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ΑΘΗΝΑ
2025
ΙΔΡΥΜΑ ΕΥΓΕΝΙΔΟΥ
ΠΑΝΕΛΛΗΝΙΟ ΣΥΝΕΔΡΙΟ
75
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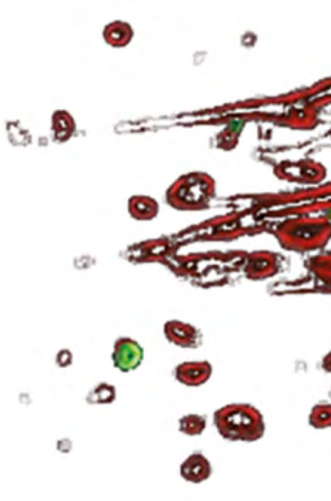

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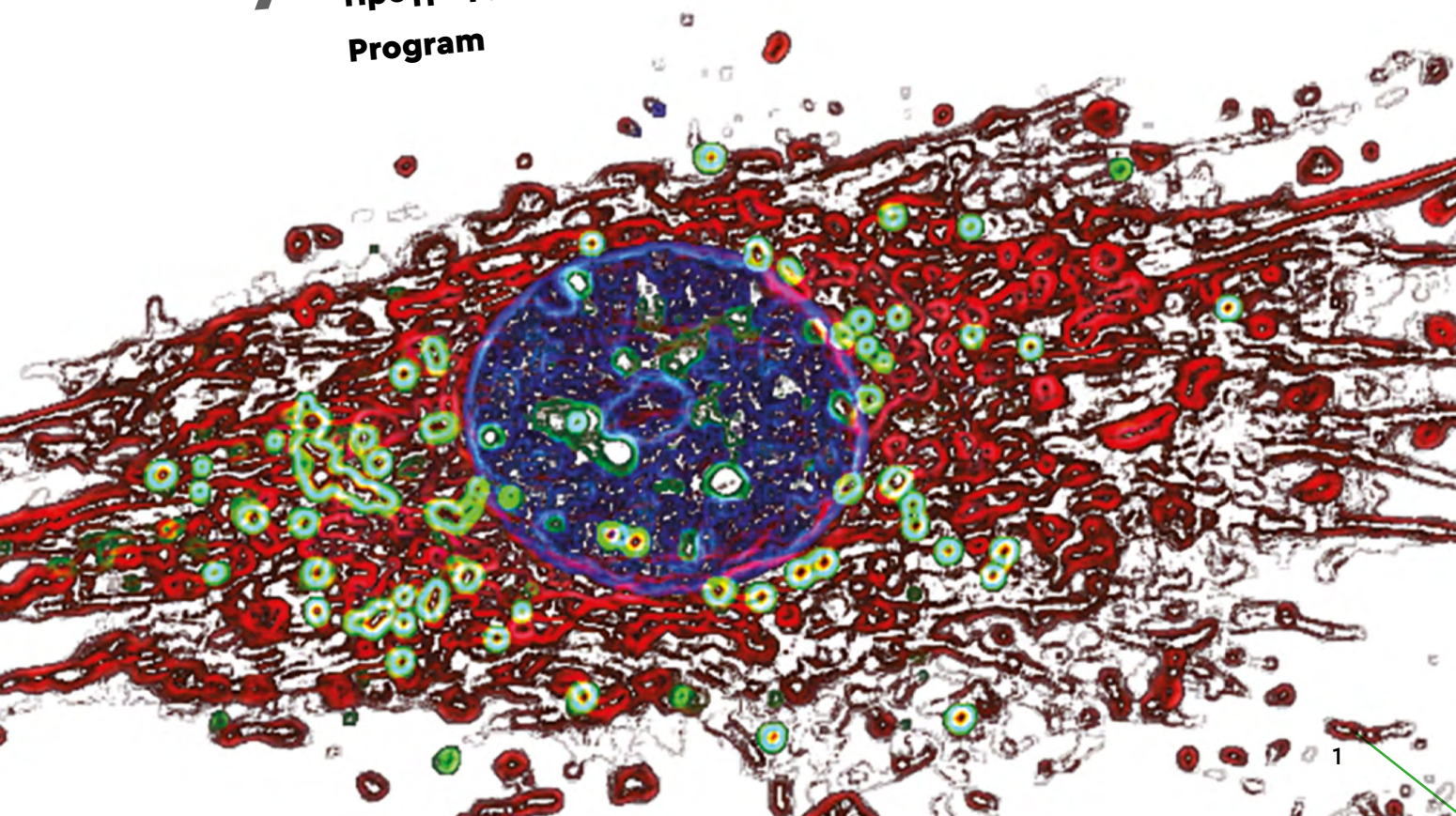

Οργάνωση

ΕΛΛΗΝΙΚΗ ΕΤΑΙΡΕΙΑ ΒΙΟΧΗΜΕΙΑΣ ΚΑΙ ΜΟΡΙΑΚΗΣ ΒΙΟΛΟΓΙΑΣ (ΕΕΒΜΒ)
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Διοικητικό Συμβούλιο ΕΕΒΜΒ

Πρόεδρος	**Δημήτρης Κλέτσας**
Αντιπρόεδρος	**Αχιλλεύς Θεοχάρης**
Γεν. Γραμματέας	**Βάσω Κωστούρου**
Ταμίας	**Διονύσης Σγούρας**
Μέλη	**Μιχάλης Αϊβαλιώτης** **Νίκος Καραμάνος** **Γιώργος Μόσιαλος**

Οργανωτική | Επιστημονική Επιτροπή

Πρόεδροι Συνεδρίου

Ιωάννης Τρουγκάκος *(Τμήμα Βιολογίας, ΕΚΠΑ)*

Ανδρέας Σκορίλας *(Τμήμα Βιολογίας, ΕΚΠΑ)*

Μέλη

Νίκος Βακιρλής *(Ελληνικό Ινστιτούτο Παστέρ)*

Δημήτρης Βλαχάκης *(Γεωπονικό Πανεπιστήμιο Αθηνών)*

Αντιγόνη Δήμα *(ΕΚΕΒΕ «Φλέμινγκ»)*

Κώστας Ευαγγέλου *(Ιατρική Σχολή, ΕΚΠΑ)*

Θεοδώρα Καλογεροπούλου *(Εθνικό Ίδρυμα Ερευνών)*

Αναστάσιος Κριεμπάρδης *(Τμήμα Βιοϊατρικών Επιστημών, ΠΑΔΑ)*

Ελένη Μαυρογονάτου *(ΕΚΕΦΕ «Δημόκριτος»)*

Ρωξάνη Τέντα *(Χαροκόπειο Πανεπιστήμιο)*

Στέλιος Ψαρράς *(ΙΙΒΕΑΑ)*

Καλωσόρισμα

Αγαπητές/οί μας συνάδελφοι,

Με ιδιαίτερη χαρά σας καλωσορίζουμε στο 75ο Πανελλήνιο Συνέδριο της Ελληνικής Εταιρείας Βιοχημείας και Μοριακής Βιολογίας (ΕΕΒΜΒ), στην Αθήνα, στο Ίδρυμα Ευγενίδου, στις 5–7 Δεκεμβρίου 2025.

Όπως κάθε χρόνο, το Συνέδριο επιχειρεί να συμπεριλάβει όλη τη θεματολογία της σύγχρονης Βιοχημείας και Μοριακής Βιολογίας και έχει σαν βασική αποστολή την ανάδειξη των ερευνητικών προσπαθειών Ελλήνων επιστημόνων που δραστηριοποιούνται σε διάφορους τομείς των Βιοεπιστημών, στην Ελλάδα και στο εξωτερικό, συμβάλλοντας έτσι στην αλληλεπίδραση και τις προοπτικές συνεργασίας μεταξύ τους. Μεταξύ των θεματικών ενοτήτων του Συνεδρίου συγκαταλέγονται οι: Λειτουργική Γονιδιωματική και Πρωτεομική, Κυτταρική Επικοινωνία και Σηματοδότηση, Κυτταρική Οργάνωση και Λειτουργία, Ανάπτυξη και Διαφοροποίηση, Κυτταρική Γήρανση, Μοριακή και Κυτταρική Βάση των Ασθενειών, Δομή και Λειτουργία Μακρομορίων, Ρύθμιση της Γονιδιακής Έκφρασης & Επιγενετική, Βλαστικά Κύτταρα, Ιστική Ανάπλαση και Αναγέννηση, Βλάβη και Επιδιόρθωση του DNA, Βιοτεχνολογία Φυτών και Μικροοργανισμών, Βιολογία Συστημάτων-Βιοπληροφορική, Βιολογία του RNA και Χημική Βιολογία.

Παράλληλα με το 75ο Συνέδριο, συνεχίζεται, ο πολύ επιτυχημένος θεσμός της διεξαγωγής της 12ης Ημερίδας Νέων Επιστημόνων, μελών της ΕΕΒΜΒ, την προηγούμενη ημέρα, 4 Δεκεμβρίου 2025.

Σας ευχαριστούμε για τη μεγάλη συμμετοχή, σας καλωσορίζουμε στην Αθήνα και σας ευχόμαστε ένα δημιουργικό συνέδριο.

Ιωάννης Τρουγκάκος **Ανδρέας Σκορίλας**
Πρόεδροι Συνεδρίου
Εθνικό και Καποδιστριακό Πανεπιστήμιο Αθηνών

Δημήτρης Κλέτσας
Πρόεδρος Δ.Σ. ΕΕΒΜΒ

Γενικές Πληροφορίες

Τόπος & Χρόνος

Αθήνα, Συνεδριακό Κέντρο Ιδρύματος Ευγενίδου

Παρασκευή 5 έως 7 Δεκεμβρίου 2025
75ο Συνέδριο ΕΕΒΜΒ

4 Δεκεμβρίου 2025
12η Ημερίδα Νέων Επιστημόνων ΕΕΒΜΒ

Γλώσσα Συνεδρίου

Η επίσημη γλώσσα του Συνεδρίου είναι η Ελληνική. Οι παρουσιάσεις μπορούν να γίνουν στα Ελληνικά ή στα Αγγλικά.

Εναρκτήρια Τελετή

Η Εναρκτήρια Τελετή του Συνεδρίου θα γίνει την Παρασκευή 5 Δεκεμβρίου 2025 και ώρα 18:45, στο Αμφιθέατρο του Ιδρύματος Ευγενίδου. Θα ακολουθήσει Κοκτέιλ Καλωσορσίματος στο ισόγειο του συνεδριακού χώρου.

Έκθεση

Κατά τη διάρκεια του Συνεδρίου θα λειτουργήσει έκθεση επιστημονικού εξοπλισμού και αναλωσίμων.

Εγγραφές

	Έως 07|11|2025	Μετά από 07|11|2025 και επιτόπου
Μέλη	€ 60	€ 90
Αρωγά Μέλη	€ 40	€ 55
Μη μέλη	€ 120	€ 140
Μεταπτυχιακοί φοιτητές*	€ 60	€ 70
Προπτυχιακοί φοιτητές**	€ 30	€ 40

Η εγγραφή περιλαμβάνει:

- Παρακολούθηση του επιστημονικού προγράμματος
- Επίσκεψη στον εκθεσιακό χώρο
- Τσάντα Συνεδρίου
- Τελικό πρόγραμμα
- Κονκάρδα
- Πιστοποιητικό Παρακολούθησης
- Καφέ στα διαλείμματα/Κοκτέιλ Υποδοχής

***Η εγγραφή προπτυχιακών φοιτητών περιλαμβάνει

- Παρακολούθηση του επιστημονικού προγράμματος
- Επίσκεψη στον εκθεσιακό χώρο
- Κονκάρδα
- Συνοπτικό πρόγραμμα
- Πιστοποιητικό παρακολούθησης

**Αυτή η κατηγορία εγγραφής αφορά μεταπτυχιακούς φοιτητές που δεν παρουσιάζουν εργασία. Οι μεταπτυχιακοί φοιτητές που παρουσιάζουν εργασία θα πρέπει να υποβάλλουν αίτηση εγγραφής στην ΕΕΒΜΒ ως Αρωγά Μέλη και να εγγραφούν στην αντίστοιχη κατηγορία εγγραφής (Αρωγά Μέλη).*

Οργάνωση-Γραμματεία

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Ομιλίες

Η διάρκεια των ομιλιών έχει καθοριστεί ως εξής:
- **Plenary Lectures** | 35 λεπτά παρουσίαση και 10 λεπτά για συζήτηση
- **Invited Lectures** | 25 λεπτά παρουσίαση και 5 λεπτά για συζήτηση

Προφορικές Ανακοινώσεις (ShortTalks)

Η συνολική διάρκεια των ανακοινώσεων είναι 13 λεπτά (10 λεπτά παρουσίαση και 3 λεπτά για ερωτήσεις-συζήτηση).

Αναρτημένες ανακοινώσεις (Posters)

Οι αναρτημένες ανακοινώσεις θα παρουσιαστούν σε τρεις συνεδρίες, μία κάθε ημέρα βάσει θεματολογίας.

Οι εν λόγω ανακοινώσεις κάθε συνεδρίας θα αναρτώνται από την έναρξη έως τη λήξη του επιστημονικού προγράμματος κάθε ημέρας. Παρακαλείστε να φροντίσετε για την ανάρτησή τους έως στις 10.00 το πρωί και την έγκαιρη απομάκρυνσή τους στο τέλος της ημέρας.

Η γραμματεία του συνεδρίου δε φέρει καμία ευθύνη για τα posters που δεν περισυλλέγησαν βάσει του προγράμματος.

Παρακαλούνται οι συγγραφείς να βρίσκονται στον χώρο των αναρτημένων εργασιών την προκαθορισμένη ώρα που τους κοινοποιήθηκε με το γράμμα έγκρισης για παρουσίαση και συζήτηση της εργασίας τους με τους ενδιαφερόμενους συνέδρους.

Η θέση των Posters είναι ο πρώτος αριθμός μπροστά σε κάθε εργασία (ενώ ο δεύτερος είναι ο κωδικός υποβολής). *Διάσταση Ao size 0,84m πλάτος και 1,19m ύψος.*

Παράδοση Ομιλιών

Η παρουσίαση (PowerPoint) θα πρέπει να παραδοθεί στους τεχνικούς που θα βρίσκονται μέσα στο Αμφιθέατρο, τουλάχιστον μία ώρα πριν την συνεδρία σας. Το μέγεθος των διαφανειών πρέπει να είναι σε widescreen ανάλυση (16:9).

Τήρηση Χρόνου

Παρακαλούνται οι ομιλητές να τηρούν αυστηρά τον προκαθορισμένο χρόνο παρουσιάσεων που τους έχει κοινοποιηθεί καθώς και οι Πρόεδροι να μεριμνήσουν ανάλογα. Η αίθουσα είναι εξοπλισμένη με χρονόμετρο.

Δημοσίευση εργασιών

Οι περιλήψεις των εργασιών θα δημοσιευθούν σε ηλεκτρονική μορφή στην ιστοσελίδα του συνεδρίου. Οι συγγραφείς είναι υπεύθυνοι για το περιεχόμενο και την ποιότητα των περιλήψεων και δημοσιεύονται όπως ακριβώς έχουν αποσταλεί.

Βραβεία και Υποτροφίες 75ου Συνεδρίου ΕΕΒΜΒ

Η ΕΕΒΜΒ ανακοινώνει ότι στο πλαίσιο του Συνεδρίου θα δοθούν σε νέους επιστήμονες, που θα παρουσιάσουν τις εργασίες τους στο συνέδριο και είναι ταμειακώς τακτοποιημένα αρωγά ή τακτικά μέλη της ΕΕΒΜΒ, βραβεία και έπαινοι για προφορικές και αναρτημένες εργασίες. Οι εργασίες θα κριθούν από επιτροπές έμπειρων επιστημόνων που θα οριστούν από το ΔΣ, με κριτήρια την επιστημονική αριστεία και την ποιότητα της παρουσίασης.

Επίσης, όπως κάθε χρόνο θα δοθούν και υποτροφίες μετακίνησης για νέους επιστήμονες εκτός Αθηνών. Οι υποτροφίες θα ανακοινωθούν κατά τη διάρκεια του Συνεδρίου.

Προσκεκλημένοι Ομιλητές

Mark Bradley
Queen Mary University of London
UK

Thales Papagiannakopoulos
NYU Grossman School of Medicine, New York
USA

Antonia Katsouda
National & Kapodistrian University of Athens, Biomedical Research Foundation of the Academy of Athens
GREECE

Antonio Cuadrado Pastor
Autonomous University of Madrid
SPAIN

Konstantinos Palikaras
National Kapodistrian University of Athens
GREECE

George Yousef
University of Toronto
CANADA

Georg Hochberg
Max Planck Institute for Terrestrial Microbiology, Marburg
GERMANY

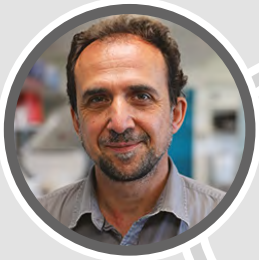
Vasileios Roukos
University of Patras
GREECE

Panagiotis Adamopoulos
National Kapodistrian University of Athens
GREECE

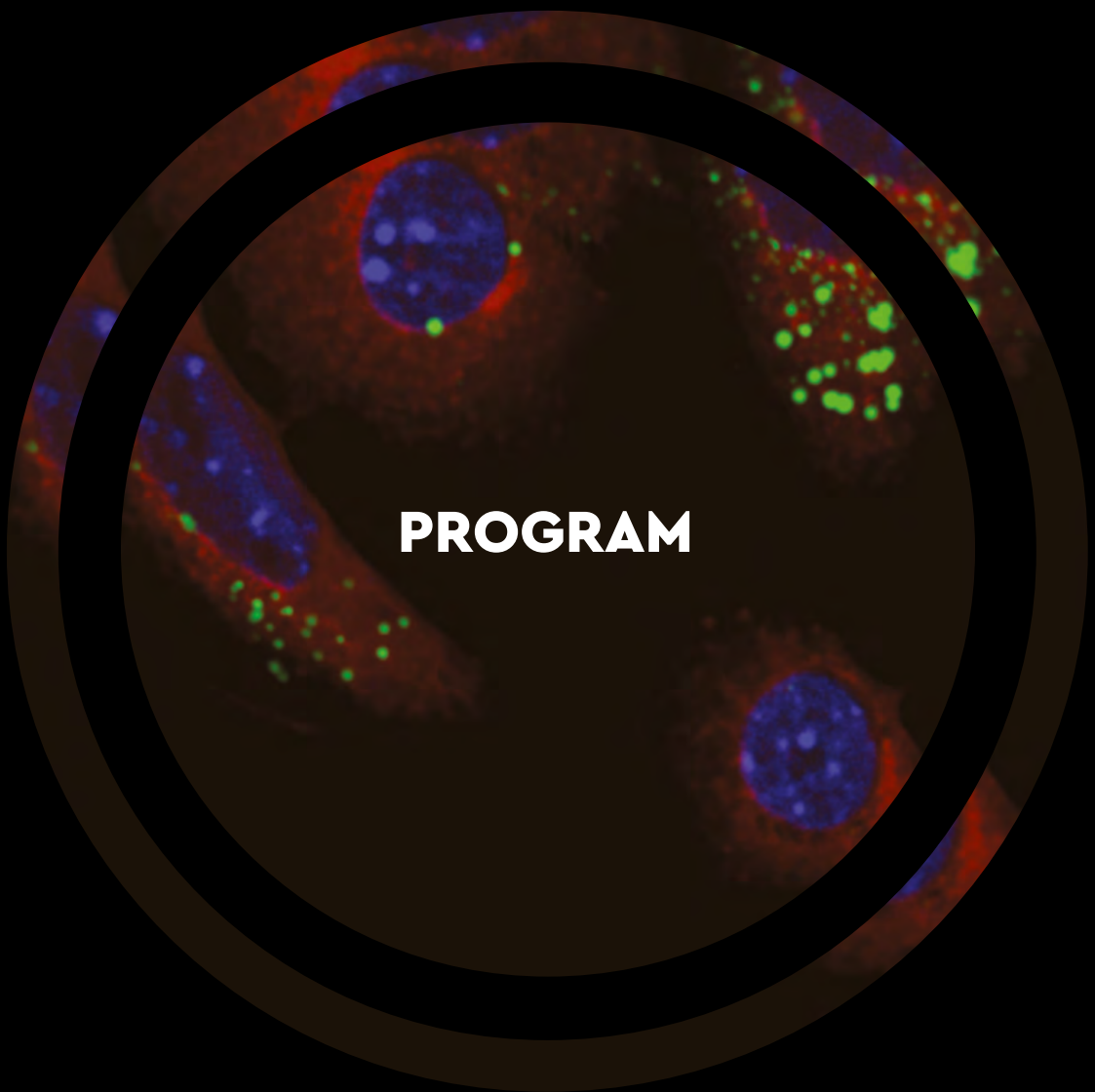
Nikolaos Louros
University of Texas, Dallas
USA

Maria Tsoumakidou
National & Kapodistrian University of Athens, BSRC "Alexander Fleming"
GREECE

Anastasia Kantsadi
University of Thessaly
GREECE



Daniel Munoz-Espin
University of Cambridge
UK



PROGRAM

Chairs: R. Tenta, D. Vlachakis

09:00-10:00 **SHORT TALKS 1**

Biotechnology - Stem Cells

ST1 - 121

Lon Protease Controls PPR-mediated RNA Processing in *Arabidopsis* Mitochondria

Dikran Tsitsekian[1*], Fengoula Avgeri[1], Gerasimos Daras[1], Dimitris Templalexis[1], Martina Samiotaki[2], Stamatis Rigas[1]

[1]Department of Biotechnology, Agricultural University of Athens, Athens, Greece, [2]Institute for Bio-Innovation, Biomedical Sciences Research Center 'Alexander Fleming', Vari, Greece

ST2 - 138

Investigating the role of FspA/B proteins in lipid peroxidation, ferroptosis and antifungal sensitivity in *Aspergillus nidulans*

Anna Kolliopoulou*, Retzep Routsi, Vicky Sophianopoulou

Microbial Molecular Genetics Laboratory, Institute of Biosciences and Applications, NCSR "Demokritos", Aghia Paraskevi, Greece

ST3 - 218

The *Storekeeper (STK)* gene of tomato is a susceptibility factor in the Tomato yellow leaf curl virus (TYLCV) interaction

Ourania Melita[1], Nikolaos Tsakirpaloglou[1], Athanasios Kaldis[1], Andreas Voloudakis[1]

[1]Laboratory of Plant Breeding and Biometry, Faculty of Crop Science, Agricultural University of Athens, Greece

ST4 - 53

Comparative Analysis of Molecular Mechanisms Regulating Reprogramming in Distinct Stem Cell Types

A. Fileles[1], O. Trohatou[1,2], M. Makridakis[3], P. Moulos[4], G. Pavlopoulos[4], G. Vatsellas[5], A. Vlahou[3], Roubelakis M.G.[1,2]

[1]Laboratory of Biology, School of Medicine, National and Kapodistrian University of Athens (NKUA), Athens, Greece, [2]Cell and Gene Therapy Laboratory, Centre of Basic Research, Biomedical Research Foundation of the Academy of Athens (BRFAA), Athens, Greece, [3]Biotechnology Laboratory, Centre of Basic Research, Biomedical Research Foundation of the Academy of Athens (BRFAA), Athens, Greece, [4] Institute for Fundamental Biomedical Research, BSRC "Alexander Fleming", Vari, Greece

10:00-10:30 **INVITED LECTURE**

Persulfidation–phosphorylation crosstalk orchestrates white adipose tissue browning

Antonia Katsouda, *National & Kapodistrian University of Athens - Biomedical Research Foundation, Academy of Athens (BRFAA)*

10:30-11:00 **COFFEE BREAK**

Chairs: M. Aivaliotis, G. Panayotou

11:00-13:00 **SHORT TALKS 2**

Chemical Biology / Functional Genomics and Proteomics (I)

ST5 - 3

Evaluation of thermodurability and activity changes of PET-hydrolase variants in a directed evolution pathway

Konstantinos Tornesakis[1], Jonathan W. Essex[2], Gerhard Koenig[1], Luisana Avilan[1*], Andrew R. Pickford[1*], Paul A. Cox[1*] et al.[1]

[1]Center of Enzyme Innovation, University of Portsmouth, St' Michael's Building, Portsmouth PO1 2DT, UK, [2]School of Chemistry, University of Southampton, Highfield, Southampton SO17 1BJ, UK

ST6 - 32

Discovery of novel antimicrobials: Inhibitors of functional amyloid aggregation linked to biofilm formation

Dimitra Gialama[1], Aristeidis Michoglou-Sergiou[1], Georgios Filis[1], Eleni Katsoni[2], Pantelis Hatzis[2], Ioannis Rabias[3], Georgios Skretas[1, 4]*

[1]Institute for Bioinnovation, Biomedical Sciences Research Center "Alexander Fleming", Vari, Greece, [2]Institute for Fundamental Biomedical Research, Biomedical Sciences Research Center "Alexander Fleming", Vari, Greece, [3]Quality Control Department, Hellenic Pasteur Institute, Athens, Greece, [4] Institute of Chemical Biology, National Hellenic Research Foundation, Athens, Greece

ST7 - 219

MBLAC2 !?

Guillaume Médard

Proteomics Core Facility, School of Science, National and Kapodistrian University of Athens, Greece

ST8 - 100

Calcium- and Strontium- Doped Mesoporous Silica Nanoparticles: Linking surface design to Hemocompatibility and Coagulation Dynamics

Maria-Aspasia Kosma[1], Sotirios P. Fortis[1], Georgia K. Pouroutzidou[2], Evangelos Meletis[1], Lida Pothitaki[1], Ioanna Pitterou[3], Alkmini T. Anastasiadi[5], Stavros Formozis[1,4], Efthymia G. Pavlou[1,4], Vassilis L. Tzounakas[5], Effie G. Papageorgiou[1], Efrosyni Nomikou[4], Anastasia Detsi[3], Christina Fountzoula[6], George Dryllis[1], Eleana Kontonasaki[2], Anastasios G. Kriebardis[1*]

[1]Laboratory of Reliability and Quality Control in Laboratory Hematology, Department of Biomedical Sciences, School of Health and Caring Sciences, University of West Attica, Athens, Greece, [2]Department of Prosthodontics, School of Dentistry, Faculty of Health Sciences, Aristotle University of Thessaloniki, Thessaloniki, Greece, [3]Laboratory of Organic Chemistry, Department of Chemical Sciences, School of Chemical Engineering, National Technical University of Athens, Athens Greece, [4]Blood Bank and Hemophilia Unit, Hippokration Hospital, 11527 Athens, Greece, [5]Department of Biochemistry, School of Medicine, University of Patras, Patras, Greece, [6]Laboratory of Chemistry, Biochemistry and Cosmetic Science, Department of Biomedical Sciences, School of Health & Caring Sciences, University of West Attica, Athens, Greece

ST9 - 11

Proteomic and Morphological Reprogramming of Breast Cancer-associated Adipocytes

Dimitrios G. Argyris[1,2,3], Ioanna Ploumaki[4], Theodora Argyri[5], Dimitra P. Anastasiadou[1,2,3], Nikos S. Karagiannis[6], Maria P. Pavlou[7], Evanthia T. Roussos-Torres[8], Panagiota S. Filippou[9*], George S. Karagiannis[1,2,3,10,11,12*]

[1]Department of Microbiology & Immunology, Albert Einstein College of Medicine, New York, USA, [2]Integrated Imaging Program for Cancer Research, Albert Einstein College of Medicine, New York, USA, [3]Tumor Microenvironment & Metastasis Program, Montefiore-Einstein Comprehensive Cancer Center, New York, USA, [4]4th Department of Internal Medicine, Medical School, University General Hospital Attikon, National and Kapodistrian University of Athens, Athens, Greece, [5]School of Medicine, Faculty of Health Sciences, Aristotle University of Thessaloniki, Thessaloniki, Greece, [6]Gruss Magnetic Resonance Research Center, Albert Einstein College of Medicine, New York, USA, [7]Proteomics Core Facility, École Polytechnique Fédérale de Lausanne, School of Life Sciences, Lausanne, Switzerland, [8]Department of Medicine, Division of Medical Oncology, Keck School of Medicine, Norris Comprehensive Cancer Center, University of Southern California, Los Angeles, California, USA, [9]Laboratory of Biological Chemistry, School of Medicine, Faculty of Health Sciences, Aristotle University of Thessaloniki, Thessaloniki, Greece, [10]Gruss-Lipper Biophotonics Center, Albert Einstein College of Medicine, New York, USA, [11]Marilyn and Stanley M. Katz Institute for Immunotherapy of Cancer and Inflammatory Disorders, Montefiore-Einstein Comprehensive Cancer Center, New York, USA, [12]Cancer Dormancy and Tumor Microenvironment Institute, Montefiore-Einstein Comprehensive Cancer Center, New York, USA

ST10 - 204

Origins and evolution of protein novelty across the entire budding yeast subphylum Saccharomycotina / an ancient yeast lineage

Emilios Tassios[1,5], David Rinker[2], Eirini M. Tzermpou[1], Chris T. Hittinger[3], Antonis Rokas[2], Christoforos Nikolaou[4], Nikolaos Vakirlis[1*]

[1]Hellenic Pasteur Institute, Athens, Greece, [2]Department of Biological Sciences, Vanderbilt University, Nashville, TN, USA, [3]Laboratory of Genetics, Wisconsin Energy Institute, Center for Genomic Science Innovation, J. F. Crow Institute for the Study of Evolution, University of Wisconsin–Madison, Madison, Wisconsin, USA, [4] Biomedical Sciences Research Center 'Alexander Fleming', Athens, Greece, [5]University of Ioannina, Ioannina, Greece

ST11 - 133

Deep proteomic exploration of bone marrow CD138+ cells from 200 MGUS, SMM and multiple myeloma patients

Julie Courraud[*1,2], Manos Vossos[3], Nestoras Karathanasis[4], Ioannis V. Kostopoulos[5], Christine-Ivy Liacos[1], Paraskevi Karousi[2,3], Foteini Paradeisi[3,6], Eirini Solia[1], Antonia Vlahou[4], Ourania Tsitsilonis[5], Jerome Zoidakis[3,6], George M. Spyrou[4], Efstathios Kastritis[1]

[1]Section of Clinical Therapeutics, Department of Medicine, National and Kapodistrian University of Athens, Greece; [2]Proteomics Core Facility, School of Science, National and Kapodistrian University of Athens, Greece; [3]Section of Biochemistry and Molecular Biology, Department of Biology, National and Kapodistrian University of Athens, Greece; [4]Bioinformatics Department, The Cyprus Institute of Neurology & Genetics, Nicosia, Cyprus; [5]Flow Cytometry Unit, Department of Biology, National and Kapodistrian University of Athens, Greece; [6]Proteomics Laboratory, Biomedical Research Foundation, Academy of Athens, Greece

ST12 - 246

Splicing modulation of the lncRNA PVT1 and its effect on regulation of target gene expression

Christos Katsioulas[1], Aikaterini Tzetzailidi[1], Angelos Kozonakis[1], Evgenia Ntini[1*]

[1]Institute of Molecular Biology and Biotechnology of the Foundation for Research and Technology Hellas, Heraklion, Greece

Chairs: M. Koffa, Z. Lygerou

13:00-13:30 **SPONSORED LECTURE**

BIOLine scientific ΑΦΟΙ ΝΤΟΥΡΟΥ - Ε.ΔΕΜΑΓΚΟΣ Ο.Ε

Cell Signaling TECHNOLOGY

Antibodies at the Frontier: Enabling Breakthroughs in Signaling, Epigenetics, and Disease Research

Maxime Jacquet, *Distributor Manager - Europe Middle East & Africa*

13:30-14:00 **INVITED LECTURE**

Decoding Amyloid Mechanisms: From Structural Principles to Therapeutic Engineering

Nikolaos Louros, *University of Texas, Dallas, USA*

14:00-16:00 **POSTER SESSION 1**

- Biotechnology of Plants & Microorganisms
- Development & Differentiation
- DNA damage/repair
- Regulation of Gene Expression & Epigenetics
- Molecular & Cellular Basis of Human Diseases (I)

LUNCH BREAK (attendee on own)

Chairs: G. Mosialos, A. Theocharis

16:00-17:30 **SHORT TALKS 3**

Cell Communication & Signaling / Cell Organization & Function

ST13 - 9

TCRζ-Driven Pre-Signaling Organization of Lck in Rab11^{+} Endosomes Shapes TCR Activation

Konstantina Karpouzou[1‡*], Nikolaos Koutras[1‡], Ioannis Tyritidis[1], Evangelos Tsioupros[1], Adriana Kotini[2], Vasileios Roukos[2], Konstantina Nika[1*]

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[2]Department of General Biology, School of Medicine, University of Patras, Patras, Greece

ST14 - 67

The extracellular matrix stiffness impacts lung cancer cell behavior and drug response

Eugenia Roupakia[1], Panagiotis Pothos[1,2], Nektarios Petropoulos[1,2], Panagiota Akrioti[1], Maria Georgiadou[1,2*]

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ST15 - 156

Cytoplasmic Galectin-1 is a novel luminal cargo of Weibel–Palade bodies, revealing a new facet of protein secretion

Panagiotis Lentzaris[1,2,#], Evangeli Goula[1,2], Vasiliki Lazani[1,2], Elena Saka[1,2], Ariadni Vardaki[1,2], Alexandra Papafotika[1,2], Michael Redd[3], Virginia Silio[3], Christopher Thrasivoulou[3], Michalis Aivaliotis[4,5], Savvas Christoforidis[1,2,*]

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ST16 - 142

Nuclear rupture in confined cell migration triggers nuclear actin polymerization to limit chromatin leakage

Christos Kamaras[1,*], Dennis Frank[1], Hong Wang[1,2], Friedel Drepper[3], Pitter F. Huesgen[2,3], Robert Grosse[1,2,*]

[1]Institute of Experimental and Clinical Pharmacology and Toxicology, Medical Faculty, University of Freiburg, 79104, Freiburg, Germany, [2]CIBSS Centre for Integrative Biological Signaling Studies, University of Freiburg, 79104, Freiburg, Germany, [3]Institute of Biology II, University of Freiburg, 79104, Freiburg, Germany

ST17 - 8

Zincore, an atypical coregulator, binds zinc finger transcription factors to control gene expression

Anastassis Perrakis

Division of Biochemistry, Netherlands Cancer Institute Amsterdam, The Netherlands

ST18 - 287

The role of Transgelin in Gut Resilience and Epithelial Homeostasis in *Drosophila*

Irene Kagianni[1,2], Katerina M. Vakaloglou[1], Athena Keramidioti[1,3], Sophia Havaki[4], Ioanna Tremi[4], Danai Fida[1], Vassilis G. Gorgoulis[1,4,5], Christos G. Zervas[1,*]

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17:30-18:00 **SPONSORED LECTURE**

ANTISEL

5D Multiomics with AVITI24

Agnieszka Ciesielska, *Senior Technical Sales Specialist, Element Biosciences*

Chair: D. Kletsas

18:00-18:20 **SPECIAL SESSION**

Anniversary - Department of Biochemistry & Biotechnology, University of Thessaly

Katerina Moutou

18:20- 18:45 **COFFEE BREAK**

Chairs: D. Kletsas, A. Scorilas, I. Trougakos

18:45-19:15 **OPENING CEREMONY / Welcome Addresses**

19:15-20:00 **PLENARY LECTURE**

Mechanisms of Lung Cancer Progression

Thales Papagiannakopoulos, *NYU Grossman School of Medicine, New York, USA*

20.00-21.00 **WELCOME DRINK**

Chairs: M. Antonelou, S. Psarras

08:45-10:15 **SHORT TALKS 4**
Molecular & Cellular Basis of Human Diseases (I)

ST19 - 70

Monocyte/macrophage profiles reflect cardiac unloading and heart failure state

Dimitris Miliopoulos[1,#], Dimitrios Valakos[2,#], Dimitra Trika[2], Paraskevas Vlachos[1], Anna Agapaki[2], Giannis Vatsellas[2], Dimitris Beis[3], Stamatis Adamopoulos[1], Stelios Psarras[2*]
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[#] Equally contributing

ST20- 33

Mitochondria-Targeted Silver – Oxadiazole Conjugates as Potent Anticancer Agents

Sotiris K. Hadjikakou, Christina N. Banti
Biological Inorganic Chemistry Laboratory, Department of Chemistry, University of Ioannina, 45110 Ioannina, Greece

ST21 - 51

Analyses of proteostatic network alterations in Multiple Myeloma

Despoina D. Gianniou[1], Eirini Gkogkou[1], Paraskevi Karousi[2,3], Julie Courraud[3,4], Jérôme Moreaux[5,6,7], Sentiljana Gumeni[1], Jerome Zoidakis[2,8], Guillaume Médard[3], Meletios-Athanasios Dimopoulos[4], Efstathios Kastritis[4], Ioannis P. Trougakos[1*]
[1]Department of Cell Biology and Biophysics, Faculty of Biology, National and Kapodistrian University of Athens, Athens, Greece, [2]Section of Biochemistry and Molecular Biology, Department of Biology, National and Kapodistrian University of Athens, Greece, [3]Proteomics Core Facility, National and Kapodistrian University of Athens, Greece, [4] Department of Clinical Therapeutics, School of Medicine, National and Kapodistrian University of Athens, Athens, Greece, [5]Department of Biological Hematology, CHU Montpellier, Montpellier, France, [6]Institute of Human Genetics, UMR 9002 CNRS-UM, Montpellier, France, [7] Institut Universitaire de France (IUF), [8] Proteomics Laboratory, Biomedical Research Foundation, Academy of Athens, Athens, Greece

ST22 - 137

Polyunsaturated fatty acid-derived lipid mediator networks determine viral pneumonia severity and risk for critical COVID-19

Maria Papadaki[1], Eleftherios Pavlos[1,2], Marc Dubourdeau[3], Vincent Bailif[3], Kamal Badirou[3], Clémence Gély[3], Ioanna-Evdokia Galani[1], Dimitris Papelis[4], Natalia Kamperi[4], Vassiliki Triantafyllia[1], Lena Siouti[1], Maria Salagianni[1], Maria Manioudaki[1], Nikolaos Paschalidis[5,6], Giannis Vatsellas[5,6], Evangelia Koukaki[7], Vasiliki Rapti[8], Dimitris Thanos[5,6], Nikoletta Rovina[7], Garyfallia Poulakou[8], Aurélie Cobat[9,10,11], Jean-Laurent Casanova[9,10,11,12,13], Constantin Tamvakopoulos[4], Evangelos Andreakos[1,*]
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**Laboratory of Immunobiology, Center for Clinical, Experimental Surgery and Translational Research, BRFAA, Athens, Greece*

ST23 - 173

Despite strong neutrophil induction, *Helicobacter pylori* escapes Neutrophil Extracellular Traps by degrading them

Aristotelis Petris[1,2], Efthalia Zervoudi[2], Elena Petrou[1,2], Elissavet Michailou[1,2], Beatriz Martinez-Gonzalez[1], Evangelia Xingi[3], Alexios Dimitriadis[4], Nikolaos Moustakas[1], Ioannis Karayiannis[1], Spyridon Michopoulos[5], Sotirios D. Georgopoulos[6], Konstantinos Kambas[2*], Dionyssios N. Sgouras[1*]

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**Equal contribution in supervision, project management and co-correspondence*

ST24- 4

Decoding Sulfated Hyaluronan–Mediated Changes in Matrix Composition and Functional Properties in 3D Cancer Models

Konstantinos Spanopoulos[1,3], Sylvia Mangani[1], Christos Koutsakis[1], Zoi Piperigkou[1,2], Alberto Passi[3], Evgenia Karousou[3], Nikos K. Karamanos[1,2]

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10:15-10:45 **SPONSORED LECTURE**

Micro purification and Image analysis of sample purity for CryoEM applications

Stephan Pötsch, *Sales Specialist Protein Purification Cytiva*

10:45-11:15 **INVITED LECTURE**

Determinants of CRISPR/Cas9 Scission Profile for Precise, Predictable and Personalized Genome Editing

Vassilis Roukos, *University of Patras Greece*

11:15-11:45 **COFFEE BREAK**

Chairs: C. Tsatsanis, N. Vakirlis

11:45-12:15 **SPONSORED LECTURE**

Streamlined and innovative NGS Library Preparation for DNA, RNA and small RNA

Kristin Schnettler, *Channel Partner Manager- Europe and Africa*

12:15-12:45 **INVITED LECTURE**

Evolutionary diversification of quaternary structure

Georg Hochberg, *Max Planck Institute for Terrestrial Microbiology, Marburg, GERMANY*

Chairs: E. Mavrogonatou, K. Stathopoulos

12:45-14:30 **SHORT TALKS 5**

Structure and Function of Macromolecules / RNA Biology

ST25 - 269

Telomere specific tumor histopathology: a novel diagnostic tool for homologous recombination deficient ovarian cancers

Eleni Dragona[1], Christopoulou Georgia[2], Monica Gatsakou[1], Anastasios Delis[3], Stamatios Theocharis[4], Pantelis Constantoulakis[2], Sarantis Gagos[1*]

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ST26 - 62

Integrative -Omics for Construction of Gene Regulatory Networks towards NKT Cell Identity Understanding

Dafni Anagnostopoulou, Arianna Ntatsopoulou, Dimitris Konstantopoulos, Mihalis Verykokakis*

Institute for Fundamental Biomedical Research BSRC Alexander Fleming, Vari, Greece

ST27 - 128

Dynamic links between the cardiac intermediate filaments of the cytoskeleton and nucleoskeleton for proper cardiomyocyte differentiation, maturation and reprogramming

Mary Tsikitis[1], Antigoni Diokmetzidou[1,2,3], Panagiotis Liakopoulos[4], Maria Karipidou[1], Ioannis Kokkinopoulos[1], Giannis Vatsellas[5], Petros Kolovos[4], Yassemi Capetanaki[1]

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ST28 - 102

T-box-i is a novel specific inhibitor of essential bacterial regulatory RNAs

Adamantia Kouvela[1], Nikoleta Giarimoglou[1], Athanasios Papakyriakou[2], Jinwei Zhang[3], Vassiliki Stamatopoulou[1*], Constantinos Stathopoulos[1*]

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ST29 - 109

Study of the GHRHR Activation Mechanism via Molecular Dynamics Simulations

Nastazia Lesgidou[1], Minos-Timotheos Matsoukas[1]

[1]Department of Biomedical Engineering, University of West Attica, Egaleo 12243, Athens, Greece

ST30 - 233

Glycome studies on engineered MDCK and human primary nasal and tracheal epithelial cellsfor H3N2 influenza virus

Aristotelis Antonopoulos[1,2], Chika Kikuchi[3], James Paulson[3], Stuart M. Haslam[1]

[1]Imperial College London, London, SW7 2AZ, UK, [2]Current address: University of West Attica, Egaleo, 12243, Greece, [3]The Scripps Research Institute, California, USA

ST31 - 201

Loss of the mitochondrial i-tRF^{GluTTC} results to early-relapse and poor treatment outcome in childhood B-cell acute lymphoblastic leukemia

Eleftheria Kravariti[1,2], Konstantinos Soureas[1,2], Antonios Marmarinos[1], Maria Nikita[3], Evgenia Magkou[3], Angeliki-Eleni Sfetsiori[3], Margarita Baka[3], Dimitrios Doganis[3], Andreas Scorilas[2], Dimitrios Gourgiotis[1], Margaritis Avgeris[1,2]

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14:30-16:15 **POSTER SESSION 2**

• Chemical Biology • Functional Genomics and Proteomics • RNA Biology

• Stem Cells, Tissue Morphogenesis & Regeneration • Structure and Function of Macromolecules

LUNCH BREAK (attendee on own)

GENERAL ASSEMBLY HSBMB (15:00-16:00)

Chairs: D. Sgouras, H. Pratsinis

16:15-17:45 **SHORT TALKS 6**

Molecular & Cellular Basis of Human Diseases (II)

ST32 - 184

Prevalence of Genetic Polymorphisms in Patients with a History of Thrombophilia

Stavros. Formozis[1,3,4], Lydia. Plavoukou[2], Maria - Panagiota Terzi[3,4], Georgios Apergis[3], Sotirios Fortis[4], Vasilios Birtsas[4], George Dryllis[4], Effie Papageorgiou[4], Efrosyni Nomikou[3], Anastasios Kriebarthis[4], Efthymia Pavlou[3,4]

[1]National and Kapodistrian University of Athens, Department of Biology, [2]Hematology Department, Hippokration General Hospital of Athens, [3]Hemostasis Department, Hospital Blood Bank and Hemophilia Center, Hippokration General Hospital of Athens, [4]Research Laboratory of Reliability and Quality Control in Laboratory Hematology, University of West Attica, Department of Biomedical Sciences

ST33 - 237

Extranuclear roles of NuRD complex proteins: Novel insights in cell cycle progression

Lito Karkaletsou†, Evgenios Eftalitsidis†, Stylianos Didaskalou, Stella Malichetoudi, Margy Koffa*

†Equal first

Laboratory of Molecular Cell Biology, Cell Cycle and Proteomics, Department of Molecular Biology and Genetics, DUTh, Alexandroupoli, Greece

ST34 - 49

Antiviral Activity Evaluation of Newly Synthesized Photocatalytic Surfaces for Environmental Decontamination – APOGEION

Olga Papaggeli[1]*, Nikolaos Moustakas[2]*, Sofia Makka[3], Nadia Todorova[4], Christos Trapalis[4], Emmanouil Aggelakis[3], Urania Georgopoulou[1], Dionyssios N. Sgouras[2], Pelagia Foka[1]****

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**Equal contribution*

ST35 - 279

Applications of Artificial Intelligence and data analytics for identifying molecular markers in Alzheimer's Disease

Marios Krokidis

Bioinformatics and Human Electrophysiology Laboratory, Department of Informatics, Ionian University, Corfu, Greece

ST36 - 289

Novel COMP–PMEPA1 Interaction Rewires SMAD Signaling to Induce EMT in Breast Cancer

Konstantinos S. Papadakos, Gilar Gorji-bahri, Anna M. Blom

Lund University, Malmö, Sweden

ST37 - 290

Bioactive NO for the treatment of long chain fatty acids oxidation disorders

Margarita Tenopoulou[1], Paschalis -Thomas Doulias*[1,2]

[1]Department of Chemistry, University of Ioannina and Ioannina, Greece, [2]Institute of Biosciences, University Research Center of Ioannina (URCI), Ioannina, Greece

SATURDAY 6 Dec 2025

AUDITORIUM - 1st floor

Chairs: A. Dima, N. Karamanos

17:45-18:15 **INVITED LECTURE**

A versatile "all-in-one" CRISPR-Cas13d tool for site-specific m6A demethylation in human mRNAs

Panagiotis G. Adamopoulos, *National and Kapodistrian University of Athens*

18:15-18:45 **INVITED LECTURE**

Mitophagy sustains inter-organellar communication to promote healthspan and lifespan

Konstantinos Palikaras, *National and Kapodistrian University of Athens*

18:45-19:00 **COFFEE BREAK**

Chairs: I. Trougakos, A. Scorilas

19:00-19:45 **PLENARY LECTURE**

Pharmacological Activation of NRF2: Redefining Therapy for MAFLD/MASH

Antonio Cuadrado Pastor, *Autonomous University of Madrid (UAM), SPAIN*

19:45-20:30 **PLENARY LECTURE**

AI for Molecular Diagnostics and Biomedical Research: Transforming medicine as we know it

George Yousef, *University of Toronto, CANADA*

Chairs: M. Lekka, I. Sotiropoulos

09:00-09:30 **INVITED LECTURE**

Structure guided discovery of new generation antimalarial drugs

Anastasia Kantsadi, *University of Thessaly*

09:30-11:30 **SHORT TALKS 7**

Exosomal Structure and Function / Gene Expression & Epigenetics

ST38 - 288

Breast cancer-derived extracellular vesicles in chemoresistance and their use in liquid biopsies as diagnostic/prognostic biomarkers

Ioanna Keklikoglou[1,2,3]

[1]Department of Biology, University of Crete, [2]Institute of Molecular Biology and Biotechnology of the Foundation for Research and Technology- Hellas (IMBB-FORTH), [3]Barts Cancer Institute, Queen Mary, University of London

ST39 - 48

Chronic psychological stress and exosomes in precipitation and diagnosis of Alzheimer's disease brain pathology

Ioannis Sotiropoulos[1]

[1]Laboratory of Brain Exosomes & Pathology - ExoBrain, Institute of Biosciences & Applications, NCSR "Demokritos", Athens, Greece

ST40 - 195

Prediction of Hepatic Steatosis in MASLD Patients Using Extracellular Vesicles: Shallow Deep Neural Networks Outperform a Foundation Model

Eleni Myrto Trifylli[1,2], Athanasios Angelakis[3*], Anastasios G. Kriebardis[1], Nikolaos Papadopoulos[2], Sotirios P. Fortis[1], Vasiliki Pantazatou[1], Evgenia Spyropoulou[1], John Koskinas[2], Hariklia Kranidioti[2], Evangelos Koustas[4], Panagiotis Sarantis[5], Spilios Manolakopoulos[2], Melanie Deutsch[2]

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ST41 - 297

An interpretable machine learning-based approach reveals patterns in extracellular vesicle formation and predicts transfusion efficacy in transfusion-dependent thalassaemia

Elli-Anna Stylianaki[1], Konstantina Theocharaki[2], Spyridon Almpanis[3], Aikaterini Ntzoura-Kani[2], Nikolaos Simantiris[4], Aikaterini Xydaki[5], Sophia Delicou[5], Veroniki Komninaka[6], Marianna Antonelou[2]*, Niki Vassilaki[1]*

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ST42 - 57

Proteolytic activities of extracellular vesicles attenuate A-Synuclein Aggregation

Kostas Vekrellis[1], Katerina Melchroinou[1], Agaristi Lamprokostopoulou[1], Marianna Kokoli[1], Eleni Zingou[2], Marina Skarveli[1], Asimina Kolianou[2], Martina Samiotaki[4], George Pampalakis[3], Georgia Sotiropoulou[2]

[1]Biomedical Research Foundation Academy Of Athens, [2]University of Patras, [3]Aristotle University of Thessaloniki, [4]BSRC Alexander Fleming

ST43 - 118

Structural and Functional Characterization of Alzheimer's Disease-Protective Apolipoprotein E Variants

Daphne Georgiadou[1], Angeliki Chroni[1]

[1]Institute of Biosciences and Applications, National Center for Scientific Research "Demokritos", Agia Paraskevi, Athens, Greece

ST44 - 15

Establishment of Patient-derived xenograft (PDX) models in the University of Patras: A tool for real time and 3-D cancer research

Susan (Souzana) Logotheti[1,2*], Konstantinos Mesiakaris[1], Efthalia Kontogianni[1], Konstantinos Pantelis[3], Peter Shepherd[2], Christopher Logothetis[2], Vasiliki Tzelepi[1]

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ST45 - 39

Hypomethylation in *A. thaliana* driven by a defense inducer is linked to salicylic acid-related expression upregulation

Theoni Margaritopoulou[1*], Spyros Foutadakis[2], Giannis Vatsellas[2], Martina Samiotaki[3], Despina Tsiriva[4], Emilia Markellou[1]

[1]Laboratory of Mycology, Scientific Directorate of Phytopathology, Benaki Phytopathological Institute, Kifissia, 14561, Greece, [2]4th Department of Internal Medicine, Medical School, National and Kapodistrian University of Athens, Athens, Greece, [3]Protein Chemistry Facility, Biomedical Sciences Research Center "Alexander Fleming", Vari, 166 72, Greece, [4] Research and Development Department, Phytorgan SA, Nea Kifissia, Greece

Chairs: C. Evangelou, D. Kletsas

11:30-12:00 **INVITED LECTURE**

Role of Senescence and Aging in Lung Carcinogenesis: Therapeutic tools

Daniel Munoz-Espin, *University of Cambridge, UK*

12:00-12:30 **INVITED LECTURE**

Antigen Presentation in the Tumor Ecosystem

Maria Tsoumakidou, *BSRC Alexander Fleming*

12:30-14:30 **POSTER SESSION 3**

• Cell Communication & Signaling • Cell Organization & Function • Cellular Ageing

• Systems Biology & Bioinformatics • Molecular & Cellular Basis of Human Diseases II

LUNCH BREAK (attendee on own)

Chairs: V. Kostourou, A. Kriebardis

14:30-16:30 **SHORT TALKS 8**

Functional Genomics and Proteomics (II) / Systems Biology / Gene Regulation

ST46 - 45

ERAP1 Allotypes 2 and 10 Differentially Regulate the Immunopeptidome of Melanocytes

Martha Nikopaschou[1], Martina Samiotaki[2], Anna Kannavou[1], Nikolaos V. Angelis[3], Ourania Tsitsilonis[3], George Panayotou[2], Efstratios Stratikos[1*]

[1]Department of Chemistry, National and Kapodistrian University of Athens, Greece, [2]Biomedical Sciences Research Center "Alexander Fleming", Institute for Bioinnovation, Vari, Greece, [3]Department of Biology, National and Kapodistrian University of Athens, Greece

ST47 - 232

"When Less becomes More": Ultra-sensitive proteomics applications down to the single cell level

Marina Cotsiki, Georgia Rouni, Martha Nikopaschou, George Panayotou, Martina Samiotaki

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

ST48- 240

Developing Metabolomic Tools for Assessing Perinatal Exposure to Endocrine-Disrupting Pesticides

Paraskevi Zagana[1], Anastasia-Konstantina Sakali[2], Aikaterini Kapama[3], Alexandra Paxinou[1], Nikolaos D. Lampros[1,4], Maria Papagianni[3*], George Mastorakos[2*], Maria I. Klapa[1*]

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ST49 - 286

Identifying drivers of clonal expansion in esophageal epithelium through a CRISPR-Cas9 competition screen

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ST50 - 127

Diet-responsive proteogenomic effects following short-term restriction of animal products in humans

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ST51 - 110

Integrated omics and biomarker profiling reveal mechanisms of adverse transfusion reaction in a thalassemia patient

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ST52- 143

Targeted epigenetic modulation of *ZBTB7A* by episomal CRISPR/dCas9 systems enhances *HBG* expression in K562 cells

Irene Dereki[1], Vasiliki Chondrou[1], Eleftherios Bochalis[2], Katerina Athanasopoulou[1], Ilias Georgakopoulos-Soares[2], Argyro Sgourou[1]

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ST53 - 221

Mechanistic Insights into Transcription Dynamics Uncovered by In Silico Simulation and Mathematical Modeling

Christos Botos[1], Michail Loulakis[2,3], Konstantinos Tsomakian[1], Marianna Stagaki[1], Aikaterini Ntouka[1], Konstantina Charmpi[3], Theodoros Katsaounis[3], Matthieu D. Lavigne[1*]

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Chair: T. Calogeropoulou

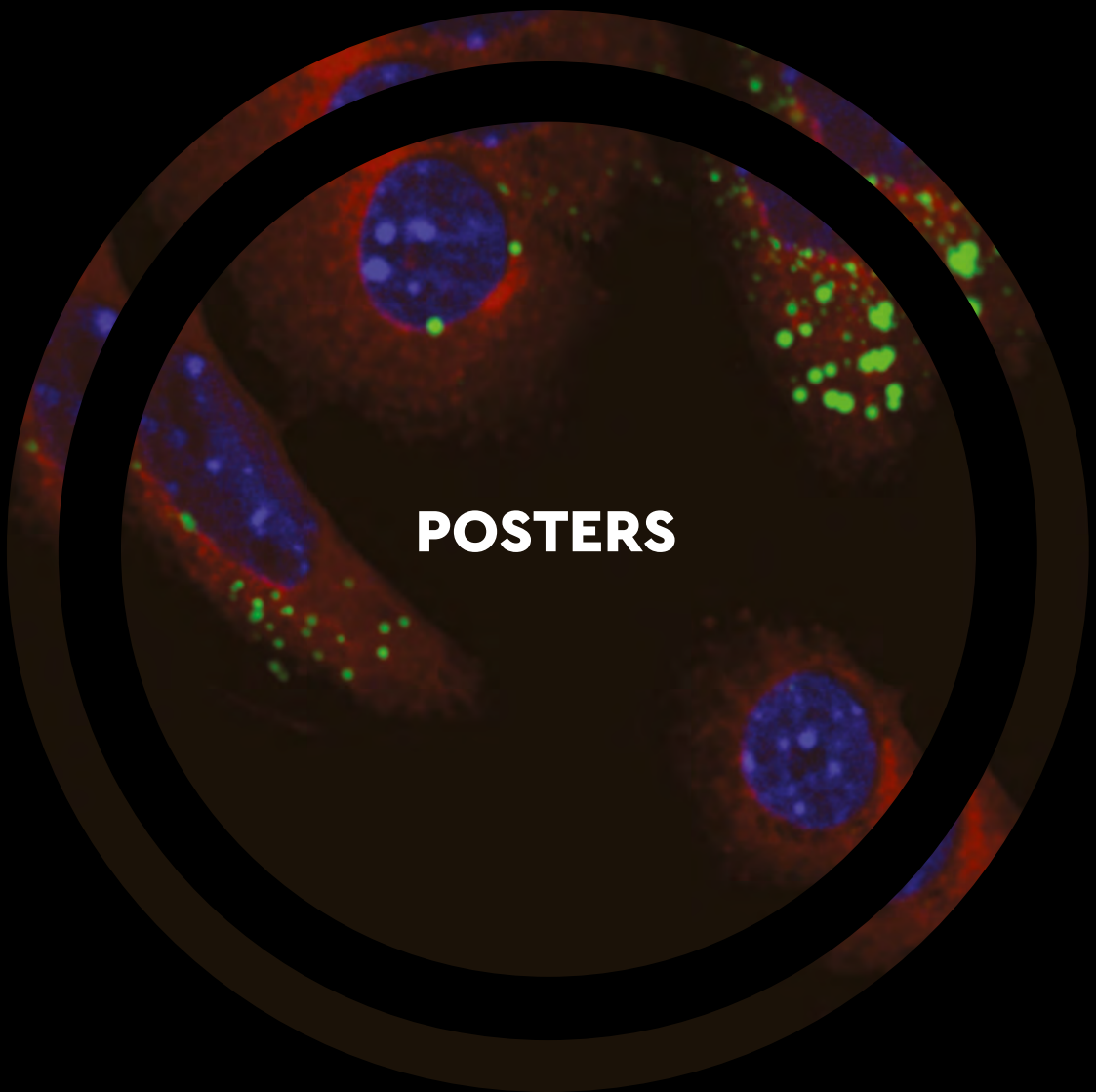
16:30-17:15 **PLENARY LECTURE**

Photons for treating and detecting cancer

Mark Bradley, *Queen Mary University of London, UK*

17:15-17:45 **CLOSING SESSION - AWARDS**

ΣΗΜΕΙΩΣΕΙΣ | NOTES



POSTERS

14:00-16:00 **POSTER SESSION 1**

- Biotechnology of Plants & Microorganisms
- Development & Differentiation
- DNA damage/repair
- Regulation of Gene Expression & Epigenetics
- Molecular & Cellular Basis of Human Diseases (I)

P1 - 42

Selenium Binding Protein: Exploring a novel stress regulator in the model microalga *Chlamydomonas reinhardtii*

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P2 - 52

Bacterial diversity analysis of glyphosate-exposed and pristine soil samples

Marina Giannakara[1], Georgia Nefeli Filandrou[1], Vukasin Jankovic[2], Jelena Milovanovic[2], Jasmina Nikodinovic-Runic[2]*, Vassiliki Lila Koumandou[1]*

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P3 - 81

Soil microbiota as affected by winter service crops in vineyards

Ioannis Theologidis[1], Dimosthenis Kizis[2], Athina Motsenigou[3*], Aggeliki Petraki[3], Dimitrios Vlotsos[3], Nikolina Vidali[3], Nikolaos Zaharias[4], Dimosthenis Chachalis[3]

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P4 - 104

Emerging viruses and Virus-like Particles (VLPs): Developing surrogate systems for Pandemic Preparedness Countermeasures

Eirini Karamichali[1], Nikolaos Mikronis[1*], Paraskevi Kestekidi[1*], Nikolaos Antoneas[1], Pantelis Saxionis[1], Ioannis Vasileios Elafropoulos[1], Vasileia Emmanouil-Kalou[1], Olga Papaggeli[1], Athanasios Kakkanas[1], Apostolos Beloukas[2], Eleni Aslanoglou[1], Vasiliki Pogka[3], Timokratis Karamitros[3], Urania Georgopoulou[1], Pelagia Foka[1]

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P5 - 122

Arabidopsis KUP/KT/HAK Transporters of Clade IIa Are Essential for Gametogenesis and Embryogenesis

Dimitrios Mallioras, Dikran Tsitsekian, Panagiota Mylona, Efstratios Kamargiakis, Charalampos Moschonas, Gerasimos Daras, Stamatis Rigas*

Department of Biotechnology, Agricultural University of Athens, Athens, Greece

P6 - 124

How Olive Fruits Make Their Oil: Developmental, Metabolic and Hormonal Control

Dikran Tsitsekian[1], Gerasimos Daras[1], Anthi Panara[2], Anastasios Alatzas[1], Anastasia Koupa[2], Efstratios Kamargiakis[1], Panagiota Mylona[1], Nikolaos S. Thomaidis[2], Stamatis Rigas[1*]

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P7 - 251

Proteomic Profiling of Doxorubicin-Treated SK-N-SH Neuroblastoma Cells and Cytotoxic Evaluation of Cannabinoid Co-Treatment

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P8 - 187

Dietary supplementation with lactic acid bacteria has beneficial effects against High fat diet induced obesity and DSS induced colitis in mice

Georgios Zormpas[1,2], Ioanna Pantazi[1,2], Evangelia Kandylaki[1,2], Ourania Kolliniati[1,2], Chrysoula Pavlatou[3], Elisavet Dimoula[3], Ioannis Kourkoutas[3], Panagiotis Panas[4], Anagnostis Argiriou[5,6], Christos Tsatsanis[1,2]

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P9 - 220

Breeding for resistance against Tobacco mosaic virus by silencing cytoplasmic *phosphoglycerate kinase* (*PGK*) genes in tobacco plants

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P10 - 241

A rapid Agrobacterium-mediated transient expression approach for non-model crop species

Vasileios Poursanidis[1], Vasileios Chasiotis[1], Vasileios Patsialas[1], Anna Kouskouveli[2], Georgios Komis[2], Konstantinos Koudounas[1*]

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P11 - 247

Metabolic characterization of the CO_2-catabolizing anaerobe *Moorella thermoacetica*'s growth in bioprocessing environments

Vasiliki A. Savvopoulou[1,2], Maria-Konstatina Ioannidi[1], Paraskevi Zagana[1], Alexandra Paxinou[1], Athena Angelopoulou[1], Maria I. Klapa[1*]

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P12 - 29

Synergy between proneural and ectodermal transcription factors and the role of Notch in the early neurogenesis of *Drosophila*

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P13 - 87

Evolutionary and Functional Insights into Primary Cilium-Mediated Regulation of Cortical Development

Stylianos Lagouros[1,2], Spyros Merkouris[1], Athanasia Rapti[1], Sylia Christou[1], Lydia Mouratidou[1], Panagiota Nti Konstanzo[1,2], Marta Labeur[3], Panagiotis Politis[4], Stavros Taraviras[5], Silvia Capello[6], Christina Kyrousi[1*]

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P14 - 89

Effect of mechanical loading and/or treatment with natural/synthetic compounds on human cells with osteoblastic phenotype

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P15 - 148

The role of BCL6 in the transcriptional control of invariant Natural Killer T (iNKT) cell development

Arianna Ntatsopoulou[1], Dafni Anagnostopoulou[1], Marianthi Gioulbasani[1], Chara Konstantopoulou[1], Dimitris Konstantopoulos[1], Mihalis Verykokakis[1]

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P16 - 176

LEFKOTHEA regulates the mode of alternative splicing events during light response

Anastasios Alatzas[1], Despina Samakovli[1,2], Loukia Roka[1], Panagiota Plitsi[1], Konstantinos Panagiotopoulos[1], Kosmas Haralampidis[2], Stamatis Rigas[1], Gerasimos Daras[1], Dimitra Milioni[1], Polydefkis Hatzopoulos[1]

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P17 - 208

Non-Invasive Multi-Omics Approaches for Comprehensive Non-Invasive Assessment of Human Preimplantation Embryos. Challenges, Limitations and Planning of a Prospective Collaboration Between Hygeia IVF Embryogenesis and BRFAA

Eleftheria Frantzela[1], Nikolaos Xydas[1], Ioannis Vogiatzis[1], Ioannis Vatselas[1], Evangelos Makrakis[2,3], Ioannis Sfontouris[2,3*], Athanasios K. Anagnostopoulos[1,4*]

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**Equal Contribution*

P18 - 12

Unraveling interactions between DNA Damage Response network and Immune System in Multiple Myeloma

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P19 - 25

DNA Damage Response and redox status reveal determinants of treatment sensitivity in multiple myeloma cells

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P20 - 135

The regulation of Mcldas protein levels is critical for normal cell cycle progression and the maintenance of genomic integrity

Spyridoula Bournaka[1], Pinelopi Moloni[1], Marina Arbi[1], Stavroula Tsaridou[1], Vasiliki Petroulaki[1], Stavros Taraviras[2], Zoi Lygerou[1*]

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P21 - 139

Utilizing predictable staggered CRISPR/Cas9 cuts for precise genome editing

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P22 - 152

miRNA profiling and genotoxicity screening of extracellular vesicles derived from human infrapatellar fat pad mesenchymal stem/stromal cells

Katerina Kandaki[1], Dimitra Katsouli[1], Maria Dimitriadou[1], Spyridon Vasilopoulos[1], Maria Vetsi[2], Maria Xilouri[2], Dimitrios Kouroupis[3,4], Michalis Fragkos[1*]

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P23 - 157

Unresolved telomere recombination in cancer leads to ultrabright telomere-driven cellular senescence

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P24 - 167

The anatomical site, the developmental stage and the differentiation state direct the vulnerability of human mesenchymal cells to UVB radiation

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P25 - 171

Targeting Replication Licensing Machinery for the Development of Cancer-Specific Therapeutic Approaches

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P26 - 21

MCU and mPTP mediate cytosolic calcium overload and neuronal dysfunction in *C. elegans* models of autosomal dominant optic atrophy

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P27 - 24

Development of a real-time PCR method for the quantitative determination of sjTREC episomal DNA in the thymus

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P28 - 26

Cracking the Apoptosis Code: Deciphering how ORF3a mutants orchestrate the RIPK1 signaling dynamics

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P29 - 61

Uncovering the pathophysiology of cerebellar ataxia with neuropathy and vestibular areflexia syndrome (CANVAS) using patient-derived brain organoids

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NLRP3- and sex-dependent inflammatory interplays contribute to adverse outcomes of cardiac repair

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P31 - 73

Impact of Cold Atmospheric Plasma on lung cancer cells before and after TGFß-induced EMT

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P32 - 74

Functional Correlation of the Antigenic Properties of Oncogenic Proteins with Paraneoplastic Neurological Disorders

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P33 - 79

Exploring integrins-matrix interactions in 2D and 3D cancer cell models

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P34 - 92

Regulation of LRRK2 Kinase Activity and Dimerization by Rab GTPases in Parkinson's Disease

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P35 - 98

Cold atmospheric plasma evokes breast cancer cell apoptosis through redox and matrix modulation

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P36 - 99

TRAF3 as a regulator of breast cancer aggressiveness

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P37 - 123

Cancer Cell Metabolic Reprogramming Through Diet and Nutrition

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P38 - 129

Functional implication of Clusterin isoforms in Osteosarcoma

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P39 - 136

Establishment of prostate cancer and melanoma derived bone metastasis models in TgRANKL mice and evaluation of anti-resorptive drugs

Christos-Chrysovalantis Syrigos[1,2], Elena Komninou[1,2], Ilias Glynos[1,2], Eleni-Dimitra Lioki[1,2], Melina Dragolia[3], Vasileios Ntafis[3], Martina Rauner[4], Eleni Douni[1,2*]
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Divergent Gastric T-cell Signatures in Autoimmune Gastritis and *Helicobacter pylori* Infection

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Therapeutic Potential of Synthetic Neurosteroids in Psoriatic Inflammation

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The effect of simvastatin in the presence of hormones on functional properties and proteoglycan expression in triple negative breast cancer cells

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microRNA profiling and cell-cell communication in 2D *vs.* 3D breast cancer cell models

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Sulfated hyaluronan modulates extracellular matrix composition and miRNA expression in 3D breast cancer spheroids

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Wisp1 matricellular protein enhances the resistance of various cancer cells against the chemotherapeutic drug doxorubicin through Nrf2 activation

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Urolithin A mediated-mitophagy restores mitochondrial and lysosomal homeostasis in a *C. elegans* model of Werner Syndrome

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

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RNase κ: A Key Regulator of Dengue Virus Proliferation and Its Implications in Cellular Homeostasis

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Dyrk1B kinase positively regulates SOD1 expression in SOD1^{G93A} mice

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Correlation of Levels of Factor VII with Mutation Arg353Gln in F7 Gene In Patients with Liver Disease

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The proteoglycan serglycin acts as a crucial regulator of the unfolded protein response (UPR) pathway in glioblastoma

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Serglycin affects unfolded protein response (UPR) pathway and the ubiquitin-proteasome system (UPS) in multiple myeloma

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Macropinocytosis Regulates Amyloid-ß Uptake and Clearance Across the Blood–Brain Barrier and Modulates Plaque Deposition in Alzheimer's Models

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Alterations of Long COVID-isolated Extracellular Vesicle Cargo Reveals Similarities to Alzheimer-Like Pathology

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Disruption of the mitochondrial homeostasis after prolonged adrenergic stress primes the innate immune response in salivary gland epithelium

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Dysregulated sympathetic nervous system shapes peripheral immune responses in Systemic Lupus Erythematosus potentially contributing to flares

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Differential induction of MAPK signaling pathways in gastric epithelial cell lines following *Helicobacter pylori* infection

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The Role of LSD1/EMMPRIN Axis in HCV-associated Hepatocellular Carcinoma and Metastasis

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Chemoresistance-related signatures in a doxorubicin-resistant cell model of osteosarcoma

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Hyperosmotic stress-induced overexpression of type II arginase in nucleus pulposus intervertebral disc cells

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Correlation of AHSP gene variants, detected by HRMA, with distinct haematological phenotype of alpha thalassaemia carriers with identical HBA genotype

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Hepatitis C Virus-directed exoPD-L1 as a key modulator of host adaptive immunity

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Modeling Vascular Dysfunction in Parkinson's Disease: The Role of LRRK2 G2019S in Endothelial Cells

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MDM2 as a precision therapeutic target in muscle-invasive bladder cancer: Insights from PDX models and clinical cohorts

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Circulating miRNA risk score in bladder cancer: translational impact from patient-derived xenografts to patients' progression and treatment outcome

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The effect of lipid metabolism regulator Angiopoietin-like-3 protein (ANGPTL-3) on the rate-limiting step of cholesterol biosynthesis during Hepatitis C virus (HCV) infection

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Elastin-derived peptides (EDPs) modulate breast cancer cell behavior in 2D and 3D cell models

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Epigenetics: Advancing Biomarker Discovery for Prostate Cancer Disease States

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Lysine Methyltransferase SUV4-20H2 activity contributes to the mesenchymal phenotype and migration potential of Pediatric Astrocytomas

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The role of histone demethylase PHF8 in macrophage type I interferon response and mitochondrial function

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GemC1 modulation drives genome-wide chromatin changes shaping the fate decisions between NSCs and ependymal cells

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Effects of a Greek Yoghurt–based Complex on the Human Facial Skin Microbiome

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Construction and Characterization of Prostate Cancer Tissue Microarrays: A High-Throughput Tool for Molecular Profiling of Disease Progression

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Investigation of the effect of HIV-1 insertion site on the transcriptional regulation of the virus and the interleukin-2 (IL-2) gene via chromosomal interactions

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Therapeutic Efficacy and Molecular Impact of the Epigenetic Modulator Panobinostat in Aggressive Prostate Cancer Patient-Derived Xenografts

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HIV-Driven Transcriptional Modulation of Human Endogenous Retroviruses in immortalized T-lymphocyte cells

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Investigating syncytial expression in placenta during COVID-19 infection

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A screening approach for uncovering functional insulators to improve safety and durability of gene therapy vectors

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A solid phase method for detection of Src protein tyrosine kinases activity

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Live Imaging and Machine Learning Reveal Context-Dependent Roles of Su(H) in Embryonic Transcriptional Bursting

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14:30-16:15 POSTER SESSION 2

- Chemical Biology
- Functional Genomics and Proteomics
- RNA Biology
- Stem Cells, Tissue Morphogenesis & Regeneration
- Structure and Function of Macromolecules

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Generation of a KLK5-specific activity-based probe (KLK5-ABP) for detection of the active KLK5 protease in biological and clinical samples

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IN3-Structure: AI-Enhanced Ligand-Receptor Profiling for Drug Repurposing

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Silver(I) Metallodrugs Induce Apoptosis in 2D and 3D Breast Tumor Models: Exploring DNA and Enzyme Interactions

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Targeting Microbial Resistance: Copper(I) Complexes with Triphenylphosphine and 2-Mercaptopyrimidine

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Design, Structural Features, and Biological Properties of a Triphenylantimony(V) Complex with Acetate Ligands

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Targeting Thyroid Cancer with a Novel Iodine-Based Complex: A Promising Therapeutic Approach

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Utilization of Metabolic Data of Metal Ions in Tissues for Supporting Clinical Decision-Making

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Investigating the Biocompatibility of Advanced Materials for Neural Interfaces under the IN3-Bio Framework

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Computational Repurposing of Approved and Investigational Drugs as Potential Inhibitors of GHRHR and Its Splice Variant SV1

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A platform for natural product screening for anti-ageing bioactivities: application on plant extracts from the Greek flora

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Urolithins - Metabolites with health benefits in Diabetes Mellitus

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Thermoresponsive block copolymer drug conjugates for targeted pancreatic cancer therapeutics

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Physicochemical and biological properties of bio-functionalized electrospun fibrous membranes

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A pan-HDAC chemoproteomics assay to profile drugs

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Investigating a potential role for chemosensory proteins in insecticide resistance

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Elucidating the molecular mechanism underlying the antifungal activity of functionalized hyperbranched Polyethyleneimine - Copper derivatives

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Papiliocin-biofunctionalized carbon nanotubes as novel antimicrobial and apoptosis-inducing nanostructures

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Targeting Insect Chemosensory Proteins with Small-Molecule Inhibitors to Probe Insecticide Resistance

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Phenoxazine derivative ST61 displays an oxidative stress-mediated cytotoxic activity against human breast cancer cells

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A bacterial discovery platform uncovers small cyclic peptides that effectively disaggregate human patient-derived tau fibrils and fully rescue cognitive function in small animal models of Alzheimer's disease

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EL244, a dual ATX inhibitor and PPARγ agonist, functions as an antidiabetic drug in type II prediabetic mice

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Cinnamaldehyde Analogues as antibacterial agents

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Development and cytotoxic evaluation of photo-activatable hydroxamic acid analogues as potential agents for melanoma therapy

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Comparative Analysis of Serum DPP4 Isoforms in Diabetes Mellitus and Severe Alzheimer's Disease

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Computational analysis of selected salicylidene imines for their potential as BACE-1 inhibitors

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Impact of heat stress on the proteome of the sponge *Aplysina aerophoba*

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Data-driven proteomic survival modeling reveals MAPK and apoptosis-related prognostic signatures in melanoma: a TCGA-SKCM survival analysis

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Comprehensive NGS-Based Detection of Germline and Somatic Mutations in HRR Genes and Hematological Malignancies

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Uncovering the Genetic Complexity of Rare Diseases through Whole-Exome Sequencing

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Deciphering the proteomic landscape of bortezomib and LB100 combination therapy in multiple myeloma

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Simultaneous proteomics and metabolomics analysis in murine bone marrow cells

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The Role of RNA-Binding Proteins in Regulating Axonal Growth in Peripheral Neurons

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Less is more: Caloric restriction reduces anxiety-related behavior in highly anxious female mice by increasing brain energy metabolism

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Proteomic analysis of the TgRANKL mouse model of osteoporosis uncovers key regulators of disease progression

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Exploring *Cistus creticus* adaptations to environmental stress via proteomic analysis

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Bulk Tissue Proteogenomics: Towards Construction of the First Greek National Non-Small Lung Cancer Patient Database for Precision Oncology

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A Hybrid Genome Sequencing and Comparative Analysis of *Listeria monocytogenes* Strains: Exploring Lineage Diversity, Virulence, and Resistance Mechanisms

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Computational Analysis of Transcriptome Data and Mapping of Functional Networks in Parkinson's Disease

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Short-term effects of glucagon-induced catabolism on proteomic landscape of HepG2 cells

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In silico comparative analysis of human lymphoma transmembranome using mass spectrometry–based proteomic data at protein and peptide level

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Balancing precision with plasticity: Redefining the roles of transcription factors in early cell fate specification

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RNA M-Type Pseudoknot Prediction, with syntactic pattern recognition

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Transcriptomic analysis identifies eIF3j as a potential key regulator of Vemurafenib resistance in melanoma cells

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Downregulation of miR-513c and let-7c as potential diagnostic markers in breast cancer

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Exploring the role of DEAH-box helicase 35 (DHX35) in RNA metabolism and cancer-associated translational control

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Functional and clinical evaluation of RNase κ alternative transcripts in bladder cancer

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Circular RNA expression dynamics reveal time- and dose-dependent responses to ionizing radiation in triple-negative breast cancer cells

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Nanopore sequencing and CRISPR/Cas9 genome editing uncover motif-dependent m6A demethylation by ALKBH5 in breast cancer cells

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Uncovering the alternatively spliced transcripts of the human gene family encoding the lysosomal associated membrane proteins (LAMPs) in multiple myeloma cell lines

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Identification and Molecular Characterization of Novel Small Non-Coding RNAs in Breast Cancer

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Regulation and clinical significance of the m6A RNA epitranscriptome in pediatric B-cell acute lymphoblastic leukemia

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Circulating miRNA-seq profiling and in-depth clinical evaluation in multiple myeloma: miR-29a as a potent liquid biopsy indicator of treatment response

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Integrative analysis of FTO m6A RNA demethylase in ovarian cancer: Functional insights and prognostic potential

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Dissecting the Vault Particle: Exploring the role of Major Vault Protein and vault RNAs in melanoma progression and therapy response

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CRISPR/Cas9-mediated RPP25-like knockout affects human RNase P function and cell viability

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IN3-BIO: An Integrated Pipeline for Biocompatibility Evaluation and Repurposing of Implantable Biomaterials in Next-Generation Neural Interfaces

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Trithorax balances ISC fate decisions via Ptx1-mediated repression of EE specification

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Severe immunodeficiency highly affects hippocampal neurogenesis at early postnatal stages

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Ectopic expression of *MCIDAS* can initiate direct reprogramming of Human Primary Astrocytes to the ependymal lineage

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Biocompatibility of implantable plug and cuff electrodes for peripheral nervous system interface applications in patients

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From Organoids to Barriers: Human iPSC-Derived Models of the Outer Blood–Retinal Barrier in PRPF31 Retinitis Pigmentosa

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Effects of *Achillea millefolium* on the physiology of red blood cells and platelets

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Pharmacological inhibition of SOS1:RAS interaction promotes pancreatic ß-cell regeneration

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Generation of Human Pluripotent Stem Cell-Derived Populations for the Construction of a Humanized Retinal Neurovascular Unit (rNVU) Model

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WITHDRAW

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Integrative Multi-Omics Analysis of VEGF-Driven Vasculogenesis from Human Pluripotent Stem Cells

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Heterogeneity of Aldh1b1^{+} ductal cells defines adult pancreatic stem cell subsets

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Ph regulates the Indole-dependent OBP1–OBP4 heterodimer formation and dissociation in mosquito antennae

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Structural insights into a nematode's Fatty acid & retinol carrier protein: Mi-FAR-1

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Mapping the areas of *Escherichia coli* glutaredoxin 2 used for its interaction with protein ligands

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***Escherichia coli* glutaredoxin 3: mapping of the areas of the molecule interacting with its protein ligands**

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Revealing Hidden Allosteric Pockets of ACE2: Structural and Functional Discovery of Potential Activators

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The pivotal role of Arkadia's non-RING elements in the self - and substrate - ubiquitination process

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Implications from the updated interactome of glutaredoxin 1 from *Escherichia coli*

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Resurrecting Ancient Phasins: Exploring the Functional Diversity and Biotechnological Potential of Paleophasins

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In Silico Structural Analysis of Ribonuclease κ Catalytic Site

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Use of human natural IgG monoclonal antibodies, able to penetratebreast cancer cells and their stem cell subpopulation, as intracellular carriers of paclitaxel-loaded gold nanorods

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Exploring in silico allosteric responses caused by cancer-associated amino acid changes in SR Protein Kinase 1

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Exploration of new chemical scaffolds to target glycogenolysis: the case of 7-O-methylmangiferin

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Characterization of multifunctional enzymes

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Biochemical characterization of an alternatively spliced variant of poly(A)-specific ribonuclease (PARN) and expression profile in mesenchymal cells

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Transient interactions between the fuzzy coat and the cross-ß core of brain-derived Aß42 filaments

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12:30-14:30 POSTER SESSION 3

- Cell Communication & Signaling
- Cell Organization & Function
- Cellular Ageing
- Systems Biology & Bioinformatics
- Molecular & Cellular Basis of Human Diseases II

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A new tension-sensitive signaling pathway involving actin polymerization prevents chromatin bridge breakage in cytokinesis

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WISP1-MIF axis impairs Nrf2-mediated antioxidant defence in COPD airway epithelium

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Dissecting Transcriptional Heterogeneity in Invasive Breast Carcinoma through Spatial Transcriptomics

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Fluorescent Labeling of CSC- and Bulk-Derived Extracellular Vesicles in Liver, Breast and Pancreatic Cancer

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Adipose tissue derived insulin-producing beta-like cells secrete condition media that ameliorate hyperglycemia-induced apoptosis in pancreatic ß-TC6 cells

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Breaking the diffraction limit: Ultrastructure Expansion Microscopy enables super-resolution imaging of tiny vesicles

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ROCK-Myosin II pathway regulates chemotherapy-induced extracellular vesicle secretion in metastatic triple negative breast cancer

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Unraveling the role of ROCK/Myosin II in modulating the metastatic capacity of breast cancer cells

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In vitro electrophysiological study of cholinergic transmission in cellular and network neuronal activity along the hippocampal axis

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The combination of CYLD and DHX35 deficiencies induces a proteomic signature of apoptosis in a head and neck cancer cell line

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Optimization of experimental conditions for *in vitro* study of T-independent B-lymphocyte proliferation

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Integrin-Linked Kinase regulates Talin confizguration and mechanical load distribution at muscle attachment sites

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Type II topoisomerases shape multi-scale 3D chromatin folding in regions of positive supercoils

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Development of methods to study positive DNA supercoiling dynamics and regulation in human cells

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Tau protein as a regulator of mitochondrial function and dynamics

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Investigating the role of AUP-1 in proteostasis, lipid metabolism and stress response

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Investigation of primary cilia development and structure in precancerous and drug-resistant breast epithelial cells

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Metabolic adaptation of lung cancer cells in response to matrix stiffness

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Characterization of the novel A30G α-Synuclein mutant in Parkinson's Disease

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The defects of macrophage antibacterial immune response in aging and DNA damage accumulation

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Intracellular calcium regulation in erythrocytes directly influences their resilience to corpuscular and redox stress

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Association of steroid hormone receptors signalling with skeletal muscle pathophysiology and aging

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***In vitro* and *in vivo* assessment of rabbit adipose-derived mesenchymal stem cells' regenerative potential for the treatment of intervertebral disc degeneration; the role of cellular senescence**

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Distinct organismal and tissue outcomes after Aß-42-induced proteotoxic stress in *Drosophila melanogaster* neural cells

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Cell-specific activation of the antioxidant transcription factor NRF2 reveals systemic proteostatic and metabolic crosstalk between the brain and gut in *Drosophila melanogaster*

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Expression, Purification and Functional study of the RING and RING-DTC Domains of the Human E3 Ubiquitin Ligase DTX3L

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Investigation of antiplatelet properties of dietary supplements

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Identification of cathepsin S cysteine protease as a novel processor of extracellular α-synuclein

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The GPCR lipid/androgen receptor OXER1 regulates neutrophil migration and cytotoxicity in the tumor microenvironment

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Assessment of curcumin-conjugated PEGylated magnetic nanoparticles in biomedical applications

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Evaluation of antibodies for detection of LEKTI, the causative factor of Netherton syndrome, using CRISPR/CAS9

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Study of variants of uncertain clinical significance in homologous recombination genes

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Generation of a three-dimensional reconstructed skin model for Netherton syndrome

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Exploring the role of macrophage-derived Versican in pulmonary fibrosis

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Investigating the localized LL-37 elevation and neutrophil activity in RSV-positive patients

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Exploring the functional role of SARS-CoV-2 ORF9b in epithelial and immune cells

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Targeting MCT1 and MCT4 in Non-Small Cell Lung Cancer (NSCLC) through in vitro and translational analyses

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Elevated expression of SOCE channel components in circulating tumor cells (CTCs) from breast cancer patients

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Expression of STIM1, ORAI1, and CD98hc in circulating tumor cells (CTCs) isolated from pancreatic cancer patients

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Serglycin regulates C10orf118 function and hyaluronan metabolism to provoke glioblastoma cells' aggressiveness

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Discovering New Pathways of Innate Immunity in Breast Cancer Metastasis

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CTCF - Mediated Regulation in Alzheimer's Disease

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Accumulation kinetics and biological action of doxorubicin in rabbit intervertebral discs

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Mass spectrometry–based proteomic profiling of sputum mucins in bronchial asthma: a pilot study

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Targeting NR5A2 Reprograms Transcriptional and Metabolic Networks to Suppress Therapy-Resistant Glioblastoma

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Nerve growth factor affects energetic pathways in human and mouse pre-adipocytes

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Enforced CYLD Expression Suppresses Proliferation and Promotes Maturation in a CML Cell Line

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Effects of 3-O-methyl-D-glucose on anxiety-like behavior and activity of acetylcholinesterase isoforms in specific brain regions of pentylenetetrazol (PTZ) epileptic male mice

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Molecular and phenotypic characterization of a paclitaxel-resistant breast cancer cell line: Insights into chemoresistance in Triple-Negative Breast Cancer

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Advanced Computational Approaches Identify Gene Expression and Extracellular Vesicle Lipid markers in Alzheimer's Disease

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Neuroprotective Effects of Anthocyanins

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Impact of lipopolysaccharide on hyaluronan turnover in airway smooth muscle cells from COPD patients

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Synthesis and biological evaluation of novel imatinib derivatives as potential tyrosine kinase inhibitors

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Functional analysis of Abracl protein in Neuro2a cell line

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siREN: A Dual RNAi Therapeutic Strategy with Targeted Lipid Nanoparticle Delivery for Chronic Lymphocytic Leukemia

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Proteins involved in endocellular trafficking in eukaryotic cells: comparative genomic analysis to identify orthologs in prokaryotes

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Comparative proteomic analysis of bone marrow CD138+ cells to understand the progression of plasma cell dyscrasias

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Large-scale collaborative work using statistical and AI tools to collect and organize stem cell differentiation protocols

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Cell-Corr: a user-friendly graphical software for descriptive analysis of molecular dynamics with live-cell imaging

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CpGene: a web application for epigenetic biomarker identification from DNA methylation arrays

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Rapid remodeling of the human gut microbiome in response to short-term animal product restriction

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Short-term animal product dietary restriction alters metabolic profiles and modulates immune function

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Kinetic Modelling of Light Mediation for Glucose-Stimulated Insulin Release in Human Pancreatic Beta-Cells

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Microbial bioenergetic diversity analysis based on 16SrRNA (amplicon) metagenomic data from soil samples

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In silico antimicrobial peptide discovery in the Animal kingdom

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Ancient population dynamics and regional patterns of SERPINA1 pathogenic variants related to α1-antitrypsin deficiency (AATD)

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Epitranscriptome editing and transcriptome fragmentation set immune-related epigenetic memory of monocytes in human systemic lupus erythematosus (SLE)

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Evolution of apoptosis in early eukaryotes

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Three-Protein Signature for Advanced Liver Fibrosis: A Minimalistic Shallow-Deep Neural Network Approach in MASLD Using Open Proteomics

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Shotgun metagenomics and volatilomics analysis reveal producer-specific microbial and functional patterns in PDO Sfela cheese

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Drug-specific signatures of chemoresistance: A metanalysis

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Bioinformatics Study on Idiopathic Central Precocious Puberty

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AI-Guided Design of *de novo* Mini-Protein Binders Targeting Allosteric Sites of MALT1 for Cancer Immunomodulation

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Longitudinal analysis of gut microbiome dynamics following allogeneic hematopoietic stem-cell transplantation: preliminary results using Oxford Nanopore full-length 16S rRNA sequencing

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Inulin supplementation partially restores gut dysbiosis in diet-induced obese mouse models: a systematic review and meta-analysis of metagenomics data

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Targeting collagens through plant-derived microRNAs (xenomiRs)

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Computational and functional analysis exploring conformational folding of protein variants in Alzheimer's disease

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Phosphorylation-dependent recruitment of HIF-1α at specific genomic loci drives triacylglycerol biosynthesis in hypoxic cancer cells

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Physical interaction of HIF-1α with the cohesin complex stimulates transcription of metabolic genes

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Identification of Prognostic Serum Biomarkers in Non-Small Cell Lung Cancer Using Omics Technologies

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