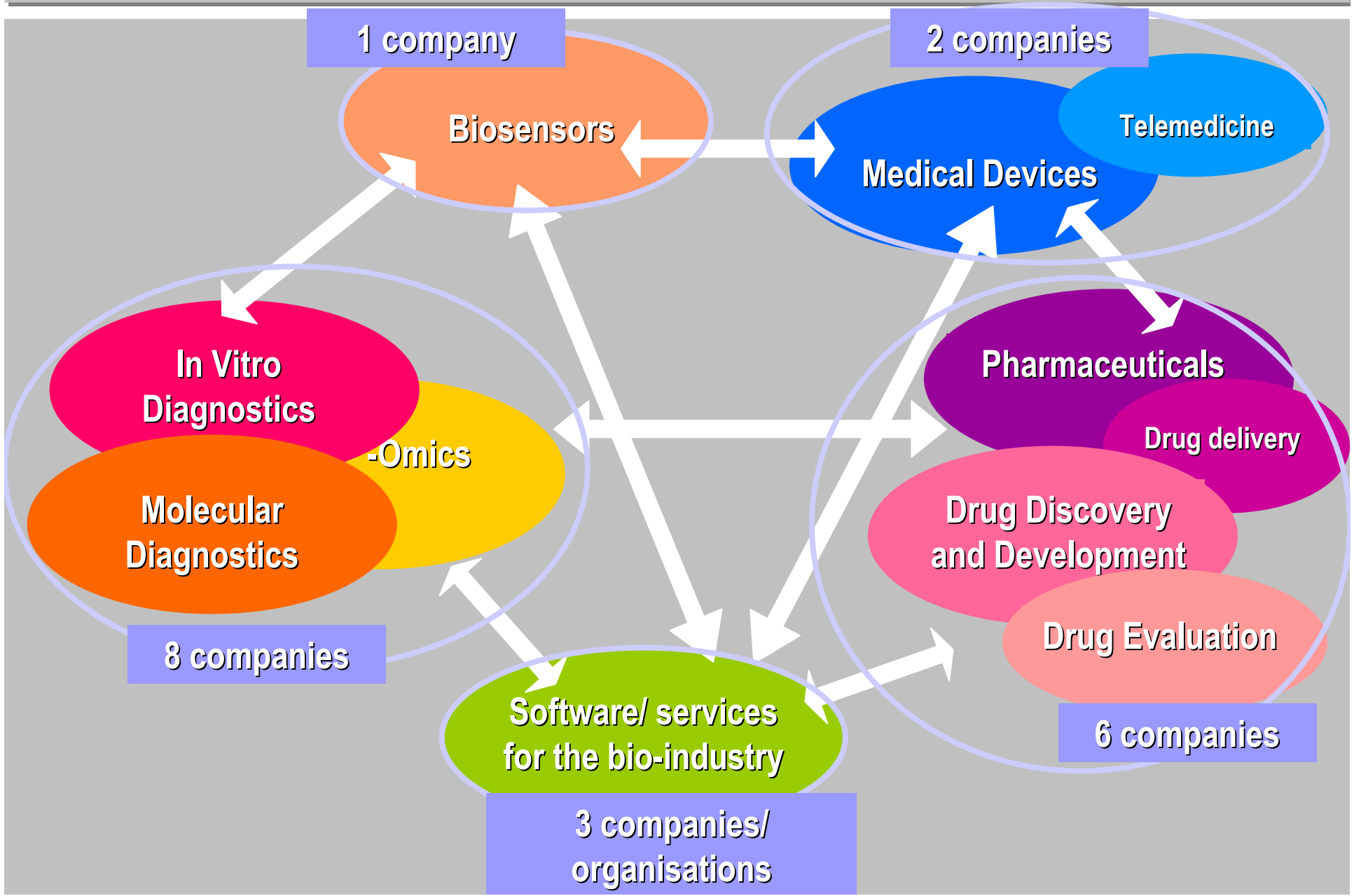
Objectives



HBio aspires to:

- ❑ Promote the business and R&D activities of its members nationally and internationally
- ❑ Encourage collaborations, synergies and complementarities between its members
- ❑ Facilitate networking of basic players (companies, researchers, investors, policy makers, diagnostic centers/ hospitals, support mechanisms...) at national level
- ❑ Establish links with other high tech clusters
- ❑ Communicate the views of the Greek bio-cluster to public authorities and improve economic/ legal/ regulatory framework.
- ❑ Facilitate technology transfer between industry and academia in Greece and the creation of start-ups/spin-offs

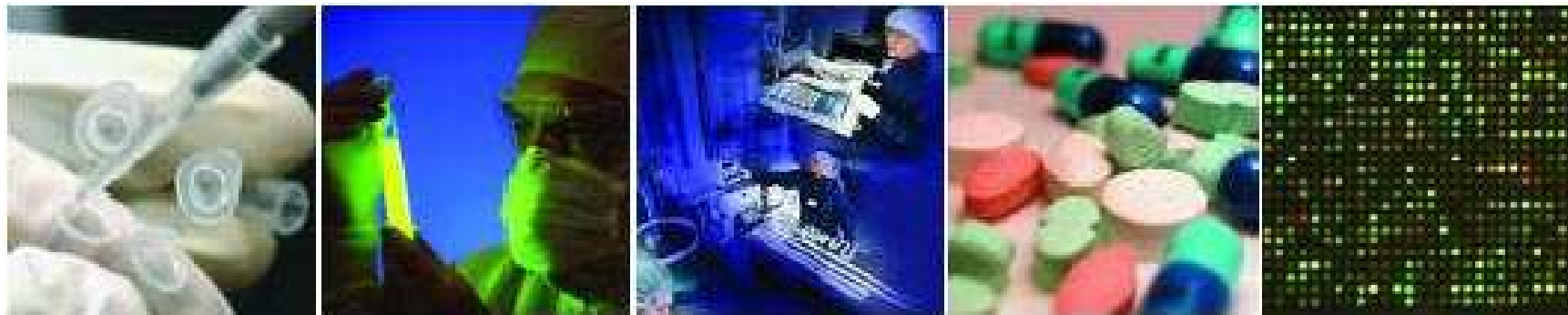
Synergies and complementarities



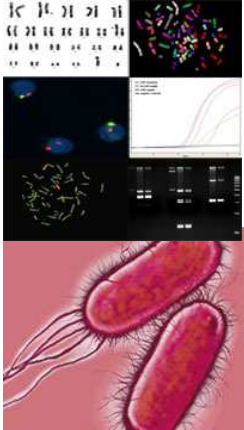
Current HBio Board

- **President**, Spiro Dimotsantos, President and CEO, MEDICON HELLAS SA
- **Managing Director**, Alexandre Tsoukalis, CEO, MICREL Medical Devices S.A.
- **Treasurer**, George Nounesis, Co-founder and Member of the Board BioGenomica SA
- **General Secretary**, Rosa Kardara, Technology Transfer Consultant, HELP-FORWARD Network/ Diktyo PRAXI
- **Member**, Kostas Alevizopoulos, Managing Director, Medexis SA
- **Member**, Andreas Persidis, CEO, Biovista

HBio Members



HBio: Members (I)



BioAnalytica-GenoType S.A.

Offering advanced molecular and cytogenetic analyses

BioAnalytica S.A.

Molecular Diagnostics, Molecular Biology, Proteomics



BioGenomica S.A. (spin-off of NCSR “Demokritos”)

High-Throughput Genetic Testing Services for Medical Screening, Individual Genomic Profiling and General Genotyping Applications, cytogenetic/ molecular cytogenetic analyses



MEDICON Hellas S.A.

Offering an extensive range of instrumentation, diagnostic tests and reagents

HBio: Members (II)



Biovista

Drug Repositioning. Development of software-based products and services for knowledge-intensive applications in the healthcare, pharmaceutical and biotechnology industries.



Lavipharm

Group of companies engaged in R&D, production, import, marketing, sales, and logistics services of pharmaceutical, dermocosmetic and healthcare products



MEDEXIS S.A.

Identification and development of novel therapeutic drug candidates and molecular diagnostics/ reagents in the field of oncology

HBio: Members (III)



Biomedcode Hellas S.A. (spin-off BSRC «Alexander Fleming»)

Pre-clinical drug evaluation services in the area of autoimmune and inflammatory diseases using unique, humanized disease animal models.



Regulon S.A.

Discovery and development of low-toxicity anticancer biopharmaceuticals based on its unique proprietary liposome encapsulation platform technology.



BioRP, Hellenic Radiopharmaceuticals SA (spin-off of NCSR “Demokritos”)

Development and production of radiopharmaceuticals

HBio: Members (IV)



MICREL Medical Devices A.E.

Developing infusion pumps and telemedicine systems



Estelle Enterprises Limited (cy)

Development of a blockage-free catheter system for post-operative drainage and local drug administration



Forth Photonics S.A.

Development of automated, cost-effective devices for the non-invasive optical detection, screening and guided therapeutics of cancerous and pre-cancerous lesions.

HBio: Members (V)



Innovision LTD (spin-off, Centre for Research and Technology, Thessaly)

Development of enhanced performance immunoassays



Micro²Gen

Microsystems company aiming at developing a low cost integrated micro system (biochip) for genetic testing



EMBIO Diagnostics Ltd (CY) (spin-off, Agricultural University of Athens)

Development of biosensors for the detection of various molecules



HELP-FORWARD Network/ Δίκτυο ΠΡΑΞΗ

Support and mediation for research and business collaborations/
technology transfer

HBio Figures

Turnover	272 millions approx.
Applications for patents	82
Expenses for R&D and Innovation (for 2007)	10 millions approx. <i>Most members spend > 10% of their turnover for R&D and innovation activities.</i>
New products/ services developed per year	10
Exports	32 millions approx.
Clientelle (non-exhaustive list)	<ul style="list-style-type: none"> - Pharmas: Merck, NovoNordisk, ZLB, Octapharma - Healthcare technology companies like Baxter - Biotech companies like BiogenIdec and Qiagen - Reagents/ diagnostics companies such as Millipore, Serologicals, Novus, η R&D Systems, INNOVA and Euroimmun. - World-class Universities, like Harvard University - Hospitals like St Marys Hospital (London, UK) - Olympus Life Science

Clients all over the world – Success stories (I)

- Lavipharm's Trinipatch (nitroglycerine transdermal delivery system) for the prevention of anginal attacks in patients with stable angina pectoris associated with coronary artery disease
- Biomedcode offers services to big pharmas all over the world
- MICREL is a leader in the parenteral nutrition markets in various European countries, such as England, Germany, Sweden, Norway, Benelux, Switzerland
- Biovista successfully collaborated with the FDA for adverse reactions prediction in 2 drugs on the markets. In Sep 2008 Biovista entered into a research agreement with Cempra Pharmaceuticalsto systematically identify and profile adverse event associations for members of the macrolide drug class.
- Forth-Photonics DySIS™ (with proprietary dynamic spectral imaging technology) for the non invasive detection & mapping of cervical neoplasia in vivo, is used in leading hospitals in the UK, the Netherlands and Ireland.
- Regulon has entered into licensing agreements for the use of its pioneering liposomal encapsulation technology, with companies in the Netherlands, Germany, Australia, etc.

Clients all over the world – Success stories (II)

- Collaboration of MICREL- ESTELLE for jointly developing a proprietary blockage-free catheter system for post-operative drainage and local drug administration.
- Facilitation of Biomedcode's creation (Spin-off of Biomedical Sciences Research Center "Alexander Fleming")
- Attraction of foreign companies with innovative technologies/ products worldwide, e.g. Dutch company Agendia: collaboration with Biogenomica
- Facilitation of EMBIO's establishment after the meeting of the company's founder (From the Agricultural University of Athens) with ERMIS Business Incubator in Cyprus
- Meetings of 7 cluster members with British VC Merlin Biosciences in the context of the 6th International Venture Capital Forum (2005).

Clients all over the world – Success stories (III)

□ In Greece

- Medicon is the only Greek company active in R&D and production of diagnostics (for the past 25 years)
- BioRP is the only company in Greece to produce radiopharmaceuticals
- BioAnalytica-Genotype is the first to receive ISO 15189
- Forth-Photonics is the first Greek spin-off to be financed by a Greek VC fund

□ Internationally

- BioGenomica is the first company to offer cytogenetic testing for radiosensitivity
- Biomedcode has unique transgenic mouse models for preclinical drug evaluation
- CK19 Quantification kit of Medexis (for detecting circulating tumour cells) is the 3rd product to be approved for the specific indication worldwide
- MICREL's pumps replaced those of BAXTER in the United Kingdom, following a comparative analysis declaring MICREL's products as the best worldwide
- MEDICON exports: Immunological diagnostics to USA /JAPAN/EUROPE

Further future development

- ❑ Incorporation of new members in various sectors: spin-offs/ start-ups, established companies initiating R&D activities
- ❑ All HBio companies plan to develop new knowledge intensive products and services in the years to come
- ❑ R&D, innovation and business development expenses of the cluster expected to increase. New equipment, production facilities, research tools and reagents, patenting, training, business development
- ❑ New collaborations with Greek research groups

HBio and its members are very willing to explore synergies with everyone involved in the field in Greece



- ❑ **Common views of the HBio business community** (on Life Sciences Related topics) sent to GSRT during the public consultation on the National Strategic Development Plan 2007-2013



- ❑ **Organising visits of foreign companies and delegations to Greece:** Agendia (NL), Progenika (ES), Surfable (CH), Avalis (CH), Medical technologies thematic group (experts from various european countries)
- ❑ **Contacts with Life Sciences clusters abroad:** BioPRO (DE), Kobe Cluster in Japan and many more
- ❑ **Participation in international brokerage events** (e.g. BioDiscovery Days 2007, Biotechnica 2007, London Technology Network Cancer event,...)

Collaborations with Greek research groups

- ❑ **7 cluster members are spin-offs and still maintain close links with their mother institutions**
- ❑ **Considerable collaborations of HBio members with research groups, e.g.:**
 - Medexis – Uni. Of Crete: Development of novel compounds for prostate cancer
 - Medexis –Uni. of Athens and Thessaloniki: Development of diagnostic product:“CK19 Quantification Kit” for the detection of circulating tumour cells in biological samples
 - Medicon –FORTH: Development of easy-to-use diagnostic dip stick.
 - Micrel – Uni. Of Crete: Development of innovative glucose sensor
 - BioAnalytica-Genotype S.A. - Uni. Of Athens and Thessaloniki, training of university students in medical genetics.

**Thanks to the HELP-FORWARD
Network/ΔΙΚΤΥΟ ΠΡΑΞΗ
Thank you for your attention**

www.hbio.gr

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