



## Prof. Electra Gizeli, FRSC

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### 1. EDUCATION

1988-1993	Ph.D. University of Cambridge, Institute of Biotechnology (Newnham College), UK <i>Supervisor: Prof. C.R. Lowe</i>
1987-1988	M.Sc. University College London, UK
1982-1987	B.Sc. Chemistry, National and Kapodistrian University of Athens, Greece

### 2. POST-DOCTORAL EXPERIENCE

1996-2002	BBSRC David Phillips Research Fellow, Univ. of Cambridge, Inst. of Biotechnology, UK
1998	Visiting Research Fellow, Sandia National Laboratory, Albuquerque, New Mexico, USA
1995	Visiting Fellow, Ecole Polytechnique Federal de Lausanne, Switzerland
1994-1996	Senior Research Associate, University of Cambridge, Inst. of Biotechnology, UK

### 3. ACADEMIC POSITIONS

2015-today	Full Professor, Dept. of Biology, Univ. of Crete
2010-2015	Associate Professor, Dept. of Biology, Univ. of Crete
2006-2009	Tenured Assistant Professor, Dept. of Biology, Univ. of Crete
2003-2006	Assistant Professor, Dept. of Biology, Univ. of Crete
2004-today	Research Professor, IMBB-FORTH, Greece
2002-2003	Lecturer, Sidney Sussex College, University of Cambridge, Inst. of Biotechnology, UK

### 4. DISTINCTIONS – FELLOWSHIPS - AWARDS

2023	Ranked within 2% of top scientists worldwide based on research-impact (J.P.A. Ioannidis, 4/10/23)
2023	Elected Member of the European Molecular Biology Organization (EMBO)
2022-	Elected Member of the Scientific Advisory Board of the Global Health European and Developing Countries Clinical Trials Partnership (EDCTP3) Joint Undertaking
2022	Leviner Distinguished Fellow, Ben Gurion University
2019	Elsevier, Editorial Board Member “Sensors and Actuators Reports”
2018	Panhellenic Society of Bioscientists, “Fotis Kafatos Lab box” competition, 1 <sup>st</sup> Award
2017	“Excellence in Innovation and Entrepreneurship” competition, Greece, 1 <sup>st</sup> Award
2016	Elected Fellow of the Royal Society of Chemistry (FRSC)
2016	Lead Guest Editor, Sensors and Bio-Sensors Research Journal, Elsevier
2015	Nokia Open Innovation Challenge Award, Finland
2014	Leviner Distinguished Fellow, Ben Gurion University
2013-2014	Max Planck Institute-Intelligent Systems, Stuttgart, Germany, Visiting Professor (3 Months)
2013	“Greece Innovates” 2013; Shortlisted in top 10 most Innovative research groups
2008	Adjunct Professor, Dept. Electrical & Computer Engineering, Marquette University, USA
1998	Sandia National Research Laboratories, USA, Visiting Fellows (4 Months)
1997	Elected Fellow of Sidney Sussex College, University of Cambridge, UK
1996-2002	BBSRC David Philips Junior Research Fellow, UK
1995	Royal Society, UK, Visiting Research Fellow (EPFL, Switzerland, 6 Months)

### 5. MEMBER OF SOCIETIES

- The Royal Society of Chemistry (FRSC) (UK)	- European Molecular Biology Organization, Germany
- Association of Greek Chemists (Greece)	- American Chemical Society (USA)

**6. REFEREE FOR RESEARCH PROGRAMS**

- EC Reviewer & Evaluator of FP6/FP7/Horizon2020 research proposals and funded research projects
- NHS, National Institut for Health Research, UK
- Welcome Trust, UK
- Government of the Hong Kong, Innovation and Technology Commission (ITC)
- The Danish Council for Independent Research/Technology and Production Sciences
- Portuguese Foundation for Science and Technology (FCT)
- French National Agency (ANR) and Institut National de la Santé et Recherché Medical (INSERM)
- Human Frontier Science Program (HFSP)
- Biotechnology and Biological Sciences Research Council, UK
- Engineering and Physical Sciences Research Council, UK

**7. CONFERENCE ORGANIZATION**

- pHealth2016 (<http://www.phealth2016.eu/index.html>), Member of the Scientific Committee; Chairing Local Organizing Committee; Conference Co-Chairperson
- Organizing Workshop on “Acoustic wave sensors for biophysical and Bioanalytical studies”, Crete 2013 (funded by the EC-ICT)
- Member of the Scientific Committee of the 34<sup>th</sup> International Conference on Micro- and Nano-Engineering 2008, Athens, Greece
- Member of the Scientific Committee of the IEEE International Frequency Control Symposium 2007, Switzerland
- Member of the Scientific Committee of the IEEE International Frequency Control Symposium 2006, USA
- Member of the Scientific Committee of the Chemical Microsensors and Applications, 2000, USA

**8. REFEREE FOR SCIENTIFIC JOURNALS**

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|--|--|
| • Journal of the American Chemical Society                               | • Science Advances                       |
| • Angewandte Chemie Int Edition  | • Biophysical Journal                    |
| • Biosensors and Bioelectronics  | • Advanced Materials                     |
| • Analytical Chemistry   | • Journal of Physical Chemistry          |
| • Reviews in Analytical Chemistry  | • Sensors and Actuators B                |
| • IEEE Journal of Sensors  | • American Chemical Society (ACS) Nano   |
| • IEEE Transactions on Ultrasonics, Ferroelectrics and Frequency Control | • Langmuir                               |
| • Biochemistry   | • Smart Materials and Structures         |
| • Journal of Applied Physics   | • Journal of Polymer Science             |
| • Current Opinion in Biotechnology                                       | • Colloids and Surfaces B: Biointerfaces |
|  | • Trends in Biotechnology                |

**9. CONSULTING/INNOVATION ACTIVITIES**

- Co-Founder of “BIOPIX-T” (<https://biopix-t.com/>), Greece Dec. 2019, FORTH spin-off company
- Co-Founder of start-up “AWS Dx” (<https://awsensorsdx.com/>), Spain 2017
- Member of the experts’ team on “Advanced micro/nano/bio medical devices” established within the program “Advancement of human capacity 2007-2013 in Greece” (funded by the EC)
- Consultant to:
  - Econous Systems Inc., Canada; spin-off company from Prof. M. Thompson’s research group at Univ. of Toronto, 2015-today; Member of the Scientific Advisory Committee
  - Microtechnology Centre, Australia, 2006-2007; Consulting on product-development for bacteria detection with acoustic biosensors
  - Atonomics, Copenhagen, Denmark, 2004-2005; Development of genetic acoustic-based Point-of-Care system
  - Cambridge PA Consulting, UK, 2001-2002; Consulting on liposomes for drug-encapsulation
  - Unipath, UK, 2001-2003; Consulting on acoustic sensors capability to detect low Mw analytes
  - Cambridge Environmental Company, UK, 1995; Acoustic sensors for monitoring humidity

**10. ADMINISTRATION**

- Member of the Scientific Advisory Board of the Global Health European and Developing Countries Clinical Trials Partnership (EDCTP3) Joint Undertaking (2022-2024)
- Director of the Mentoring and Career Track Scheme (MCTS) Committee, IMBB-FORTH (2022)
- Deputy Director, IMBB-FORTH (2018-now)
- Member of the General Assembly of the Hellenic Foundation for Research and Innovation (HFRI); Representative (Deputy) of the University of Crete (2018-2023)
- Elected member of the Scientific Advisory Board of IMBB-FORTH (2010-now)
- Coordinator of fifteen scientific consortia carrying out multidisciplinary research (funded by the EC, HFSP, BBSRC and GSRI)
- Undergraduate Students Tutor, Dept. of Biology, Univ. of Crete
- Member of the Committee for Undergraduate Studies, Dept. of Biology, Univ. of Crete (2008-2013 & 2022-)
- Member of the Evaluation Committee, Dept. of Biology, Univ. of Crete (2008-today)
- Coordinator of “Nano/biotechnology” module, M.Sc. on Protein Biotechnology, Dept. of Biology, UoC (from 2005)
- Member of the Steering Committee of M.Sc. programs on “Protein Biotechnology” and “Molecular Biology and Biotechnology”, Dept. of Biology, Univ. of Crete (2005-today)
- Member of the Management Committee, Inst. of Biotechnology, Univ. of Cambridge, UK (1996-2002)
- Students' Tutor, Sydney Sussex College, Univ. of Cambridge, UK (2001-2002)
- Member of the Governing Body, Sydney Sussex College, Univ. of Cambridge, UK (1997-2002)

**11. CONFERENCE PRESENTATIONS****Conferences (last 6 years)**

1. 5<sup>th</sup> International Conference on Bio-Sensing Technology: Grammoustianou et al., “A liquid biopsy platform combining a High Fundamental Frequency QCM device with “dynamic chemistry” for detecting mutations in circulating tumor DNA”, Riva del Garda, Italy, May 7<sup>th</sup>-10<sup>th</sup>, 2017 (poster)
2. ISOCS-MiNaB-ICT-MNBS joint event on “Sensing for smart anything anywhere: materials, technologies, applications” Gizeli et al., Otranto June 2016, (oral)
3. BIOSENSORS 2016: Grammoustianou et al., “On-chip DNA isothermal amplification and detection using a Quartz Crystal Microbalance (QCM) device”, Gothenburg, Sweden, May 25<sup>th</sup>-27<sup>th</sup>, 2016 (poster)
1. 4<sup>th</sup> International Conference on Biosensing Technology, Gizeli et al., Lisbon 2015 (oral)
2. Microfluidics Congress 2015, G. Kaprou, E. Gizeli et al., London October 2015 (poster)
3. SPIE Microtechnologies BioMEMS and Medical Microdevices, Kaprou, E. Gizeli et al., Barcelona, May 2015 (oral)
4. 10<sup>th</sup> PanHellenic Conference of Chemical Engineering, G. Kaprou, E. Gizeli et al., Patras, Greece, June 2015 (poster)
5. 6<sup>th</sup> International Conference Micro&Nano, Kaprou, Gizeli et al., (oral), Athens, October 2015 (oral)
6. 41<sup>st</sup> Micro and Nano Engineering, Kastania, Gizeli et al. The Netherlands, September 2015 (oral)
7. Lab on Chip Conference, Tsougeni, Gizeli et al., Berlin, March 2015 (oral)
8. AVS 61<sup>st</sup> International Symposium, Gizeli, Tsortos et al., Baltimore 2014 (oral)
9. 39<sup>th</sup> International Conference on Micro and Nano Engineering, Papadopoulos, Gizeli et al., London 2013 (poster)
10. 5<sup>th</sup> International Conference on Micro-Nanoelectronics, Nanotechnologies and MEMS devices, A.K. Pantazis, G. Konstantinidis, E. Gizeli, Greece, 2012 (oral)
11. 63<sup>rd</sup> Congress of the Hellenic Society of Biochemistry and Molecular Biology, K. Bakela, E. Gizeli et al., Crete 2012 (poster)
12. PITTCON 2012, G. Papadakis, A. Tsortos, E. Gizeli, Orlando USA 2012 (oral)
13. Biophysical Society Meeting 2012, P. Mateos-Gil, A. Tsortos, G. Rivas, E. Gizeli, M. Velez USA 2012 (poster)
14. EuroSensors XXV, K. Mitsakakis, A. Tserepi, E. Gizeli, Greece 2011 (poster)
15. NanobioEurope, E. Gizeli, K. Mitsakakis, Cork, Ireland, 2011 (oral)
16. NanobioEurope, A. Tsortos, G. Papadakis, E. Gizeli, Ireland, 2010 (poster)
17. FACSS 2010, L. Steller, M. Laughsh, H. Schmidt, R. Jessberger, E. Gizeli, 2010, USA (poster)
18. NanobioEurope, E. Gizeli, A. Tsortos, G. Papadakis, Germany 2010 (oral)
19. 2<sup>nd</sup> International Conference on Drug Discovery and Therapy, A.K. Pantazis, E. Gizeli and G. Konstantinidis, Dubai, 2010 (oral)

## Invited Speaker

## (a) Conferences-Workshops

1. Laboratory Medicine for Mobile Societies in our area (LF4MB) (<https://lm4ms.org/>) 2-5 October 2022, Heraklion, Crete, Invited lecture on "Sensor systems applications for the molecular analysis at the POC"
2. Dept. of Chemistry, Ben Gurion University, "Employing acoustic wave biosensor for applications in health care and agro/food safety", Leviner Distinguished Invited Lecture, 2022
3. "2nd International Electronic Conference on Biosensors", 14-18 February 2022, Keynote presentation
4. International workshop "Acoustic methods in the study of affinity interaction at surfaces" Horizon 2020 (MSCA-RISE-2020), 16 November 2021 Plenary Lecture
5. 1st EFLM/AFCB Conference on Laboratory Medicine for Mobile Societies (LM4MS), 18-20 Febr. 2021, web-conference
6. 18th National Congress, Greek Society of Clinical Chemistry/Biochemistry, 15-17 Oct. 2020
7. 8th Annual Diagnostics Innovation Summit, "Developing Rapid Tests and Liquid Biopsies", Lisbon, Portugal
8. EU Workshop "Smart Bioelectronic and Wearable Systems", 22-23 October 2019, Brussels (Keynote)
9. 12th RME2018 (Rapid Methods Europe Conference), Amsterdam, the Netherlands, 5-7 Nov. 2018
10. 1st International Conference on Nanotechnologies and Bionanosciences, Heraklion, Crete, 24-28 Sept. 2018
11. 10th International Conference of Instrumental Methods of Analysis (IMA)-2017, Heraklion, Greece, September 2017 (Plenary Lecture)
12. Nanoscience and Nanotechnology at Interfaces, April 2017, The Hebrew Univ. of Jerusalem, Israel (Invited)
13. 67th Panhellenic Conference of the Hellenic Society for Biochemistry and Molecular Biology, Nov. 2016, Ioannina, Greece (Invited)
14. Israel-Greece Meeting on Nanotechnology and Bioscience, Heraklion, Greece, October 2016 (Invited)
15. Micro- and NanoEngineering (MNE) 2016, September 2016 Vienna (Invited)
16. Hellenic Forum 2016, Workshop on Lab on Chip for diagnostics and food analysis, July 2016, Athens (Invited)
17. International Workshop "Acoustic and electrochemical methods in the study of affinity interactions at surfaces", Bratislava 2016 (Keynote)
18. SAW Symposium 2014, The role of SAW devices in clinical; and diagnostic platforms, E. Gizeli, Viena, 2014 (Keynote)
19. 11th International Conference on Nanosciences & Nanotechnologies, Thessaloniki, Greece, 2014
20. MinaSens Workshop on "Miniaturized biochemical sensing devices and systems for health/food/environmental monitoring", EC-funded, Athens, 2013 (Invited)
21. 4th ANKA/KNMF Joint Users Meeting, Karlsruhe, Germany 2012 (Invited)
22. Workshop on "QCM-D as a tool to study cells at an interface", organized by Chalmers University of Technology, Dept. of Applied Physics, Gothenburg, and Q-Sense, Sweden, 2012 (Invited)
23. 1st International Workshop on Novel Developments & Applications in Sensor Technology, Coburg, Germany 2009 (Invited)
24. "Research activities on Nanobiotechnology in Greece", Organized by Nano2Life EC-funded Consortium, Greece (Invited)
25. IEEE International Ultrasonics Symposium, 2006, Vancouver, Canada (Invited)
26. EuroNanoForum 2005, Nanotechnology and the Health of the EU Citizen in 2020, European Commission, 2005, Edinburgh, UK (Invited)
27. Gordon Research Conference, Chemical Sensors and Interfacial Design, 2000, New Hampshire, USA,
28. Immunoassays of the '90s, The Royal Society of Chemistry, 1993, London, UK (Invited)

## 12. RESEARCH GRANTS

<i>Total No of grants:</i>	<b>42</b>	<i>Coordinator/PI:</i>	<b>33</b>
<i>Total funding:</i>	<b>23.8M €</b>	<i>Biosensors Lab:</i>	<b>8.84M €</b>
<i>International:</i>	<b>2 (HFSP)</b>	<i>European:</i>	<b>19 (13 Horizon, 2 FP7, 1 FP6, 3 M.Curie Fellowships - Host)</b>
<i>National:</i>	<b>15 (9 Greek, 6 UK)</b>	<i>Industrial/other:</i>	<b>12</b>

## GRANTS OBTAINED IN THE PERIOD 2003-2023, UNIV. OF CRETE/IMBB-FORTH

*(i) Competitive research grants*

Period	Funding Body/ Type of Grant	Title	No of Participants	Role	Total Funding (€)	Biosensors Funding (€)
2024-2027	<b>HORIZON-HLTH-2023-TOOL-05</b>	Development of a global diagnostic ecosystem for detecting and monitoring emergency-prone pathogens across species and in a unified way	11	<b>Coordinator</b>	5.540M	<b>1.284M</b>
2024-2027	<b>HORIZON-CL6-2023-FARM2FORK-01</b>	Next Generation Biopesticides for the control of the most "difficult-to-manage" pests and pathogens in fruits and vegetables	22	Participating Member		<b>100,000</b>
2024-2026	<b>HORIZON-CL6-2023-ZEROPOLLUTION-01 RIA</b>	On-site biological sensing for aquatic pollutants and biohazards	8	<b>Coordinator</b>	3.8M	<b>917,000</b>
2023-2027	<b>NextGeneration EU-Greece 2.0 - National Recovery &amp; Resilience Plan/ Flagship actions</b> in interdisciplinary scientific areas with of particular interest to the productive fabric	Innovations in Plant Protection for sustainable and environmentally friendly pest control Acronym: InnoPP	>10	Participating Member		<b>120,000</b>
2021-2022	<b>H2020 DIH-World RA</b>	ROPID: A digital IF for safe cereal crops in the agrifood sector	2	Participating Member		<b>10,000</b>
2020-2024	<b>HORIZON2020 Blue Growth-2020-1 RA</b>	Technologies for ocean sensing	13	Participating Member		<b>679,250</b>
2021-2023	<b>EC-H2020-SC1-PHE-CORONAVIRUS-2020-2-CNECT RIA</b>	Market release of a portable device for COVID-19 at the point-of-care; a global diagnostics approach	8	<b>Coordinator</b>	2.4M	<b>252,000</b>
2021-2022	<b>HFRI 4<sup>th</sup> Call, Science &amp; Society</b>	Acoustic biosensor for rapid and sensitive COVID-19 antibodies detection in whole blood and at the point-of-care	2	<b>Coordinator</b>	99.5K	<b>81,400</b>
2020-2023	<b>ESPA Research-Creat-Innovate</b>	Development of novel technologies for monitoring viral diseases-vectors of citrus & evaluation of defense mechanism activation	4	Participating Member		<b>121,630</b>
2020-2023	<b>Human Frontier Science Program</b>	Self-organization and biomechanical properties of the endosomal membrane	4	<b>Coordinator</b>	1.350M	<b>450,000</b>
2020-2023	<b>H2020-MSCA-RISE-2018</b>	Novel approaches for plant-health monitoring	7	Participating Member		<b>60,000</b>
2020-2022	<b>HORIZON2020 FET-OPEN-2018-2020 RIA</b>	Towards an instrument-free future of molecular diagnostics at the point-of-care	5	<b>Coordinator</b>	3.052M	<b>1,146,250</b>
2019-2021	<b>Region of Crete RIS3</b>	Development of integrated system for plantborne pathogens detection in the field	2	<b>Coordinator</b>	215,000	<b>127,500</b>
2019-2020	<b>Patras Science Park Proof-of-Concept</b>	Digital colorimetric DNA analysis in real time	1	<b>Coordinator</b>		<b>50,000</b>
2019-2020	<b>Ministry of Education Flagship initiative</b>	Olive pathways	Several	Participating Member		<b>40,000</b>
2017-2020	<b>HORIZON2020 FET-OPEN-2015 RIA</b>	Capturing non-amplified tumor circulating DNA with ultrasound hydrodynamics	7	<b>Coordinator</b>	3.412M	<b>682,500</b>
2016 3 months	<b>Institut Français</b>	Study of membrane permeabilization with acoustic biosensors	2	<b>Principal Investigator</b> Greek team	12,000	<b>6,000</b>

2016-2019	<b>HORIZON2020</b> KET-2015	A portable MicroNanoBioSystem and Instrument for ultra-fast analysis of pathogens in food: Innovation from LOVE-FOOD prototype to pre-commercial instrument	7	<b>Coordinator</b>	3.152M	<b>809,791</b>
2016-2019	<b>HORIZON2020</b> KET-2015	Reliable Novel Liquid Biopsy technology for early detection of colorectal cancer	6	Participating Member		<b>450,000</b>
2013-2015	<b>EC/GSRT</b> (KRIPIS)	Development of interdisciplinary research actions for systems biology	1	Participating Member		<b>25,000</b>
2013-2015	<b>EC-FP7</b> REGPOT-2011-1 CSA	Unlocking the innovative capacity of multidisciplinary structural biology-driven research in Crete	1	Participating Member		<b>92,000</b>
2013-2015	<b>GSRT</b> Synergasia 2011	Converging Lamb wave sensors with microtechnologies towards an integrated Lab-on-chip for clinical diagnostics	4	<b>Coordinator</b>	299,032	<b>80,480</b>
2012-2015	<b>EC FP7-ICT: Micro-Nano-Bio</b>	Love wave fully integrated Lab-on-chip platform for food pathogen detection	7	<b>Coordinator</b>	2.997M	<b>652,965</b>
2011-2013	<b>Ministry of Education</b> Heraclitus II	Study of the mechanism of interaction of antimicrobial peptides $\alpha$ -defensins using biosensors	1	<b>Principal Investigator</b>		<b>45,000</b>
2009-2011	<b>GSRT/DAAD</b> Bilateral	Biosurfaces and devices for the study of cancerous cells and the specific activation of T-lymphocytes	2	<b>Principal Investigator</b> Greek team	20,000	<b>10,000</b>
2008	<b>ELKE</b> Univ. of Crete	Acoustic study of the mechanism of action of the anti-microbial peptide Crp4	1	<b>Principal Investigator</b>		<b>3,500</b>
2007-2009	<b>EC-FP6</b> Marie Curie Research Training Network	European network on selection and analysis of protein-protein interactions	10	Participating Member		<b>147,139</b>
2006-2008	<b>GSRT</b> ENTER	Study of the elusion profile of immobilized BMP-2 and VEGF proteins from implants using biosensors	1	<b>Principal Investigator</b>		<b>80,000</b>
2006-2009	<b>GSRT</b> PENED	Biosensor for probing protein interactions	3	<b>Coordinator</b>	139,450	<b>46,483</b>
2005-2006	<b>Ministry of Education</b> Pythagoras II	Development of polymer surfaces for the formation of membrane arrays	1	<b>Principal Investigator</b>		<b>37,250</b>
2004-2007	<b>Human Frontier Science Program</b>	Mechanism of antimicrobial peptide interactions with the target cell membrane	4	<b>Coordinator</b>	1.107 M	<b>377,100</b>
2004-2006	<b>GSRT/British Council</b>	Polymer patterns for the formation of membrane arrays	2	<b>Principal Investigator</b> Greek team	23,000	<b>11,500</b>
<i>Total</i>					<b>23.85M</b>	<b>8.03M</b>

**(ii) Marie Curie Fellowships (Biosensors Lab, IMBB-FORTH: Host)**

Year	Type of Fellowship	Title	Budget (€)
2012	<b>Intra European Fellowship IEF</b>	Cellular Analyses of APCs and T-cells on SAW-based Platform for Early and Multiplex Disease Diagnosis	(Fellow took up permanent position)
2011	<b>Marie Curie Career Integration Grant CIG</b>	Nanoparticle-Cell Interactions, a Pathway for Understanding Nanotoxicity: from a Model System to in vitro Systems	(Fellow took up permanent position)
2005	<b>Marie Curie European Return and Reintegration Grant</b>	Mechanism of interaction of antimicrobial peptides with the cell membrane using biosensors	<b>40,000</b>
<i>Total</i>			<b>40,000</b>

**(iii) Other**

Year	Type of Grant	Title	Budget (€)
2021 (12 months)	<b>Industrial Research Grant</b> Funded by AWS, Spain	Development of an acoustic platform for immunetesting	12,000
2012 (6 months)	<b>Collaboration</b> IMDEA Nanociencias, Madrid, Spain	Study of the interaction of ZipA with a model membrane using acoustic techniques	5,000
2006 (3 months)	<b>Industrial</b> Microtechnology Centre Ltd, Australia	Evaluation of Love wave sensor towards the detection of <i>Legionella</i> bacteria	30,000
<i>Total</i>			<b>47,000</b>

## GRANTS OBTAINED IN THE PERIOD 1995-2002, UNIV. OF CAMBRIDGE, UK

**(i) Competitive reseach grants**

Period	Funding Body	Title	No of Participants	Role	Total Funding (€)	Biosensors Funding (€)
1999-2002	<b>BBSRC UK</b>	Development of acoustic wave sensors for biochemical analysis	2	<b>Project Coordinator</b>	315,000	239,450
1999	<b>Nuffield Foundation, UK</b>	Equipment Grant	1	<b>Principal Investigator</b>		5,000
1998-1999	<b>Royal Society, UK</b>	Equipment Grant	1	<b>Principal Investigator</b>		8,000
1997-1999	<b>British Council UK</b>	Research Grant (Bilateral)	1	<b>UK Principal Investigator</b>		6,300
1996-2002	<b>BBSRC UK</b>	Novel acoustic wave geometries for clinical diagnosis	1	<b>Principal Investigator</b>		323,900
1995	<b>Research Council (UK/Switzerland)</b>	Study of lipid bilayers using acoustic and optical biosensors	1	<b>UK Principal Investigator</b>		15,800
<i>Total</i>						<b>598,450</b>

**(ii) Other**

Period	Funding Body	Type of grant	No of Participants	Role	Total Funding (€)	Biosensors Lab Funding (€)
1999-2000	<b>Sandia National Laboratory, USA</b>	Research Grant	1	<b>Principal Investigator</b>		67,940
1999	<b>Unilever Research Colworth, UK</b>	Industrial Grant	1	<b>Principal Investigator</b>		47,400
<i>Total</i>						<b>115,340</b>

**13. TEACHING EXPERIENCE****UNIV. OF CRETE, DEPT. OF BIOLOGY 2003-today****Undergraduate courses**

2004-today

Compulsory course on "Organic chemistry"

2005-today

Elective course on "Micro/nanotechnology in biology and molecular diagnostics"

**Graduate Courses**

2004-today

"Technologies for characterizing proteins at surfaces and nanobiotechnology" Module BIO 1504 M.Sc. courses on Protein Biotechnology &amp; Molecular Biology and Biotechnology

2004-today

"Application of AFM in biological studies" and "Sensors and integrated systems for diagnostic purposes", MSc courses on Protein Biotechnology &amp; Molecular Biology and Biotechnology

**Summer Schools**

2006-2008

"Methods in micro-nanotechnology and nanobiotechnology", EC-funded course within Nano2Life programme, NCSR-D, Athens

2004

"Biosensors; Application in Biology and Biotechnology", Dept. of Physics, Univ. of Crete

**Students' supervision**

Ph.D.: 15

M.Sc. thesis: 38

Post doctoral researchers: 22

Bachelor thesis ("Ptychiaki"): 30

**INTERNATIONAL**

2009 “Biosensors” M.Sc. course on “Analytical Instruments, Measurement & Sensor Technology”, School of Optical, Electrical & Computer Engineering, University of Shanghai for Science & Technology/CHINA & Coburg University/Germany

**UNIVERSITY OF CAMBRIDGE, 1997-2003****Undergraduate courses**

2001-2003 *Biology of Cells*, Trinity Hall and Sidney Sussex College, Natural Sciences, University of Cambridge, UK

1997-1998 *Inorganic Chemistry*, Sidney Sussex College, Natural Sciences, University of Cambridge, UK

**Graduate Courses**

1997 “Molecular Sensor Technology”, Univ. of Cambridge, UK, Graduate Erasmus course

**Students' supervision**

Ph.D.: 2; M.Sc.: 3; Rotation: 1

**14. PUBLICATIONS**

<i>Reviewed articles in journals:</i>	88	<i>Patents:</i>	6
<i>Invited articles:</i>	3	<i>Corresponding author:</i>	64
<i>Edited Books:</i>	2	<i>Citations (google):</i>	4226
<i>Book chapters:</i>	4	<i>h factor (google):</i>	37
<i>Conference proceedings:</i>	6		

**Editor**

- Biomolecular Sensors**  
Eds E. Gizeli, C.R. Lowe, Taylor & Francis, UK, 2002
- pHealth 2016**  
Eds N. Maglaveras, E. Gizeli, IOS Press, 2016

**Book chapters**

- Handbook of Immunoassay technologies: Approaches, Performances and Applications**  
Ed. SK. Vashist and J. Luong  
Grammoustianou A., E. Gizeli, Chapter on “Acoustic wave-based immunoassays”, pp. 203-216, Elsevier, Academic Press, London, UK, 2018
- Handbook of Biosensors and Biochips, Eds C.R. Lowe, D. Cullen, H.W. Weetall and I. Karube  
K. Melzak, E. Gizeli “Love Wave Biosensors”, John Wiley & Sons, 2007
- High frequency acoustic wave devices for analyses of planar lipid bilayers Eds H.T. Tien & A. Ottava  
K. Melzak, E. Gizeli “Advances in planar lipid bilayers and liposomes”, Elsevier Academic Press, 2005
- Biomolecular Sensors Eds E. Gizeli, C.R. Lowe  
E. Gizeli “Acoustic Immunosensors”, Taylor & Francis, UK, 2002

**Guest Editor**

- Sensing and Bio-Sensing Research, Elsevier, Special issue on “Acoustic wave sensor technology for biophysical and bioanalytical studies”, 2016, in preparation

**Patents**

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#### Peer-reviewed articles in conference proceedings

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  4. K. Mitsakakis, A. Tserepi, E. Gizeli  
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A. Tsortos, G. Papadakis, E. Gizeli, *IEEE International Frequency Control Symposium Proceedings*, 2008, 346-349
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## 15. PRESS AND MEDIA RELEASES - DISSEMINATION TO THE PUBLIC

1. Participation in La French Tech Athens. Invited member of the panel on "Women led Healthcare Companies and Biotech Startups: Science and Innovation combined", French Embassy, Athens (Oct. 2023)
2. Participation in the "13<sup>th</sup> FORTH Scientific Retreat" & the "Researchers Night" (Oct. 2022)
3. Our innovation exploited by spin-off company BioPix-T reaches the market with two products: Pebble, a portable device to perform real-time quantitative LAMP at the point-of-care, and one assay for COVID-19 (Oct. 2021)  
<https://startupper.gr/news/75580/i-proti-foriti-diagnostiki-syskevi-covid-tis-biopix-t-vgike-stin-agora/>
4. Press release for the article "Hybrid Sensor Device for Simultaneous Surface Plasmon Resonance and Surface Acoustic Wave Measurements" (Sensors 2020) in HFSP News and Events site  
<https://www.hfsp.org/hfsp-news-events/combined-optical-and-acoustic-biosensor-better-understand-surface-binding-events>
5. Interview of Dr. Gizeli to Y. Elafros at "Kathimerini" newspaper talking about the novel device and rapid molecular test developed in Biosensors' lab for COVID-19 and for the point-of-care.  
<https://www.kathimerini.gr/society/561177415/elliniko-ergastirio-tsepis-gia-grigora-test/> (29-11-2020)
6. Article in the Business section of the Greek newspaper Kathimerini devoted on the lab's new portable molecular diagnostic device and its commercial release in the next few months for the detection of SARS-CoV-2. FORTH's spin off company BioPix-T has undertaken the commercial exploitation of the technology.  
<https://www.kathimerini.gr/economy/561157942/foriti-syskeyi-anichneysis-koronoioy-made-in-greece/> (14-11-20 by D. Konti)
7. To Vima Science <https://www.tovima.gr/2020/09/11/science/diagnosi-edo-kai-tora/> article on "Diagnostic analysis on the spot", with reference to the H2020-SC1-PHE-CORONAVIRUS-2020-2 EU grant on "Market Release of a Portable Device for COVID-19 at the Point-of-Care; a Global Diagnostics Approach" awarded on August 2020 (11-08-20 by I. Soufleri)
8. Patris newspaper, article on the newly developed methodology for SARS-CoV-2 detection at the point-of-care  
<https://www.patris.gr/2020/09/12/ereynitiki-omada-toy-ite-schediase-syskeyi-gia-test/>
9. Kathimerini, article on resrach activities in Prof. Gizeli's lab on the development of a SARS-CoV-2 molecular test (<https://www.kathimerini.gr/1073824/article/epikairothta/ellada/sth-maxh-gia-ellhnika-test-diagnwshs-toy-ioy>) (14-04-20 by N. Blatsiou)
10. 360Dx platform, article on our work related to COVID-19 novel detection platform (28 Aug. 2020)  
<https://www.360dx.com/infectious-disease/greek-researchers-developing-point-care-covid-19-lamp-assay#.X2xIN5MzbgE>
11. Article in 3D-printing industry global media company entitled "Greek researchers 3D print bioreactors for DNA amplification via FFF" on our Sensors Actuators B: Chemical, 2020 publication (24 June 2020)  
<https://3dprintingindustry.com/news/greek-researchers-3d-print-bioreactors-for-dna-amplification-via-fff-172864/>

12. European Innovation Council declares CATCH-U-DNA project as one of the success stories of EU-funded work (8 May 2020)
13. [https://ec.europa.eu/research/infocentre/article\\_en.cfm?id=/research/headlines/news/article\\_20\\_05\\_08\\_en.html?infocentre&item=Countries&artid=52405&caller=SuccessStories](https://ec.europa.eu/research/infocentre/article_en.cfm?id=/research/headlines/news/article_20_05_08_en.html?infocentre&item=Countries&artid=52405&caller=SuccessStories)
14. Efimerida Syntakton (The Editors' Newspaper), article on research activities within Biosensors lab at FORTH ([https://www.efsyn.gr/ellada/ygeia/238767\\_diagnostiko-test-gia-ton-covid-19-anaptyssei-ite](https://www.efsyn.gr/ellada/ygeia/238767_diagnostiko-test-gia-ton-covid-19-anaptyssei-ite)) regarding the development of a diagnostic test for COVID-19 (10-04-20)
15. European Researcher's Night 2018: Presentation of Lab's research and innovation activities at IMBB-FORTH (28 September 2018)
16. Biosensors Lab represents IMBB in Thessaloniki International Fair 2018 and presents its work on research and innovation (5 September 2018)
17. For 1st award on «Excellence in Innovation and Entrepreneurship, 2016» competition
  - Article, 'Patris', Heraklion Crete, 21/2/2017 "Microbiological analysis via your smartphone" (by K. Milona)
  - Interview, Local radio 21/2/2017
18. EC-funded project LOVE-FOOD: Distinction by the Council of European Research and Innovation Ministers (<https://ec.europa.eu/digital-single-market/en/news/project-food-safety-gets-recognition-eu-council>) (January 2016)
19. European Researcher's Night 2015: Presentation of Biosensors Lab research activities, Heraklion, Crete, Greece, September 25<sup>th</sup>, 2015
20. European Researcher's Night 2014: Representing Biosensors Lab research activities, Heraklion, Crete, Greece, September 26<sup>th</sup>, 2014
21. For Innovation Award at "Greece Innovates 2013" competition, received by Prof Gizeli for 'best applied scientific innovation' in Greece, sponsored by Eurobank & the Hellenic Federation of Enterprises (ΣΕΒ) 17/9/2013
  - Interview, 'Kapa' magazine [Kathimerini](#)-Sunday Edition 5/5/2013 «Genetic analysis at low cost» (by C. Deligiannis)
  - Interview, [National Public Radio](#) (B' Programma, 103.7 FM) 19/5/2013 (by Y. Daras)
  - Interview, [SKAI](#) TV ("Proti Grammi") 10/9/2013 (by V. Lyrantzis & D. Economou)
19. For the article in Scientific Reports (Papadakis et al., 2013): Report on GenomeWeb.com "Researchers pair acoustic measurements with PCR for label free SNP genotyping-gene expression assays" (June 27, 2013)
20. For the article in Biophysical Journal (Tsortos et al. 2008):
  - Commentary in HFSP Journal (vol. 2(4), pp. 171-177, 2008)
  - Hot-off-the-press report by the Human Frontier Science Program: «Acoustic waves can 'see' the conformation of surface-attached DNA molecules»
  - Report in "Biotech Business Week" (NewsRx, p.796, 16/6/2008)
21. For the article in Biophysical Journal (Saitakis et al. 2008): Report in "Biotech Business Week" (NewsRx, 08/01/2009)
22. For the article in Biosensors & Bioelectronics (Papadakis et al. 2009): Hot-off-the-press report by the Human Frontier Science Program: "Novel biophysical method to characterize drug candidates for anti-gene therapy"