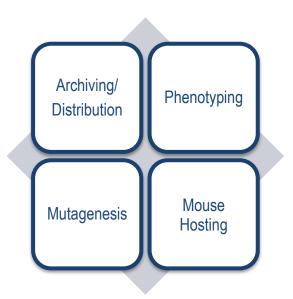
# Infrafrontier-GR/Phenotypos

The Greek Research Infrastructure for Molecular and Behavioral Phenotyping of biological model organisms for chronic degenerative diseases



### www.infrafrontier.gr











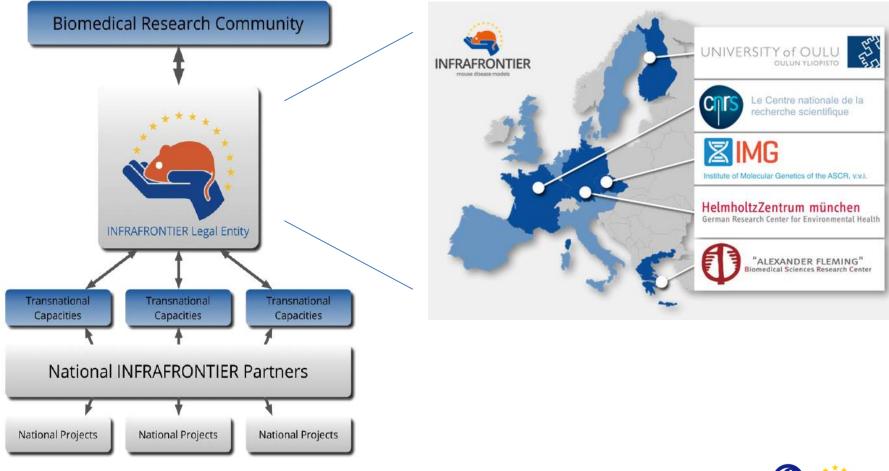
Develop **a comprehensive discovery pipeline** for diseaseoriented phenotyping, archiving and distribution of mouse models of human disease

**Provide high end, open access services** to academic and industrial R&D users to develop their scientific and innovation portfolios.

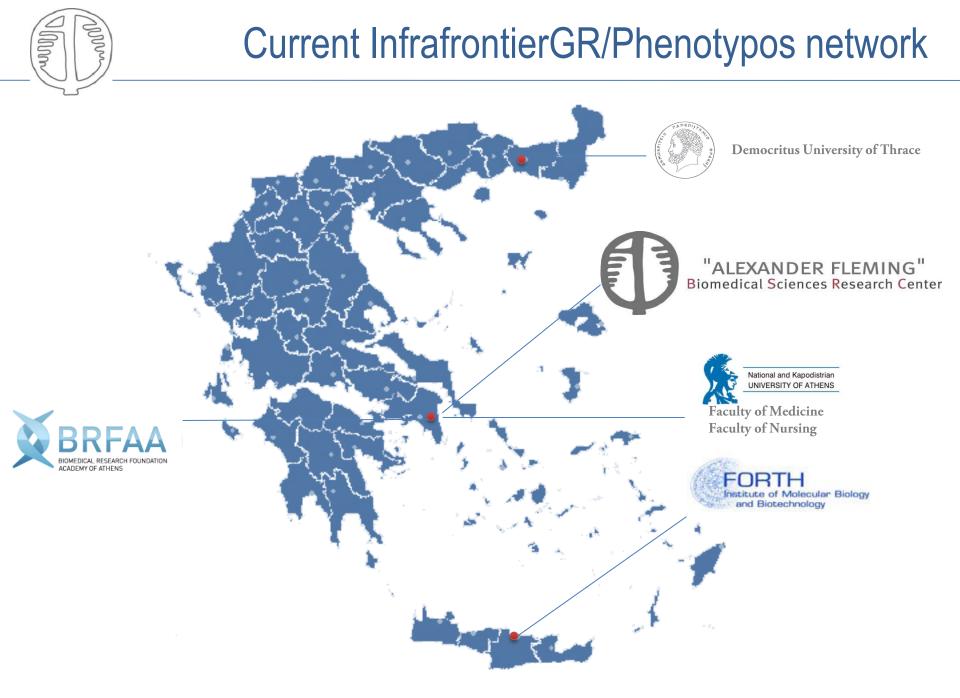
Liaise with pre-clinical and translational programs and outreach to regional research communities



## Infrafrontier GmbH Founding members









## Infrafrontier-GR/Phenotypos services



- Archiving/distribution/hosting
  - Sperm & embryo cryopreservation
  - Live mouse generation
  - Embryo generation
  - Long term storage
  - Mouse hosting and distribution
  - Import of mice
  - Mouse breeding
  - Health report screening



- Mouse modeling
- In vivo phenotyping
- Tissue Phenotyping
- Molecular phenotyping
  - Genomics
  - Proteomics
  - System/disease specific:
- Inflammatory/Autoimmune
- Cancer

#### Infrafrontier-GR / Phenotypos:

- Behavioral
- Metabolic

Full list of services at www.infrafrontier.gr











3.64MEuros, 2012-2015

- Pronuclear injection
- Founder Generation
- Embryonic Stem Cell Gene Targeting
- Blastocyst Injection
- Chimera Production
- Germline transmission





Faculty of Medicine Faculty of Nursing Democritus University of Thrace



### Preparatory Phase (Feasibility Study, participation in INFRAFRONTIER-EUROPE) Start: 01/2010 End: 03/2011 Budget: €125,000

Construction Phase (procurement of equipment, salaries) Start: 06/2012 End: 12/2015 Budget: €3,641,000



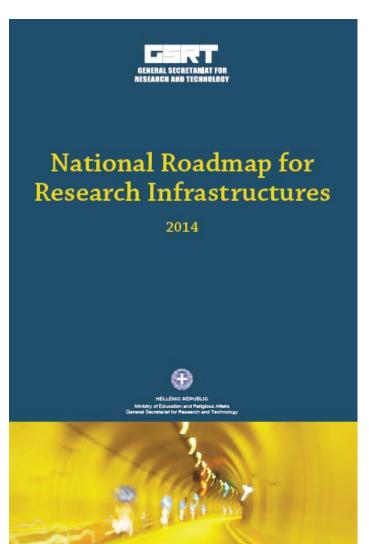
- 17 new positions for highly skilled personnel (of which 9 PhD level, 4 MSc level and 1 DMV)
- $\checkmark$  3 new technology units (Advanced imaging, microCT, Hybrid  $\gamma$ -ray imaging system)
- 7 upgraded facilities (Transgenesis and cryopreservation, animal house units, histopathology, FACS, genomics, proteomics units)
- Service provision to academic and industrial users in Greece and abroad, including transnational access services (Infrafrontier I3).
- ✓ Strategic participation in ESFRI Infrafrontier Founding member of Infrafrontier GmbH
- ✓ Open access services to the scientific community, enhancing research competitiveness
- Support of high impact publications and competitive research programs (including ERC grants, Marie-Curie actions, collaborative FP7, H2020 and IMI projects, industrial R&D projects)
- ✓ Hands-on training to new personnel on state-of-the-art technologies
- Centralised web portal for service requests www.infrafrontier.gr



- Bureaucracy
- Gaps in funding between SF cycles



### InfrafrontierGR/Phenotypos in the national Roadmap for research infrastructures



Annex I - National Roadmap RIs

#### Annex I - National Roadmap RIs

<u></u>		Social Sciences and Hu		
No	Acronym	Title	ESFRI relation	RIS3 & societal relevance
μ.	CESSRI *	Greek Research Infrastructure for Social Sciences	CESSDA, ESS	Evidence base for RIS3, skills, demographic change
2.	GR-SHARE-ERIC *	Greece in SHARE-ERIC	SHARE	Health & Ageing
з.	APOLLONIS *	Greek Infrastructure for Digital Arts. Humanities and Language Research and Innovation	CLARIN, DARIAH	Culture, Tourism, ICT
		e-infrastructur	es	•
No	Acronym	Title	ESFRI relation	RIS3 & societal relevance
4.	HELIX *	National Digital Infrastructures for Research	PRACE	ЮТ
5.	ELIXIR-GR	Managing and analyzing biological data	ELIXIR	Health, ICT
		Energy		
No	Acronym	Title	ESFRI relation	RIS3 & societal relevance
6.	PROMETHEUS	A Research Infrastructure for the Integrated Energy Chain	ECCSEL / EU- SOLARIS	Energy, Environment & Sustainable Development
7.	FUVEP	Centre of Excellence for Future Vehicle Environmental Performance		Energy, Environment & Sustainable Development, Transport
>		Biological and Medical	Sciences	
No	Acronym	Title	ESFRI relation	RISS & societal relevance
8.	INFRAFRONTIER- GR / Phenotypos *	The Greek Research Infrastructure for Molecular and Behavioural Phenotyping of biological model organisms for chronis degenerative diseases	INFRAFRONTIER	Health & Pharmaceuticals
9.	IN I point a formed *	Integrated Greek Infrastructure for Biomedical necession	BBMRI - EATRIS	Un illing enarmaceuticals
10.	Biolmaging-GR	A Greek Research Infrastructure for visualizing and monitoring fundamental biological processes	EURO-Biolmaging	Health & Pharmaceuticals, ICT
11.	INSPIRED	The National RIs on Integrated Structural Biology, Drug Screening Efforts and Drug - target functional characterisation	INSTRUCT	Health & Pharmaceuticals
12.	Openscreen-GR	An Open-Access Research Infrastructure of Chemical Biology and Target-Based Screening Technologies for Human and Animal Health, Agriculture and the Environment	EU OpenSCREEN	Health & Phanmaceuticals
13.	pMED-GR	The Greek Research Infrastructure for		Health & Pharmaceuticals.

\* Research Infrastructures (or part of them) that already have a funding commitment are designated Category I. The remaining RIs of the roadmap are designated Category II.

National Roadmap for Research Infrastructure