



Topics to be covered by the presentation:

		<u>Page</u>
-	Overview of the CY Research and Innovation Ecosystem	3-10
-	Overview of the PSF Specific Support Activity	11-16
_	Mapping exercise of Research Organisations funded by the Government	17-49

A vibrant fast developing research & innovation ecosystem

- With a history of just 25 years
- 3 public universities ranked rather high in international rankings
- > 5 ambitious and fast developing private universities with emerging but still limited research and innovation activities
- A few tens of R&I based companies which are very successful in EU programs
- A dynamic but still immature start-up ecosystem
- A number of recently established private accelerators/incubators
- A business angels network (CYBAN) but no VCs

CY R&I Ecosystem in a Nutshell

EU HEADLINE &	EU	CYPRUS	CYPRUS	CYPRUS	Cyprus	EU 28
NATIONAL	TARGET	TARGET	2015	2016	2017	2017 (Eurostat
TARGETS						data)
R&D (% of GDP)	3%	0.50%	0.48%	0,53%	0,56% ^p	2.07% ^p

p = provisional data, c.t.= compared to, n.a. = not available *=EU28 data for year 2016

- ➤ The national target for R&D expenditures as a percentage of GDP has been set to 0.50% by the year 2020.
- ➤ The target was set taking into consideration the particularities of Cyprus in terms of the size of the research community, the orientation of the economy in low value-added products and services and the very small size and low involvement of Cypriot companies in research and innovation (R&I) activities.
- ➤ Even though the above particularities continue to exist, it was managed to achieve the target since 2014 (with the exemption of 2015).

CY R&I Ecosystem in a Nutshell

Facts & Figures								
R&D Expenditure (2017)	€109 Mil.							
R&D Personnel (2017)	1015 (Full time equivalent) – 60% coming from Higher Education sector (Eurostat)							
Innovation Performance	Moderate Innovator, 18th in EU (EIS 2018)							

Performance of EU Member States Innovation Systems 2017 (EIS 2018)



CY R&I Ecosystem in a Nutshell (2016)

Expenditure on Research by field of science	mln Euros	% of total
Natural sciences	37,707	38%
Engineering and technology	30,120	30%
Social sciences	13,298	13%
Agricultural sciences	5,701	6%
Medical sciences	5,790	6%
Humanities	6,199	6%

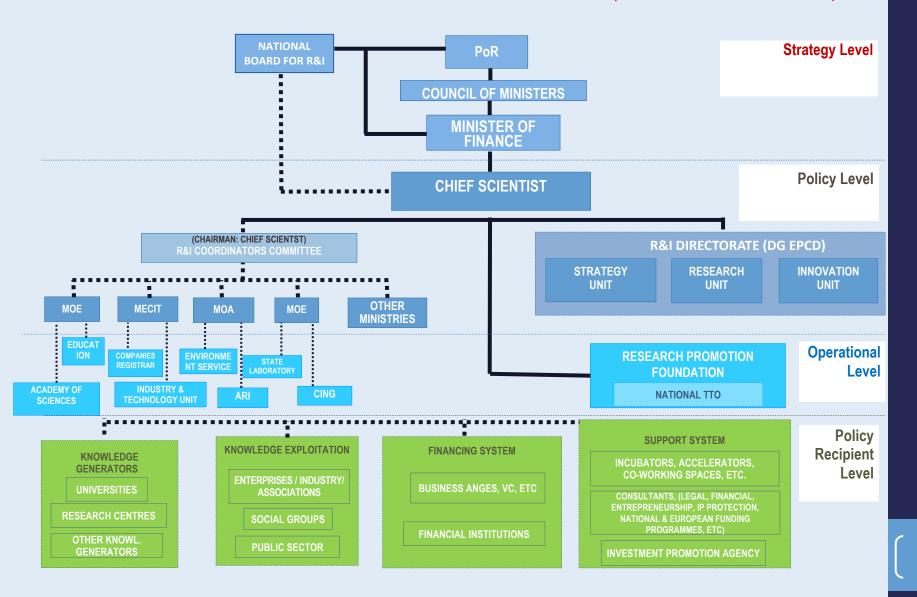
Size of Enterprise	Number of	
(Number of Employees)	Enterprises	Share (%)
0-9	92,095	95
10-49	4,060	4,2
50-249	674	0,7
249+	107	0,1
Total	96,936	100

Source: Statistical Service of Cyprus, Business Register, 2017

A young but fast developing R&I Ecosystem

- Strong commitment of present Government to address innovation gap
- 2018 Political Decisions on the adoption of a modern, functional and effective R&I Governance System
 - The **Minister of Finance** is appointed as the competent Minister for Research and Innovation.
 - The new governance system includes the establishment of a National Research and Innovation Council (10 Members) as the foremost advisory body for the development of Research and Innovation strategy in Cyprus. The Council is chaired by the former Minister of Health Mr. Philippos Patsalis.
 - A **Chief Scientist** is appointed by the President of the Republic. He is responsible for the coordination and promotion of Research and Innovation policy and the operation of the relevant governance system.
 - A Coordinator for R&I will be appointed in every Ministry.
 - The **Directorate for Research and Innovation** of Directorate General for European Programmes, Coordination and Development undertakes the responsibilities pertaining to the coordination and monitoring of the National Strategy on Research and Innovation and the designing and coordination of relevant policies. It also acts as Secretariat to the National Research and Innovation Council and extends administrative support to the Chief Scientist, in addition to the support provided by the Research Promotion Foundation.
 - The **Research Promotion Foundation** acts as the executive arm of the Government for Research and Innovation issues.

New R&I Governance Structure (CoM Decisions Oct. 18)



FOR RESEARCH & INNOVATION



KYRIACOS KOKKINOS CHIEF SCIENTIST



PROF. LEONIDAS PHYLACTOU CHIEF EXECUTIVE MEDICAL DIRECTOR - CING



MARINA HATSOPOULOS Entrepreneur & Investor



PROF. PHILIPPOS PATSALIS, CEO, NIPD GENETICS Ltd CHAIRMAN



EVGENIOS EVGENIOU CEO PWC



PROF. ANASTASIA AILAMAKI
Ecole Polytechnique Federale de Lausanne



PROF. ANDREAS ANAYIOTOS

CYPRUS UNIVERSITY OF

TECHNOLOGY - RECTOR



PROF. VASSILIKI KASSIANIDOU University of Cyprus



DR. MICHALIS NEOPTOLEMOY Managing Director, Remedica



DR. CHRISTAKIS SERGIDES MEDOCHEMIE

<u>Directorate General for European Programmes, Coordination and Development (DG EPCD)</u>

DG EPCD: an independent Government Service with developmental orientation, administratively under the Minister of Finance.

Its responsibilities includes, inter alia, with:

- Promotion of Development policies including research and innovation
- European Structural and Investment Funds (national Programming Authority for the use of ESIF in Cyprus and Managing Authority for three Operational Programmers 2014-2020)
- Promotion of the participation of Cyprus in the EU Competitive Programmes (including HORIZON 2020 and ERASMUS+)
- Public Investment Appraisal

Directorate for Research, Innovation and Lifelong Learning Policy

Research and Innovation

- **Coordination** of the preparation of **national R&I strategies and policies**, including the **Smart Specialisation Strategy for Cyprus and the National ERA Roadmap**.
- Monitoring implementation
- Promotion and Coordination of the participation of Cyprus in H2020
- Representation of Cyprus in the EU bodies such as the Competitiveness Council Research Affairs, the ERA Governance Structures, the Strategic Configuration of the HORIZON 2020 Management Committee, Bodies and Working Groups for the Euro-Mediterranean Cooperation, etc.

Lifelong Learning

National Authority for ERASMUS+ and European Solidarity Corps

Purpose

Provide tailored advice and concrete recommendations that could be of use to the Cyprus authorities for the basis of the new action plan on optimal utilisation of public research laboratories.

Benefits

- Easing the access in national Research Infrastructures, through the removal of any obstacles of legal or technical nature.
- Optimisation of the use of national RIs and the widening of their scope, in order to cover the whole spectrum of potential users from the academia, the research community and the business world.
- Enhancement of collaboration between public research and business sectors.
- Fostering science-industry linkages, effective knowledge transfer and business innovation and
- Promote the extroversion and internalisation of participating Organisations.

Stakeholders involved

- University of Cyprus
- Cyprus University of Technology
- Open University of Cyprus
- The Cyprus Institute
- The Cyprus Institute of Neurology and Genetics
- Agricultural Research Institute, Department of Fisheries & Marine Research and Meteorological Service of the Ministry of Agriculture, Rural Development and Environment
- Additional Government Departments could be included in the exercise (Department of Agriculture, Geological Survey Department, Veterinary Services Department, State General Laboratory)

Main actions to be promoted through the support

1) Analysis of identification of limitations and opportunities

- SWOT Analysis of the current situation in Cyprus
- Identification of best case examples that exist abroad. Recommendation on the ideal scenario to be followed based on the specificities of Cyprus.
- Examination of the Cyprus as well as the European market, as regards the current trend on research laboratory use.

2) Legal issues

- Identification of possible legal obstacles that hamper the optimal utilisation of research laboratories and their collaboration with the private sector. Special focus should also be placed on the legal obstacles that exist on:
 - The cooperation of the referred Organisations / Institutions with the private sector (i.e. against the main objectives of the organization etc).
 - The faculty members to work with the private sector, (e.g. time restrictions between academic responsibility and commercial interest activities for the case of University Laboratories)
 - Intellectual property rights e.g. in the field of patents, trademarks, copyright, industrial designs and trade secrets
 - state-aid rules in relation to the use of publicly-funded RI's, by the business community
- Recommendation on the changes that will need to take effect in order to facilitate the procedure.

- Provide advice on how to develop a broad overarching framework for collaboration with the private sector, based on best case examples. The advice should address, inter alia, the following issues:
- a) access of "external partners" to the premises of the organisations including:
 - safety issues of personnel who makes use of the equipment and training of personnel who makes use of the equipment
 - maintenance and repair issues of the equipment used by external partners
 - Insurance and indemnification issues
 - Costing issues that take into account the hours that the experts use the
 equipment, possible training of the experts, the damage which may occur in the
 equipment from the use, possible upgrades of the equipment software, the
 number of man-hours to be spent by the staff of the organisation for the purpose
 of carrying out the work as well as VAT issues. In addition, the cost of
 laboratories' consumables should be taken into consideration.
 - Copyright and other IP issues, together with confidentiality issues
- b) Examination of Laboratories' Accreditation issues such as:
 - requirements/obligations for accreditation
 - accreditation costs and time
 - status of research laboratories which could not be accredited due to their size or mandate

- Recommendation on the way to follow on these issues by the Government and relevant Institutions (i.e. funding).
- Identification of the steps to be promoted for upgrading the referred Laboratories in order to make them capable of competing Internationally (i.e. accreditation requirements and other)
- c) Analysis and identification of the actions to be undertaken in order to **encourage the networking and collaboration** between the Research Laboratory Institutions in Cyprus
 with the private sector in Cyprus
- d) In this context, revisit the role of the Technology Transfer Office
- e) Examination of the issue of the possible creation of a competitive environment between the government funded infrastructures and the private companies that also provide those services. Additionally, provide recommendations on how to eliminate or minimize this possibility.

Main outcome of the exercise:

- ➤ a report providing tailored advice and recommendations on the implementation of issues concerned, which will include a proposal for an Action plan for the optimal utilization of Research Laboratories of Organisations that are funded by the Government.
- The Action plan will have two sections:
 - ☐ the first section should focus on the proposed actions that need to be taken by the Government on a central level and
 - ☐ the second section should focus on the actions that need to be undertaken by the Organisations/Institutions themselves.

Notes for Action Plan

- A separate chapter for each Research Organisation/Institution, in which all appropriate steps to be followed will need to be included (legislation issues, accreditation issues, marketing issues etc).
- It should be accompanied by specific recommendations to be used on the preparation of an overarching framework agreement for:
- (a) collaboration between the laboratories of Organisations that are funded by the Government and
- (b) collaboration between the laboratories of Organisations that are funded by the Government and the private sector, that should be based on best-case examples and in which all the issues mentioned above are taken into consideration.

A related exercise currently taking place

A mapping exercise for the existing Research Infrastructures that are funded by the Government. The exercise will assist in identifying the future needs of Cyprus for the creation and upgrading of research infrastructures.

- started in the last quarter of 2018
- is currently at an advanced stage of implementation.

Organisations participating in the exercise:

- the Organisations currently participating in the PSF activity
- additional Departments (already mentioned in slide 11)

- National European Research (ERA) Roadmap 2016-2020 priority for the optimal use of public investments in Research Infrastructures (RIs)
- **Objective:** To map the existing national RI funded by the Government
- Results will assist towards:
 - Utilization of the RIs funded by the Government towards the benefit of the economy
 - Assessment of needs for upgrade and funding of existing RIs or new ones in the context of the Smart Specialization Strategy for Cyprus (S3CY)
 - Rationalization of public spending in existing and new RIs
 - Optimal utilization of RIs by the business community and enhancement of their collaboration
 - Identification of the needs for participation in international and European RIs
 - Input for the preparation of the National Roadmap for the Investments in RIs
 - Input for the preparation of the National Roadmap for the participation of Cyprus in the European Strategy Forum on Research Infrastructures (ESFRI)

Organisations that participate in the Mapping Exercise of RIs:

PSF Specific Support Participants:

- University of Cyprus (UCY)
- Cyprus University of Technology (CUT)
- Open University of Cyprus (OUC)
- 4. The Cyprus Institute (Cyl)
- 5. The Cyprus Institute of Neurology and Genetics (CING)
- 6. Agricultural Research Institute (ARI)
- 7. Department of Fisheries and Marine Research (DFMR)
- 8. Department of Meteorology (DoM)

Additional Departments:

- 9. Department of Agriculture (DoA)
- 10. Geological Survey Department (GSD)
- 11. Veterinary Services Department (VSD)
- 12. State General Laboratory (SGL)

TABLE 1: RESEARCH IN	TABLE 1: RESEARCH INFRASTRUCTURE										
Research Infrastructure Name	Hosting Legal Entity of Research Infrastructure	Research Infrastructure Scientific Domain and Category (MERIL Categorisation)	Research Infrastructure Main Priorities	Research Infrastructure Mission and Objectives	Main Research Infrastructure Activities / Services provided and Equipment used	Head of Research Infrastructure					
Please complete the following information for the Research Infrastructure (Acronym¹:name commonly used to identify the Research Infrastructure)	following information	Please select scientific domain/s and category/ies of the Research Infrastructure from the excel woksheet 1.1 Scientific Domains (For the description of the scientific domains and categories please see excel worksheet 1.2 Sci. Domains Descriptions)	Please describe the main priorities of the Research Infrastructure	Please describe the mission and objectives of the Research Infrastructure	Please describe: (a) the main activities and services provided by the Research Infrastructure (b) the mainequipment (accessories should not be included) of the Research Infrastructure. In case the Research Infrastructure has research laboratories as well, this information should also be completed in a summary form, for each of the research laboratories of the Infrastructure.	Please complete the following information					
	Name: Address: Telephone Number: Website: Email address:			Mission: Objectives:		Name: Title: Address: Telephone Number: Email Address:					

NOTES:

- (1) For Research Infrastructures please fill table 1 and table 2 of the excel file.
- (2) Additionally, if the Research Infrastructure hosts Research Laboratories, also fill table 3 of the excel file separately for each laboratory.
- (3) Please forward photos of the Research Infrastructure to be uploaded on our website under

TABLE 2: RESEARCH INFRASTRUCTURE

I ADLL 2. IN	ESEARCH INFRASTRUCTUR										
Research Infrastruct ure Contact Person	Equipment (small accessories should not be included)	Analysis /Measurement / Test Type Method Sampl e Cost e Type (€)	Other services provided by the Research Infrastructure	Accreditation	Users of Research Infrastructure	Collaboration with the business community	Personnel	Open Access for scientific information (publications, data, etc.)		Funding sources for the Research Infrastructure for the year 2018	Details of person filling in the questionnaire (for DG EPCD use only)
Please complete the following informatio n	Please complete the following information fo each piece equipment		Please complete the following information	Please select yes or no and complete the following information	are engaged in the concept	Please select (a) yes for existing collaboration (b) no for no existing collaboration and (c) yes or no for potential collaboration	the following information	Please select yes or no and complete the information	Please specify if there is cooperati o.g. other research laborator es or participat ion in ESFRI projects	Please complete the right box and fill in the information where applicable	
Telephone Number: Email Address:	Type: e.g. Superco mputer, three dimensio nal scanner, prniter, microsco pe etc.			Accredita Need for Accredita tion field: Accredita tion: needed: Accredite e.g. d method YES Accredite based on CYS EN 1744-1:1998 NO 1:1998		YES NO POTENTIAL COLLABORATIO N YES NO	Full Time Ratio Equivalen men / t wome personnel n: Research ers: Technical: Academic s: Administr ative: Students:	Reposit Use of ory other Name: means to ensure Open Access:		funding: national YES funding: NO	

NOTES:

(1) For Research Infrastructures please fill table 1 and table 2 of the excel file.

(2) Additionally, if the Research Infrastructure hosts Research Laboratories, also fill table 3 of the excel file separately for each laboratory.

(3) Please forward photos of the Research Infrastructure to be uploaded on our website under the relevant section.

21

TABLE 3: RESEARCH LABORATORY

IADLE 3: KE	ABLE 3: RESEARCH LABORATORY										
Research Laboratory Contact Person	Equipment (small accessories should not be included)	Analysis /Measurement / Test Type Metho Sampl Sampl e Type e Type Size (€)	Other services provided by the Research Laboratory	Accreditation	Users of Research Laboratory	Collaboration with the business community	Personnel	l scientitic		Funding sources for the Research Laboratory for the year 2018	
Please complete the following informatio n	following information for	Please enter the following information for each analysis/ Measurement / Test	Please complete the following information	Please select yes or no and complete the following information	services. They are engaged in the concept	Please select (a) yes for existing collaboration (b) no for no existing collaboration and (c) yes or no for potential collaboration	Please complete the following information		Please specify if there is cooper ation with e.g. oher researc h laborat ories or particip ation in ESFRI projects		
Name: Title: Address: Telephone Number: Email Address:	Type: e.g. Superco mputer, three dimensio nal scanner, prniter, microsco pe etc.			Accredita Need for tion field: Accredite e.g. ation: field needed: d method YES based on CYS EN 1744-1:1998 NO CYS EN 1744-1:1998	:	YES NO POTENTIAL COLLABORATIO N YES NO	Equivalen men / t women personnel : Research	Reposit Use of other Name: means to ensure Open Access:		NO	r

NOTES:

(1) For Research Infrastructures please fill table 1 and table 2 of the

(2) Additionally, if the Research Infrastructure hosts Research Laboratories, also fill table 3 of the excel file separately for each

(3) Please forward photos of the Research Laboratory to be uploaded on our website under the relevant section.

University of Cyprus (UCY)



- Status: Public Equivalent Body established by the Republic of Cyprus under the University of Cyprus Law 144/1989
- Seat: Nicosia
- Mission: "The advancement of science, knowledge, learning and education by teaching and research"
- Website: http://www.ucy.ac.cy/en/
- PSF Contact person: Mr. Marios Demetriades (demetriades.a.marios@ucy.ac.cy, Tel: 22894287)
- Mapping or Research Infrastructures: data not yet received



- Status: Public Equivalent Body established by the Republic of Cyprus under the Cyprus University of Technology Law N.198(I)/2003
- Seat: Limassol
- Mission: "To provide high-quality education and high-level training and to promote lifelong learning with modern pedagogical methods, to produce and disseminate scientific knowledge through research and teaching, and through contribution towards addressing challenges in the fields of Science and Technology, to become a catalyst for the state and society"
- Website: https://www.cut.ac.cy/?languageId=1
- PSF Contact person: Mrs. Marilia Panayiotou (<u>marilia.panayiotou@cut.ac.cy</u>, Tel: 25002348)



'					Technology
	Name of Research Infrastructure	Name of Research Lab	Scientific Domain / Category (MERIL)	Personnel	Funding (2018)
1.		Device Technology and Chemical Physics Laboratory	- Chemistry & Material Sciences- Engineering & Sciences- Physics, Astronomy, Astrophysics & Mathematics	1 Academic 3 Students	National funding: €189.000 Competitive funding: €250.000
2.		Robotics Control & Decision Systems (RCDS Lab)	- Engineering & Energy / Marine & Maritime Engineering Facilities	5 Researchers1 Academic8 Students	National funding: €6.000 Competitive Funding: €80.000
3.	Molecular Electronic & Photonics Research Unit (MEP)		 - Engineering & Energy - Information Science & Technology - Physics, Astronomy, Astrophysics & Mathematics - Chemistry & Material Sciences - ESFRI domain: Physical Sciences & Engineering 	4 Researchers 1 Technical 3 Academics 3 Students	Competitive funding: €500.000 Other: ERC Grant Agreement No. 647311
4.		Archimedes Solar Energy Laboratory (ASEL)	- Energy Engineering Facilities (non-nuclear)	4 Researchers 1 Academic 1 Administrative 2 Students	Competitive funding: €120.000
5.	Nanostructured Materials Systems (RUNMS)		- Chemistry & Materials Sciences/Materials Synthesis or Testing Facilities	6 Researchers 1 Technical 4 Academics 1 Administrative 7 Students	National funding: 80% of total funding Competitive funding: 20% of total funding
5a.		Computational Research Lab	- Chemistry & Materials Sciences/Materials Synthesis or Testing Facilities	3 Researchers 1 Technical 2 Academics 1 Administrative 2 Students	
5b.		Materials Synthesis Lab	- Chemistry & Materials Sciences/Materials Synthesis or Testing Facilities	3 Researchers 1 Academic 1 Administrative 3 Students	



		9			- reciliology
	Name of Research	Name of	Scientific Domain /	Personnel	Funding (2018)
	Infrastructure	Research Lab	Category (MERIL)		
5c.		Characterization Lab	- Chemistry & Materials Sciences/Materials Synthesis or Testing Facilities	3 Researchers 2 Academic	
			Synthesis of Testing Facilities	1 Administrative	
				2 Students	
6.		Data Intensive Computing	- Information Science &	1 Researcher	
		Research Lab	Technology/Distributed Computing Facilities	1 Academic 2 Students	
7.		Photonics and Optical	- Engineering & Energy/Electrical and Optical		
		Sensors Research	Engineering Facilities	1 Academic	
		Laboratory	- Physics, Astronomy, Astrophysics and	2 Students	
			Mathematics/Micro and Nanotechnology Facilities		
8.		Wireless Sensor Networks	- Earth & Environmental	1 Academic	
		Research Lab (CUT Air)	Sciences/Atmospheric Measurement	3 Students	
			Facilities/In Situ Earth Observatories		
9.		Network System and	- Network Science & Complex Systems	2 Academics	
		Science Research	- Big Data Analytics	6 Researchers	
		Laboratory	- Social Networks	1 Project Manager	
			- Computer Networks	2 Former Post- Doctoral	
				Researchers	
				1 Former Post-	
				Graduate Researcher	
10.	Centre for Social Research		- Social Sciences/Data Archives, Data	7 Researchers	
	and Regional Development		Repositories and Collections/National	3 Academics	
	HERACLITUS (Heraclitus)		Statistical Facilities/Registers and Survey-led	2 Students	
			Studies/Databases		



	Name of Research	Name of	Scientific Domain /	Personnel	Funding (2018)
	Infrastructure	Research Lab	Category (MERIL)		
11.	Euro-Mediterranean Research Center for Oncology and Palliative Care (ERCOPC)		- Biological & Medical Sciences/Clinical Research Centers - Social Sciences/Research Data Service Facilities	1 Researcher 2 Technical 1 Academic 4 Students	National funding: maximum Competitive funding: minimum Other: Pharma Industry
12.		Visual Sociology & Museum Studies Lab (VSMSIab)	Humanities & Arts	1 Academic 5 Students	National funding: University level Competitive funding: H2020/ITN Other: Consultancies
13.		Visual Media Computing Research Lab (VMC)	Information Science Technology/Distributed Computing Facilities	2 Researchers 1 Academic 10 Students	National funding
14.		Semiotics and Visual Communication Research Lab (SVCRlab)	Humanities & Arts/Collections	4 Academics 1 Student	National funding: University level Other: Consultancies
15.		Art & design elearning Lab- Design for Social Change (ADEL)	Humanities & Arts		
16.		Microsoft Computer Games and Emerging Technologies Lab (GET Lab)	Information Science & Technology/Software Service Facilities	3 Researchers 1 Academic 1 Student	National funding: University funding Competitive funding: H2020- Teaming-RISE-Stage 2
17.		Water & Health Lab	Biological & Medical Sciences/Clinical Research Centers/ Environmental Health Research Facilities/Genomic, Transcriptomic, Proteomics and Metabolomics Facilities Chemistry & Material Sciences/Analytical Facilities	1 Academic 1 Lab Manager 2 Research Fellows 2 PhD Students 1 MPH Student 1 Laboratory Fellow	National funding: Research Promotion Foundation Competitive Funding: H2020

Mapping of Research Infrastructures funded by the Government Cyprus University of

Cyprus University of Technology (CUT)

1	Name of Research	ame of Research Name of Scientific Domain / Personnel			
	Infrastructure	Research Lab	Category (MERIL)	T ersonner	Funding (2018)
8.	Department of Rehabilitation Sciences	Nescaren Eas	Biological & Medical Sciences/Clinical Research Centres		
18a.		University Rehabilitation Clinic- Speech Language Therapy		5 Researchers 1 Technical 1 Administration 1 Clinical Coordinator & Special Teaching Staff 30 Students	
18b.		TheraLab	Biological & Medical Sciences/Clinical Research Centres		Startup fund level Restart dual collaboration Innovation Vouchers Other: Cyprus Association of SLTs and National SLT Registry Council
18c.		Epilogo	Biological & Medical Sciences/Clinical Research Centres		Startup funding
18d.		AAClab	·	1 Researcher 1 Academic	
18e.		Neurorehabilitation Lab		2 Academics 2 Students	Other: Ch. 4/414
19.		Language and Graphic Communication Research Lab	Humanities & Art/Collections		National funding: University level Other: Consultancies
20.	Eratosthenes Research Centre		techniques to conduct both basic and applied research	1 Principal Investigator 17 Lab Members	
20a.		Atmospheric Remote Sensing Site (Part of Eratosthenes Research Centre)	Earth & Environmental Sciences/Atmospheric Measurement Facilities/In Situ Earth Observatories		Competitive funding Other sources
21.	Department of Agricultural Science, Biotechnology and Food Sciences (ABF)		Biological & Medical Sciences/Agronomy, Forestry, Plant Breeding Centres/Collections of Biological Resources/Genomic, Transcriptomic, Proteomic and		

Metabolomics Facilities/Structural Biology Facilities

Open University of Cyprus (OUC)



- Status: Public Equivalent Body established by the Republic of Cyprus under the Open University of Cyprus Law N.234(I)/2002
- Seat: Nicosia
- Mission: "To provide its students the opportunity for lifelong learning and for obtaining new knowledge and skills needed to start or progress with their professional careers, without having to engage into typical student work routines"
- Website: http://www.ouc.ac.cy/web/guest/home
- PSF Contact person: Mr. Michalis A. Savva (michalis.savva@ouc.ac.cy, Tel: 22411692)

Open University of Cyprus



	Name of Research Infrastructure	Name of Research Lab	Scientific Domain / Category (MERIL)	Personnel	Funding (2018)
1.		Educational Technology Lab	Educational technology	2 Researchers 1 Academic	National Funding: up to €120.000 Competitive Funding: up to €250.000 Other: up to €200.000
2.		Computational Cognition Lab	Cognitive processes often associated with individual or collective intelligence - such as learning, reasoning, sensing, communication, cooperation - and how these are employed by humans and other organisms in everyday life	5 PhD Students 1-4 MSc Students	Internally funded projects Horizon 202020 and EU Cohesion Funds up to €600.000
3.		Terrestrial Ecosystems Management (TemLab)	Earth & Environmental Sciences	1 Academic 3 Research Associates 5 PhD Students 2 PhD Alumni 8 MSc Alumni	
4.		Telecommunication Systems Research Lab	Wireless communications and support of teaching activities at OUC		
5.		Laboratory of Chemical Engineering and Engineering Sustainability			

The Cyprus Institute (CyI)



Status: Public Equivalent Body established in 2005

Seat: Nicosia

Mission: "To strengthen the research community of Cyprus, help transform its
economy to a knowledge-based economy and to create a research hub for
the Eastern Mediterranean region by developing pioneering research
infrastructures and programs involving cutting-edge, high throughput
technologies, in order to address problems of local and regional significance
and of international interest and providing high quality graduate education
and training in related areas"

Website: https://www.cyi.ac.cy/#

PSF Contact person: Mr. Euripides Stephanou (e.stephanou@cyi.ac.cy,

Tel.: 22208720)

The Cyprus Institute (CyI)



	Name of Research Infrastructure	Name of Research Lab	Scientific Domain / Category (MERIL)	Personnel	Funding (2018)
1.	Energy, Environment and Water Research Center (EEWRC)		Other: Atmosphere and Climate Energy and Renewables Water and Marine Resources	18 Faculty and Researchers 2 Adjunct	
1a.		Instrumentation Lab	Design, Develop and Test Instruments for Experimental Research, including research in atmospheric sciences		
1b.		Cyprus Atmospheric Observatory (CAO)	Atmospheric Measurement Facilities	8	
1c.		Unmanned Systems Research Laboratory (USRL)	Provide high quality services to relevant research projects while maintaining efforts to improve, to develop and to enhance current Unmanned Aerial Systems (UAS) capacities	9	

The Cyprus Institute (CyI)

	Name of Research Infrastructure	Name Research Lab	Scientific Domain / Category (MERIL)	Personnel	Funding (2018)
2.	Computation-Based Science and Technology Research Center (CaSToRC)		Other: Computational Sciences Climate Modelling Chemical Dynamics and Kinetic Modelling Computational Biology	8 Faculty 6 Researchers 3 Researcher Support 4 Post Docs 1 Administration 4 Visiting and Adjunct Facility 16 PhD Students	
2a.		Simulation Lab	Efficient usage of supercomputers for scientific applications	8	
2b.		Visualization Lab	Simulation and visualization research to better understand complex phenomena and translate data into images on large-scale and high resolution visualization walls or other display devices.		
2c.		Digital Cultural Heritage	Digital media technologies to improve the documentation, management, understanding and communication of cultural heritage	4	
3.	Science and Technology in Archaeology and Culture Research Center (STARC)		Development, introduction and use of advanced science and technologies in the field of archaeology, cultural heritage and history of the region	34	
3a.		STARLAB	Self-contained, mobile laboratory for archaeological analyses and investigations	Scientific personnel: Specialty/ies: (1) 3D documentation; (2) art history and archaeology; (3) chemical- physical diagnostics (to be recruited) Technical personnel: Specialty/ies: (1) geodesic engineering; (2) chemical engineering	Research Promotion Foundation's Framework Programme for Research, Technological Development and Innovation: 'Strategic Infrastructure Projects' Action

The Cyprus Institute of Neurology and Genetics (CING)



- Status: Public Equivalent Body established in 1990
- Seat: Nicosia
- Mission: "To develop and provide high level clinical and laboratory services, develop and pursue advanced innovative research and provide postgraduate education in the areas of Neurology, Genetics and Biomedical and Medical Sciences"
- Website: https://www.cing.ac.cy/
- PSF Contact persons: Mr. Leonidas Phylactou (<u>laphylac@cing.ac.cy</u>, 22392600), Mrs. Elena loannidou (<u>elenai@cing.ac.cy</u>, Tel: 22392614), Mrs. Kyproula Christodoulou (<u>roula@cing.ac.cy</u>, Tel: 22392649)

The Cyprus Institute of Neurology and Genetics (CING)



	7 I				
	Name of Research Infrastructure	Name of Research Lab	Scientific Domain / Category (MERIL)	Personnel	Funding (2018)
1.	The Cyprus Institute of Neurology and Genetics (CING)		Biological & Medical Sciences/Animal Facilities/Collections of Biological Resources/Bio-Informatics Facilities/Biological-Biomedical Engineering and Biotechnology-Nanotechnology Research Facilities/Biomedical Imaging Facilities/Cell Culture Facilities/Clinical Research Centres/Genomic, Transcriptomic, Proteomics and Metabolomics Facilities/Systems Biology/Computational Biology Facilities/Translational Research Centres Other: Forensic Genetics, Molecular Genetics of Diseases		
1a.		Mol Genetics Function Therapy	Molecular diagnostic services mainly for inherited diseases	7 Researchers 1 Technical 5 Academics (also acting as Researchers) 3 Students	National Funding: Research Promotion Foundation Competitive Funding: AFM grant Other sources: A.G. Leventis Foundation
1b.		Electron Microscope	Diagnostic services in the areas of predisposition to familiar cancer, in individuals with multiple cases of cancer in the family and mutated genes in certain types of cancers	3 FTE	National Funding Competitive Funding
1c.		Mouse Facility	Therapeutic, epidemiological, immunological and genetic aspects of myasthenia gravis, motor neuron disease, and other neuromuscular and rare neurological disorders	2 Researchers 3 Technical	National Funding: €40.000
1d.		Forensic Genetics	DNA-based typing methodologies to study evidence from civil, criminal, mass disaster and missing persons investigations	10 Researchers	National Funding: 97% Competitive Funding: 3%
1e.		Cardiovascular genetics	Studies aimed towards the understanding of the role of genetics, epigenetics and other factors that affect the expression of genes in the development of cardiovascular conditions in Cyprus	4 Researchers	Other sources: CSMM, Telethon, RCB Bank

The Cyprus Institute of Neurology and Genetics (CING)

	Name of Research Infrastructure	Name of Research Lab	Scientific Domain / Category (MERIL)	Personnel	Funding (2018)
1f.		Cytogenetics and Genomics	Clinical services, to develop research programs in the area of genetics		Other sources
1g.		Cytogenetics and Genomics_NGS	Next generation sequencing technology for genetic studies in humans		Competitive Funding
1h.		Molecular Virology	Serological and molecular methods for specific and accurate diagnosis of viral infections		
1i.		Bioinformatics	Applied bioinformatics to early diagnosis, effective prognosis and drug discovery contributing to the concepts of Preventive, Personalized and Precise Medicine	5 Researchers 5 Students	Competitive Funding: EU ERA- Chair BIORISE Project Funds of the CING Bionformatics Group (Total amount - €250.000 for 5 years until June 2020)
1j.		Neurogenetics	Diagnostic services for neurogenetic and other hereditary diseases prevalent in Cyprus and neighbouring countries	2 Researchers 2 Technical 2 Academics 1 Administrative 3 Students	National Funding Competitive Funding: EU/IMI, EU/H2020 Other sources: CSMM, Telethon, RCB Bank
1k.		Biochemical Genetics	Investigation of inherited metabolic disorders (inborn errors of metabolism)	1	
11.		Molecular Genetics Thalassaemia	Haemoglobinopathies and specialized diagnostic services, advanced education and research	6 Researchers 5 Technical 1 Academic 2 Students	National Funding Competitive Funding: €242.000 (for total duration of the projects) Other sources: €35.000 sub- contracting

Agricultural Research Institute (ARI)



- Status: Department under the Ministry of Agriculture, Rural Development and Environment (MARDE) / Agriculture-Fisheries Sector
- Seat: Nicosia
- Mission: "The rational increase of agricultural and livestock production and upgrade of product quality"
- Website:
 - http://www.moa.gov.cy/moa/ari/ari.nsf/index en/index en?OpenDocument
- PSF Contact Officer: Mr. Marinos Markou (<u>Markou@ari.gov.cy</u>, Tel.: 22403119)

Agricultural Research Institute (ARI)



	Name of Research Infrastructure	Name of Research Lab	Scientific Domain / Category (MERIL)	Personnel	Funding (2018)
1.	Agricultural Research Institute (ARI)		Biological & Medical Sciences/Agronomy, Forestry, Plant Breeding Centres/Animal Facilities/Collection of Biological Resources Earth & Environmental Sciences/Environmental Management Infrastructures/Geothermal Research Facilities/In Situ Earth Observatories	2 Researchers 2 Technical	National Funding Competitive Funding

Department of Fisheries and Marine Research (DFMR)



- Status: Department under the Ministry of Agriculture, Rural Development and Environment (MARDE) / Agriculture-Fisheries Sector
- Seat: Nicosia (central office), Larnaca-Famagusta District (Paralimni Fishing Shelter),
 Limassol-Zygi District Unit (Zygi Fishing Shelter), Paphos District Unit
- Mission: "Sustainable management and development of fisheries and aquaculture and the protection and preservation of the marine environment through an integrated scientific approach"
- Website:
 - http://www.moa.gov.cy/moa/dfmr/dfmr.nsf/index en/index en?OpenDocument
- PSF Contact Officer: Mr. Constantinos Moustakas (<u>cmoustakas@dfmr.moa.gov.cy</u>, Tel: 22807850)

Department of Fisheries and Marine Research (DFMR)



	Name of Research Infrastructure	Name of Research Lab	Scientific Domain / Category (MERIL)	Personnel	Funding (2018)
1.	Kalopanagiotis Fresh Water Aquaculture Research Station		Other: Fresh water Aquaculture	0.5 Researcher2.5 Technical0.5. Administrative	National Funding
2.	Cyprus Marine Aquaculture Research Center		Other: Marine Aquaculture	4.5	Annual State Budget

Department of Meteorology (DoM)



- Status: Department under the Ministry of Agriculture, Rural Development and Environment (MARDE) / Natural Resources Sector
- Seat: Nicosia (central office), Larnaca Airport, Athalassa Radiosonde Station,
 Paphos Airport
- Mission: "To provide services and information relevant to the weather and climate, aiming to the wellbeing of the people of Cyprus and the protection of their life and property"
- Website:
 - http://www.moa.gov.cy/moa/ms/ms.nsf/DMLindex_en/DMLindex_en?open_document#
- PSF Contact Officer: Mr. Filippos Tymbios (<u>f.tymbios@dom.moa.gov.cy</u>, Tel.: 22802954)

Department of Meteorology (DoM)



	Name of Research Infrastructure	Name of Research Lab	Scientific Domain / Category (MERIL)	Personnel	Funding
1.	Automatic Climatological Stations (AWS)		Earth & Environmental Sciences/Atmospheric Measurement Facilities/Earth, Ocean, Marine, Freshwater and Atmosphere Data Centres		National Funding Competitive Funding: Research programmes 20% Other sources: Aviation 10%
2.	Climatological Stations (Clima)		Earth & Environmental Sciences/Atmospheric Measurement Facilities/Earth, Ocean, Marine, Freshwater and Atmosphere Data Centres		National Funding Competitive Funding: Research programmes
3.	Meteorological Reporting System		Earth & Environmental Sciences/Atmospheric Measurement Facilities/Earth, Ocean, Marine, Freshwater and Atmosphere Data Centres		National Funding
4.	Radar Network (MRN)		Earth & Environmental Sciences/Atmospheric Measurement Facilities/Earth, Ocean, Marine, Freshwater and Atmosphere Data Centres		National Funding Other sources: Aviation 80%

Department of Agriculture (DoA)



- Status: Department under the Ministry of Agriculture, Rural Development and Environment (MARDE) / Agriculture-Fisheries Sector
- Seat: Nicosia/Kyrenia District Agricultural Office (DAO), Limassol DAO, Larnaca DAO, Famagusta DAO, Pafos DAO, Pitsilia DAO
- Mission: "To develop the agricultural-sector through training and guidance for farmers, planning and implementation of development programs"
- Website: http://www.moa.gov.cy/moa/da/da.nsf/index_en/index_en?OpenDocument

Department of Agriculture (DoA)



	Name of Research Infrastructure	Name of Research Lab	Scientific Domain / Category (MERIL)	Personnel	Funding (2018)
1.		Virgin Olive Oil Organoleptic Assessment	Biological & Medical Sciences/Agronomy, Forestry, Plant Breeding Centres (Food Science, sensory analysis)	3 Technical	National funding: 100%
2.	Section of Plant Protection and Apiculture		Biological & Medical Sciences/Agronomy, Forestry, Plant Breeding Centres	6 Researchers 4 Technical 10 Administrative 7 Workers	National funding: 100%
3.		Analytical Laboratories	Biological & Medical Sciences/Agronomy, Forestry, Plant Breeding Centres	8	National funding: 100%
4.		Oenological Laboratory	Biological & Medical Sciences/Agronomy, Forestry, Plant Breeding Centres	5	National funding: 100%

Geological Survey Department (GSD)



- Status: Department under the Ministry of Agriculture, Rural Development and Environment (MARDE) / Natural Resources Sector
- Seat: Nicosia
- Mission: "The safeguard of public interest through the identification, the exploitation and
 protection of mineral and groundwater resources, the investigation and assessment of
 the geological environment and geohazards, the monitoring and assessment of
 seismicity, the investigation of the foundation conditions, the protection and promotion
 of sites of geological and mining heritage and the production and dissemination of
 unbiased geo-information to society"
- Website:

http://www.moa.gov.cy/moa/gsd/gsd.nsf/dmlIndex_en/dmlIndex_en?opendocument

Geological Survey Department (GSD)



	Name of Research Infrastructure	Name of Research Lab	Scientific Domain / Category (MERIL)	Personnel	Funding (2018)
1.	Geological Survey Department (GSD)		Chemistry & Material Sciences/Analytical Facilities	6 FTE	Research Promotion Foundation Other sources: Transnational research program ERANETMED

Veterinary Services Department (VSD)

- Status: Department under the Ministry of Agriculture, Rural Development and Environment (MARDE) / Agriculture-Fisheries Sector
- Seat: Nicosia (central office), Larnaca, Limassol, Famagusta and Paphos District Veterinary Offices)
- *Mission*: "The reduction and eradication of animal diseases that exist in Cyprus, the prevention of the entry of other diseases in the country and, the protection of public health through the control of all food of animal origin and zoonoses"
- Website:

http://www.moa.gov.cy/moa/vs/vs.nsf/index en/index en?OpenDocument

Veterinary Services (VS)

	Name of Research	Name of	Scientific Domain /	Personnel	Funding (2018)
	Infrastructure	Research Lab	Category (MERIL)		
1.		Pathology Bacteriology &	Biological & Medical Sciences/Collections of	3 Technical	National Funding
		Parasitology Laboratory (PBPL)	Biological Resources/Biological –Biomedical Engineering and Biotechnology- Nanotechnology Research Facilities	1 Academic	EU Co-financing
2.		Virology Laboratory (VLab)	Biological & Medical Sciences/Collections of	2 Technical	National Funding
			Biological Resources/Biological –Biomedical Engineering and Biotechnology- Nanotechnology Research Facilities	1 Academic	EU Co-financing
3.		Bacteriology Serology	Biological & Medical Sciences/Collections of	4 Technical	National Funding
		Laboratory (BSL)	Biological Resources/Biological –Biomedical Engineering and Biotechnology- Nanotechnology Research Facilities		EU Co-financing
4.		Transmissible Spongiform	Biological & Medical Sciences/Collections of	5 Technical	National Funding
		Encepalopathies Laboratory (TSEs)	Biological Resources/Biological –Biomedical Engineering and Biotechnology- Nanotechnology Research Facilities	1 Academic	EU Co-financing
5.		Histopathology Laboratory	Biological & Medical Sciences/Collections of	1 Technical	National Funding
		(EIST)	Biological Resources/Biological –Biomedical Engineering and Biotechnology- Nanotechnology Research Facilities	1 Academic	EU Co-financing
6.		Laboratory for the Control	Biological & Medical Sciences/Collections of	11 Technical	National Funding
		of Food of Animal Origin (LSFAO)	Biological Resources/Biological –Biomedical Engineering and Biotechnology- Nanotechnology Research Facilities	3 Academics	EU Co-financing

State General Laboratory (SGL)



- Status: The Official Government Laboratory under the Ministry of Health
- Seat: Nicosia
- Mission: "The provision of high quality services to the authorities and the citizens through innovative management and technology for (a) the protection of public health and the environment focused on prevention, (b) the protection of citizen security and consumer rights, (c) the scientific support of legal, police and other state authorities and European Union Committees, (d) applied research aiming at utilization of national and European resources for scientific development and solution or prevention of specific problems, (e) constant development of infrastructure and know-how for managing new risks and crises"
- Website: https://www.moh.gov.cy/moh/sgl/sgl.nsf/index en/index en?OpenDocument
- Mapping of Research Infrastructures: data not yet provided

Thank you