



# Short Talks

## Auditorium Hall

Friday 29<sup>th</sup> November 2019

09:00 - 10:30

## SHORT TALKS 1

## Molecular &amp; Cellular Basis of Human Diseases I

- 561** **Constitutive activation of B cell receptor (BCR) pathways triggered by ectopic expression of T-cell tyrosine kinase Lck in Chronic Lymphocytic Leukemia (CLL) cells**  
**Vasileios Morfos<sup>1\*</sup>, Nikos Koutras<sup>1</sup>, Dimitrios Konstantinou<sup>1</sup>, Alexandros Spyridonidis<sup>2</sup> and Konstantina Nika<sup>1</sup>**  
<sup>1</sup>Department of Biochemistry, School of Medicine, University of Patras, Patras, Greece  
<sup>2</sup>Bone Marrow Transplantation Unit, University Hospital of Patras, Patras, Greece  
\*email: vmorfos@upnet.gr
- 582** **Chronic stress induces endoplasmic reticulum stress and activation of the unfolded protein response in minor salivary gland cells of patients with primary Sjögren's syndrome**  
**K. Moustaka<sup>1</sup>, S. Katsiougianis<sup>1</sup>, R. Tenta<sup>1</sup>, S. Havaki<sup>2</sup>, P. Koutsoudaki<sup>2</sup>, H.M. Moutsopoulos<sup>3</sup>, F. N. Skopouli<sup>1</sup>**  
<sup>1</sup>Dpt of Nutrition and Dietetics, Harokopio University, Athens, Greece  
<sup>2</sup>Dpt of Histology and Embryology, Medical School, University of Athens, Greece  
<sup>3</sup>Academy of Athens
- 95** **Association of dengue virus and hepatitis C virus replication with L-dopa decarboxylase in the liver**  
**Efseveia Frakolaki<sup>1</sup>, Katerina I. Kalliampakou<sup>1</sup>, Anna Chalari<sup>1</sup>, Vasileios Siozos<sup>1</sup>, Haralabia Boleti<sup>2</sup>, John Koskinas<sup>3</sup>, Dido Vassilacopoulou<sup>4</sup> and Niki Vassilaki<sup>1\*</sup>**  
<sup>1</sup>Laboratory of Molecular Virology, Hellenic Pasteur Institute (HPI), Athens, Greece  
<sup>2</sup>Light Microscopy Unit, Hellenic Pasteur Institute, Athens, Greece  
<sup>3</sup>2nd Department of Internal Medicine, Medical School of Athens, Hippokration Hospital, Athens, Greece  
<sup>4</sup>Section of Biochemistry and Molecular Biology, Faculty of Biology, National and Kapodistrian University of Athens, Athens, Greece
- 13** **Role of 3-mercaptopyruvate sulfur transferase (3-MST) on the mouse cardiovascular system**  
**Maria Peleli<sup>1,2</sup>, Sofia-Iris Bibli<sup>2</sup>, Athanasia Chatzianastasiou<sup>3</sup>, Constantinos H Davos<sup>1</sup>, Antonia Katsouda<sup>1,2</sup>, Maria-Rosaria Bucci<sup>4</sup>, Valentina Vellecco<sup>4</sup>, David J Lefer<sup>5</sup>, Andreas Papapetropoulos<sup>1,2</sup>**  
<sup>1</sup>Experimental Surgery & Translational Research, Biomedical Research Foundation Academy of Athens (BRFAA), Athens, Greece  
<sup>2</sup>Laboratory of Pharmacology, Faculty of Pharmacy, National and Kapodistrian University of Athens, Athens Greece  
<sup>3</sup>Faculty of Medicine, First Department of Critical Care and Pulmonary Services, Evangelismos Hospital, National and Kapodistrian University of Athens, Greece  
<sup>4</sup>Department of Pharmacy, University of Naples "Federico II", Naples, Italy  
<sup>5</sup>Cardiovascular Center of Excellence and Department of Pharmacology, Louisiana State University Health Sciences Center, New Orleans

- 27** **Greek adolescents with higher BMI are more likely to adhere to a diet regimen. Synergistic effect of common genetic variants**  
**Katerina Meimari<sup>1,4</sup>, Maria Kafyra<sup>1,4</sup>, Ioanna Ntalla<sup>2,3</sup>, Konstantinos Apostolou-Karampelis<sup>1</sup>, Georgios Dedoussis<sup>1,\*</sup>**  
<sup>1</sup>Harokopio University of Athens, Department of Nutrition and Dietetics, Athens, Greece  
<sup>2</sup>Clinical Pharmacology William Harvey Research Institute, Barts and the London Medical School, Queen Mary University of London, London, United Kingdom  
<sup>3</sup>Centre for Genomic Health, Queen Mary University of London, London, United Kingdom  
<sup>4</sup>These authors contributed equally to this work  
\*Corresponding author: Georgios Dedoussis, PhD, Vice-President of ELIDEK/HFRI General Assembly, Professor of Human Molecular Genetics, Director of Biology/Biochemistry/Physiology Lab, Department of Nutrition and Dietetics, Harokopio University of Athens, 70 El. Venizelou Avenue, 17671 Athens, Greece, Tel: 0030 210 9549 304, E-mail: dedousi@hua.gr
- 595** **The deubiquitinase activity of CYLD is required for B Cell lymphopoiesis in mice**  
**Konstantinos Xanthopoulos<sup>1\*</sup>, Alessandra Rovida<sup>2</sup>, Dimitra Dafou<sup>3</sup>, Athanasios Pseftogkas<sup>2</sup>, Lucia Bongiovanni<sup>4</sup>, Eirini Kanata<sup>1</sup>, Thomas Winkler<sup>5</sup>, Maurilio Ponzoni<sup>4</sup>, Theodoros Sklaviadis<sup>1</sup>, Georgios Mosialos<sup>3</sup>, Paolo Ghia<sup>2</sup>**  
<sup>1</sup>School of Pharmacy, Aristotle University of Thessaloniki, Greece  
<sup>2</sup>B-cell Neoplasia Unit, Università Vita-Salute San Raffaele and IRCCS Istituto Scientifico San Raffaele, Milan, Italy  
<sup>3</sup>School of Biology, Aristotle University of Thessaloniki, Greece  
<sup>4</sup>Pathology Unit, Università Vita-Salute San Raffaele, Milan, Italy  
<sup>5</sup>Division of Genetics, Nikolaus-Fiebiger-Center of Molecular Medicine, Erlangen, Germany  
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## Conference Hall

**Friday 29th November 2019 09:00 - 10:30**

### SHORT TALKS 2

#### Systems Biology & Bioinformatics

- 596** **Assessment of classification algorithms for clinical metagenomics in viral infections**  
**Anastasios Mexias<sup>1#</sup>, Getsimani Papadopoulou<sup>1,3#</sup>, Andreas Mentis<sup>2</sup>, Timokratis Karamitros<sup>1\*</sup>**  
<sup>1</sup>Unit of Bioinformatics and Applied Genomics, Hellenic Pasteur Institute, Athens  
<sup>2</sup>Public Health Laboratories  
<sup>3</sup>Department of Genetics and Biotechnology, Faculty of Biology, School of Science, National and Kapodistrian University of Athens, Greece  
#Equal contribution  
\*e-mail: tkaram@pasteur.gr
- 83** **Deleterious mutations enrichment in intrinsically disordered regions and short linear motifs in the human transcription factor ZNF217.**  
**Dimitra Tsakona<sup>1</sup>, Panagiota-Angeliki Galliou<sup>1</sup>, Nikolaos A. Papanikolaou<sup>1\*</sup>**  
<sup>1</sup>Department of Biology, Aristotle University of Thessaloniki, Thessaloniki, Greece  
<sup>1</sup>Department of Medicine, Aristotle University of Thessaloniki, Thessaloniki, Greece  
\*e-mail: papanikn@med.auth.gr

- 99** **Molecular and geoinformatics management system of agriculture based on microbiome analysis**  
**Eleni Papakonstantinou<sup>1</sup>, Nikolaos Katsenios<sup>2</sup>, Dimitrios Koumoulidis<sup>2</sup>, Elias Eliopoulos<sup>1</sup>, Aspasia Efthimiadou<sup>2</sup>, Dimitrios Vlachakis<sup>1,3,4\*</sup>**  
<sup>1</sup>Genetics and Computational Biology Group, Laboratory of Genetics, Department of Biotechnology, Agricultural University of Athens, 75 Iera Odos, 11855, Athens, Greece  
<sup>2</sup>Hellenic Agricultural Organization – Demeter, Institute of Soil and Water Resources, Department of Soil Science of Athens, Lycovrisi, Greece  
<sup>3</sup>Division of Endocrinology and Metabolism, Clinical Research Center, Biomedical Research Foundation of the Academy of Athens, Athens, Greece  
<sup>4</sup>Faculty of Natural & Mathematical Sciences, King's College London, London, U.K.  
 \*e-mail: dimvl@aua.gr
- 87** **Bioinformatic analysis of more than 60.000 full human genome sequences: An in-depth view of molecular interactions between nuclear receptors, their cofactors, enzymes, and epigenetic mediators**  
**Thanasis Mitsis<sup>1,2\*</sup>, George Chrousos<sup>2,3</sup>, Tomoshige Kino<sup>4</sup>, Elias Eliopoulos<sup>1</sup>, Dimitrios Vlachakis<sup>1,2,5</sup>**  
<sup>1</sup>Laboratory of Genetics, Department of Biotechnology, School of Food, Biotechnology and Development, Agricultural University of Athens, 75 Iera Odos, 11855, Athens, Greece  
<sup>2</sup>Laboratory of Molecular Endocrinology, Center of Clinical, Experimental Surgery and Translational Research, Biomedical Research Foundation of the Academy of Athens, Athens, Greece  
<sup>3</sup>Center for Adolescent Medicine and UNESCO Chair on Adolescent Health Care, First Department of Pediatrics, Medical School, National and Kapodistrian University of Athens, Aghia Sophia Children's Hospital, Athens 11527, Greece  
<sup>4</sup>Department of Human Genetics, Division of Translational Medicine, Sidra Medical and Research Center, Doha 26999, Qatar  
<sup>5</sup>School of Informatics, Faculty of Natural & Mathematical Sciences, King's College London, London, U.K.  
 \*e-mail: mitsis.ath91@gmail.com
- 621** **Transcription of key genes disrupts the spatial clustering of gene expression and marks the progression of Systemic Lupus Erythematosus**  
**Vassilis Ntassis<sup>1</sup>, Dimitrios Boumpas<sup>2</sup>, George Bertisias<sup>3,4</sup>, Christoforos Nikolaou<sup>1,4\*</sup>**  
<sup>1</sup>Department of Biology, University of Crete, Heraklion 70013, Crete, Greece  
<sup>2</sup>Department of Physiology, Medical School, National Kapodistrian University of Athens, Greece  
<sup>3</sup>Medical School, University of Crete, Heraklion 70013, Crete, Greece  
<sup>4</sup>Institute for Molecular Biology and Biotechnology, Foundation of Research and Technology (IMBB-FORTH), Heraklion, Crete, Greece  
 \*e-mail: nikolaou@uoc.gr
- 627** **Low complexity regions in the proteins of prokaryotes perform important functional roles and are highly conserved.**  
**Chrysa Ntountoumi<sup>1</sup>, Panayotis Vlastaridis<sup>1</sup>, Dimitrios Mossialos<sup>2</sup>, Constantinos Stathopoulos<sup>3</sup>, Ioannis Iliopoulos<sup>4</sup>, Vasilios Promponas<sup>5</sup>, Stephen G. Oliver<sup>6</sup>, Grigoris D. Amoutzias<sup>1\*</sup>**  
<sup>1</sup>Bioinformatics Laboratory, Department of Biochemistry and Biotechnology, University of Thessaly, 41500, Larisa, Greece.  
<sup>2</sup>Microbial Biotechnology-Molecular Bacteriology-Virology Laboratory, Department of Biochemistry and Biotechnology, University of Thessaly, 41500, Greece.  
<sup>3</sup>Department of Biochemistry, School of Medicine, University of Patras, 26504, Greece.  
<sup>4</sup>Department of Medicine, University of Crete, Heraklion 71003, Greece.  
<sup>5</sup>Bioinformatics Research Laboratory, Department of Biological Sciences, New Campus, University of Cyprus, PO Box 20537, CY-1678 Nicosia, Cyprus.  
<sup>6</sup>Cambridge Systems Biology Centre & Department of Biochemistry, University of Cambridge, CB2 1GA, UK.

## Auditorium

Friday 29th November 2019

11:30 - 13:00

## SHORT TALKS 3

## Stem Cells, Tissue Morphogenesis &amp; Regeneration

**139** Context dependent Asymmetric Cell Division in Embryonic Stem Cells.**Diana-Maria Potsi<sup>1,3</sup>, Karakaidos Panagiotis<sup>3,4</sup> and Spyros Georgatos<sup>1,2,3,\*</sup>**<sup>1</sup> Stem Cell and Chromatin Group, The University of Ioannina, School of Medicine<sup>2</sup> The Laboratories of Biology and Biological Chemistry and Institute of Molecular Biology and Biotechnology-Biomedical Division (IMBB) FORTH-ITE<sup>3</sup> 45110 Ioannina, Greece, Biomedical Research Foundation Academy of Athens<sup>4</sup> 4 Soranou Ephessiou St., 115 27 Athens, Greece.

\*To whom correspondence should be addressed at: sgeorgat@cc.uoi.gr

**144** In vitro combination of anti-VEGF nanocarriers and adipose-derived stem cells for retinal vein occlusion treatment**Eleni Gounari<sup>1,2,4\*</sup>, Stavroula Nanaki<sup>3</sup>, Vassileios Karampatakis<sup>4</sup>, Dimitrios Bikiaris<sup>3</sup>, George Koliakos<sup>1,2</sup>**<sup>1</sup> Department of Biochemistry, School of Medicine, Aristotle University of Thessaloniki, 54124 Thessaloniki, Greece<sup>2</sup> Biohellenika Biotechnology Company, Leoforos Georgikis Scholis 65, 57001, Thessaloniki, Greece<sup>3</sup> Department of Chemistry, Laboratory of Polymer Chemistry and Technology, Aristotle University of Thessaloniki, 54124 Thessaloniki, Greece<sup>4</sup> Laboratory of Experimental Ophthalmology, School of Medicine, Aristotle University of Thessaloniki, 54124 Thessaloniki, Greece

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**578** Direct reprogramming of cortical astrocytes to induced-neurons using miR-124 and ISX9: Study of the enhancement of a latent midbrain dopaminergic program by Shh and Fgf8**Mairi Margariti<sup>1</sup>, Elsa Papadimitriou<sup>1</sup>, Timokratis Karamitros<sup>2</sup>, Dafni Chroni<sup>3</sup> Dimitra Thomaidou<sup>1</sup>**<sup>1</sup> Neural Stem Cells and Neuroimaging Lab, Department of Neurobiology, Hellenic Pasteur Institute, Athens, Greece<sup>2</sup> Department of Microbiology, Public Health Laboratories, Hellenic Pasteur Institute, Athens, Greece<sup>3</sup> Molecular Neurobiology and Immunology, Department of Neurobiology, Hellenic Pasteur Institute, Athens, Greece

\*e-mail: mairimnx@gmail.com

**24** Investigation of the plasticity of cardiac progenitors in the adult and embryonic heart**I. Kokkinopoulos<sup>1,2</sup>, H. Ishida<sup>2</sup>, R. Saba<sup>2</sup>, H. Hamada<sup>3</sup>, K. Yashiro<sup>2</sup> and D. Beis<sup>1</sup>**<sup>1</sup> Immunobiology and Developmental Biology Laboratories, Center for Translational Research Biomedical Research Foundation of the Academy of Athens (BRFAA) Soranou Efessiou 4, Athens, 11527, Greece<sup>2</sup> Barts and The London School of Medicine and Dentistry, Queen Mary University of London, Charterhouse Square, London, EC1M 6BQ, UK<sup>3</sup> Department of Developmental Genetics, Graduate School of Frontier Biosciences, Osaka University, 2-3 Yamadaoka, Suita, Osaka 565-0871, Japan

**620 Links of desmin cytoskeleton to mechanochemical signaling and cardiomyocyte differentiation, trans-differentiation and reprogramming****Mary Tsikitis<sup>1\*</sup>, Antigoni Diokmetzidou<sup>1</sup>, Kloukina Ismini<sup>1</sup>, Deepak Srivastava<sup>2</sup>, Yassemi Capetanaki<sup>1\*</sup>**<sup>1</sup> Center of Basic Research, Biomedical Research Foundation, Academy of Athens, Athens, Greece<sup>2</sup> Gladstone Institute of Cardiovascular Disease, University of California, San Francisco, USA

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**577 CRH promotes the neurogenic activity of neural stem cells in the adult hippocampus****Yassemi Koutmani<sup>1\*</sup>, Ioannis A. Gampierakis<sup>1</sup>, Alexia Polissidis<sup>1</sup>, Methodios Ximerakis<sup>2</sup>, Paraskevi N. Koutsoudaki<sup>3</sup>, Alexandros Polyzos<sup>4</sup>, George Agrogiannis<sup>5</sup>, Sevasti Karaliota<sup>1</sup>, Dimitra Thomaidou<sup>3</sup>, Lee L. Rubin<sup>2,6,7</sup>, Panagiotis K. Politis<sup>4</sup> and Katia P. Karalis<sup>1,8,9\*</sup>**<sup>1</sup> Center of Clinical, Experimental Surgery and Translational Research, Biomedical Research Foundation of the Academy of Athens, Athens, 11527, Greece<sup>2</sup> Department of Stem Cell and Regenerative Biology, Harvard Stem Cell Institute, Harvard University, Cambridge, MA 02138, USA<sup>3</sup> Laboratory of Cellular and Molecular Neurobiology, Hellenic Pasteur Institute, Athens, 11521, Greece<sup>4</sup> Center of Basic Research, Biomedical Research Foundation of the Academy of Athens, Athens, 11527, Greece<sup>5</sup> Department of Pathology, University of Athens Medical School, Athens, 11527, Greece<sup>6</sup> Harvard Stem Cell Institute, Cambridge, MA 02138, USA<sup>7</sup> Broad Institute of MIT and Harvard, Cambridge, MA 02142, USA<sup>8</sup> Endocrine Division, Children's Hospital, Harvard Medical School, Boston, MA 02115, USA<sup>9</sup> Emulate Inc., Boston, MA 02210, USA Correspondence

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**Auditorium****Friday 29th November 2019****16:30 - 18:30**

## SHORT TALKS 4

**Cell Organization & Function****170 Tissue elongation requires Integrin-Linked Kinase (ILK)****Athina Keramidiotou<sup>1,2</sup>, Eleni Psarra<sup>1</sup>, Elisavet Lotsi<sup>1</sup> and Christos Zervas<sup>1</sup>**<sup>1</sup> Biomedical Research Foundation Academy of Athens, Athens, Greece<sup>2</sup> University of Thessaly, Department of Biochemistry, Larissa, Greece

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**151 Mcdas maintains correct centriole numbers in cells****Marina Arbi<sup>1</sup>, Stavroula Tsaridou<sup>1</sup>, Spyridoula Bournaka<sup>1</sup>, Margarita Skamnelou<sup>1</sup>, Sihem Zitouni<sup>2</sup>, Monica Bettencourt-Dias<sup>2</sup>, Stavros Taraviras<sup>3</sup> & Zoi Lygerou<sup>1</sup>**<sup>1</sup> Department of General Biology, School of Medicine, University of Patras, Greece<sup>2</sup> Instituto Gulbenkian de Ciência, Oeiras, Portugal<sup>3</sup> Department of Physiology, School of Medicine, University of Patras, Greece

- 522 Intracellular compartmentalization of mitochondrial population driven by selective amino acid starvation**  
**Panagiotis Chandris<sup>1,2,4</sup>, Christina Giannouli<sup>2,3</sup>, Brian English<sup>4</sup>, Jadranka Loncarek<sup>5</sup>, Dong Kong<sup>5</sup>, Christopher Bleck<sup>6</sup>, Martina Samiotaki<sup>2</sup>, George Panayotou<sup>2</sup>, Hari Shroff<sup>1</sup>**  
<sup>1</sup>Section on High Resolution Optical Imaging, National Institute of Biomedical Imaging and Bioengineering, National Institutes of Health, Bethesda, MD, USA;  
<sup>2</sup>BSRC Alexander Fleming, Institute of Bioinnovation, Vari, Greece;  
<sup>3</sup>Feinstein Institute for Medical Research, Manhasset, NY;  
<sup>4</sup>Janelia Research Campus, HHMI, Ashburn, Virginia, USA;  
<sup>5</sup>NIH/NCI at Frederick, Laboratory of Protein Dynamics and Signaling, MD, USA;  
<sup>6</sup>Electron Microscopy Core, NHLBI, NIH, Bethesda, MD, USA  
chandris@fleming.gr
- 537 Controlling HURP protein in time and space during cell division**  
**Stelios Didaskalou<sup>1</sup>, Christos Eftstathiou<sup>1</sup>, Ilona Kesisova<sup>1</sup>, Avgi Tsolou<sup>1</sup> Margy Koffa<sup>1\*</sup>**  
<sup>1</sup>Department of Molecular Biology and Genetics, Alexandroupolis, Greece  
\*e-mail: mkoffa@mbg.duth.gr
- 22 A novel intracellular delivery technology for in vitro transcribed (IVT)-mRNAs**  
**Miliotou N. Androulla<sup>1</sup>, Pappas S. Ioannis<sup>2</sup>, Vizirianakis S. Ioannis<sup>1</sup>, Papadopoulou C. Lefkothea<sup>1\*</sup>**  
<sup>1</sup>Laboratory of Pharmacology, School Pharmacy, Faculty of Health Sciences, Aristotle University of Thessaloniki  
<sup>2</sup>Laboratory of Pharmacology and Toxicology, Faculty of Veterinary Science, University of Thessaly  
\*e-mail: lefkotea@pharm.auth.gr
- 504 On the roles of mammalian PNLDC1 during early development**  
**Ilias Skeparnias<sup>1</sup>, Christos Katsioulas<sup>1</sup>, Dimitrios Anastasakis<sup>1,2</sup>, Athanasios-Nasir Shaukat<sup>1</sup>, Katerina Grafanaki<sup>1</sup> and Constantinos Stathopoulos<sup>1\*</sup>**  
<sup>1</sup>Department of Biochemistry, School of Medicine, University of Patras, Greece  
<sup>2</sup>RNA Molecular Biology Group, Laboratory of Muscle Stem Cells and Gene Regulation, NIAMS, NIH, USA  
\*To whom correspondence should be addressed e-mail: cstath@med.upatras.gr
- 126 Mechanisms of stochasticity in cellular reprogramming**  
**Dimitris Valakos<sup>1</sup>, Ioanna Polidouri<sup>1,2</sup>, Katerina Vassaki<sup>1,2</sup>, Eleftheria Klagkou<sup>1</sup>, Maria Papathanasiou<sup>1</sup>, Giannis Vatsellas<sup>1</sup>, Giorgos Panagopoulos<sup>1</sup>, Georgios Sianidis<sup>1</sup>, Depy Papadopoulou<sup>1</sup>, Marios Agelopoulos<sup>1</sup> and Dimitris Thanos<sup>1\*</sup>**  
<sup>1</sup>Biomedical Research Foundation, Academy of Athens, <sup>4</sup> Soranou Ephessiou, 11527 Athens, Greece.  
<sup>2</sup>These authors contributed equally.  
\* thanos@bioacademy.gr
- 163 The transcription factor CXXC5 regulates stemness and invasion in glioblastoma**  
**Kalliopi Tzavlaki<sup>1</sup>, Mahsa Shahidi Dadras<sup>2</sup>, Artur Mezheyeuski<sup>2</sup>, Anita Morén<sup>1</sup>, Carl-Henrik Heldin<sup>1</sup>, Laia Caja<sup>1</sup>, Aristidis Moustakas<sup>1\*</sup>**  
<sup>1</sup>Department of Medical Biochemistry and Microbiology, Science for Life Laboratory, Box 582, Biomedical Center, Uppsala University, SE-75123 Uppsala, Sweden  
<sup>2</sup>Department of Immunology, Genetics and Pathology, Rudbeck Laboratory, Science for Life Laboratory, Uppsala University, SE-75185 Uppsala, Sweden.  
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## Conference Hall

Friday 29th November 2019

16:30 - 18:30

### SHORT TALKS 5

#### Chemical Biology

**563 Enzymatic amination of furanoids for the production of biopolymers**

**Panagiotis Kelefiotis Stratidakis<sup>1</sup>, Daphne Minopoulou<sup>1</sup>, Ioannis V. Pavlidis<sup>1\*</sup>**

<sup>1</sup> University of Crete, Department of Chemistry, Heraklion, Greece.

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**30 An insect cell-based screening platform for identification of modifiers of odor-triggered mosquito behaviors**

**Georgia Kythreoti<sup>1</sup>, Nadia Sdralia<sup>1</sup>, Panagiota Tsitoura<sup>1#</sup>, Dimitrios P. Papachristos<sup>2</sup>, Antonios Michaelakis<sup>2</sup>, Stefan Schulz<sup>3</sup>, Kostas Iatrou<sup>1\*</sup>**

<sup>1</sup>Institute of Biosciences & Applications, National Centre for Scientific Research "Demokritos", Aghia Paraskevi, Greece

<sup>2</sup>Entomology & Agricultural Zoology, Benaki Phytopathological Institute, Kifissia, Greece

<sup>3</sup>Institute of Organic Chemistry, TU Braunschweig, Germany.

#Current address: Department of Immunology, Hellenic Pasteur Institute, 11521 Athens, Greece.

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**33 Bringing methyltransferases to the forefront of organic synthesis**

**Lyn Lisette Kailing<sup>1</sup>, QingYun Tang<sup>2</sup>, Friedrich W. Herberg<sup>1</sup>, Uwe T. Bornscheuer<sup>2</sup>, Ioannis V. Pavlidis<sup>3\*</sup>**

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<sup>2</sup> Institute of Biochemistry, University of Greifswald, Greifswald, Germany

<sup>3</sup> Department of Chemistry, University of Crete, Heraklion, Greece.

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**53 Epigenetic effect of Persistent Organic Pollutants (POPs) on Peripheral Blood Mononuclear Cells (PBMCs)**

**Maria-Sofia Vidali<sup>1,2</sup>, Stefanos Dailianis<sup>2</sup>, Dimitris Vlastos<sup>3</sup>, Panagiotis Georgiadis<sup>1</sup>**

<sup>1</sup>National Hellenic Research Foundation, Institute of Biology, Medicinal Chemistry and Biotechnology, Vas. Constantinou 48, GR-11635 Athens, Greece

<sup>2</sup> Section of Animal Biology, Lab of Zoology, Department of Biology, University of Patras, GR-26500, Patras, Greece

<sup>3</sup> Department of Environmental and Natural Resources Management, University of Patras, GR-30100 Agrinio, Greece



## Auditorium

Saturday 30th November 2019

09:00 - 10:30

## SHORT TALKS 6

## Functional Genomics and Proteomics

- 137** **Comparative genomics of the endosymbiotic bacterium *Candidatus Erwinia dacicola* provides insights for the management of the olive pest *Bactrocera oleae***  
**Vassiliki Lila Koumandou**, Louis Papageorgiou, Nikos Cosmidis, Dimitrios Vlachakis\*  
*Genetics Laboratory, Department of Biotechnology, Agricultural University of Athens, Greece*  
*\*e-mail: dimvl@aua.gr*
- 6** **Emerging role of the Nucleobase Cation Symporter 2 (NCS2) family of *Sinorhizobium meliloti* on purine uptake and metabolism and on the regulation of symbiotic nitrogen fixation**  
**Katerina I. Kalliampakou**<sup>1\*</sup>, Maria Botou<sup>2</sup>, Sofia Prassopoulou<sup>2</sup>, Georgios Karalias<sup>1</sup>, Chrysanthi Kalloniati<sup>1</sup>, Fotios Komaitis<sup>1</sup>, Dimitrios Skliros<sup>1</sup>, Konstantinos Papakostas<sup>2</sup>, Michael K. Udvardi<sup>3</sup>, Stathis Frillingos<sup>2</sup>, and Emmanouil Flemetakis<sup>1\*</sup>.  
<sup>1</sup>*Laboratory of Molecular Biology, Department of Agricultural Biotechnology, Agricultural University of Athens, Iera Odos*<sup>75</sup>, 11855 Athens, Greece  
<sup>2</sup>*Laboratory of Biological Chemistry, Department of Medicine, School of Health Sciences, University of Ioannina, Panepistimiopolis Dourouti, 45110 Ioannina, Greece*  
<sup>3</sup>*Plant Biology Division, The Samuel Roberts Noble Foundation, Ardmore, Oklahoma 73401, USA*  
*\*e-mail: mflem@aua.gr, \*e-mail: kalliap@yahoo.gr*
- 101** **Histone H3.3 dynamics resolved with time-lapse quantitative ChIP-Seq and Mass Spectrometry**  
**Anna-Maria Katsori**<sup>1</sup>, George Mermelekas<sup>2</sup>, Simon J Elsässer<sup>1\*</sup>  
<sup>1</sup>*Department of Medical Biochemistry and Biophysics, Karolinska Institutet, Science for Life Laboratory, 17165 Solna, Sweden*  
<sup>2</sup>*Department of Oncology and Pathology, Karolinska Institutet, Science for Life Laboratory, 17165 Solna, Sweden*  
*\*e-mail: simon.elsasser@scilifelab.se*
- 176** **High-resolution Mapping of the Whole-proteome Landscape in Normal Mouse Brain**  
**Artemis G. Korovesi**<sup>1,2\*</sup>, Athanasios K. Anagnostopoulos<sup>1</sup>, Dimitrios J. Stravopodis<sup>2</sup> and George Th. Tsangaris<sup>1</sup>  
<sup>1</sup>*Proteomics Research Unit, Center of Basic Research II, Biomedical Research Foundation of Academy of Athens, Athens, Greece*  
<sup>2</sup>*Section of Cell Biology and Biophysics, Department of Biology, National and Kapodistrian University of Athens, Athens, Greece*  
*\*e-mail: akoroves@biol.uoa.gr*
- 143** **Proteomic characterization of purified ribosomes in erythropoiesis: Evidence for ribosome heterogeneity**  
**Christos Papagiannopoulos**<sup>1</sup>, Konstantinos A. Kyritsis<sup>1</sup>, Georgia Orfanoudaki<sup>3</sup>, George Stamatakis<sup>5</sup>, Martina Samiotaki<sup>5</sup>, Konstantina Psatha<sup>3</sup>, Michalis Aivaliotis<sup>2,3,4</sup>, Ioannis S. Vizirianakis<sup>1\*</sup>  
<sup>1</sup>*Laboratory of Pharmacology, Department of Pharmacy, School of Health Sciences, Aristotle University of Thessaloniki, Greece*  
<sup>2</sup>*Laboratory of Biological Chemistry, Department of Medicine, School of Health Sciences, Aristotle University of Thessaloniki, Greece*  
<sup>3</sup>*Institute of Molecular Biology and Biotechnology, Foundation for Research and Technology-Hellas, Crete, Greece.*  
<sup>4</sup>*Functional Proteomics and Systems Biology (FunPATH), Center for Interdisciplinary Research and Innovation-Aristotle University of Thessaloniki (CIRI-AUTH), Thessaloniki, Greece*  
<sup>5</sup>*Institute for Bioinnovation, Biomedical Sciences Research Center "Alexander Fleming", Athens, Greece*  
*\*e-mail: ivizir@pharm.auth.gr*

## Conference Hall

Saturday 30th November 2019

09:00 - 10:30

### SHORT TALKS 7

#### Biotechnology

**9 Protein-based biocompatible ECM scaffolds for bone and cartilage regeneration**

**Aglaia Mantsou<sup>1\*</sup>, Paraskevas Lamprou<sup>1</sup> and Theodora Choli-Papadopoulou<sup>1</sup>**

<sup>1</sup> Laboratory of Biochemistry, Department of Chemistry, Aristotle University of Thessaloniki, Greece

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**28 Efficient production of fibrin gel obtained from Cord Blood Units as a tool for wound healing applications.**

**Vivian Alevrogianni<sup>1\*</sup>, Panagiotis Mallis<sup>1</sup>, Faidra Sarri<sup>1</sup>, Jerome Zoidakis<sup>2</sup>, Antonia Vlahou<sup>2</sup>, Catherine Stavropoulos- Giokas<sup>1</sup>, Efstathios Michalopoulos<sup>1</sup>**

<sup>1</sup> Hellenic Cord Blood Bank, Biomedical Research Foundation Academy of Athens, Greece

<sup>2</sup> Biochnology Division, Biomedical Research Foundation, Academy of Athens, Greece.

\*e-mail: vivien.alev<sup>17</sup>@gmail.com

**521 SuptoxD @ SuptoxD2.0: First- and second- generation specialized Escherichia coli strains for high-level recombinant membrane protein production**

**Myrsini Michou<sup>1,2</sup>, Dimitra Gialama<sup>1</sup>, Angelos Stergios<sup>1,2</sup>, Charalampos Kapsalis<sup>3</sup>, Christos Pliotas<sup>3,4</sup>, Georgios Skretas<sup>1\*</sup>**

<sup>1</sup> Institute of Chemical Biology, National Hellenic Research Foundation, Athens 11635, Greece

<sup>2</sup> Department of Biochemistry and Biotechnology, University of Thessaly, Larisa 41500, Viopolis, Greece

<sup>3</sup> Biomedical Sciences Research Complex, School of Biology, University of St Andrews, St Andrews KY169ST, United Kingdom

<sup>4</sup> Astbury Centre for Structural Molecular Biology, School of Biomedical Sciences, University of Leeds, Leeds LS2 9JT, United Kingdom

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**60 Understanding the cyanobacterial metabolism and expanding it towards bioproduction**

**Konstantinos Vavitsas<sup>1\*</sup> and Dimitris Hatzinikolaou<sup>1</sup>**

<sup>1</sup> Enzyme and Microbial Biotechnology Unit, Department of Biology, National and Kapodistrian University of Athens, Panepistimioupolis, Athens, 15784, Greece.

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**72 Photometric assay for atherosclerosis-associated 7-keto-cholesterol quantification for clinical use**

**Anna Michalaki, Polyxeni Papadea, Marianna Skipitari, Electra Kalaitzopoulou, Christos D. Georgiou**

Department of Biology, University of Patras, Greece

email: annamichalaki@outlook.com

## Auditorium

Saturday 30th November 2019

11:30 - 13:00

## SHORT TALKS 8

## Molecular &amp; Cellular Basis of Human Diseases

**185 Role of mitochondrial physiology and signaling to the nucleus in gastric cancer development****Zoi Erpapazoglou, Vasiliki Papadaki, Andrada Birladeanu, Myrto Potiri, Panagiota Kafasla***BSRC Alexander Fleming, Institute of Fundamental Biomedical Research, Athens, Greece***585 Generation and characterisation of a novel IFN $\alpha$ R1 reporter mouse****Stelios Vlachiotis<sup>1</sup>, Ioanna Galani<sup>1</sup>, Evangelos Andreacos<sup>1\*</sup>***<sup>1</sup>Laboratory of Immunobiology, Center for Clinical, Experimental Surgery and Translational Research, Biomedical Research Foundation Academy of Athens, Greece***644 Glycosphingolipids suppress anti-glioma immunity****Anastasia Xagara<sup>1,2</sup>, Twan de Waard<sup>1</sup>, Megan Houweling<sup>2</sup>, Marlieke Jongsma<sup>3</sup>, Sophie Bliss<sup>1</sup>, Tao Zhang<sup>3</sup>, Manfred Wuhrer<sup>3</sup>, Bart Westerman<sup>2</sup>, Robbert Spaapen<sup>1</sup>***<sup>1</sup>Department of ImmunoPathology, Sanquin Research, Amsterdam, Netherlands**<sup>2</sup>Department CCA-Neurosurgery, Cancer Center Amsterdam, VUMC Amsterdam, Netherlands**<sup>3</sup>Leiden University Medical Center, LUMC Leiden, Netherlands***66 The role of the interplay between Tip60 and Ets-2 in multiple sclerosis (MS) pathogenesis****Ioanna Aggeletopoulou<sup>1\*</sup>, Ioannis Panagoulas<sup>1</sup>, Constantinos Kilidireas<sup>2</sup>, Athanasia Mouzaki<sup>1</sup>***Laboratory of Immunohematology, Division of Hematology, Department of Internal Medicine, Faculty of Medicine, University of Patras, Patras, Greece**<sup>1</sup>st Department of Neurology, School of Medicine, Eginition Hospital, National and Kapodistrian University of Athens, Athens, Greece***601 Lumican inhibits in vivo melanoma metastasis by altering matrix-effectors and invadopodia markers****Konstantina Karamanou<sup>1,2,3\*</sup>, Marco Franci<sup>4</sup>, Maurizio Onisto<sup>5</sup>, Alberto Passi<sup>6</sup>, Isabelle Proult<sup>2</sup>, Shukti Chakravarti<sup>7</sup>, Demitrios Vynios<sup>3</sup>, Stéphane Brézillon<sup>1,2</sup>***<sup>1</sup> CNRS UMR 7369, Matrice Extracellulaire et Dynamique Cellulaire, Reims, France**<sup>2</sup> Université de Reims Champagne Ardenne, Laboratoire de Biochimie Médicale et Biologie Moléculaire, Reims, France**<sup>3</sup> Biochemistry, Biochemical Analysis & Matrix Pathobiology Research Group, Laboratory of Biochemistry, Department of Chemistry, University of Patras, Patras, Greece**<sup>4</sup> Department for Life Quality Studies, University of Bologna, Rimini, Italy**<sup>5</sup> University of Padova, Department of Biomedical Sciences Padova, Padova, Italy**<sup>6</sup> Dipartimento di Scienze Chirurgiche e Morfologiche, Università degli Studi dell'Insubria, Varese, Italy**<sup>7</sup> Departments of Medicine, Cell Biology and Ophthalmology, Ross 954, 720 Rutland Avenue, Baltimore, MD 21205, U.S.A.*

**127 BMP signaling and polarity pathways regulate stemness in glioblastoma tumors****Aristidis Moustakas<sup>1\*</sup>, Mahsa S. Dadras<sup>1</sup>, Kalliopi Tzavlaki<sup>1</sup>, Laia Caja<sup>1</sup>**<sup>1</sup> Department of Medical Biochemistry and Microbiology, Science for Life Laboratory, Box 582, Biomedical Center, Uppsala University, SE-75123 Uppsala, Sweden

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**Auditorium****Saturday 30th November 2019****16:30 - 18:30**

## SHORT TALKS 9

**Cell Communication & Signaling I & II****123 Secreted PLA2-IIA mRNA in extracellular vesicles from bronchoalveolar lavage fluid of ARDS patients: Possible regulation by microRNAs****Stylianos Papadopoulos<sup>1</sup>, Athanasios-Nasir Shaukat<sup>2</sup>, Constantinos Stathopoulos<sup>2</sup>, Vasilios P. Koulouras<sup>3</sup>, Marilena E. Lekka<sup>1\*</sup>**<sup>1</sup>Laboratory of Biochemistry, Department of Chemistry, School of Sciences, University of Ioannina, Ioannina, Greece, <sup>2</sup>Department of Biochemistry, School of Medicine, University of Patras, Patras, Greece, <sup>3</sup>Department of Intensive Care Unit, University Hospital of Ioannina, Ioannina, Greece

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**75 Estrogen receptors inversely regulate miR-200b to stimulate epithelial-to-mesenchymal transition and matrix expression in mammary cancer****Zoi Piperigkou<sup>1,3,4</sup>, Marco Franchi<sup>2</sup>, Christoph Riethmüller<sup>3</sup>, Martin Götte<sup>4</sup>, Nikos K. Karamanos<sup>1,5\*</sup>**<sup>1</sup>Biochemistry, Biochemical Analysis & Matrix Pathobiology Research Group, Laboratory of Biochemistry, Department of Chemistry, University of Patras, Patras, Greece<sup>2</sup>Department for Life Quality Studies, University of Bologna, Rimini, Italy,<sup>3</sup>Centre for Nanotechnology, Serend-ip GmbH, Münster, Germany<sup>4</sup>Department of Gynecology and Obstetrics, Münster University Hospital, Münster, Germany<sup>5</sup>Foundation for Research and Technology-Hellas (FORTH)/Institute of Chemical Engineering Sciences (ICE-HT), Patras, Greece

\*e-mail: n.k.karamanos@upatras.gr

**5 Long non-coding RNAs that function as regulators of TGF-β signaling in normal and cancer cells****Panagiotis Papoutsoglou<sup>1,2\*</sup>, Yutaro Tsubakihara<sup>1</sup>, Cédric Coulouarn<sup>2</sup> and Aristidis Moustakas<sup>1</sup>**<sup>1</sup> Department of Medical Biochemistry and Microbiology, Ludwig Cancer Research, Science for Life Laboratory, Uppsala University, Box 582, BioMedical Center, Uppsala SE-751 23, Sweden<sup>2</sup>INSERM, Univ Rennes, Institut NuMeCan (Nutrition Metabolisms and Cancer), UMR\_S 1241, 35033, Rennes, France

\*e-mail: panagiotis.papoutsoglou@inserm.fr

**590 Argonautes' topology in protrusional structures reveals their role in intercellular trafficking and in cell segregation.****Pantazopoulou V.I.<sup>1</sup>, Delis A.<sup>1</sup>, Georgiou S.<sup>1</sup>, Pagakis S.N.<sup>1</sup>, Filippa V.<sup>1</sup>, Kloukina I.<sup>1</sup>, Hatzitheodoridis E.<sup>2</sup>, Trebicka J.<sup>3</sup>, Velentzas AD<sup>4</sup>, Thanos D.<sup>1</sup>, Tseleni-Balafouta S.<sup>5</sup>, Stravopodis D.J.<sup>4</sup>, Anastasiadou E.<sup>1\*</sup>**<sup>1</sup> Biomedical Research Foundation of the Academy of Athens (BRFAA), Greece<sup>2</sup> Department of Geological Sciences, School of Mining and Metallurgical Engineering, National Technical University of Athens, Greece<sup>3</sup> Department of Internal Medicine I, Department of Internal Medicine, University Clinic Bonn, Bonn, Germany.<sup>4</sup> Department of Cell Biology and Biophysics, Faculty of Biology, University of Athens, Greece<sup>5</sup> Medical School, Department of Pathology, University of Athens, Greece

\*e-mail: anastasiadou@bioacademy.gr

**503 KRASG12C oncogenic signaling affects genomic context dependent rewiring of translation initiation and rates****George Kyriakopoulos<sup>1</sup>, Vicky Katopodi<sup>1</sup>, Ilias Skeparnias<sup>1</sup>, Katerina Grafanaki<sup>1,2</sup> and Constantinos Stathopoulos<sup>1\*</sup>**<sup>1</sup>Department of Biochemistry, School of Medicine, University of Patras, Greece<sup>2</sup>Department of Dermatology, School of Medicine, University of Patras, Greece

\*correspondence to cstath@med.upatras.gr

**609 The role of κ-opioid receptor-induced autophagy in synaptic alterations****Christos Karoussiotis<sup>1</sup>, Aggeliki Sotiriou<sup>2</sup>, Danae Papavranoussi-Daponte<sup>1</sup>, Alexia-Victoria Polissidis<sup>3</sup>, Vassiliki Nikolettou<sup>2</sup> and Zafiroula Georgoussi<sup>1\*</sup>**<sup>1</sup>Laboratory of Cellular Signaling & Molecular Pharmacology, Institute of Biosciences and Applications, National Centre for Scientific Research "Demokritos", 15310 Athens, Greece<sup>2</sup>Institute of Molecular Biology and Biotechnology, Foundation for Research and Technology, Heraklion 70013, Crete, Greece<sup>3</sup>Clinical, Experimental Surgery & Translational Research Biomedical Research Foundation of the Academy of Athens, 11527 Athens, Greece

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**588 Global analysis of canonical TGFβ<sup>3</sup>-superfamily signalling dynamics in liver biology and pathophysiology****Athanasios Stavropoulos<sup>1\*</sup>, Georgios Divolis<sup>1</sup>, Maria Manioudaki<sup>1</sup>, Ariana Gavriil<sup>1</sup>, Imini Kloukina<sup>2</sup>, Georgios Germanidis<sup>3</sup>, Maria Xilouri<sup>1</sup> and Paschalis Sideras<sup>1\*</sup>**<sup>1</sup>Center for Clinical Research, Experimental Surgery and Translational Research, Biomedical Research Foundation of the Academy of Athens, 11527 Athens, Greece<sup>2</sup>Center of Basic Research, Biomedical Research Foundation of the Academy of Athens, Athens, Greece<sup>3</sup>First Department of Internal Medicine, AHEPA Hospital, Aristotle University of Thessaloniki, School of Medicine, 54636 Thessaloniki, Greece.

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**558 Binding of pleiotrophin to vascular endothelial growth factor receptor 2 regulates endothelial cell migration****Margarita Lamprou<sup>1</sup>, Pinelopi Kastana<sup>1</sup>, Effrosyni Choleva<sup>1</sup>, Haralampos Tzoupis<sup>2</sup>, Spyridoula Barmpoutsis<sup>1</sup>, Despoina Ntenekou<sup>1</sup>, Evangelia Poimenidi<sup>1</sup>, Katerina Zompra<sup>3</sup>, Md Sanaulah Sajib<sup>4</sup>, Theodoros Tselios<sup>2</sup>, Constantinos M. Mikelis<sup>4</sup> and Evangelia Papadimitriou<sup>1,\*</sup>**<sup>1</sup>Laboratory of Molecular Pharmacology, Department of Pharmacy, University of Patras, GR26504 Patras, Greece<sup>2</sup>Department of Chemistry, University of Patras, Greece<sup>3</sup>Laboratory of Pharmacognosy, Department of Pharmacy, University of Patras, GR26504 Patras, Greece<sup>4</sup>Department of Biomedical Sciences, School of Pharmacy, Texas Tech University Health Sciences Center, Amarillo, TX, USA

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## Hall

Saturday 30th November 2019

16:30 - 18:30

## SHORT TALKS 10

## Structure and Function of Macromolecules

- 122** **Affinity Crystallography constitutes a new rapid and reliable approach to discover the most bioactive molecule from a collection of compounds (e.g. natural extracts) for a pharmaceutical target.**

**George A. Stravodimos, Efthimios Kyriakis, Theodora G. A. Solovou, Vassiliki T. Skamnaki and Demetres D. Leonidas\***

*Department of Biochemistry and Biotechnology, University of Thessaly, Biopolis, 41500 Larissa, Greece*

*\*e-mail: ddleonidas@bio.uth.gr*

- 608** **Natural human monoclonal IgGs able to penetrate metastatic breast cancer cells and exhibit anti-neoplastic activities**

**Theodora Stivarou, Ioannis Sarrigeorgiou, Athena Polychronopoulou, and Peggy Lymberi\***

*Immunology Laboratory, Immunology Dept, Hellenic Pasteur Institute, Athens, Greece*

*e-mail: plymberi@pasteur.gr*

- 611** **Characterization of functional and toxicological properties based on structure of surface-active molecules produced by bacterial strains of marine origin**

**Styliani A. Chasapi<sup>1</sup>, Aikaterini A. Zompra<sup>1</sup>, Karina Salek<sup>2</sup>, Theodora Mantso<sup>3</sup>, Georgia Voulgaridou<sup>4</sup>, Ioannis Anestopoulos<sup>4</sup>, Mònica Maijó<sup>5</sup>, Claudia Navarro<sup>5</sup>, Jessica Romero<sup>5</sup>, Lourdes Gombau<sup>5</sup>, Alex Galanis<sup>4</sup>, Aglaia Pappa<sup>4</sup>, Mihalis Panagiotidis<sup>3</sup>, Stephen R. Euston<sup>2</sup>, Tony Gutierrez<sup>2</sup>, Georgios A. Spyroulias<sup>1\*</sup>**

*<sup>1</sup>Department of Pharmacy, University of Patras, Patras, Greece*

*<sup>2</sup>School of Engineering & Physical Sciences, Heriot Watt University, Edinburgh, UK*

*<sup>3</sup>Department of Applied Sciences, Northumbria University, Newcastle Upon Tyne, UK*

*<sup>4</sup>Department of Molecular Biology & Genetics, Democritus University of Thrace, Alexandroupolis, Greece*

*<sup>5</sup>Acondicionamiento Tarrasense (LEITAT). Barcelona, SP*

*\*e-mail: G.A.Spyroulias@upatras.gr*

- 619** **Unrevealing centriole polarity by structural analysis of protein SAS-6**

**Anastassia L. Kantsadi<sup>1</sup>, George N. Hatzopoulos<sup>2</sup>, Pierre Gönczy<sup>2</sup>, Ioannis Vakonakis<sup>1</sup>**

*<sup>1</sup>Department of Biochemistry, University of Oxford, Oxford, UK*

*<sup>2</sup>Swiss Institute for Experimental Cancer Research (ISREC), School of Life Sciences, Swiss Federal Institute of technology (EPFL), Lausanne, Switzerland*

## Auditorium

Sunday 1st November 2019

09:00 - 10:30

Short Talks 1 1

## Molecular &amp; Cellular Basis of Human Diseases

**622 Mechanisms of p.A53T- $\alpha$ Synuclein mediated synaptic dysfunction****Elissavet-Kalliopi Akrioti<sup>1</sup>, Georgia Kouroupi<sup>1</sup>, Rebecca Matsas<sup>1</sup>, Era Taoufik<sup>1\*</sup>**<sup>1</sup>Laboratory of Cellular and Molecular Neurobiology, Hellenic Pasteur Institute, Athens, Greece

\*etaoufik@pasteur.gr

**640 ADAR mediated A-I RNA editing modulates microglial responses to Experimental Autoimmune Encephalomyelitis****Dimitra Dafou<sup>1\*</sup>, Konstantinos Xanthopoulos<sup>2</sup>, Eirini Kanata<sup>3</sup>, Manos Tavladorakis<sup>3</sup>, Nikolaos Bekas<sup>1</sup>, Georgia Christoforidou<sup>1</sup>, Spyros Pettas<sup>1</sup>, Effi Kechagia<sup>1</sup>, Chrysanthi Ainali<sup>4</sup>, Konstantinos Lilakos<sup>5</sup>, Matthias Schmitz<sup>6</sup>, Inga Zerr<sup>6</sup>, Theodoros Sklaviadis<sup>3\*</sup>**<sup>1</sup>Department of Genetics, Development and Molecular Biology, School of Biology, Faculty of Sciences, Aristotle University, Thessaloniki, Greece<sup>2</sup>Laboratory of Pharmacognosy-Pharmacology, School of Pharmacy, Faculty of Health Sciences, Aristotle University, Thessaloniki, Greece<sup>3</sup>Neurodegenerative Disorders Research Group, Laboratory of Pharmacognosy-Pharmacology, School of Pharmacy, Faculty of Health Sciences, Aristotle University, Thessaloniki, Greece<sup>4</sup>DIGNOSIS Ltd, London, United Kingdom<sup>5</sup>ANTISEL SA, 116 Michalakopoulou str., Athens<sup>6</sup>University Medical School Göttingen, Department of Neurology, Göttingen, Germany

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**535 Mechanisms driving bone marrow adiposity in modeled osteoporosis****Vagelis Rinotas<sup>1,2</sup>, Apostolos Papadopoulos<sup>1,2</sup>, Kostas Kritikos<sup>1,2</sup>, Martina Samiotaki<sup>2</sup>, George Panayotou<sup>2</sup>, Eleni Douni<sup>1,2\*</sup>**<sup>1</sup>Department of Biotechnology, Agricultural University of Athens, Athens, Greece<sup>2</sup>Institute for Bioinnovation, B.S.R.C. "Alexander Fleming", Vari, Greece

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**52 A High Content Screening in a patient-derived model of Parkinson's disease identifies a kinase inhibitor as a candidate therapeutic****Nasia Antoniou<sup>1</sup>, Kanella Prodromidou<sup>1</sup>, Georgia Kouroupi<sup>1</sup>, Era Taoufik<sup>1</sup>, Regis Grailhe<sup>2</sup>, Martina Samiotaki<sup>3</sup>, George Panayotou<sup>3</sup>, and Rebecca Matsas<sup>1\*</sup>**<sup>1</sup>Laboratory of Cellular and Molecular Neurobiology-Stem Cells, Hellenic Pasteur Institute, 11521 Athens, Greece<sup>2</sup>Technology Development Platform, Screening Sciences & Novel Assay Technology, Bundang-gu, Seongnam-si, Gyeonggi-do, 463-400 Rep. of Korea<sup>3</sup>Proteomics Facility Biomedical Sciences Research Centre "Alexander Fleming" Vari, 16672, Greece

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**55 Transcriptomic signatures in the liver of apoE3L.CETP mice with Metabolic Syndrome (MetS) before and after therapeutic interventions that improve MetS comorbidities****Dimitris Nasias<sup>1,2#</sup>, Erika Tarasco<sup>3,4</sup>, Thomas A. Lutz<sup>3,4</sup> and Dimitris Kardassis<sup>1,2\*</sup>**<sup>1</sup>Laboratory of Biochemistry, University of Crete Medical School, Heraklion, Greece<sup>2</sup>Gene Regulation and Epigenetics group, Institute of Molecular Biology and Biotechnology, Foundation for Research and Technology of Hellas, Heraklion, Greece<sup>3</sup>Institute of Veterinary Physiology, Vetsuisse Faculty University of Zurich, Zurich, Switzerland;<sup>4</sup>Zurich Center for Integrative Human Physiology (ZIHP), University of Zurich, Zurich, Switzerland;

#present address: New York University School of Medicine, New York, USA

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**156 Cartilage oligomeric Matrix Protein expression in breast cancer tumors activates Notch3 pathway and increases the percentage of cancer stem cells****Konstantinos S. Papadakis<sup>1</sup>, Michael Bartoschek<sup>2</sup>, Chrysostomi Gialeli<sup>1</sup>, Carmen Rodriguez<sup>1</sup>, Shao-Bo Jin<sup>3</sup>, Urban Lendahl<sup>3</sup>, Christian Pietras<sup>2</sup>, Anna Blom<sup>1\*</sup>**<sup>1</sup>Division of Medical Protein Chemistry, Department of Translational Medicine, Lund University, Malmö, Sweden<sup>2</sup>Division of Translational Cancer Research, Department of Laboratory Medicine, Lund University, Lund, Sweden<sup>3</sup>Department of Cell and Molecular Biology, Karolinska Institute, Stockholm, Sweden.

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**Auditorium**

28

**Sunday 1<sup>st</sup> November 2019****14:00 - 15:30**

## SHORT TALKS 12

**Ageing/ Development & Differentiation / DNA damage / repair****47 Lipofuscin: a highly reactive by-product and its effects on the ageing model of Caenorhabditis elegans**  
**Nikoletta Papaevgeniou<sup>1</sup>, Annika Hoehn<sup>2</sup>, Tilman Grune<sup>2</sup>, Niki Chondrogianni<sup>1\*</sup>**<sup>1</sup>Institute of Chemical Biology, National Hellenic Research Foundation, Athens, Greece<sup>2</sup>Department of Molecular Toxicology, Institute of Nutritional Sciences, German Institute of Human Nutrition (DIfE), Potsdam Rehbruecke, Germany

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**560 Functional wiring of proteostatic and mitostatic modules ensures transient organismal survival during proteome instability or imbalanced mitochondrial dynamics****Sentiljana Gumeni, Zoi Evangelakou, Maria P. Lamprou, Eleni N. Tsakiri, Ioannis P. Trougakos**Department of Cell Biology and Biophysics, Faculty of Biology, University of Athens, Panepistimiopolis, Athens <sup>15704</sup>, Greece**168 Platelets as novel regulators of postnatal brain Neural Stem Cells****Christina Dimitriou<sup>1,2\*</sup>, Georgios Marios Theocharopoulos<sup>1</sup>, Konstantinos Papadimitriou<sup>1</sup>, Konstantinos Roussis<sup>1</sup>, Jose Guerrero<sup>3</sup>, Cédric Ghevaert<sup>3</sup>, Robin JM Franklin<sup>2</sup>, Ilias Kazanis<sup>1,2</sup>**<sup>1</sup>Laboratory of Developmental Biology, Department of Biology, University of Patras, Rio, Greece<sup>2</sup>Wellcome Trust – MRC Cambridge Stem Cell Institute & Department of Clinical Neurosciences, University of Cambridge, Cambridge, United Kingdom<sup>3</sup>Wellcome Trust – MRC Cambridge Stem Cell Institute & Department of Haematology, University of Cambridge, Cambridge, United Kingdom

\*e-mail: chdimit12@gmail.com



- 43** **Aberrant DNA Damage Response of Hematopoietic Cell Subsets in Systemic Lupus Erythematosus**  
**Theodora Manolakou<sup>1,2\*</sup>, Aggelos Banos<sup>1</sup>, Anastasia Filia<sup>1</sup>, Antigone Pieta<sup>2</sup>, George Bertias<sup>3</sup>, Panayotis Verginis<sup>1</sup>, Dimitrios Boumpas<sup>1,2,4</sup>**  
*<sup>1</sup>Laboratory of Immune Regulation and Tolerance, Autoimmunity and Inflammation, Biomedical Research Foundation of the Academy of Athens, Athens, Greece.*  
*<sup>2</sup>4th Department of Medicine, Attikon University Hospital, Medical School, National and Kapodistrian University of Athens, Greece.*  
*<sup>3</sup>Rheumatology, Clinical Immunology and Allergy, University of Crete School of Medicine, Heraklion, Greece.*  
*<sup>4</sup>Department of Internal Medicine, Medical School, University of Cyprus, Nicosia, Cyprus.*
- 614** **The role of the nuclease EXD2 in the Alternative Lengthening of Telomeres in neoplasia**  
**Veronica Cherdyntseva<sup>1</sup>, Ronan Broderick<sup>2</sup>, Theodora Evmorfopoulou<sup>1</sup>, Jadwiga Nieminuszczy<sup>2</sup>, Christina Raftopoulou<sup>1</sup>, Ariadni Liakopoulou<sup>1</sup>, Tamara Araidou<sup>1</sup>, Eleni Dragona<sup>1</sup>, Wojciech Niedzwiedz<sup>2</sup> and Sarantis Gagos<sup>1</sup>**  
*<sup>1</sup>Laboratory of Genetics, Center of Experimental Medicine and Translational Research, Biomedical Research Foundation of the Academy of Athens (BRFAA), Athens, Greece*  
*<sup>2</sup>The Institute of Cancer Research (ICR) Royal Cancer Hospital, London, UK*
- 591** **Increased sensitivity of neural stem cells to impaired replication licensing results to replication stress-induced microcephaly**  
**Argyro Kalogeropoulou<sup>1</sup>, Maria Mougkogianni<sup>1</sup>, Marianna Iliadou<sup>1</sup>, Zoi Lygerou<sup>2</sup>, Stavros Taraviras<sup>1</sup>**  
*<sup>1</sup>Department of Physiology, School of Medicine, Patras University, Patras, Greece*  
*<sup>2</sup>Department of General Biology, School of Medicine, Patras University, Patras, Greece*

