

## 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 (15)**

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 (16)**

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 (17)**

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 IKK $\alpha$  and its role in alternative RNA splicing in lung cancer (18)**

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 (19)**

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 (110)**

Georgia Voudouri, Kleanthi Chalkiadaki, Maria Zafeiri, Elpida Statoulla and Christos G. Gkogkas

Presenting author: Georgia Voudouri (**YOUNG INVESTIGATOR**), Corresponding author: Christos Gkogkas

**P2.21 Modelling CNTNAP2 loss of function using human induced pluripotent stem cell-derived cerebral organoids (111)**

Kleanthi 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 (112)**

Androutopoulou 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- $\beta$  blood-brain barrier clearance in Alzheimer's disease (113)**

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 (114)**

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 CO<sub>2</sub>-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, Vlas 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 Baxevani, Evangelia Kalligiannaki and Vagelis Harmandaris

Presenting author: Georgia Baxevani (**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.

**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**