

Under the patronage of H.E. the President of the Hellenic Republic
Ms. Katerina Sakellaropoulou

14th FORTH SCIENTIFIC RETREAT
International Olympic Academy, Ancient Olympia
October 11-13 2024

Friday, October 11 2024

13:15 – 14:45 *Registration & Light Lunch (foyer of IOA Conference Center)*

All sessions of the day will take place in the D. Vikellas Amphitheatre

14:45 - 15:15 **Opening Session**

14:45 – 14:55 **Welcome – Opening Remarks**

Dr. Maria Klapa, ICE-HT Research Director
Chair of the 14th FORTH Retreat Organizing Committee

14:55 - 15:15 **President's Address**

FORTH – How to stay young after 40
Prof. Nektarios Tavernarakis, Chairman of FORTH Board of Directors

15:15-16:15 **DIRECTORS' PRESENTATIONS: SESSION I**

BEING A 40+ RESEARCH INSTITUTE OF FORTH: OPPORTUNITIES & CHALLENGES

Moderator: Alexandros Lappas, IESL

Prof. Vasilis Ntziachristos, Institute of Electronic Structure and Laser (IESL)

Prof. Ioannis Vontas, Institute of Molecular Biology and Biotechnology (IMBB)

Prof. Dimitris Plexousakis, Institute of Computer Science (ICS)

Prof. Charalambos Makridakis, Institute of Applied & Computational Mathematics (IACM)

Prof. Gelina Harlaftis, Institute for Mediterranean Studies (IMS)

Dr. Theophilos Ioannides, Institute of Chemical Engineering Sciences (ICE-HT)

16:15-17:15 **PRESENTATION SESSION I**

FORTH RESEARCH HIGHLIGHTS Part I

Chair: Konstantina Georgiadi, IMS

16:15 - 16:25 **Stavroula Ntoa**, Principal Researcher, ICS

Accessibility and User Experience in Digital Applications and Services

16:25- 16:35 **Panagiotis Moschou**, Collaborating Faculty Member, IMBB

Associate Professor, University of Crete

Limited proteolysis mechanisms in plants for selective protein translation to improve heat tolerance

16:35- 16:45 **Konstantina Kalfa**, Post-Doctoral Researcher, IMS

The apartment building in the Eastern Mediterranean: a project funded by the ERC Starting Grant 2024

16:45- 16:55 **George Vasilakis**, Principal Researcher, IESL

Quantum Science & Metrology

- 16:55- 17:05 **Maria Georgiadou**, Assistant Researcher, BRI
The road to studying the impact of matrix stiffness to lung cancer cell treatment response
- 17:05- 17:15 **Katerina Nikiforaki**, Collaborating Researcher, ICS
Magnetic resonance imaging: Probing information at a sub-anatomical level
- 17:15-18:00 POSTER & DEMO SESSION I: PITCHING PRESENTATIONS**
Areas: 1. Nanotechnology/Materials/Microelectronics & 2. Humanities/ Geoinformatics
Chair : Evina Gontikaki, IG

FORTH CELEBRATORY EVENT

(in the Dimitrios Vikellas Amphitheatre)

18:30 – 19:00 Welcome Coffee

Welcoming Remarks

19:00-19:10 Maria Klapa, ICE-HT Research Director, Researchers' Representative in FORTH BoD
Chair of the 14th FORTH Retreat Organizing Committee

19:10-19:30 **Short Addresses from Invited Officials**

FORTH Today

19:30-19:50 Nektarios Tavernarakis, Professor
Chair of FORTH BoD

The contribution of technology in the evolution of the Olympic Movement

19:50-20:20 Isidoros Kouvelos
President of the International Olympic Academy

FORTH Award Ceremony

- 20:20-21:15
- *Research Awards*
 - *Distinguished Members' Awards*
 - *Employees' Awards*

21:15-21:30 Tour of FORTH Scientific Exhibition

21:30 Cocktail Reception (IOA Restaurant)

Saturday, October 12 2024

Morning Sessions

All presentation sessions will take place in the D. Vikellas Amphitheatre

08:45-10:00 WORKSHOP I
FROM THE RESEARCH RESULT TO PRODUCT EXPLOITATION
Moderator: Maria Klapa , ICE-HT

Panelists

Kostas Vavekis, Director, PRAXI NETWORK

George Papamichail, Director, Science & Technology Park of Crete (STEP-C)

Electra Gizeli, Innovator, Deputy Director IMBB, Professor Dept. of Biology, U. of Crete

Panos Trahanias, CRO & Co-founder of ORamaVR, Collaborating Faculty Member and Lab Head at ICS, Professor of Computer Science, U. of Crete

Nikolaos Kyriazis, Co-Founder of SceneOpsis

Giannis Zacharakis, CEO of KYMATONICS, Principal Researcher IESL

Achilleas Gravanis (via zoom), Co-founder & CEO of ReNeurocell Therapeutics / Co-founder & BoD Member of BioNature, Collaborating Faculty Member IMBB, Professor of Pharmacology, Medical School, U. of Crete

10:00-10:30 DIRECTORS' PRESENTATIONS: SESSION II
BEING A YOUNG INSTITUTE OF FORTH: OPPORTUNITIES & CHALLENGES
Moderator: Stavroula Ntoa (ICS)

Prof. Vasilios Charmandaris, Institute of Astrophysics (IA) - *via zoom*

Prof. Savvas Christoforidis, Biomedical Research Institute (BRI)

Prof. Ioannis Yentekakis, Institute of Geoenery (IG)

10:30-10:45 THE GREEK INSTITUTE OF HUMAN GENOMICS: THE VISION OF NEWCOMER

Prof. Panos Deloukas, Director, Greek Institute of Human Genomics (GIHG)

10:45 - 10:50 Group Photo (at the foyer of the Conference Centre)

10:50-11:45 POSTER & DEMO SESSION I EXHIBITION (1st floor) + Coffee Break

11:45-14:30 Ancient Olympia Archaeological Site & Museum tour

14:30-15:30 Lunch

Saturday, October 12 2024

Afternoon Sessions

All presentation except the Parallel sessions will take place in the D. Vikellas Amphitheatre

15:30-16:20 PRESENTATION SESSION II

FORTH PARTICIPATION IN INFRASTRUCTURES & MISSIONS: FLASH TALKS

Chair: Ioannis Kamarianakis, IACM

- *Precision Medicine, Emmanouela Linardaki, IMBB (via zoom)*
- *BioImaging, Ioannis Zacharakis, IESL*
- *Hybrid Molecular Imaging Unit - HMIU, George Papadakis, ICS*
- *ELIXIR-GR, Maria Klapa, ICE-HT*
- *HDHC, smartHEALTH, PRECISEU: Flagship projects & initiatives addressing digital challenges of the health ecosystem, Dimitris Katehakis, ICS*
- *AI/HPC Computational Infrastructure, Antonis Chazapis, ICS*
- *IESL in Infrastructures (LASERLAB, NFFA, RIANA, HELLAS-CH, INNOVATION-EL, EUSMI, ACTPHAST, IPERION HS), Emmanouel Stratakis, IESL*
- *Air Quality Monitoring Infrastructure, Spyros Pandis, ICE-HT*

16:20-16:35 PRESENTATION SESSION III

Regional Development Plans of Crete and Western Greece

Chair: Maria Klapa, ICE-HT

- **Eleni Maraki-Mpeladaki**, Regional Consultant in the field of Education and Lifelong Learning, Region of Crete
- **Nikos Thomopoulos**, Head of Programming Unit, Managing Authority of Western Greece

16:35-17:45 POSTER SESSION II: PITCHING PRESENTATIONS

Areas: 3. Life Sciences & 4. Mathematical Methods/Informatics/Robotics

Chair : Achilleas Tsortos (IMBB)

17:45-18:45 POSTER & DEMO SESSION II Exhibition (1st floor) + Coffee Break

18:45-20:45 PARALLEL SESSIONS ON INTERDISCIPLINARY TOPICS IN SEARCH OF SYNERGIES

Panel Discussions

Room 1 : Ketseas Room (Ground Floor)

18:45-19:45 Bioinformatics/Precision Medicine

Moderators: Irini Fundulaki , ICS; Mathieu Lavigne, IMBB; Maria Klapa, ICE-HT

19:45-20:45 Agrobiotechnology

Moderators: Ioannis Vontas, Panagiotis Moschou, IMBB

Room 2 : Diem Room (Ground Floor)

18:45-19:45 Smart Cities

Moderator: Costantine Stephanidis, ICS

19:45-20:45 Natural sciences & Engineering for the Protection of Cultural Heritage

Moderators: Paraskevi Pouli , IESL; Nasos Argyriou ,IMS; Georgios Alexandrakis, IACM

Room 3 : Amphitheatre "D. Vikellas"

18:45-19:45 Materials and Methods for Energy & Environment

Moderators: Emmanouel Glynos, IESL; Christos Aggelopoulos, ICE-HT; Emmanouel Stamatakis, IG

19:45-20:45 Integrated Processes for Energy & Environmental Challenges

Moderators: Stavros Pissadakis, IESL; Maria Daletou, ICE-HT; Spyros Bellas, IG

21:30 Gala Dinner in "Amvrosia" Restaurant in Ancient Olympia town

Sunday, October 13 2024

All presentation sessions will take place in the D. Vikellas Amphitheatre

08:50-10:00 PRESENTATION SESSION IV

FORTH RESEARCH HIGHLIGHTS Part II

Chairs: Maria Georgiadou, BRI; Nasos Argyriou, IMS

- 08:50-09:00 **Alexis Panoutsopoulos**, Elected Assistant Researcher, ICE-HT (via zoom)
Human neural organoids for the mechanistic study of neural tube defects. The example of folate receptor 1
- 09:00-09:10 **Ioannis Kamarianakis**, Principal Researcher, IACM
Solar and wind power forecasting
- 09:10-09:20 **Alexandros Pittis**, Assistant Researcher, IMBB
Molecular diversity and evolution of the nervous system
- 09:20-09:30 **Tasos Kostopoulos**, Post-Doctoral Researcher, IMS
MACAUTH: Exploring the Macedonian Roots of the Balkan-wide Deep State
- 09:30-09:40 **Anna Sydorenko**, Post-Doctoral Researcher, IMS
Shadow Trade: Unravelling Maritime Smuggling between the Russian and Ottoman Empires (1853-1914)
- 09:40-09:50 **Ioannis Paradisanos**, Post-Doctoral Researcher, IESL
Tailoring Optical Properties and Beyond: Recent Advances in van der Waals Semiconductors and Collaborative Research at FORTH
- 09:50-10:00 **Grigoris Tsagkatakis**, Affiliated Researcher, ICS
Assistant Professor, University of Crete
Advancing Astrophysical Data Analysis through Computational Intelligence

10:00-10:30 WORKSHOP II

organized and moderated by Crete University Press (CUP)

CRETE UNIVERSITY PRESS: A DISTINCT PRESENCE IN THE GREEK PUBLISHING INDUSTRY

Presenter: Hephaestion Christopoulos, in-house Editor, CUP

Discussion Panel: Dionysia Daskalou, Panagiotis Soutanis, Nikos Koumpias, CUP

10:30-11:15 WORKSHOP III

organized & moderated by the FORTH Gender Equality & Anti-Discrimination Committee

WHAT WE DON'T SEE: GENDER STEREOTYPES, DISCRIMINATION AND EXCLUSION IN OUR EVERYDAY LIVES. NECESSARY REFLECTIONS AND TRANSFORMATIONS

created and presented by the Gender Alliance Initiative (G-All) team: Vangelis Kosmatos, Psychologist & Giorgos Nikolaidis, Actor/Performer & Playwright

Chairs: Maria Klapa, ICE-HT; Konstantina Georgiadi, IMS (on behalf of FORTH GEADC)

11:15-11:45 Coffee Break

11:45-12:45 FORTH GENERAL ASSEMBLY

chaired by Prof. Nektarios Tavernarakis, Chairman of FORTH BoD

12:45-13:30 Closing Session

moderated by Prof. Nektarios Tavernarakis, Chairman of FORTH BoD

12:45-13:10 YOUNG INVESTIGATORS' BEST POSTER/DEMO AWARDS

(funded by the Association of FORTH Researchers - SYLER)

13:10-13:30 CONCLUSIONS - CLOSING REMARKS

13:30-14:30 Light Lunch - Goodbye

POSTER/DEMO SESSION I

AREA 1. NANOTECHNOLOGY/MATERIALS/MICROELECTRONICS

P1.1 Gas sensing applications on intelligent food packaging, control of air quality and detection of explosive energy-related gases (A3)

Gagaoudakis Emmanouil, Skliri Evangelia, Sfakianou Angeliki, Tsihchlis Christos and Binas Vasilios

Presenting author: Gagaoudakis Emmanouil, Corresponding author: Gagaoudakis Emmanouil, Binas Vasilios

P1.2 Understanding surface kinetics of InGaN epitaxy: Applications towards advanced photovoltaics (A4)

Lymperakis L. and Iliopoulos E.

Presenting author: E. Gagaoudakis, Corresponding author: E. Iliopoulos

P1.3 Metamaterials and metasurfaces for advanced electromagnetic wave control (A5)

A. Tasolamprou, M. Kafesaki, O. Tsilipakos, A. Ptilakis, G. Perrakis, I. Katsantonis, A. Theodosi E.N. Economou

Presenting author: Anna Tasolamprou, Corresponding author: Maria Kafesaki

P1.4 Nanomaterials for smart electronics and sensing (A6)

I. Polioudakis, A. Papadopoulou, D. Kosmidis, S. Spinthaki, and G. Deligeorgis

Presenting author: I. Polioudakis, Corresponding author: G. Deligeorgis

P1.5 Conformational changes of PGL-3 upon crowding and phase separation (A7)

Ioannis Sampson, Patrick McCall, Andrei Pozniakovskiy, Anthony A. Hyman and Emmanouela Filippidi

Presenting author: Matthieu Lavigne, Corresponding author: Emmanouela Filippidi

P1.6 Perfect ring-shaped Bose-Einstein Condensates (A8)

Vishal K. Pathak, Vishnupriya P. Veetill, Pedro R. Antunez and Wolf von Klitzing

Presenting author: Vishal K. Pathak (**YOUNG INVESTIGATOR**), Corresponding author: Wolf von Klitzing

P1.7 Designing Polymer Electrolytes for Next Generation Solid State Batteries (A9)

Georgia Nikolakakou, Athanasios Machas, Benoit Loppinet, Georgios Petekidis, and Emmanouil Glynos

Presenting author: Emmanouil Glynos, Corresponding author: Emmanouil Glynos

P1.8 Tuning Surface Properties by Utilizing Polymer Nanocomposite Coatings (A10)

F. Gojda, E. Petsi, M. Vlasiadi, A. Thomos, F. Krasanakis, M. Stylianakis, K. Chrissopoulou, and S. H. Anastasiadis

Presenting author: K. Chrissopoulou, Corresponding author: K. Chrissopoulou, S. H. Anastasiadis

P1.9 Tweaking Nanoscale Functionalities by Correlated Disorder (A11)

George Antonaropoulos, Marianna Vasilakaki, Kalliopi N. Trohidou, Vincenzo Iannotti, Emil S. Bozin and

Alexandros Lappas

Presenting author: Alexandros Lappas, Corresponding author: Alexandros Lappas

P1.10 Antifungal Graphene-based Aerogels as Innovative Absorbers for Preventive Conservation of Cultural Heritage (D1)

George Gorgolis, George Paterakis, Christos Tsakonas, Maria Giovanna Pastore-Carbone and Costas Galiotis

Presenting author: George Gorgolis, Corresponding author: Costas Galiotis

P1.11 Synthesis and in situ characterization of graphene grown on liquid metal catalysts (D2)

Anastasios C. Manikas, Christos Tsakonas, Ilias Sfougkaris and Costas Galiotis

Presenting author: Anastasios Manikas, Corresponding author: Costas Galiotis

P1.12 New spectroscopic methods for non-invasive pH sensing of aerosols (D3)

G. Theodoropoulos, A. Psarelis, A. Soto Beobide, G. Mathioudakis, Z. Lada, C. Molina, K. Andrikopoulos, A. Nenes ,

G. Voyiatzis

Presenting author: G. Theodoropoulos (**YOUNG INVESTIGATOR**), Corresponding author: G. Voyiatzis

P1.13 Interfacial Interaction of Palladium with MoS₂ and MoS₂-rGO hybrids (D5)

Labrini Sygellou

Presenting author: Labrini Sygellou, Corresponding author: Labrini Sygellou

P1.14 Laser-assisted graphene electrodes for smart textiles: From energy harvesting to miniaturized energy storage (D6)

Natalia Kantouni , Athinais Mavrikaki, Markos Anagnostakos, Kapil Bhorkar, Nikolaos Samartzis, Michail

Athanasίου, Spyros N. Yannopoulos

Presenting author: Natalia Kantouni (**YOUNG INVESTIGATOR**), Corresponding author: Spyros Yannopoulos

P1.15 In-silico Studies of Complex Molecular Systems via Computational Modeling and Data-driven Atomistic Simulations: 'Linear-to-Colloidal' Transition in Star Polymers (E1)

Eirini Gkolfi, Petra Baková and Vagelis Harmandaris

Presenting author: Eirini Gkolfi (**YOUNG INVESTIGATOR**), Corresponding author: eirini.gkolfi@iacm.forth.gr and

vagelis@iacm.forth.gr

P1.16 Integrated Autonomous Hydrogen Energy Systems – Resilience advantages & humanitarian crises response (H2)

Emmanuel Stamatakis, Yentekakis Ioannis

Presenting author: Emmanuel Stamatakis, Corresponding author: Emmanuel Stamatakis

P1.17 Effect of the Reactor Configuration and Operational Parameters on Formation, Growth and Dissociation of Carbon Dioxide Hydrate – A Combined Experimental and Computational Study (H3)

Stamatakis Emmanuel, Labropoulos Anastasios, Tallarou Chrysoula, Stavropoulos Stavros, Bellas Spyridon, Pasadakis Nikolaos, Yentekakis Ioannis

Presenting author: Labropoulos Anastasios, Corresponding author: Stamatakis Emmanuel

P1.18 Hydrocarbon Generation Potential of the Diatomites, Western Crete, Greece (H4)

Bellas Spyridon, Telemenis Dimosthenis, Manoutsoglou Emmanouil, Yentekakis Ioannis

Presenting author: Telemenis Dimosthenis (**YOUNG INVESTIGATOR**), Corresponding author: Spyridon Bellas

D1 Ionic liquid dehumidifying System - DEMO (D8)

Dionysios Vroulias, Theophilos Ioannides, Vassilios Dracopoulos

Presenting author: Dionysios Vroulias (**YOUNG INVESTIGATOR**), Corresponding author: Vassilios Dracopoulos

D2 Wavelens: a novel wavefront shaping digital microscopy lens (KYMATONICS) - DEMO (A2)

Mikis Mylonakis, Evangelos Marakis, George J. Tserevelakis, Athanasios Zacharopoulos, Maira Tampakaki, Angela

Pasparaki, Joseph Papamatheakis, Nektarios Tavernarakis, Dimitrios G. Papazoglou and Giannis Zacharakis

Presenting author: Mikis Mylonakis (**YOUNG INVESTIGATOR**), Corresponding author: Giannis Zacharakis

D3 Photonic Sensors in Ophthalmological Sutures (PHAETHON) - DEMO (A1)

V. Sarakatsianos, E. Grantzioti, I. Chapalo, T. Manouras, M. Vamvakaki, A. Charonis, M. Konstantaki and Stavros Pissadakis

Presenting author: M. Konstantaki, Corresponding author: S. Pissadakis

AREA 2. HUMANITIES/GEOINFORMATICS

P1.19 Shallow Offshore Archaeological Prospection in Ancient Olous, Crete (F1)

Angelos Plageras, Dimitrios Oikonomou, Nikos Papadopoulos, and Nasos Argyriou

Presenting author: Angelos Plageras (**YOUNG INVESTIGATOR**), Corresponding author: Angelos Plageras

P1.20 Religious Patronage as an Instrument of 'Soft' Political Power during War: Russian Donations to Orthodox Communities in the Ottoman Empire (F2)

Yuliana Boycheva

Presenting author: Yuliana Boycheva, Corresponding author: Yuliana Boycheva

P1.21 SLAVEGENTS: Enslaved persons in the making of societies and cultures in Western Eurasia and North Africa, 1000 BCE - 300 CE (F3)

Clara Maria Ramos-Taboada, Kostas Vlassopoulos

Presenting author: Clara Maria Ramos-Taboada (**YOUNG INVESTIGATOR**), Corresponding author: Clara Maria Ramos-Taboada

P1.22 Electrical Resistivity Tomography (ERT) measurements in inclined boreholes (F4)

Eleni Tzima, Panagiotis Tsourlos, Prodromos Louvaris, Georgia Zacharopoulou

Presenting author: Eleni Tzima (**YOUNG INVESTIGATOR**), Corresponding author: Panagiotis Tsourlos

P1.23 The Role of Biogenic Silica and Microscopic Phytoliths in Advancing Archaeoenvironmental Research (F5)

Nafsika-Chrysoula Andriopoulou, Georgios E. Christidis

Presenting author: Nafsika-Chrysoula Andriopoulou (**YOUNG INVESTIGATOR**), Corresponding author: Nafsika-Chrysoula Andriopoulou

Note: Numbers in parenthesis correspond to the numbering at the Retreat website per FORTH Institute:

A: IESL; B: IMBB; C: ICS; D: ICE-HT; E: IACM; F: IMS; H: IG

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Presenting author: Labropoulos Anastasios, Corresponding author: Stamatakis Emmanuel

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Presenting author: M. Konstantaki, Corresponding author: S. Pissadakis

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P1.19 *Shallow Offshore Archaeological Prospection in Ancient Olous, Crete (F1)*

Angelos Plageras, Dimitrios Oikonomou, Nikos Papadopoulos, and Nasos Argyriou

Presenting author: Angelos Plageras (**YOUNG INVESTIGATOR**), Corresponding author: Angelos Plageras

P1.20 *Religious Patronage as an Instrument of 'Soft' Political Power during War: Russian Donations to Orthodox Communities in the Ottoman Empire (F2)*

Yuliana Boycheva

Presenting author: Yuliana Boycheva, Corresponding author: Yuliana Boycheva

P1.21 *SLAVEGENTS: Enslaved persons in the making of societies and cultures in Western Eurasia and North Africa, 1000 BCE - 300 CE (F3)*

Clara Maria Ramos-Taboada, Kostas Vlassopoulos

Presenting author: Clara Maria Ramos-Taboada (**YOUNG INVESTIGATOR**), Corresponding author: Clara Maria Ramos-Taboada

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P1.23 *The Role of Biogenic Silica and Microscopic Phytoliths in Advancing Archaeoenvironmental Research (F5)*

Nafsika-Chrysoula Andriopoulou, Georgios E. Christidis

Presenting author: Nafsika-Chrysoula Andriopoulou (**YOUNG INVESTIGATOR**), Corresponding author: Nafsika-Chrysoula Andriopoulou

Note: Numbers in parenthesis correspond to the numbering at the Retreat website per FORTH Institute:

A: IESL; B: IMBB; C:ICS; D:ICE-HT; E:IACM; F: IMS; H:IG

POSTER/DEMO SESSION II

AREA 3. LIFE SCIENCES

P2.1 *Dendrites endow artificial neural networks with accurate, robust, and parameter-efficient learning (B1)*

Spyridon Chavlis, Panayiota Poirazi

Presenting author: Spyridon Chavlis (**YOUNG INVESTIGATOR**), Corresponding author: Panayiota Poirazi

P2.2 *Linking neural activity to mouse perception using closed loop approaches (B2)*

Maria Diamantaki, Konstantina Georgelou, Stamatios Aliprantis, Konstantin Willeke, Katrin Franke, Andreas Tolia, and Emmanouil Froudarakis

Presenting author: Maria Diamantaki (**YOUNG INVESTIGATOR**), Corresponding author: Maria Diamantaki, Emmanouil Froudarakis

P2.3 *Studying insecticide resistance and the physiology of mosquitoes to facilitate the prevention of vector borne diseases (B3)*

Linda Grigoraki, Mengling Chen, Latifa Remadi, Sibora Teta, Hilary Ranson, Gareth Lycett and John Vontas

Presenting author: John Vontas, Corresponding author: Linda Grigoraki

P2.4 *An IL-10/DEL-1 axis supports granulopoiesis and survival from sepsis in early life (B4)*

Ourania Kolliniati, Ioanna Lapi, Christos Tsatsanis and Eleni Vergadi

Presenting author: Ourania Kolliniati (**YOUNG INVESTIGATOR**), Corresponding author: O Kolliniati and Eleni Vergadi

P2.5 *Investigating tick biology for disease prevention and novel biotechnological solutions (B5)*

Michail Kotsyfakis

Presenting author: Michail Kotsyfakis, Corresponding author: Michail Kotsyfakis

P2.6 *Unraveling the impact of chromatin dissociation dynamics of lncRNAs in gene expression regulation (B6)*

Kozonakis A., Katsioulas C. and Ntini E

Presenting author: Ntini Evgenia, Corresponding author: Ntini Evgenia

P2.7 *Reproductive regulation of the mitochondrial stress response in *Caenorhabditis elegans* (B7)*

Nikolaos Charmpilas, Aggeliki Sotiriou, Konstantinos Axarlis, Thorsten Hoppe and Nektarios Tavernarakis

Presenting author: Aggeliki Sotiriou (**YOUNG INVESTIGATOR**), Corresponding author: Th. Hoppe and N. Tavernarakis

P2.8 *Setdb1 regulates proper differentiation of adult intestinal stem cells via restraining permissive chromatin structure and transcriptional variability (B8)*

Dimitris Botskaris, Ioannis K. Deligiannis, Ioanna Peraki, Haroula Kontaki, Marianna Stagaki, Matthieu D.

Lavigne, Celia P. Martinez-Jimenez and Iannis Talianidis

Presenting author: Thymiakou Effie, Corresponding author: Iannis Talianidis, Celia P. Martinez-Jimenez

P2.9 *Epigenetic complexes and Notch signaling dynamics in intestinal stem cell plasticity (B9)*

Zoe Veneti, Virginia Fasoulaki, Aristides Eliopoulos and Christos Delidakis

Presenting author: Zoe Veneti, Corresponding author: Christos Delidakis

- P2.10 Modeling Transcription: an integrated approach to investigate the role of nascent RNAs in the maintenance of healthy gene expression programs (B10)**
Matthieu Lavigne, Vaios Theodosiou and Marianna Stagaki, Electra Tsaglioti, Christos Botos
Presenting author: Matthieu Lavigne, Corresponding author: Matthieu Lavigne
- P2.11 Advancing patient care through health data engineering and trustworthy AI (I1)**
Vasileios C. Pezoulas, Dimitrios I. Zaridis, Kosmas Apostolidis, Nikolaos S. Tachos, Kostas Marias, Manolis Tsiknakis and Dimitrios I. Fotiadis
Presenting author: Vasileios C. Pezoulas (YOUNG INVESTIGATOR), Corresponding author: Prof. Dimitrios Fotiadis
- P2.12 Development of the retinal neuro-vascular unit from human pluripotent stem cells as a model system to study retinal diseases (I2)**
Katerina Apostolidi, Maria Markou, Sofia Bellou, Theodore Fotsis, Carol Murphy, and Eleni Bagli
Presenting author: Aikaterini Apostolidi (YOUNG INVESTIGATOR), Corresponding author: Carol Murphy
- P2.13 Molecular Mechanisms of Vessel Morphogenesis (I3)**
Rakovoliou Elena, Markou Maria, Eleni Bagli, Bellou Sofia, Theodore Fotsis and Carol Murphy
Presenting author: Eleni Rakovoliou (YOUNG INVESTIGATOR), Corresponding author: Carol Murphy
- P2.14 Investigating a potential role for chemosensory proteins in insecticide resistance (I4)**
Angeliki Tsouri, Grigorios Dosis, Kerkyra Pandi, Anastassios Vassiliadis and Vassilis Douris
Presenting author: Angeliki Tsouri (YOUNG INVESTIGATOR), Corresponding author: Vassilis Douris
- P2.15 Dietary interventions in high anxiety: Focus on mitochondria (I5)**
Maria P. Papageorgiou, Markus Nussbaumer, Martina Samiotaki, Marianthi Firoglani Moschi and Michaela D. Filiou
Presenting author: Maria P. Papageorgiou (YOUNG INVESTIGATOR), Corresponding author: Michaela D. Filiou
- P2.16 Elucidating the interplay between high anxiety and caloric restriction: a multiomics approach (I6)**
Elissavet Anousi, Markus Nussbaumer, Maria P. Papageorgiou, Frederik Dethloff, Martina Samiotaki, Afroditi Divane, Anastasia Mitka, Eirini Panteli and Michaela D. Filiou
Presenting author: Elissavet Anousi (YOUNG INVESTIGATOR), Corresponding author: Michaela D. Filiou
- P2.17 Elucidating the behavioral and mitochondrial correlates of early handling (I7)**
Markus Nussbaumer, Christina Thomou, Eleni Grammenou, Chrysoula Komini, Angeliki-Maria Vlaikou, Maria P. Papageorgiou and Michaela D. Filiou
Presenting author: Markus Nussbaumer (YOUNG INVESTIGATOR), Corresponding author: Michaela D. Filiou
- P2.18 Exploring the interactome of IKKa and its role in alternative RNA splicing in lung cancer (I8)**
Besta S, Roupakia E, Kanellis D.C., Samiotaki M, Foutadakis S, Vatsellas G, Giamas G, Jiri Bartek and Kolettas E
Presenting author: E. Roupakia (YOUNG INVESTIGATOR), Corresponding author: E. Kolettas
- P2.19 Proteolytic processing of VE-cadherin during thrombin treatment (I9)**
Konstantina Tasioula, Panagiotis Karras, Violetta Maltabe and Panos Kouklis
Presenting author: Konstantina Tasioula (YOUNG INVESTIGATOR), Corresponding author: Panos Kouklis
- P2.20 The Human Brain Organoids Facility at BRI-FORTH (I10)**
Georgia Voudouri, Kleantchi Chalkiadaki, Maria Zafeiri, Elpida Statoulla and Christos G. Gkogkas
Presenting author: Georgia Voudouri (YOUNG INVESTIGATOR), Corresponding author: Christos Gkogkas
- P2.21 GABA/Glutamate neuron differentiation imbalance and increased AKT/mTOR signalling in CNTNAP2 -/- cerebral organoids (I11)**
Kleantchi Chalkiadaki, Elpida Statoulla, Maria Zafeiri, Georgia Voudouri, Alexandra Typou, Theoklitos Amvrosiadis, Niki Theodoridou, Dimitrios Moschovas, Apostolos Avgeropoulos, Martina Samiotaki, John O. Mason and Christos G. Gkogkas
Presenting author: Elpida Statoulla (YOUNG INVESTIGATOR), Corresponding author: Christos Gkogkas
- P2.22 The role of matrix stiffness on the morphology and migration of lung cancer cells (I12)**
Androutsopoulou A, Maroudi M, Pothos P, Petropoulos N, Roupakia E and Georgiadou M
Presenting author: Panagiotis Pothos (YOUNG INVESTIGATOR), Corresponding author: Maria Georgiadou
- P2.23 Unraveling the role of endocytic pathways of endothelial cells in amyloid- β blood-brain barrier clearance in Alzheimer's disease (I13)**
Evi Vasili, Martha Kontostathi, Natalia Tsironi and Savvas Christoforidis
Presenting author: Martha Kontostathi (YOUNG INVESTIGATOR), Corresponding author: Savvas Christoforidis
- P2.24 Beyond confocal resolution: differentiating the lumen from the periphery of thin, elongated vesicles in endothelial cells (I14)**
Panagiotis Lentzaris, Evangelia Goula, Alexandra Papafotika, Michaela Redd, Virginia Silio, Christopher Thrasivoulou, Vasiliki Lazani, Michalis Aivaliotis and Savvas Christoforidis
Presenting author: Panagiotis Lentzaris (YOUNG INVESTIGATOR), Corresponding author: Savvas Christoforidis
- P2.25 Predicting Gleason Score in Prostate Cancer Using Explainable Machine Learning Radiomics and Quantitative Diffusion MRI (C1)**
Georgios S. Ioannidis, Katerina Nikiforaki, Michalis Goumenakis, Kostas Marias
Presenting author: Georgios S. Ioannidis (YOUNG INVESTIGATOR), Corresponding author: Georgios S. Ioannidis
- P2.26 An Artificial Intelligence-Powered Annotation Methodology for a Sparsely Labeled Computed Tomography Lung Cancer Dataset: A Use Case for Non-Expert Observers (C6)**

Eleftherios Trivizakis, Kostas Marias

Presenting author: Eleftherios Trivizakis (**YOUNG INVESTIGATOR**), Corresponding author: Eleftherios Trivizakis

P2.27 Deep Learning-based automated assessment of reduced left ventricular ejection fraction by echocardiography (C7)

Grigorios Kalliatakis, Georgios Manikis, Kostas Marias

Presenting author: Grigorios Kalliatakis (**YOUNG INVESTIGATOR**), Corresponding author: Grigorios Kalliatakis

P2.28 ICT Ecosystems for Precision Medicine Initiatives (C19)

Irini Fundulaki, Vassilis Papakonstantinou, Tzanina Saveta, Yannis Rousakis

Presenting author: Irini Fundulaki, Corresponding author: Irini Fundulaki

P2.29 Reconstructing the protein-protein interaction network of an industrial CO₂-assimilating anaerobe using comparative genomics and systematic literature curation (D7)

Vanessa Savvopoulou and Maria I. Klapa

Presenting author: Vanessa Savvopoulou (**YOUNG INVESTIGATOR**), Corresponding author: Maria I. Klapa

P2.30 Comparative Study on Protein Language Models for Antimicrobial Peptide Classification (E3)

Elias Georgoulis, Michaela-Areti Zervou and Yannis Pantazis

Presenting author: Elias Georgoulis (**YOUNG INVESTIGATOR**), Corresponding author: Elias Georgoulis

P2.31 Subsurface microbial hydrogen cycling: implications for Underground Hydrogen Storage projects (H1)

Elpida Maragkozioglou, Simon Poirier, Spyros Bellas, Emmanouel Stamatakis, Ioannis Yentekakis, Evina Gontikaki

Presenting author: Elpida Maragkozioglou (**YOUNG INVESTIGATOR**), Corresponding author: Evina Gontikaki

AREA 4. COMPUTATIONAL METHODS - INFORMATICS - ROBOTICS

P2.32 The ubiquitous need for integrating data for e-science and the data transformation framework of FORTH-ICS-ISL (C5)

Yannis Marketakis, Yannis Tzitzikas

Presenting author: Yannis Marketakis (**YOUNG INVESTIGATOR**), Corresponding author: Y. Marketakis, Y. Tzitzikas

P2.33 Leveraging Symbolic and Data-driven Methods for Object State Classification (C8)

Filippos Gouidis, Kostas Papoutsakis, Katerina Papantoniou, Theodoros Patkos, Dimitris Plexousakis, Antonis Argyros

Presenting author: Filippos Gouidis (**YOUNG INVESTIGATOR**), Corresponding author: Filippos Gouidis

P2.34 Interception Inception: Analyzing CUDA call interception methods for Serverless Environments (C9)

Manos Pavlidakis, Anargyros Argyros, Stelios Mavridis, Giorgos Vasiliadis, Angelos Bilas

Presenting author: Manos Pavlidakis (**YOUNG INVESTIGATOR**), Corresponding author: Manos Pavlidakis

P2.35 Can LLMs detect deception? An exploratory study from a linguistic cues perspective in a multilingual context (C16)

Papantoniou Katerina, Papadakos Panagiotis, Plexousakis Dimitris

Presenting author: Papadakos Panagiotis, Corresponding author: Papadakos Panagiotis

P2.36 Exploiting the power of HPC: Benefits and technology transfer (C17)

Eleni Kanellou, Christos Kozanitis, Angelos Bilas

Presenting author: Eleni Kanellou, Corresponding author: Eleni Kanellou

P2.37 Knot: Instant productivity for Kubernetes (C18)

Antony Chazapis, Angelos Bilas

Presenting author: Antony Chazapis (**YOUNG INVESTIGATOR**), Corresponding author: Antony Chazapis

P2.38 Predicting and Parameterizing the Glass Transition Temperature of Atmospheric Organic Compounds via Molecular Dynamics Simulations (D4)

Panagiota Siachouli, Vlasios G. Mavrantzas and Spyros N. Pandis

Presenting author: Panagiota Siachouli (**YOUNG INVESTIGATOR**), Corresponding author: Spyros Pandis

P2.39 Modeling Transient Dynamics of Coarse-Grained Molecular Systems (E2)

Georgia Baxevasi, Evangelia Kalligiannaki and Vagelis Harmandaris

Presenting author: Georgia Baxevasi (**YOUNG INVESTIGATOR**), Corresponding author: Evangelia Kalligiannaki and Vagelis Harmandaris

P2.40 LASSO-type estimators for Subset ARMA selection (E3)

Eleni Dretaki, Jorgo Xhixho, Mario Giacomazzo and Yiannis Kamarianakis

Presenting author: Yiannis Kamarianakis, Corresponding author: Yiannis Kamarianakis

P2.41 Computational Intelligence for Multimodal Astrophysical Tomography (C20)

A. Papadaki, G. Tzagkarakis, K. Tassis

Presenting author: A. Papadaki (**YOUNG INVESTIGATOR**), Corresponding author: G. Tzagkarakis, K. Tassis

D4 ProximIoT: An IoT Platform for Context-Aware Proximity-driven Services - DEMO (C12)

Giorgos Kelantonakis, Chrysostomos Zeginis, Eleni Maragkaki, Michalis Samaritakis, Kostas Magoutis Presenting author: Giorgos Kelantonakis (**YOUNG INVESTIGATOR**), Corresponding author: Giorgos Kelantonakis

D5 Gamified VR Storytelling for Cultural Tourism Using 3D Reconstructions, Virtual Humans, and 360° Videos - DEMO (C13)

Emmanouil Kontogiorgakis, Antonis Agapakis, Aldo Jhako, Emmanouil Zidianakis, Eirini Kontaki, Constantina Manoli, Stavroula Ntoa, Constantine Stephanidis

Presenting author: Antonis Agapakis, Corresponding author: Emmanouil Zidianakis

D6 *Interactive Storytelling in VR: Exploring the Cultural Richness of Heraklion - DEMO (C14)*

Ilias Proimakis, Antonis Agapakis, Emmanouil Zidianakis, Eirini Kontaki, Constantina Manoli, Stavroula Ntoa, Constantine Stephanidis

Presenting author: Antonis Agapakis, Corresponding author: Emmanouil Zidianakis

D7 *Democratizing Photorealistic 3D Modeling Using the Power of AI and Your Smartphone- DEMO (C11)*

Nikolaos Kyriazis, Paschalis Panteleris, Antonis Argyros

Presenting author: Nikolaos Kyriazis, Corresponding author: Nikolaos Kyriazis

D8 *Legged Robots In The Wild - DEMO (C10)*

Despina-Ekaterini Argiropoulos, Michael Maravgakis, Manos Papadakis, Markos Sigalas, Dimitrios Papageorgiou, Panos Trahanias

Presenting author: Despina-Ekaterini Argiropoulos (**YOUNG INVESTIGATOR**), Corresponding author: Despina-Ekaterini Argiropoulos

D9 *ORamaVR: Accelerating the world's transition to medical XR through spatial computing and spatial intelligence - DEMO*

Panos Trahanias, George Papagiannakis

Presenting author: Panos Trahanias, Corresponding author: Panos Trahanias, George Papagiannakis

D10 *Activities of Statistical Learning Lab @IACM - DEMO*

Ioannis Kamarianakis

Presenting author: Ioannis Kamarianakis, Corresponding author: Ioannis Kamarianakis

P, D stand for poster and demo, respectively.

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