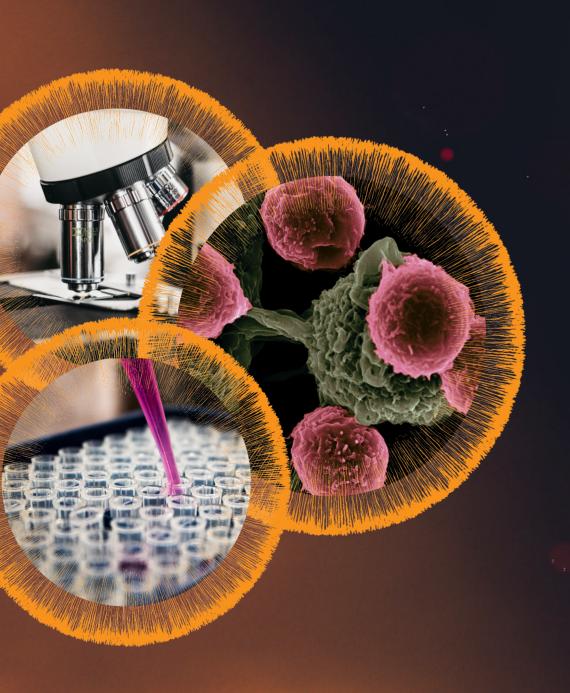
Αυτήμους Αυτήμους Ελιγνιή Εταιρεία Βιοχημείας και Μοριατής ΕΒΜΒ ΕΠΙΟΤημόνων Της ΕΕΒΜΒ

30 Νοεμβρίου 2023 Ίδρυμα Ευγενίδου, Αθήνα

Αναλυτικό Πρόγραμμα



Χορηγοί

Μέγας Χορηγός

Lab Supplies Scientific







ΓΕΩΠΟΝΙΚΟ ΠΑΝΕΠΙΣΤΗΜΙΟ ΑΘΗΝΩΝ

ΕΙΔΙΚΟΣ ΛΟΓΑΡΙΑΣΜΟΣ ΚΟΝΔΥΛΙΩΝ ΕΡΕΥΝΑΣ





Πρόσκληση

Αγαπητοί συνάδελφοι,

Με ιδιαίτερη χαρά σας προσκαλούμε να συμμετάσχετε στη 10^η Ημερίδα Νέων Επιστημόνων της Ελληνικής Εταιρείας Βιοχημείας και Μοριακής Βιολογίας (ΕΕΒΜΒ) που θα λάβει χώρα στο Ίδρυμα Ευγενίδου, την Πέμπτη 30 Νοεμβρίου 2023. Πρόκειται για ένα θεσμό που διεξάγεται εδώ και 10 χρόνια δορυφορικά του Πανελλήνιου Συνεδρίου της ΕΕΒΜΒ και έχει γνωρίσει μεγάλη επιτυχία.

Πρωταρχικό στόχο της Ημερίδας αποτελεί η ανάδειξη του ερευνητικού έργου νέων επιστημόνων τόσο της Ελλάδας όσο και του εξωτερικού που δραστηριοποιούνται σε τομείς της Βιοχημείας, της Μοριακής Βιολογίας και γενικότερα στις Βιοεπιστήμες. Κατά τη διάρκεια της Ημερίδας, οι συμμετέχοντες καλούνται να παρουσιάσουν τις ερευνητικές τους προσπάθειες μέσω προφορικών ομιλιών και ανακοινώσεων (posters) και να πάρουν μέρος σε συζητήσεις που αφορούν την επαγγελματική εξέλιξη των νέων επιστημόνων. Ταυτόχρονα, θα έχουν τη δυνατότητα αλληλεπίδρασης με άλλους ερευνητές και προσκεκλημένους ομιλητές δημιουργώντας νέες προοπτικές συνεργασίας και διευρύνοντας τους επιστημονικούς τους ορίζοντες.

Προσβλέπουμε στην ενεργή συμμετοχή σας και παραμένουμε στη διάθεσή σας για οποιαδήποτε πληροφορία ή διευκρίνιση.

Η Οργανωτική Επιτροπή της 10^{ης} Ημερίδας Νέων Επιστημόνων της ΕΕΒΜΒ

Η Οργανωτική Επιτροπή

Πρόεδρος

Εύη Γκικοπούλου, Τμήμα Βιοτεχνολογίας ΓΠΑ/ Ινστιτούτο Βιοκαινοτομίας, Ε.ΚΕ.ΒΕ. «Αλέξανδρος Φλέμινγκ»

Μέλη

Πένη Γαλάνη, Ίδρυμα Ιατροβιολογικών Ερευνών Ακαδημίας Αθηνών

Άννα Γιοράν, Ινστιτούτο Χημικής Βιολογίας, Εθνικό Ίδρυμα Ερευνών

Αναστασία- Γεωργία Δεδεμάδη, Ινστιτούτο Βιοεπιστημών και Εφαρμογών, ΕΚΕΦΕ «Δημόκριτος»

Ιωάννης Κωστόπουλος, Τμήμα Βιολογίας, ΕΚΠΑ

Νίκος Μουστάκας, Ελληνικό Ινστιτούτο Παστέρ

Ντικράν Τσιτσεκιάν, Τμήμα Βιοτεχνολογίας ΓΠΑ

10th Young Scientists' Forum – HSBMB

08:45 – 09:15	Registration
09:15 – 09:25	Welcome
09:25 – 10:25	Short talk session I (ST1–4)
09:25 - 09:40	ST1-Aristotelis Petris (Hellenic Pasteur Institute) Study of neutrophil responses in Helicobacter pylori infection
09:40 - 09:55	ST2-Katerina Fourmouzi (Hellenic Pasteur Institute) Disrupted hippocampal neurogenesis following brain chemical lesion induced by the chemotherapeutic agent Ara-C
09:55 – 10:10	ST3-Karolina Mangani (University of Patras) Monocarboxylate transporters 1 and 4 on Circulating Tumor Cells (CTCs) in Patients with Non-Small Cell Lung Cancer
10:10 -10:25	ST4-Paraskevi loannou (University of Patras) The effect of EGFR and JAK/STAT signaling pathways on glypican expression in breast cancer cells
10:25 – 12:00	Poster session I & coffee break
12:00 – 13:00	Short talk session II (ST5-8)
12:00 – 12:15	ST5-Eftichia Aggelaki (University of Patras) Unveiling the Metabolomic Profile of Growth Hormone Deficient Children Using NMR Spectroscopy ST6-Alexandros Simistiras (BSRC Al. Fleming)
12:15 – 12:30	Dietary restriction and genetics drive expression levels of plasma proteins with key roles for human health: the FastBio study
12:30 – 12:45	ST7-Eleni Vasilopoulou (BSRC Al. Fleming) Development of specialized Escherichia coli strains for high-level recombinant membrane protein production ST8-Stefanos Gravalos (University of Patras)
12:45 – 13:00	Physicochemical and spectroscopical study of Nostoc sp. bacterial homolog of β1 H-NOX domain of human soluble Guanylyl Cyclase (sGC) in complex with sGC activators
13:00 – 14:00	Lunch break
14:00 – 15:00	Open Discussion Session I - Polydefkis Hatzopoulos (Agricultural University of Athens) "Academic career pathways and future challenges in academic research"
15:00 – 16:30	Poster session II & coffee break
16:30 – 17:15	Short talk session III (ST9-11)
16:30 – 16:45	ST9-Maria Barmpoutsi (University of Patras) Artificial matrix-based bioscaffolds promote the chondrogenic differentiation potential of mesenchymal stem cells
16:45 – 17:00	ST10-Dimitra Mpainantzou (University of Patras) Chondrocyte differentiation potential of dog adipose-derived mesenchymal stem cells in artificial matrix-based bioscaffolds
17:00 – 17:15	ST11-Asimina Fotopoulou (NCSR Demokritos) Molecular and functional characterization of a subset of human skin fibroblasts that resist UVB- mediated premature senescence
17:15 – 18:15	Open Discussion Session II - Panagiota Dimitropoulou (University of Crete) "Mental health and young researchers: the importance of soft skills"
18:15- 18:45	Best Short Talk and Best Poster Presentation Awards – Closing Remarks

Poster Session I Thursday 30 November 2023 | 10:25 - 12:00

P1: Suppression of chemically-induced mammary cancer by early-life oral administration of cholera toxin in mice is associated with aberrant regulation of Bmp and Notch signaling pathways

Dimitris G. Argyris¹, Hara Afaloniati¹, Maria Markaki¹, Theofilos Poutahidis², Katerina Angelopoulou^{1*}

¹Laboratory of Biochemistry and Toxicology, School of Veterinary Medicine, Faculty of Health Sciences, Aristotle University of Thessaloniki, Greece, ²Laboratory of Pathology, School of Veterinary Medicine, Faculty of Health Sciences, Aristotle University of Thessaloniki, Greece, *e-mail: kangelop@vet.auth.gr

P3: The effect of Nutlin-3a-induced activation of the p53 signaling pathway on mitochondrial proteome in a human mantle cell lymphoma

Alexandros Syllas^{1,2}, Martina Samiotaki³, Konstantina Psatha^{1,2,4}, Michalis Aivaliotis^{1,2,5}

¹Laboratory of Biological Chemistry, School of Medicine, Faculty of Health Sciences, Aristotle University of Thessaloniki, Greece ²Functional Proteomics and Systems Biology (FunPATh), Center for Interdisciplinary research and Innovation (CIRI), Aristotle University of Thessaloniki, Greece

³Biomedical Sciences Research Center "ALEXANDROS FLEMING", Athens, Greece

⁴Laboratory of Medical Biology and Genetics, School of Medicine, Faculty of Health Sciences, Aristotle University of Thessaloniki, Greece

⁵Basic and Translational Research Unit, Special Unit for Biomedical Research and Education, School of Medicine, Aristotle University of Thessaloniki, 54124 Thessaloniki, Greece

P5: Deciphering the role of autophagy and exosomes in human lymphoma and leukemia using systems biology approaches Konstantina Psatha^{1,2,3}, Angeliki Christidou^{1,4}, Aikaterini Kalantidou⁵, Anna-Aspasia Karkavitsa⁵, Eirini Papadaki⁶, Georgia Orfanoudaki¹, Laxmikanth Kollipara⁷, Albert Sickmann^{7,8}, George Rassidakis⁹, Elias Drakos¹⁰, Michalis Aivaliotis^{1,2,11}

¹Functional Proteomics and Systems Biology (FunPATh), Center for Interdisciplinary research and Innovation (CIRI), Aristotle University of Thessaloniki, Thessaloniki, Greece

²Laboratory of Biological Chemistry, School of Medicine, Faculty of Health Sciences, Aristotle University of Thessaloniki, Greece

3Laboratory of Medical Biology and Genetics, School of Medicine, Faculty of Health Sciences, Aristotle University of Thessaloniki, Thessaloniki, Greece

⁴School of Biology, Aristotle University of Thessaloniki, Thessaloniki, Greece

⁵Department of Biology, University of Crete, Heraklion, Greece

⁶Department of Chemistry, University of Crete, Heraklion, Greece ⁷Leibniz-Institut f\u00f3r Analytische Wissenschaften-ISAS-e.V., Dortmund, Germany

⁸Medizinische Fakultot, Medizinische Proteom-Center (MPC), Ruhr-Universitot Bochum, Bochum, Germany

⁹Department of Oncology and Pathology, Cancer Centrum, Karolinska Institutet, Stockholm, Sweden

¹⁰School of Medicine, University of Crete, Heraklion, Greece

¹¹Basic and Translational Research Unit, Special Unit for Biomedical Research and Education, School of Medicine, Aristotle University of Thessaloniki, Thessaloniki, Greece

P7: A study of antimicrobial and antiproliferative activity of indigenous Greek hop (*Hmulus Lupulus*) plants from Central Greece Elisavet M. Andronidou¹, Gregoria Mitropoulou³, Anastasios Nikolaou³, Vasileios Gkalpinos⁵, Panagiota I. Kontou², Konstantinos

Tegopoulos³, Ioannis Tamposis¹, Panagiotis Pergantas⁴, George Skavdis³, Pantelis G. Bagos¹, Maria E. Grigoriou³, Andreas G Tzakos⁵, Yiannis Kourkoutas³, Georgia G. Braliou^{1*}

Department of Computer Science and Biomedical Informatics, University of Thessaly, Lamia, Greece

Department of Mathematics, University of Thessaly, Lamia, Greece
 Department of Molecular Biology & Genetics, Democritus University of Thrace, Alexandroupolis, Greece

⁴ Bioapplications Ltd., Levadia, Greece

⁵Department of Chemistry, University of Ioannina, Ioannina, Greece

P9: Generation of vascularized human pluripotent stem cells derived retinal organoids as a platform to study retinogenesis and disease

Katerina Apostolidi ^{1,2}, Maria Markou ¹, Sofia Bellou ^{1,4}, Theodore Fotsis ^{1,3}, Carol Murphy ^{1*}, Eleni Bagli ^{1*}

¹Foundation of Research and Technology-Hellas, Biomedical Research Institute, University Campus, 45110 Ioannina, Greece

²Department of Biological Applications and Technology, University of Ioannina, 45110 Ioannina, Greece

³Laboratory of Biological Chemistry, Medical School, University of Ioannina, 45110 Ioannina, Greece

⁴Confocal Laser Scanning Microscopy Unit, Network of Research Supporting Laboratories, University of Ioannina, Ioannina, 45110, Greece

P11: McIdas localizes at centrioles to control centriole numbers in cycling and multiciliated cells

Marina Arbi^{1*}, Vasiliki Bakali^{1†}, Lydia Koufoudaki^{1†}, Margarita Skamnelou¹, Spyridoula Bournaka¹, Sihem Zitouni², Aikaterini Tsika³, Georgios Spyroulias³, Monica Bettencourt-Dias², Stavros Taraviras⁴ & Zoi Lygerou^{1*}

¹Department of General Biology, School of Medicine, University of Patras, Greece

²Instituto Gulbenkian de Ciência, Oeiras, Portugal

³Department of Pharmacy, University of Patras, Greece

⁴Department of Physiology, School of Medicine, University of Patras, Greece

† These authors contributed equally to this work

P13: Precision Nutrition: Breakthrough of Multi-omics Precision Medicine

Olympia-Eirini Boulioglou¹, Giannis Vatsellas², Dimitris Thanos², Konstantinos N. Syrigos³, Athanasios K. Anagnostopoulos¹

¹Department of Biotechnology, Center of Systems Biology, Biomedical Research Foundation of Academy of Athens, 11527, Athens, Greece

²Greek Genome Center, Biomedical Research Foundation of Academy of Athens, 11527 Athens, Greece 33rd Department of Internal Medicine, Sotiria Hospital, School of Medicine, National and Kapodistrian University of Athens, 11527 Athens, Greece

P15: Evaluation of the therapeutic potential of AK057887 IncRNA inhibition in CD133⁺/CD44⁺ stem-like pancreatic cancer cells Elisavet Deligianni¹, Giasemi Eptaminitaki², Vasiliki Stravokefalou ¹, Apostolos Zaravinos^{3,4}, Panagiota Stamou¹, Christos Chochos¹, Stavroula Baritaki*2 and Dimitris Stellas*1

¹Institute of Chemical Biology, National Hellenic Research Foundation, 11635 Athens, Greece

²Laboratory of Experimental Oncology, Division of Surgery, School of Medicine, University of Crete, 71003 Heraklion, Greece

³Department of Life Sciences, School of Sciences, European University Cyprus, 2404 Nicosia, Cyprus

⁴Basic and Translational Cancer Research Center (BTCRC), Genomics and Systems Biology Laboratory, Cancer Genetics, 1516 Nicosia, Cyprus

P17: The Notch protein family and Neurodegenerative Diseases; A mutation analysis reveals new insights in CADASIL syndrome Louis Papageorgiou^{1,2}, Lefteria Papa¹, Elias Eliopoulos^{1,} and Dimitrios Vlachakis^{1,*}

¹ Laboratory of Genetics, Department of Biotechnology, Agricultural University of Athens, Athens 11855, Greece;

P19: Prolonged adrenergic stress disrupts mitochondrial homeostasis and primes the innate immune response in salivary gland epithelium Maria Filika^{1*}, Chrysafenia Papavissarion¹, Maria Skoufou¹, Kalliopi Moustaka², Roxanne Tenta², Martina Samiotaki³, George Stamatakis G³, Fotini Skopouli² and Stergios Katsiougiannis¹

² Department of Biomedical Sciences, School of Health and Care Sciences, University of West Attica, Agioy Spyridonos, 12243, Egaleo, Greece;

¹ Biomedical Research Foundation Academy of Athens, Greece

² Department of Nutrition and Dietetics, Harokopio University, Athens, Greece

³Biomedical Sciences Research Center Alexander Fleming, Athens, Greece

P21: The plasma membrane associated protein remorin6.6: in silico characterization and protein purification under native conditions <u>Veronica Giourieva</u>¹, Nestoras Kargios², Murray Grant², Rigini Papi³, George Komis^{1*}

*email: gkomis.bio.auth.gr

² School of Life Sciences, University of Warwick, Coventry, United Kingdom

P23: "Sustainable Hydroponic Waste Management Through Microalgae Bioremediation: A Study on Nutrient Removal and Biomass

Danae Ifanti^{1*}, Georgios-Chrisovalantis Prattis^{1*}, Maria-Eleftheria Zografaki¹, Sofia Marka¹, Alexandros Ntzouvaras¹, Ioannis Karavidas², Theodora Ntanasi², Gabriel Vasilakis³, Georgia Ntatsi², Emmanouil Flemetakis¹

Agricultural University of Athens, Laboratory of Molecular Biology, Department of Biotechnology, Iera Odos 75, 11855, Athens, Greece

² Agricultural University of Athens, Laboratoty of Vegetable Crops, Department of Crop Science, Iera Odos 75, 11855, Athens, Greece

³Agricultural University of Athens, Laboratory of Food Microbiology and Biotechnology, Department of Food Science and Human Nutrition, Iera Odos 75, 11855, Athens, Greece *email: stud318113@aua.gr

P25: SayWES4Life: Whole exome sequencing for diagnosis of rare genetic diseases for 400 patients in Greece reveals ultra-rare entities E. Veltsou^{1,2}, V. Tzimogianni^{1,2}, O. Preza^{1,2}, S. Mavromatis^{1,2}, N. Georgakopoulou^{1,2}, D. Veltista³, E. Chroni³, E. Kostopoulou⁴, G. Dimitriou⁴, A. Katerelos⁵, M.Iliopoulou⁵, P. Tsoumpos⁵, L. Lykopoulou⁶, M. R. Pons⁶, A. Kattamis⁶, R. Koros⁷, G. Tsigkas⁷, P. Davlouros⁷, V. Panagiotopoulos⁸, G. Karadima⁹, G. Koutsis⁹, G. Papadimas⁹, L. Stefanis⁹, V. Giannatos¹², A. Konstantopoulou⁵, K. Loritis¹⁰, A. Briasoulis¹⁰, G. Georgiopoulos¹⁰, R. Seung Woo¹¹, K. JiHye¹¹, S. Taraviras¹², Z. Lygerou^{1,2}

¹Institute of Precision Medicine, University Research and Innovation Center, University of Patras.

²Molecular Genetics Unit, General Biology Department, Medical School, University of Patras, Greece.

³Neuromuscular Center, University General Hospital of Patras and Medical School, University of Patras,

⁴Paediatric Clinic, University General Hospital of Patras and Medical School, University of Patras, ⁵Karamandaneio Childrens' Hospital, Patras.

⁶Ag. Sofia Children's Hospital, Athens,

⁷Cardiology Unit, Pathology Clinic, University General Hospital of Patras and Medical School, University of Patras,

8Neurosurgery Unit, Surgery Clinic, University General Hospital of Patras and Medical School, University of Patras,

⁹Neurology Clinic, Eginition Hospital, Athens,

¹⁰Department of Clinical Therapeutics, National and Kapodistrian University of Athens,

¹¹3billion Inc., Seoul, South Korea

P27: Mechanistic insights into the anticancer effect of sulfated hyaluronan in aggressive cancer cells

Christos Koutsakis¹, Sylvia Mangani¹, Nikolaos Ef. Koletsis¹, Zoi Piperigkou^{1,2}, Martyna Maszota-Zieleniak³, Sergey A. Samsonov³, Nikos K. Karamanos^{1,2}

¹ Biochemistry, Biochemical Analysis & Matrix Pathobiology Research Group, Laboratory of Biochemistry, Department of Chemistry, University of Patras, Greece

² Foundation for Research and Technology-Hellas (FORTH) / Institute of Chemical Engineering Sciences (ICE-HT), Patras, Greece

³ Faculty of Chemistry, University of Gdansk, Gdansk, Poland

P29: Quantitative detection of Non Helicobacter pylori Helicobacter (NHPH) species in human gastric biopsies

Beatriz Martinez-Gonzalez¹, Ioanna Nanou^{1,2}, Nikolaos Moustakas¹, Stylliani Xenaki¹, Ioannis Karayiannis¹, Panagoula Kollia² and Dionyssios N. Sgouras^{1*}

¹Laboratory of Medical Microbiology, Hellenic Pasteur Institute, Athens, Greece

²Department of Genetics and Biotechnology, Faculty of Biology, School of Physical Sciences, University of Athens, Athens, Greece

P31: HSP90 is a key regulator of the GA signaling pathway

Konstantinos Panagiotopoulos, Despina Samakovli, Aggeliki Rambou, Polydefkis Hatzopoulos, Dimitra Milioni*

Agricultural University of Athens, School of Applied Biology and Biotechnology, Department of Biotechnology, Iera Odos 75, Athens 11855

P33: Identification of specific testosterone-like antagonists for the membrane receptor of androgens, OXER1

Panagiotopoulos¹, Evangelia Konstantinou¹, Konstantina Kalyvianaki¹, Stergios A. Pirintsos², Elias Castanas^{1*}, Marilena Kampa^{1*}

¹Laboratory of Experimental Endocrinology, University of Crete, School of Medicine, Heraklion, Greece

²Department of Biology, School of Science and Technology, University of Crete, Heraklion, Greece *e-mails: Marilena Kampa (<u>kampam@uoc.gr</u>), and Elias Castanas (<u>castanas@uoc.gr</u>)

P35: Effect of simvastatin on Hs578T breast cancer cells: functional properties, and expression of stem and EMT markers of selected extracellular proteases.

Constantine Papadimatos, Ioanna Christodoulou, Spyridon S. Skandalis, Nikos K. Karamanos and Demitrios H. Vynios

Biochemistry, Biochemical Analysis & Matrix Pathobiochemistry Research Group, Department of Chemistry, University of Patras, 26504 Patras, Greece

P37: Identification of the protein interactome of *Escherichia coli* Glutaredoxin 2

Eleni Poulou-Sidiropoulou¹, Charalampos N. Bompas¹, Martina Samiotaki², Alexios Vlamis-Gardikas^{1*}

¹Department of Chemistry, University of Patras, 26504, Rion, Patras, Greece

² Institute for Bioinnovation, Biomedical Sciences Research Center "Alexander Fleming", 16672, Vari, Attica, Greece,

P39: Activin A Signalling in Human Pluripotent Stem Cells

Elena Rakovoliou^{1*}, Angelos Papadopoulos², Athena Kyrkou¹, Nikoleta Kostopoulou¹, Sofia Bellou^{1,3}, Aikaterini Apostolidi¹, Maria Margariti⁴, Maria Markou¹, Eleni Bagli¹, Panagiota Chira⁴, Eleni Tschari⁵, Philippe Chavrier⁵, John Heath², Theodore Fotsis^{1,4}, and Carol Murphy^{1**}

¹ Biomedical Research Institute, Foundation of Research and Technology-Hellas, University Campus, 45110

Ioannina. Greece ²School of Biosciences, College of Life and Environmental Sciences, University of Birmingham, UK.

³Confocal Laser Scanning Microscopy Unit, Network of Research Supporting Laboratories, University of Ioannina,

⁴Laboratory of Biological Chemistry, Medical School, University of Ioannina, 45110, Greece

⁵Centre de Recherche, Institut Curie, CNRS, UMR 144, 26 rue d'Ulm, 75248 Paris Cedex 05, France

Presenting author: Rakovoliou Elena, email: elenarakovoliou@gmail.com Corresponding author, email:<u>carol_murphy@bri.forth.gr</u>

P41: Characterization of the putative DEAH-box RNA helicase DHX35: Insights into cancer translation deregulation Nikolaos Kypraios¹, Katerina Gentekaki¹, Eleni G. Kaliatsi¹, Adamantia Kouvela¹, Constantinos Stathopoulos¹, Vassiliki Stamatopoulou^{1*}

¹ Department of Botany, School of Biology, Aristotle University of Thessaloniki, Greece

³ Department of Biochemistry, School of Chemistry, Aristotle University of Thessaloniki, Greece

¹²Department of Physiology, School of Medicine University of Patras, Greece.

P43: GCN5 plays multiple regulatory roles in *Arabidopsis thaliana* root development

Christos Tersenidis¹, Emmanuel Panteris^{1*}, Konstantinos Vlachonasios^{1,2}

1 Department of Botany, School of Biology, Faculty of Science, Aristotle University of Thessaloniki, Greece

2 Natural Products Research Centre of Excellence (NatPro-AUTh), Center of Interdisciplinary Research and Innovation of Aristotle University of Thessaloniki (CIRI-AUTh), Thessaloniki,

P45: Structural investigation of DTX3L domains

Nikolaos K. Fourkiotis^{#1}, Aikaterini C. Tsika^{#1}, Konstantina P. Kravvariti¹, Sofia-AntigoniTsatsouli¹, Maria Birkou¹ and Georgios A. Spyroulias^{1*}

¹Department of Pharmacy, University of Patras, 26504 Patras, Greece

P47: A transcriptomic analysis to decipher olive antioxidants biosynthesis during olive fruit ripening of the "Koroneiki" cultivar Dikran Tsitsekian¹, Gerasimos Daras¹, Dimitrios Templalexis¹, Fengoula Avgeri¹, Anthi Panara², Nikolaos S Thomaidis², Polydefkis Hatzopoulos¹ and Stamatis Rigas^{1*}

¹Laboratory of Molecular Biology, Department of Biotechnology, Agricultural University of Athens, Iera Odos 75, 11855, Athens, Greece.

²Laboratory of Analytical Chemistry, Department of Chemistry, National and Kapodistrian University of Athens, 15771 Athens, Greece.

*e-mail: srigas@aua.gr

P49: Deciphering TF dynamics during T-cell differentiation: Transcription factor motification through deep learning interpretation Panagiotis Xiropotamos¹, Yiannis Vasilopoulos¹, Georgios K. Georgakilas^{1,2*}

¹Laboratory of Genetics, Section of Genetics, Cell Biology and Development, Department of Biology, University of Patras, 26504 Patras, Greece,

²Information Management Systems Institute, "ATHENA" Research and Innovation Center in Information, Communication and Knowledge Technologies

*e-mail: ggeorgakila@upnet.gr

P51: Astrocyte-neuron interactions: game changers in Parkinson's disease?

Olympia Apokotou¹, Christina Paschou², Anastasios Kollias², Konstantina Charmpi¹, Sofia Dede², Martina Samiotaki³, George Panayotou³, Era Taoufik², Rebecca Matsas², Florentia Papastefanaki^{1, 2*}

¹Human Embryonic and Induced Pluripotent Stem Cell Unit, Hellenic Pasteur Institute, Athens, Greece

²Laboratory of Cellular and Molecular Neurobiology-Stem Cells, Hellenic Pasteur Institute, Athens, Greece ³Institute of Bioinnovation, Biomedical Sciences Research Center "Alexander Fleming", Vari, 16672, Greece

P53: Peri-weaning cholera toxin consumption suppresses chemically-induced carcinogenesis in mice

Hara Afaloniati¹, Georgios Aindelis², Katerina Spyridopoulou², Maria K. Lagou³, Anastasia Tsingotjidou⁴, Katerina Chlichlia², Suzan E. Erdman⁵, Theofilos Poutahidis³, Katerina Angelopoulou^{1*}

¹Laboratory of Biochemistry and Toxicology, School of Veterinary Medicine, Faculty of Health Sciences, Aristotle University of Thessaloniki, Thessaloniki, Greece, ²Department of Molecular Biology and Genetics, Democritus University of Thrace, University Campus Dragana, Alexandroupolis, Greece, ³Laboratory of Pathology, School of Veterinary Medicine, Faculty of Health Sciences, Aristotle University of Thessaloniki, Thessaloniki, Greece, ⁴Laboratory of Anatomy, Histology and Embryology, School of Veterinary Medicine, Faculty of Health Sciences, Aristotle University of Thessaloniki, Thessaloniki, Greece, ⁵Division of Comparative Medicine, Massachusetts Institute of Technology, Cambridge, USA, *e-mail: kangelop@vet.auth.gr

P55: Unravelling cannabidiol's therapeutic potential in stress and Alzheimer's disease brain pathologies

Anastasia Vamvaka-lakovou^{1,2,3,4}, Joana Silva^{3,4}, Patricia Gomes^{3,4}, Carlos Campos-Marques^{3,4}, Martina Samiotaki⁵, George Panayotou^{5,4} Anastasia Megalokonomou^{1,3,4}, Filippos Katsaitis ¹, Kalliopi Skourti¹, Georgia Papadimitriou^{1,3,4}, Beatriz Barros-Santos^{3,4}, Ioannis Sotiropoulos^{1,3,4}

¹ Institute of Biosciences and Applications, NCSR Demokritos, Agia Paraskevi, Greece

² Department of Biological Applications & Technology, University of Ioannina, Ioannina, Greece

³ Life and Health Sciences Research Institute (ICVS), School of Medicine, University of Minho, Braga, Portugal

⁴ ICVS/3B's - PT Government Associate Laboratory, Braga/Guimaraes, Portugal

⁵ Institute for Bioinnovation, Biomedical Sciences Research Center "Alexander Fleming", Vari, Attica, Greece

P57: Study of chitin metabolism of the psychrophilic bacterium *Moritella marina* by proteomic analysis Andreas Paliouras¹, Anastasios Georgoulis¹ Aggeliki Tsoka¹, Martina Samiotaki² Constantinos Vorgias¹, Jerome Zoidakis^{1,3*}

1 Department of Biology, National and Kapodistrian University of Athens, Panepistimioupolis, Zografou, 15701, Athens, Greece

2 Proteomics Facility, Institute for Bioinnovation, Biomedical Sciences Research Center 'Alexander Fleming', 16672, Vari, Greece.

3 Proteomics Laboratory, Biomedical Research Foundation, Academy of Athens, 11527, Athens, Greece

P59: Serglycin is a novel regulator of unfolded protein response pathway in glioblastoma cells

Eleftherios N. Athanasopoulos¹, Theodora Stamatogiannopoulou¹, Dimitra Manou², Dimitra Bainantzou¹, Achilleas D. Theocharis¹

¹Biochemistry, Biochemical Analysis & Matrix Pathobiology Research Group, Laboratory of Biochemistry, Department of Chemistry, University of Patras, Greece ²Brain Tumor Biology, Division of Translational Cancer Research, Lund University, Sweden

P61: Lactococcus lactis ssp. lactis bacteriocins exert cytotoxic effects on colon cancer cells

Christina Thoda¹, Eleni Gounari², Dimitris Kontoyiannis¹, George Koliakos^{2,3}, Maria Touraki¹

¹ Department of Genetics, Development and Molecular Biology, School of Biology, Faculty of Sciences, Aristotle University of Thessaloniki, Thessaloniki, 54124

² Biohellenika, Biotechnology Company, Thessaloniki, 57001

³ Laboratory of Biological Chemistry, School of Medicine, Faculty of Health Sciences, Aristotle University of Thessaloniki, Thessaloniki, 54124

P63: Natural Product Analogues as Antibacterial Agents: The Case of Cinnamaldehyde and Colupulone Angeliki Kokkali¹, Anna-Maria Kostaki^{2,3}, Georgia Athanassopoulou^{2,3}, Apostolia Makri⁴, Marina Sagnou⁵, Veroniki P. Vidali^{2*}, Georgia Kythreoti1*

¹School of Liberal Arts and Sciences, The American College of Greece, Aghia Paraskevi, Greece. *Email: gkythreoti@acg.edu

²Institute of Nanoscience & Nanotechnology, National Center for Scientific Research "Demokritos", Aghia Paraskevi, Greece. *Email: v.vidali@inn.demokritos.gr

³Department of Pharmacy, National and Kapodistrian University of Athens, Greece.

⁴Department of Food Science and Human Nutrition, Agricultural University of Athens, Greece. ⁵Institute of Biosciences & Applications, National Centre for Scientific Research "Demokritos", Aghia Paraskevi, Greece.

P65: Extracellular vesicles produced by the gut microbiome and their effect on mental disorders

Effrosyni Louka, Vassiliki Lila Koumandou*

Department of Biotechnology, Agricultural University of Athens, Greece

P67: A novel RNA-targeted therapeutic approach against Tau-driven neuronal pathology in Alzheimer's disease brain pathology Anastasia Megalokonomou^{1,2}*, Carlos Campos-Marques^{3,4}, Bruno Godinho^{5,6}, Jonathan Watts^{5,7}, Martina Samiotaki⁸, George Panayotou⁸, Georgia Papadimitriou^{1,3,4}, Anastasia Vamvaka-lakovou^{1,9}, Beatriz Barros dos Santos^{3,4}, Kalliopi Skourti¹, Filippos Katsaitis¹, Joana Silva^{3,4}, Ioannis Sotiropoulos^{1,3,4}

¹ Institute of Biosciences and Applications (IBA), National Center of Scientific Research "Demokritos", Athens, Greece.

² Faculty of Medicine, University of Crete, Heraklion, Greece.

³ Life and Health Sciences Research Institute (ICVS), School of Medicine, University of Minho, Braga 4710-057, Portugal.

⁴ ICVS/3B's-PT Government Associate Laboratory, Braga/Guimarães 4710-057, Portugal.

⁵ RNA Therapeutics Institute, University of Massachusetts Medical School, Worcester, Massachusetts, USA

⁶ Department of Molecular Medicine, University of Massachusetts Medical School, Worcester, Massachusetts, USA Department of Biochemistry and Molecular Pharmacology, University of Massachusetts Medical School, Worcester, Massachusetts, USA

⁸ Institute for Bioinnovation (IBI), Biomedical Sciences Research Center "Alexander Fleming", Athens, Greece Department of Biological Applications & Technology, University of Ioannina, 45110, Ioannina, Greece

P69: Inactivation of tumor suppressor CYLD inhibits fibroblast re-programming to pluripotency Nikolaos Bekas¹, Martina Samiotaki², Maria Papathanasiou³, Panagiotis Mokos¹, Athanasios Pseftogas⁴, Konstantinos Xanthopoulos⁵, Dimitris Thanos³, George Mosialos¹, Dimitra Dafou¹

- 1 School of Biology, Aristotle University Of Thessaloniki, Thessaloniki Greece
- 2 Biomedical Sciences Research Center "Alexander Fleming", Athens Greece
- 3 Biomedical Research Foundation Academy of Athens, Athens Greece
- 4 Vita-Salute San Raffaele University Division of Experimental Oncology, Milan Italy
- 5 Laboratory of Pharmacology, Department of Pharmacy, School of Health Sciences, Aristotle University of Thessaloniki, Thessaloniki Greece

P71: Development of an antigen-specific therapy for myasthenia gravis

<u>Eleni Ntoukaki</u>, Vasiliki Baltatzidou, Konstantinos Lazaridis*

Department of Immunology, Hellenic Pasteur Institute, Athens, Greece.

P73: AlphaFold Prediction of Structural Ensembles of Disordered Proteins

<u>Faidon Brotzakis</u>^{1,2}, Shengyu Zhang¹, Michele Vendruscolo^{1,*}

1. Centre for Misfolding Diseases, Yusuf Hamied Department of Chemistry, University of Cambridge, Cambridge, UK

2. BSRC Fleming, Vari, Greece

P75: Reassessment of PTEN inhibitors: A comparative study of bisperoxovanadium complexes and novel compounds.

<u>Kyriaki Premeti</u>^{1*}, Antonios E. Nadalis¹, Vasiliki Syropoulou¹, Danai Karagkiozeli¹, George Aggelis¹, Mlhalis G. Papanikolaou², Themistoklis Kampanos², Charalampos Labrakakis^{3,4}, Katerina Antoniou^{1,4}, George Leondaritis^{1,4}

P77: Cold atmospheric plasma regulates breast cancer cells' microenvironment

<u>Varvara-Christina Siagka</u>¹, Aggeliki Kanellaki¹, Maria-Elpida Christopoulou^{1,2}, Stavros Meropoulis³, Christos Aggelopoulos³, Spyros S. Skandalis^{1*}

¹Biochemistry, Biochemical Analysis & Matrix Pathobiology Res. Group, Laboratory of Biochemistry, Department of Chemistry, University of Patras, Patras, Greece

*skandalis@upatras.gr

¹Department of Pharmacology, Faculty of Medicine, School of Health Sciences, University of Ioannina, 45110 Ioannina, Greece

² Section of Inorganic and Analytical Chemistry, Department of Chemistry, University of Ioannina, Ioannina 45110, Greece

³Department of Biological Applications and Technology, School of Health Sciences, University of Ioannina, 45110 Ioannina, Greece

⁴Institute of Biosciences, University Research Center of Ioannina, 45110 Ioannina, Greece

²Department of Pneumology, Medical Center-University of Freiburg, Faculty of Medicine-University of Freiburg, Germany

³Laboratory of Cold Plasma and Advanced Techniques for Improving Environmental Systems, Institute of Chemical Engineering Sciences, Foundation for Research and Technology Hellas (FORTH/ICE-HT), Patras, Greece

Poster Session II Thursday 30 November 2023 | 15:00 – 16:30

P2: Study of the relationship between mitochondrial function and dysregulation of significant signaling pathways in Parkinson's disease through comparative proteomics analysis

Sofia Ioannidou^{1,2}, Konstantina Psatha^{1,2,3}, Sofia Notopoulou⁴, Martina Samiotaki⁵, Nikolaos Grigoriadis⁶, Spyros Petrakis⁴, Michalis Aivaliotis^{1,2,7}

¹Laboratory of Biological Chemistry, School of Medicine, Faculty of Health Sciences, Aristotle University of Thessaloniki, Greece

²Functional Proteomics and Systems Biology (FunPATh), Center for Interdisciplinary research and Innovation (CIRI), Aristotle University of Thessaloniki, Greece

³Laboratory of Medical Biology and Genetics, School of Medicine, Faculty of Health Sciences, Aristotle University of Thessaloniki, Greece

⁴Institute of Applied Biosciences (INAB), Center for Research and Technology Hellas, Thessaloniki, Greece ⁵Biomedical Sciences Research Center "ALEXANDROS FLEMING", Athens, Greece

⁶Laboratory of Experimental Neurology and Neuroimmunology, School of Medicine, Aristotle University of Thessaloniki, Greece

⁷Basic and Translational Research Unit, Special Unit for Biomedical Research and Education, School of Medicine, Aristotle University of Thessaloniki, 54124 Thessaloniki, Greece

P4: Comparative study of key epigenetic protein regulators in different subtypes of human lymphoma after Nutlin-3a-induced p53 activation Stergiani Telliou^{1,2}, Paschalina Tangili^{1,2}, Stefania Maniatsi^{2,3}, Georgia Orfanoudaki², Konstantina Psatha^{2,3,4}, Michalis Aivaliotis^{2,3,5}

¹School of Biology, Aristotle University of Thessaloniki, Thessaloniki, Greece

²Functional Proteomics and Systems Biology (FunPATh), Center for Interdisciplinary research and Innovation (CIRI), Aristotle University of Thessaloniki, Thessaloniki, Greece

3Laboratory of Biological Chemistry, School of Medicine, Faculty of Health Sciences, Aristotle University of Thessaloniki, Thessaloniki, Greece

⁴Laboratory of Medical Biology and Genetics, School of Medicine, Faculty of Health Sciences, Aristotle University of Thessaloniki, Thessaloniki, Greece ⁵Basic and Translational Research Unit, Special Unit for Biomedical Research and Education, School of Medicine, Aristotle University of Thessaloniki, Thessaloniki, Greece

P6: Elucidation of the relative abundance of p53 isoforms and protein complexes in human lymphoma and leukemia cell line models Anastasia Theodosiadou^{1,2}, Athina Kyriazi^{2,3}, <u>Ilektra Mavroudi</u>^{1,2}, Stefanos Polychronis⁴, Stefania Maniatsi^{2,5}, Elias Drakos⁶, Martina Samiotaki⁷, Konstantina Psatha^{2,5,8}, Michalis Aivaliotis^{1,2,9}

¹School of Biology, Aristotle University of Thessaloniki, Thessaloniki, Greece

²Functional Proteomics and Systems Biology (FunPATh), Center for Interdisciplinary research and Innovation (CIRI), Aristotle University of Thessaloniki, Thessaloniki, Greece

³Department of Biology, University of Crete, Heraklion, Greece

⁴Department of Biochemistry, Eberhard Karls University of Tuebingen, Tuebingen, Germany

⁵Laboratory of Biological Chemistry, School of Medicine, Faculty of Health Sciences, Aristotle University of Thessaloniki, Greece

⁶School of Medicine, University of Crete, Heraklion, Greece

⁷Biomedical Sciences Research Center "ALEXANDROS FLEMING", Athens, Greece

8Laboratory of Medical Biology and Genetics, School of Medicine, Faculty of Health Sciences, Aristotle University of Thessaloniki, Thessaloniki, Greece

9Basic and Translational Research Unit, Special Unit for Biomedical Research and Education, School of Medicine, Aristotle University of Thessaloniki, Thessaloniki, Greece

P8: The regulatory role of the interaction between platelets and postnatal brain Neural Stem and Progenitor Cells of the Subependymal Zone Maria Anesti1*, Cédric Ghevaert2, Ilias Kazanis1

¹Laboratory of Developmental Biology, Division of Genetics Cell and Developmental Biology, Department of Biology, University of Patras, Patras, Greece

²Wellcome Trust – MRC Cambridge Stem Cell Institute & Department of Haematology, University of Cambridge, Cambridge, UK

*e-mail: anestimaria@gmail.com

P10: Identification of factors that decrease the occurrence of oncogenic therapy-induced *MLL* fusions

Anna Athanasouli¹, Diana Kotini¹, Henrike Gothe², Vera Minneker², Jan Heidelberger², Petra Beli² and Vassilis Roukos^{1,2}

¹Department of General Biology, Medical School, University of Patras, Patras, Greece

² Institute of Molecular Biology (IMB), Mainz, Germany

P12: Identification of the protein interactome of Escherichia coli Glutaredoxin 3

Charalampos N. Bompas¹, Eleni Poulou-Sidiropoulou¹, Martina Samiotaki², Alexios Vlamis-Gardikas¹

¹ Department of Chemistry, University of Patras, 26504, Rion, Patras. Greece

² Institute for Bioinnovation, Biomedical Sciences Research Center "Alexander Fleming", 16672, Vari, Attica, Greece.

P14: The 'linchpin' Arg983 of E3 Ubiquitin Ligase Arkadia and its role in the ubiquitination machinery

Georgia N. Delegkou¹, Nefeli Fragkaki¹, Maria Birkou¹, Tamara Toro¹, Konstantinos D. Marousis¹, Vasso Episkopou², Georgios A. Spyroulias^{1*}

¹Department of Pharmacy, University of Patras, 26504 Patras, Greece

²Department of Brain Sciences, Imperial College, London W12 0NN, UK

*e-mail: <u>G.A.Spyroulias@upatras.gr</u>

P16: Modulation of neuronal and astroglial gene expression markers in European Sea Bass (*Dicentrarchus labrax*) infected with nervous necrosis virus

Antonia Efstathiou, Dimitra K. Toubanaki, Odysseas P. Tzortzatos, Evdokia Karagouni*

Hellenic Pasteur Institute, Department of Microbiology, Vas. Sofias 127, 11521, Athens, Greece

*e-mail: <u>ekaragouni@pasteur.gr</u>

P18: Semi-synthetic analogues of oleuropein with improved anticancer activity in vitro and in vivo

Nikolaos Angelis^{1*}, Panagiota Papakotsi², Efthimios Paronis¹, Georgia Sarikaki², Ioannis Kostopoulos¹, Alexandros-Leandros Skaltsounis², Ioannis Kostakis³, Ourania Tsitsilonis¹

¹Section of Animal and Human Physiology, Department of Biology; ²Section of Pharmacognosy & Natural Products Chemistry, Department of Pharmacy; ³Section of Pharmaceutical Chemistry, Department of Pharmacy, National and Kapodistrian University of Athens, Greece

P20: The lipid metabolism regulator Angiopoietin-like-3 protein (ANGPTL-3) modulates cholesterol biosynthesis in Hepatitis C virus (HCV)infected hepatocytes

<u>Athanassios Batsilas,</u> Despoina Olga Papaggeli, Georgia Papadopoulou, Vaia Valiakou, Danai Damda, Eirini Karamichali, Urania Georgopoulou, Pelagia Foka*

Molecular Virology Laboratory, Hellenic Pasteur Institute, Athens, Greece

P22: Molecular Determinants of CRISPR/Cas9 Scissile Profile for Precise and Predictable Genome Editing <u>Demetriana Hadjichristou</u>¹, Gabriel M. C. Longo², Sergi Sayols², Andriana G. Kotini¹, Vassilis Roukos^{1,2}

¹ Department of General Biology, Medical School, University of Patras, Patras, Greece

² Institute of Molecular Biology (IMB), Mainz, Germany

P24: Neural Stem Cells and Platelets: allies or rivals? an investigation of cell viability, apoptosis, mitosis and neurogenesis in co-cultures F. Katsaitis^{1,2*}, Maria Anesti¹, Aggeliki Dimopoulou¹, I. Kazanis^{1*}

¹ Laboratory of Developmental Biology, Department of Biology, University of Patras, 26500, Patras, Greece

² Current Affiliation: Laboratory of Cell Signaling and Molecular Pharmacology, Institute of Biosciences and Applications, NCSR "Demokritos", 15343, Athens, Greece

Corresponding E-mails: filippos.katsaitis@upnet.gr or ikazanis@upatras.gr

P26: Investigation of metabolic responses following treatment with a novel synthetic purine analog with antitumor activity in mouse model of breast cancer

Panagiotis Malamos^{1*}, Manolis Matzapetakis¹, Maria Georgiou², Nikolaos Lougiakis², Vassilis L. Souliotis¹, Nicole Pouli², Panagiotis Marakos², Dimitris Stellas¹, Maria Zervou¹

¹ Institute of Chemical Biology, National Hellenic Research Foundation, Athens, Greece

P28: Effect of graphene and graphene oxide on human pluripotent and vascular cells

Maria Markou, Kostas Spyrou, Athanasia Zoi Pappa, Sofia Bellou, Eleni Bagli, Dimitrios Gournis, Theodore Fotsis, Carol Murphy*

¹Biomedical Research Institute (BRI) -FORTH, Ioannina, Greece.

²Department of Material Sciences and Engineering, University of Ioannina, Greece.

³Laboratory of Biological Chemistry, Medical Department, School of Health Sciences. University of Ioannina, Greece.

Corresponding author: Carol Murphy, email: carol-murphy@bri.forth.gr

P30: Sequencing-based mutational screening of the β-globin gene and pipeline development for variant calling in β-thalassemia modifier loci from Whole Exome Sequencing data

Sotiris Mavromatis¹, Eirini Veltsou¹, A. Symeonidis², A. Kourakli², Zoi Lygerou¹

Molecular Genetics Unit, Department of General Biology, School of Medicine, University of Patras, Greece.

P32: TOP2 topoisomerases remodel chromosome organization at boundaries of active, positively supercoiled and nuclear lamina-associated regions of the human genome.

Anastasia Panagi^{1*}, Amalia Stavridou^{1*}, Gabe Longo², Sergi Sayols², Ting Xie³, Argyris Papantonis³, Diana Kotini¹, Vassilis Roukos^{1,2}

¹Department of General Biology, Medical School, University of Patras, Patras, Greece

²Institute of Molecular Biology (IMB), Mainz, Germany

³Institute of Pathology, University Medical Center Göttingen, Robert-Koch-Strasse 40, 37075 Göttingen

*equal contribution

P34: Evidence for nuclear translocation of the membrane androgen receptor, OXER1 through its interaction with karyopherins systems Panagiotis Malamos¹, Athanasios A. Panagiotopoulos¹, Konstantina Kalyvianaki¹, Amalia Vogiatzoglou¹, Artemis Tsitsikalaki¹, Panayiotis A. Theodoropoulos², Christos A. Panagiotidis³, George Notas¹, Elias Castanas^{1*}, Marilena Kampa^{1*}

¹Laboratory of Experimental Endocrinology, University of Crete, School of Medicine, Heraklion, Greece ²Department of Biochemistry, School of Medicine, University of Crete, Heraklion, Greece ³Laboratory of Pharmacology, School of Pharmacy, Aristotle University of Thessaloniki, Thessaloniki, Greece *e-mails: Marilena Kampa (<u>kampam@uoc.gr</u>), and Elias Castanas (<u>castanas@uoc.gr</u>)

P36: Studying the pathophysiological role of SLC25A46 through proteomic analysis

<u>Vasiliki-Iris Perivolidi</u>^{1,2}, Pavlina-Ilianna Moutzouri^{1,2}, Martina Samiotaki², George Panayotou², Eleni Douni^{1,2,*}

¹ Laboratory of Genetics, Department of Biotechnology, Agricultural University of Athens, Iera Odos 75, 11855, Athens, Greece ² Institute for Bioinnovation, Biomedical Sciences Research Center "Alexander Fleming", Fleming 34, 16672, Vari, Greece

P38: Microalgae-Based Wastewater Purification and Resource Valorization: A Study on Chlamydomonas sp. and Scenedesmus sp. in Tomato Hydroponic Effluents

Georgios-Chrisovalantis Prattis¹*, Danae Ifanti¹, Sofia Marka¹, Maria-Eleftheria Zografaki¹, Alexandros Ntzouvaras¹, Ioannis Karavidas², Theodora Ntanasi² Gabriel Vasilakis³, Georgia Ntatsi², Emmanouil Flemetakis¹

¹Agricultural University of Athens, Laboratory of Molecular Biology, Department of Biotechnology Iera Odos 75, 11855, Athens, Greece

² Agricultural University of Athens, Laboratoty of Vegetable Crops, Department of Crop Science, Iera Odos 75, 11855, Athens, Greece

3Agricultural University of Athens, Laboratory of Food Microbiology and Biotechnology, Department of Food Science and Human Nutrition, Iera Odos 75, 11855, Athens, Greece *stud318085@aua.gr

P40: In vivo microglial Bin1 deletion following LPS stimulation regulates neuroinflammation in the mouse hippocampus and Adult Hippocampal Neurogenesis

Maria Anna Roussaki^{1*}, Maria Margariti¹, Irini Thanou¹, Evangelia Xingi², Vasiliki Kyrargiri³, Marcos Costa^{4, 5}, Dimitra Thomaidou¹

¹ Hellenic Pasteur Institute, Neural Stem Cells and Neuro-imaging Group, Department of Neurobiology, Athens, Greece, ² Hellenic Pasteur Institute, Light Microscopy Unit, Athens, Greece, ³ Hellenic Pasteur Institute, Laboratory of Molecular Genetics, Microbiology Department, Athens, Greece, ⁴Institut Pasteur de Lille, Univ. Lille, Inserm, CHU Lille, Lille, France, ⁵Federal University of Rio Grande do Norte, Brain Institute, Natal, Brazil

P42: Investigating the role of RANKL in mammary and prostate gland pathophysiology

Christos Chrysovalantis Syrigos^{1,2}, Evi Gkikopoulou^{1,2}, Dimitrios Lymperopoulos^{2,3}, Anthi Kolokotroni^{1,2}, and Eleni Douni^{1,2*}

Department of Biotechnology, Agricultural University of Athens, Iera Odos 75, 11855, Athens, Greece

² Institute for Bioinnovation, B.S.R.C. "Alexander Fleming", Fleming 34, 16672, Vari, Greece

³ School of Medicine, European University Cyprus, Nicosia, Cyprus

P44: Pancreatic Cancer-Associated Depression (PCAD) is linked to adult neurogenesis impairment

<u>Dimitrios Troumpoukis</u>¹, Adriana Papadimitropoulou¹, Effrosyni Koronaiou², Paraskevi Kogionou^{1,3}, Chrysanthi Charalampous¹, Alexia Polissidis², Nicolas Nicolaides^{2,4}, Yassemi Koutmani^{2*} and Ioannis Serafimidis^{1*}

¹Center of Basic Research, Biomedical Research Foundation of the Academy of Athens, Athens, Greece

²Center of Experimental Surgery, Clinical and Translational Research, Biomedical Research Foundation of the Academy of Athens, Athens, Greece

³Department of Biology, National and Kapodistrian University of Athens, Athens, Greece

⁴First Department of Pediatrics, National and Kapodistrian University of Athens, Athens, Greece

*emails: ykoutmani@bioacademy.gr, iseraf@bioacademy.gr

P46: Structural biology-based targeting of viral and human macrodomains

<u>Aikaterini C. Tsika^{#1}</u>, Nikolaos K. Fourkiotis^{#1}, Angelo Gallo¹, <u>Christos Sideras-</u> <u>Bisdekis¹</u>, Sofia-Antigoni Tsatsouli¹, Danai Moschidi¹, Athanasios Papakyriakou² and Georgios A. Spyroulias^{1*}

¹Department of Pharmacy, University of Patras, 26504 Patras, Greece

²Institute of Biosciences and Applications, National Centre for Scientific Research "Demokritos", 15341 Agia Paraskevi, Athens, Greece

*Correspondence to: G.A.Spyroulias@upatras.gr

#Contributed equally

P48: Modulation of Immune Response and Gene Expression Profiling of European Sea Bass (Dicentrarchus labrax, L.) Challenged with bacterial and viral infection mimics

Odysseas P. Tzortzatos¹, Dimitra K. Toubanaki¹, Akindynos Palaiologos², Michail-Aggelos Valsamidis², Leonidas Papaharisis³, Vasileios Bakopoulos², Evdokia Karagouni^{1*}

¹Hellenic Pasteur Institute, Department of Microbiology, Vas. Sofias 127, 11521, Athens, Greece; ²University of the Aegean, Department of Marine Sciences, 81100 Mytilene, Greece; ³Nireus Aquaculture S.A., 1st klm. Koropiou-Varis Avenue, 19400 Koropi, Greece.

*e-mail: ekaragouni@pasteur.gr

² Division of Pharmaceutical Chemistry, Department of Pharmacy, School of Health Sciences, National and Kapodistrian University of Athens, Athens, Greece

² Thalassemia Center, Haematology Unit, University Hospital of Patras, School of Medicine, University of Patras, Greece

P50: Detection of mitochondrial transfer RNA mutations in patients with Idiopathic Pulmonary Fibrosis, Sarcoidosis, Asthma and Chronic Obstructive Pulmonary Disease

Michaela Kafida¹, Maria Karela ^{1*}, Stefania Stefanidou¹, Vasilios Xronopoulos ¹, Maria Tasiou ¹, Zoi Daniil ² and Emily Zifa ¹

- 1 Department of Biochemistry and Biotechnology, University of Thessaly, 26 Ploutonos St., 41221, Larissa, Greece.
- 2 Department of Medicine, University of Thessaly, 26 Ploutonos St., 41221, Larissa, Greece.

P52: PERK kinase: A "master tactician" for the emergence of apoptotic and inflammatory nature of SARS-CoV-2 ORF3a protein Panagiotis Keramidas^{1*}, Eleni Papachristou^{1*}, Rigini M. Papi¹, Aglaia Mantsou¹, Theodora Choli-Papadopoulou^{1**}

¹Laboratory of Biochemistry, Department of Chemistry, Aristotle University of Thessaloniki, Greece

*Equal contribution

**Email: tcholi@chem.auth.gr

P54: Comparative targeted metabolomics and proteomics analysis in human lymphoma model cell lines for the study of metabolic rewiring and differential diagnosis

Eleni Stolaki^{1,2}, Thomai Mouskeftara^{3,4}, Konstantina Psatha^{1,2,5}, Georgia Orfanoudaki², Aristeidis Kritis^{6,7}, Helen Gika^{3,4}, Michalis Aivaliotis^{1,2,8}

¹Laboratory of Biological Chemistry, School of Medicine, Faculty of Health Sciences, Aristotle University of Thessaloniki, Greece

²Functional Proteomics and Systems Biology (FunPATh), Center for Interdisciplinary Research and Innovation (CIRI-AUTH), Balkan Center, Thessaloniki, Greece

³Laboratory of Forensic Medicine and Toxicology, Department of Medicine, Aristotle University of Thessaloniki, Greece ⁴Biomic_AUTh, Center for Interdisciplinary Research and Innovation (CIRI-AUTH), Balkan Center, Thessaloniki, Greece

⁵Laboratory of Medical Biology and Medical Genetics, School of Medicine, Faculty of Health Sciences, Aristotle University of Thessaloniki, Greece ⁶Laboratory of Physiology, Department of Physiology and Pharmacology, School of Medicine, Faculty of Health Sciences, Aristotle University of Thessaloniki, Greece

⁷cGMP Regenerative Medicine Facility, Department of Physiology and Pharmacology, School of Medicine, Faculty of Health Sciences, Aristotle University of Thessaloniki, Greece ⁸Basic and Translational Research Unit, Special Unit for Biomedical Research and Education, School of Medicine, Aristotle University of Thessaloniki, 54124 Thessaloniki, Greece

P56: Proteomics Analysis offers insights on the resilience of the Mediterranean plant Cistus creticus to environmental stress Elena Sampanai¹, Aggeliki Tsoka¹, Julie Courraud^{2,3}, Guillaume Médard³, Constantinos Vorgias¹, Paraskevi Skourou^{1*}, Jerome Zoidakis^{1,4*}

1 Department of Biology, National and Kapodistrian University of Athens, Panepistimioupolis, Zografou, 15771, Athens, Greece

2 Department of Clinical Therapeutics, School of Medicine, National and Kapodistrian University of Athens, Alexandra Hospital, Leof. Vasilissis Sofias 80, Athens 11528, Greece

3 Laboratory of Analytical Chemistry, Department of Chemistry, National and Kapodistrian University of Athens, Panepistimioupolis Zografou, 15771, Athens, Greece

4 Proteomics Laboratory, Biomedical Research Foundation, Academy of Athens, 11527, Athens, Greece

4 Proteomics Laboratory, Biomedical Research Foundation, Academy of Athens, 11527, Athens, Greece

P58: Evaluation of a protocol for proteomics analysis of biological samples using the organic phase remaining after nucleic acid isolation Julie Courraud^{1,2}, Guillaume Médard², Fotini Paradisi³, Sotiris Karapatakis³, Jerome Zoidakis^{3,4*}

- 1 Department of Clinical Therapeutics, School of Medicine, National and Kapodistrian University of Athens, Alexandra Hospital, Leof. Vasilissis Sofias 80, Athens 11528, Greece
- 2 Laboratory of Analytical Chemistry, Department of Chemistry, National and Kapodistrian University of Athens, Panepistimioupolis Zografou, 15771, Athens, Greece
- 3 Department of Biology, National and Kapodistrian University of Athens, Panepistimioupolis, Zografou, 15771, Athens, Greece

P60: Lon protease the guardian of mitostasis

Fengoula Avgeri^{1*}, Dikran Tsitsekian¹, Gerasimos Daras¹, Dimitris Templalexis¹, Martina Samiotaki², Polydefkis Hatzopoulos¹, and Stamatis Rigas¹

- ¹ Department of Biotechnology, Agricultural University of Athens, Athens, Greece
- ² Sciences Research Center "Alexander Fleming", Athens, Greece

* e-mail: favgeri@aua.gr

P62: Identification of novel synthetic lethal interactions in cancer cells with DNA replication licensing aberrations Elena Karydi¹, Nibal Badra-Fajardo³, Ourania Preza¹, Stavros Taraviras², Zoi Lygerou^{1*}

- ¹ Department of General Biology, School of Medicine, University of Patras, Greece.
- ² Department of Physiology, School of Medicine, University of Patras, Greece.
- ³ Department of Physiology, School of Medicine, University of Seville, Spain.

P64: Unconventional protein secretion: cytoplasmic galectin-1 hijacks the exocytic organelles of endothelial cells.

Panagiotis Lentzaris^{1,2,#}, Evangeli Goula^{1,2,#}, Panagiotis Botsios^{1,2,#}, Vasiliki Lazani^{1,2}, Styliani Tsiagka^{1,2}, Alexandra Papafotika^{1,2}, Michalis Aivaliotis^{3,4} and Savvas Christoforidis^{1,2,*}

- 1 Biomedical Research Institute, Foundation for Research and Technology-Hellas, Ioannina, Greece
- 2 Laboratory of Biological Chemistry, Department of Medicine, School of Health Sciences, University of Ioannina, Ioannina, Greece
- 3 Institute of Molecular Biology and Biotechnology, Foundation for Research and Technology-Hellas, Heraklion, Greece
- 4 Laboratory of Biological Chemistry, School of Medicine, Faculty of Health Sciences, Aristotle University of Thessaloniki, 54124 Thessaloniki, Greece.

These authors contributed equally

*Corresponding author: Savvas Christoforidis, email: savvas_christoforidis@bri.forth.gr, schristo@uoi.gr

P66: Heterogeneous nuclear ribonucleoprotein A3 is a regulator of intestinal infection Fotis loakeimidis^{1#}, Panagiotis Mavrommatis-Parasidis^{2#}*, Sofia Gargani^{1,2}, Margarita Andreadou¹, Dimitris L. Kontoyiannis^{1,2}

¹.Institute of Fundamental Biomedical Research, Biomedical Sciences Research Centre "Alexander Fleming", Vari, Greece 2. Department of Genetics, Development and Molecular Biology, School of Biology, Aristotle University of Thessaloniki, Thessaloniki, Greece

P68: Bioinformatic analysis of the mitochondrial carrier SLC25A46: evolution, mutations, interactions & structure Nikolaos Nodarakis, Vassiliki Lila Koumandou*

Department of Biotechnology, Agricultural University of Athens, Greece

P70: Crosstalk between Neural Stem Cells and Platelets: Insight from co-cultures under differentiation conditions Maria Nousia^{1*}, Maria Anesti¹, Aggeliki Dimopoulou¹, Ilias Kazanis^{1*}

1. Laboratory of Developmental Biology, Department of Biology, University of Patras, Patras, Greece

P72: Exploring m6A epitranscriptome machinery in ovarian cancer: Clinical relevance of FTO m6A RNA "eraser" in early-progression and treatment response

Eleni-Foteini Pasiali¹, Konstantina Panoutsopoulou¹, Eva Obermayr², Sven Mahner³, Toon van Gorp⁴, Ioana Braicu⁵, Robert Zeillinger², Margaritis Avgeris^{1,6,*}, Andreas Scorilas¹

- ¹ Department of Biochemistry and Molecular Biology, Faculty of Biology, National and Kapodistrian University of Athens, Athens, Greece
- ² Molecular Oncology Group, Department of Obstetrics and Gynecology, Comprehensive Cancer Center-Gynecologic Cancer Unit, Medical University of Vienna, Vienna, Austria
- ³ Department of Gynecology, University Medical Center Hamburg-Eppendorf, Hamburg, Germany, AGO; current address: Department of Obstetrics and Gynecology, University Hospital, Ludwig-Maximilians-University Munich, Munich, Germany
- ⁴ Department of Obstetrics and Gynaecology, Division of Gynecologic Oncology, University Hospital Leuven, Leuven Cancer Institute, Leuven, Belgium
- ⁵ Department of Gynecology, Charité University Medicine, Campus Virchow, Berlin, Germany
- 6 Laboratory of Clinical Biochemistry Molecular Diagnostics, Second Department of Pediatrics, School of Medicine, National and Kapodistrian University of Athens, "P. & A. Kyriakou" Children's Hospital, Athens, Greece

^{*} margaritis.avgeris@gmail.com; mavgeris@med.uoa.gr

P74: Unraveling epitranscriptomic regulation of nuclear chromatin dissociation dynamics Nikoleta Pateraki^{1,2}, Christos Katsioulas¹, Nikoletta Triantopoulo³, Annalisa Marsico⁴, Marina Vidaki^{1,3}, Evgenia Ntini¹

- ^{1.} Institute of Molecular Biology and Biotechnology, IMBB-FORTH, Crete, ^{2.} Department of Biology, University of Crete,
- 3. Division of Basic Sciences, Medical School, University of Crete, Greece,
- ^{4.} Computational Health Center, Helmholtz Center Munich

P76: Association between GALANIN gene rs4432027 SNP and variations in depressive and anxiety symptoms, sense of coherence and vital exhaustion in the real-life setting of mandatory basic military training

Maria Toptsi¹, Polychronis Economou², Panagiotis Alexopoulos³, Ioannis K. Zarkadis^{1*}

- ¹Laboratory of General Biology, Department of Medicine, School of Health Sciences, University of Patras, 26504, Rion, Patras, Greece
- ²Department of Civil Engineering (Statistics), School of Engineering, University of Patras, 26504, Rion Patras, Greece
- ³Department of Psychiatry, Faculty of Medicine, School of Health Sciences, University of Patras, University Hospital of Patras, 26504, Rion, Patras, Greece

P78: Identification of genes and transcription factors involved in EGFR inhibitor resistance in Non-Small Cell Lung Cancer cells John Balanos¹*, Maria F. Chatziaslani¹*, Maria Tsagiopoulou³, Spiros Papakostas², Maria Georgiadou⁴

- ¹ Aristotle University of Thessaloniki (AUTh), Greece ² International Hellenic University, Thessaloniki, Greece
- ³ Centro Nacional de Analisis Genomico (CNAG), Barcelona, Spain
- ⁴ Biomedical Research Institute, Foundation for Research and Technology, Ioannina, Greece