



# 63<sup>ο</sup>

## ΠΑΝΕΛΛΗΝΙΟ ΣΥΝΕΔΡΙΟ Ελληνικής Εταιρείας Βιοχημείας & Μοριακής Βιολογίας

9-11 Νοεμβρίου 2012

**Ηράκλειο Κρήτης**

Ίδρυμα Τεχνολογίας & Έρευνας

**ΔΙΟΡΓΑΝΩΣΗ**

Ελληνική Εταιρεία Βιοχημείας  
& Μοριακής Βιολογίας

Ιατρικό Τμήμα Πανεπιστημίου Κρήτης

Ινστιτούτο Μοριακής Βιολογίας  
& Βιοτεχνολογίας-ΙΤΕ

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#### Πρόεδρος

Χ. Στουρνάρας

#### Μέλη

Α. Γραβάνης  
Α. Ηλιόπουλος  
Π. Θεοδωρόπουλος  
Κ. Καλαντίδης  
Σ. Καμπράνης  
Δ. Καραγωγέως  
Δ. Καρδάσης  
Γ. Κουμουνδούρος  
Α. Οικονόμου  
Ε. Παπακωνσταντή  
Ι. Σουγκλάκος  
Γ. Σουρβίνος  
Ν. Ταβερναράκης  
Χ. Τσατσάνης  
Ι. Χαραλαμπόπουλος

### Διοικητικό Συμβούλιο ΕΕΒΜΒ



#### Πρόεδρος

Γιώργος Παναγιώτου

#### Αντιπρόεδρος

Χρήστος Παναγιωτίδης

#### Γεν. Γραμματέας

Διδώ Βασιλακοπούλου

#### Ταμίας

Δημήτρης Κλέτσας

#### Μέλη

Νίκος Καραμάνος  
Διονύσης Σγούρας  
Χρήστος Στουρνάρας

## ΚΑΛΩΣΟΡΙΣΜΑ

**Αγαπητοί συνάδελφοι,**

Με ιδιαίτερη χαρά σας καλωσορίζουμε στις εργασίες του 63<sup>ου</sup> Πανελληνίου Συνεδρίου της Ελληνικής Εταιρείας Βιοχημείας και Μοριακής Βιολογίας που θα πραγματοποιηθεί στο Ηράκλειο της Κρήτης, στο Ίδρυμα Τεχνολογίας & Έρευνας, από τις 9 έως τις 11 Νοεμβρίου 2012.

Το φετινό συνέδριο της ΕΕΒΜΒ διοργανώνεται με την ενεργό στήριξη του Ιατρικού Τμήματος του Πανεπιστημίου Κρήτης και του Ινστιτούτου Μοριακής Βιολογίας & Βιοτεχνολογίας του ΙΤΕ.

Το Συνέδριο είναι όπως πάντα ανοικτό σε όλη τη θεματολογία της σύγχρονης Βιοχημείας και Μοριακής Βιολογίας καθώς και σε διεπιστημονικές προσεγγίσεις στη διερεύνηση ερωτημάτων αιχμής. Για να υπηρετήσει το σκοπό αυτό, η Οργανωτική Επιτροπή έχει προσκαλέσει ένα σημαντικό αριθμό διακεκριμένων επιστημόνων από την Ελλάδα και το εξωτερικό, οι οποίοι και θα καλύψουν ευρύ φάσμα θεματικών περιοχών.

Παρά την άκρως δυσμενή συγκυρία, η συμμετοχή σας με 196 εργασίες, που θα παρουσιαστούν ως προφορικές και αναρτημένες ανακοινώσεις, επιβεβαιώνει το ενδιαφέρον της επιστημονικής μας κοινότητας στις Βιοεπιστήμες και ενδυναμώνει το θεσμό του Συνεδρίου μας. Στους δύσκολους καιρούς που διανύουμε, η ενεργός συμμετοχή σας αποτελεί τον κρισιμότερο παράγοντα για να αναδείξουμε την επιστημονική ποιότητα και τη δυναμική της Εταιρείας μας. Παράλληλα εκπέμπει και ένα σαφές μήνυμα ελπίδας για τον κομβικό ρόλο της παιδείας, της έρευνας και της επιστημονικής αριστείας στην ανάπτυξη της χώρας μας.

Με την πεποίθηση ότι το 63<sup>ο</sup> Συνέδριο θα αποτελέσει πρόσφορο πεδίο για την ανταλλαγή επιστημονικής σκέψης, προσβλέπουμε στη δικιά σας ενεργή συμμετοχή για την επιτυχία του.

Με θερμούς συναδελφικούς χαιρετισμούς,



**Καθ/τής Χρήστος Στουρνάρας**  
Πρόεδρος Οργανωτικής Επιτροπής



**Δρ Γιώργος Παναγιώτου**  
Πρόεδρος ΕΕΒΜΒ

# ΓΕΝΙΚΕΣ ΠΛΗΡΟΦΟΡΙΕΣ

## Τόπος & Χρόνος Συνεδρίου

Ηράκλειο, 9-11 Νοεμβρίου 2012  
Ίδρυμα Τεχνολογίας & Έρευνας

N. Πλαστήρα 100, Βασιλικά Βουτών,  
Τ.Κ. 711 10 Ηράκλειο, Κρήτη  
Τηλ.: 2810 391500-2 • Fax: 2810 391555  
E-mail: central@admin.forth.gr

## Επίσημη Γλώσσα

Επίσημες γλώσσες του Συνεδρίου θα είναι τα Ελληνικά και τα Αγγλικά.

## Έκθεση

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

## Τελετή ΠΑΝΕΠΙΣΤΗΜΙΟΥ ΚΡΗΤΗΣ

Στα πλαίσια του Συνεδρίου θα πραγματοποιηθεί Τελετή αναγόρευσης του Καθηγητή Florian Lang σε Επίτιμο Διδάκτορα του Τμήματος Ιατρικής του Πανεπιστημίου Κρήτης. Η Τελετή θα γίνει στο Αμφιθέατρο του Φοιτητικού Κέντρου του Πανεπιστημίου, το Σάββατο 10 Νοεμβρίου και ώρα 18:45.

Θα υπάρχει μεταφορά από το ΙΤΕ.

## Ελληνική Εταιρεία Βιοχημείας και Μοριακής Βιολογίας

Κατά τη διάρκεια του Συνεδρίου θα λειτουργεί γραμματεία της ΕΕΒΜΒ όπου οι ενδιαφερόμενοι μπορούν να ενημερωθούν για τις δραστηριότητες της Εταιρείας, να εγγραφούν ή να ανανεώσουν τις εγγραφές τους. Το Σάββατο 10 Νοεμβρίου 2012 και ώρα 13.15-15.15 θα γίνει Γενική Συνέλευση της Εταιρείας.

## Πιστοποιητικό παρακολούθησης

Τα πιστοποιητικά παρακολούθησης θα δοθούν την Κυριακή 11 Νοεμβρίου 2012 μεταξύ 12.00 - 14.00.

## Κονκάρδες

Παρακαλούνται οι σύνεδροι να έχουν την κονκάρδα τους καθ' όλη τη διάρκεια του Συνεδρίου. Η κονκάρδα θα ελέγχεται κατά την είσοδο στην Συνεδριακή αίθουσα με σύστημα barcode, με το οποίο καταγράφονται και οι ώρες παρακολούθησης του επιστημονικού προγράμματος.

## Γραμματεία Συνεδρίου



Η γραμματεία θα λειτουργεί έξω από το Αμφιθέατρο του ΙΤΕ τις εξής ημέρες και ώρες:

Παρασκευή 9 Νοεμβρίου	09:00-13:30 & 14:30-20:00
Σάββατο 10 Νοεμβρίου	08:00-13:30 & 14:30-18:00
Κυριακή 11 Νοεμβρίου	08:30-14:00

## Εγγραφές

	Μέχρι και 1/10/2012	Μέχρι και 15/10/2012	Μετά 15/10 & on-site
<b>Μέλη</b>	€ 55	€ 65	€ 70
<b>Αρωγά Μέλη</b>	€ 35	€ 40	€ 50
<b>Μη Μέλη</b>	€ 100	€ 115	€ 135
<b>*Μειωμένη Τιμή Εγγραφής</b>	€ 20	€ 20	€ 20

Το δικαίωμα εγγραφής (Μέλη και Αρωγά Μέλη της Εταιρείας & Μη Μέλη) περιλαμβάνει: παρακολούθηση του επιστημονικού προγράμματος, επίσκεψη στον εκθεσιακό χώρο, παραλαβή τσάντας και όλου του έντυπου συνεδριακού υλικού, CD εργασιών του συνεδρίου, κονκάρδα, βεβαίωση συμμετοχής, καφέ στα διαλείμματα και συμμετοχή στο Κοκτέιλ Υποδοχής.

\* Η μειωμένη τιμή εγγραφής αφορά τους προπτυχιακούς φοιτητές, τους απόφοιτους νεοεισαχθέντες σε μεταπτυχιακά προγράμματα που δεν είναι υποψήφιοι διδάκτορες και θα πρέπει να προσκομίζουν στη γραμματεία φοιτητικό πάσο ή βεβαίωση. Αυτή η κατηγορία εγγραφής περιλαμβάνει: παρακολούθηση του επιστημονικού προγράμματος, κονκάρδα, βεβαίωση συμμετοχής και το CD των εργασιών του συνεδρίου.

## Κρατήσεις Δωματίων

Οι ενδιαφερόμενοι μπορούν να επικοινωνούν με τη γραμματεία του Συνεδρίου. Οι τιμές αφορούν μία διανυκτέρευση με πρωινό.

Ξενοδοχείο	Μονόκλινο	Δίκλινο
<b>Galaxy hotel</b>	80 €	100 €
<b>Capsis Astoria hotel</b>	80 €	95 €
<b>LATO Boutique Hotel</b>	65 €	80 €
<b>Castello City Hotel</b>	40 €	50 €

## Ακυρώσεις

- Το Δικαίωμα Συμμετοχής στο Συνέδριο δεν επιστρέφεται
- Ακυρώσεις δωματίων θα γίνονται δεκτές έως 20 Σεπτεμβρίου 2012 με παρακράτηση του 50% του συνολικού κόστους
- Μετά τις 20 Σεπτεμβρίου 2012 ακυρώσεις δεν θα γίνονται δεκτές.

# ΠΛΗΡΟΦΟΡΙΕΣ ΕΠΙΣΤΗΜΟΝΙΚΟΥ ΠΡΟΓΡΑΜΜΑΤΟΣ

## Επιστημονικό Πρόγραμμα

Το επιστημονικό πρόγραμμα του Συνεδρίου θα περιλαμβάνει διαλέξεις, ελεύθερες και αναρτημένες ανακοινώσεις.

## Προφορικές ανακοινώσεις

Η διάρκεια των ανακοινώσεων είναι αυστηρά 12 λεπτά. Παρακαλούμε να τηρηθεί ο προαναφερόμενος χρόνος για την ομαλή διεξαγωγή του επιστημονικού προγράμματος.

## Αναρτημένες ανακοινώσεις (Posters)

Τα posters θα πρέπει να τοποθετηθούν την **Παρασκευή 9 Νοεμβρίου 2012** και ώρα **09:00-12:00** και θα μείνουν αναρτημένα καθ' όλη τη διάρκεια του Συνεδρίου.

Τα πάνελ θα είναι τοποθετημένα ανά θεματολογία. Παρακαλούμε αναζητήστε τον αριθμό του πόστερ σας, σύμφωνα με το τελικό πρόγραμμα, όπου υπάρχει NEA αρίθμηση.

Οι διαστάσεις των posters είναι 0,90 μ. πλάτος και 1,20 μ. ύψος (σε περίπτωση που το θεωρείτε αναγκαίο μπορεί να έχει μέγιστο ύψος έως 1,50 μ.)

Η απόσυρση των posters θα πρέπει να γίνει την Κυριακή 11 Νοεμβρίου 2012 και ώρα 12:30 -13:30.

Οι συγγραφείς επιπλέον θα πρέπει να βρίσκονται την ημέρα & ώρα παρουσίασής τους (σύμφωνα με την επιστολή έγκρισης) στον χώρο των posters, όπου θα πραγματοποιηθεί η συζήτηση με την Επιτροπή Αξιολόγησης.

## CD ΠΕΡΙΛΗΨΕΩΝ

Οι περιλήψεις των εργασιών έχουν δημοσιευθεί σε ηλεκτρονική μορφή CD και θα διανεμηθούν σε όλους τους συνέδρους. Οι συγγραφείς είναι υπεύθυνοι για το περιεχόμενο και την ποιότητα των περιλήψεων και δημοσιεύονται όπως ακριβώς έχουν αποσταλεί.

## Βραβεία Συνεδρίου

Κατά την Τελετή Λήξης, την Κυριακή 11 Νοεμβρίου 2012 θα απονεμηθούν τα εξής βραβεία:

- Βραβείο Καλύτερης Προφορικής Ανακοίνωσης
- Έπαινος Καλύτερης Προφορικής Ανακοίνωσης
- Βραβείο Καλύτερου Poster
- Έπαινος Καλύτερου Poster

## Παρουσιάσεις ομιλιών

Παρακαλούνται οι εισηγητές να παραδώσουν την παρουσίασή τους στην τεχνική γραμματεία τουλάχιστον 1 ώρα πριν την ομιλία τους.

# ΠΡΟΣΚΕΚΛΗΜΕΝΟΙ ΟΜΙΛΗΤΕΣ

Triantafyllos Chavakis,  
Dresden Germany  
Leukocyte-endothelial  
interactions in inflammation



Aggeliki Chroni,  
Athens Greece  
Unraveling the connection between  
apolipoprotein E and Alzheimer's disease



Fotsis Theodore,  
Ioannina Greece  
The signal-transducing role  
of the ER in VEGF signaling



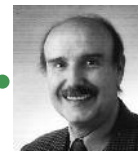
Foukas Lazaros,  
London U.K.  
Insulin signalling at the intersection  
of metabolism and cancer



Francois Guillemot,  
London U.K.  
Transcriptional regulation  
of stem cell activity in the adult brain



Florian Lang,  
Tuebingen GERMANY  
The diverse functions  
of the serum & glucocorticoid  
inducible kinase SGK1



Aggeliki Malliri,  
Manchester U.K.  
Spatial regulation of Rac  
signalling in cell-cell adhesion



Alfred Nordheim,  
Tuebingen GERMANY  
Linking cytoskeletal actin dynamics  
and nuclear gene expression  
to regulate cell motility



Herman Spink,  
Leiden Netherlands  
High throughput screening of immune-  
related diseases in zebrafish



Constantinos Stathopoulos,  
Patras Greece  
RNA biology for adaptors  
and the regulation of  
the translational apparatus



Madalena Tarsounas,  
Oxford U.K.  
BRCA1 and BRCA2 tumour  
suppressors in genome integrity  
and tumorigenesis



# ΕΥΧΑΡΙΣΤΙΕΣ

Η Οργανωτική Επιτροπή του 63<sup>ου</sup> Πανελληνίου Συνεδρίου και το Δ.Σ. της Ελληνικής Εταιρείας Βιοχημείας και Μοριακής Βιολογίας (ΕΕΒΜΒ) ευχαριστούν θερμά για την υποστήριξη τους στο Συνέδριο

## τους χορηγούς

 <p><b>ANTISELA</b> ΑΦΟΙ Α. ΣΕΛΙΔΗ Α.Ε. Ι. Π. Καραϊσάκου 6, 54250, Χαμάκι, Θεσσαλονίκη T 231 0322526, F 231 0321912, antisea@antisel.gr, www.antisel.gr</p>	 <p><b>ΒΑΡΕΛΑΣ Α.Ε.</b> ΧΗΜΙΚΑ ΚΑΙ ΔΙΑΓΝΩΣΤΙΚΑ</p>	 <p><b>BIOLine scientific</b> ΑΦΟΙ ΝΤΟΥΡΟΥ - Ε. ΔΕΜΑΓΚΟΣ Ο.Ε.</p> 
 <p><b>CHEMBIOTIN</b></p>	 <p><b>Interlab</b> Κωνσταντίνος Δικονόμου Πατρικής Εργοστασιακής Εξοπλισμός Ι.Π.Ε.</p>	 <p><b>Janssen</b> PHARMACEUTICAL COMPANIES OF JANSSEN-CILANTO</p>
 <p><b>GENOTEST</b> Κέντρο Γενετικών Αναλύσεων Γ. ΚΟΡΔΟΠΑΤΗΣ</p>	<p><b>LAB SUPPLIES</b></p>	 <p><b>M</b> MERCK MILLIPORE</p>
 <p><b>Roche</b></p>	 <p><b>SafeBlood BioAnalytica</b></p>	 <p><b>SARSTEDT</b></p>

## τις εταιρείες

- ANALAB
- ΕΚΔΟΣΕΙΣ ΕΜΒΡΥΟ

## και τα προγράμματα

**TransPOT**  
Building Excellence in Translational Medical Research

The EC FP7 programme **TransPOT (Translational Potential)** awarded to the University of Crete Medical School (coordinator: A. Eliopoulos)

**COST**



**COST Action BM0804 – (EuFishBiomed)**

# ΕΠΙΣΤΗΜΟΝΙΚΟ ΠΡΟΓΡΑΜΜΑ



**11:00-13:15 Session: Regulation of gene expression***Chair: S. Kampranis – S. Papamatheakis***11:00-11:30 Lecture****Lazaros Foukas**, *London U.K.*

Insulin signaling at the intersection of metabolism and cancer

**11:30-12:45 Oral Presentations****11:30-11:45** Modulation of a viral E3 ubiquitin ligase activity by its physical interaction with a chromatin architectural protein  
**176****Panagiotidis, C.H, Stoikou M., Panagiotidis C.A.***School of Pharmacy, Aristotle University, Thessaloniki***11:45-12:00** Role of cadmium in the regulation of H-ras Expression accompanied by Caspase-3 Apoptotic Cell Death in Breast Cancer Epithelial MCF-7 cells  
**21****Petanidis S., Salifoglou S.***Laboratory of Inorganic Chemistry, Department of Chemical Engineering, Aristotle University of Thessaloniki, Thessaloniki 54124, Greece***12:00-12:15** AtLFL1 and AtULC1 are two homologous WD40 repeat proteins with distinctive regulatory function in plant development  
**183****Beri D.<sup>1</sup>, Kapolis G.<sup>1</sup>, Roussis A.<sup>1</sup>, Milioni D.<sup>2</sup>, Haralampidis K.<sup>1</sup>**<sup>1</sup>*University of Athens, Faculty of Biology, Department of Botany, 15784 Athens*<sup>2</sup>*Agricultural University of Athens, Department of Agricultural Biotechnology, 11855 Athens***12:15-12:30** Transcriptional regulation of rhizobial purine transfer and metabolism during symbiotic nitrogen fixation  
**31****Karalias G.<sup>1</sup>, Kalloniati C.<sup>1</sup>, Kalliampakou K.I.<sup>1</sup>, Papakostas K.<sup>2</sup>, Frillingos S.<sup>2</sup>, Flemetakis E.<sup>1</sup>**<sup>1</sup>*Laboratory of Molecular Biology, Agricultural University of Athens, Athens, Greece*<sup>2</sup>*Laboratory of Biological Chemistry, University of Ioannina Medical School, Ioannina e-mail: mflem@aua.gr***12:30-12:45** The role of Forkhead Box A2 (FOXA2) transcription factor in the regulation of High Density Lipoprotein genes in hepatic cells  
**112****Kanaki M., Tiniakou I., Thymiakou E., Kardassis D.***Department of Biochemistry, University of Crete Medical School and Institute of Molecular Biology and Biotechnology of Crete, Heraklion, Greece 71003***12:45-13:15 Lecture****Aggeliki Chroni**, *Athens Greece*

Unraveling the connection between apolipoprotein E and Alzheimer's disease

**13:15-15:00 Lunch break/Poster viewing****15:00-15:30 Lecture***sponsored by Roche-Applied Science***Foteini Papageorgiou**, *Roche-Applied Science*

Modern tools in molecular analysis



**15:30-18:15 Session: Cell organization and functions***Chair: M. Koffa – S. Taraviras***15:30-16:00 Lecture****Theodore Fotsis, Ioannina Greece**

The signal-transducing role of the ER in VEGF signaling

**16:00-16:45 Oral Presentations**

16:00-16:15

**51**

MgcRacGAP, a cytoskeleton regulator, inhibits HIF-1 transcriptional activity in an oxygen-independent manner by blocking its dimerization

**Lyberopoulou A., Mylonis I., Papachristos G., Sagris D., Kalousi A., Befani C., Liakos P., Simos G., Georgatsou E.***Laboratory of Biochemistry, Department of Medicine, University of Thessaly, Larissa, Greece*

16:15-16:30

**97**

RhoD Participates in the Regulation of Cell Cycle Progression and Centrosome Duplication

**Kyrkou A.<sup>1,2</sup>, Soufi M.<sup>1</sup>, Bahtz R.<sup>3</sup>, Ferguson C.<sup>5</sup>, Bai M.<sup>4</sup>, Parton R.G.<sup>5</sup>, Hoffmann I.<sup>3</sup>, Zerial M.<sup>6</sup>, Fotsis T.<sup>1,2</sup>, Murphy C.<sup>2</sup>**<sup>1</sup>*Laboratory of Biological Chemistry, University of Ioannina Medical School, Ioannina, Greece*<sup>2</sup>*Division of Biomedical Research (Ioannina), Institute of Molecular Biology and Biotechnology (IMBB) Foundation for Research & Technology-Hellas (FORTH), Greece*<sup>3</sup>*Cell Cycle Control and Carcinogenesis, German Cancer Research Center (DKFZ), Heidelberg, Germany*<sup>4</sup>*Department of Pathology, University of Ioannina Medical School, Ioannina, Greece*<sup>5</sup>*The University of Queensland, Institute for Molecular Bioscience and Centre for Microscopy and Microanalysis, Brisbane, Queensland, Australia*<sup>6</sup>*Max Planck Institute for Molecular Cell Biology and Genetics (MPI-CBG), Pfotenhauerstrasse, Dresden, Germany*

16:30-16:45

**195**

The Geminin superfamily: Geminin, Idas and Lynkeas control cell cycle and cell fate choices

**Pefani E.D.<sup>1</sup>, Armpi M.<sup>1</sup>, Kyrousi C.<sup>2</sup>, Symeonidou IE<sup>1</sup>, Taraviras S.<sup>2</sup>, Lygerou Z.<sup>1</sup>**<sup>1</sup>*Department of General Biology, School of Medicine, University of Patras, Greece*<sup>2</sup>*Department of Physiology, School of Medicine, University of Patras, Greece*

16:45-17:15

**Coffee break/Poster viewing****17:15-18:15 Oral Presentations**

17:15-17:30

**178**

Tripolin A, a Novel Small-Molecule Inhibitor of Aurora Kinase, reveals new regulation of HURP's binding on Microtubules

**Kesisova I.<sup>1</sup>, Tsoulou A.<sup>1</sup>, Arapatzi C.<sup>1</sup>, Girod A.<sup>2</sup>, Chatzaki A.<sup>3</sup>, Giannis A.<sup>4</sup>, Agianian B.<sup>5</sup>, Koffa M.<sup>1</sup>**<sup>1</sup>*Laboratory of Molecular Cell Biology, Department of Molecular Biology and Genetics, Democritus University of Thrace, Alexandroupolis, Greece*<sup>2</sup>*CIBIT Facility, Department of Molecular Biology and Genetics, Democritus University of Thrace, Alexandroupolis, Greece*<sup>3</sup>*Laboratory of Pharmacology, Department of Medicine, Democritus University of Thrace, Alexandroupolis, Greece*<sup>4</sup>*Institute for Organic Chemistry, University of Leipzig, Leipzig, Germany*<sup>5</sup>*Biomolecular Structure and Function Group, Department of Molecular Biology and Genetics, Democritus University of Thrace, Alexandroupolis, Greece*

## 15:30-18:15 Session: Cell organization and functions

17:30-17:45 The role of Geminin in the self-renewal and differentiation of hematopoietic stem cells  
159 **Patmanidi A.<sup>1</sup>, Karamitros D.<sup>1</sup>, Papadimitriou C.<sup>1</sup>, Kioussis D.<sup>2</sup>, Lygerou Z.<sup>3</sup>, Taraviras S.<sup>1</sup>**

<sup>1</sup>*Department of Physiology, Medical School, University of Patras*

<sup>2</sup>*Division of Molecular Immunology, MRC/National Institute for Medical Research, London*

<sup>3</sup>*Department of Biology, Medical School, University of Patras*

17:45-18:00 The role of mitophagy and retrograde response in ageing  
132 **Palikaras K., Tavernarakis N.**

*Institute of Molecular Biology and Biotechnology, Foundation for Research and Technology-Hellas & Medical School, University of Crete, Heraklion, Crete, Greece*

18:00-18:15 Cancer cell stemness in the alternative lengthening of telomeres is driven by polyploidization and polyploidy reduction

**Chiourea M., Gagos S.**

*Laboratory of Genetics, Center of Basic Research II, Biomedical Research Foundation of the Academy of Athens, Greece (BRFAA)*

18:15-18:30 **OPENING CEREMONY/ WELCOME ADDRESSES**

*Chair: D. Kardassis – G. Panagiotou*

18:30-19:15 **Lecture**

**Madalena Tarsounas, Oxford U.K.**

BRCA1 and BRCA2 tumour suppressors in genome integrity and tumorigenesis

*Lecture sponsored by the EC Program Translational Potential (TransPOT) of the University of Crete Medical School (<http://transpot.med.uoc.gr/>)*

19:15-20:00 **Lecture**

**Alfred Nordheim, Tübingen Germany**

Linking cytoskeletal actin dynamics and nuclear gene expression to regulate cell motility

*Lecture sponsored by the EC Program Translational Potential (TransPOT) of the University of Crete Medical School*

09:00-10:15 **Session: Cell communication and signaling**  
*Chair: Z. Lygerou-I. Charalambopoulos*

09:00-10:15 **Oral Presentations**

- 09:00-09:15  
**105** A screen for novel PI(3,5)P<sub>2</sub> interacting proteins from Arabidopsis thaliana.  
 Identification of enzymes participating in plant stress responses through their interaction with PI(3,5)P<sub>2</sub>  
**Karali D.<sup>1</sup>, Oxley D.<sup>2</sup>, Ktistakis N.<sup>3</sup>, Farmaki T.<sup>1</sup>**  
<sup>1</sup> *Institute of Applied Biosciences, Center for Research and Technology - Hellas*  
*6th km Charilaou - Thermi rd. 570 01 Thermi Thessaloniki Greece*  
<sup>2</sup> *The Mass Spectrometry Group, Babraham Institute, Cambridge, CB2 4AT, UK*  
<sup>3</sup> *Signalling Programme, Babraham Institute, Cambridge, CB2 4AT, UK*
- 09:15-09:30  
**47** NMR insights on the functional modulations of the RING domain of Arkadia tumor suppressor  
**Vlachou M.<sup>1</sup>, Birkou M.<sup>1</sup>, Tsapardoni M.<sup>1</sup>, Melekis E.<sup>1</sup>, Chasapis C.T.<sup>1</sup>, Bentreop D.<sup>2</sup>, Episkopou V.<sup>3</sup>,  
 Spyroulias G.A.<sup>1</sup>**  
<sup>1</sup> *Department of Pharmacy, University of Patras, GR-26504, Patras, Greece*  
<sup>2</sup> *Institute of Physiology II, University of Freiburg, D-79104 Freiburg, Germany*  
<sup>3</sup> *Mammalian Neurogenesis, MRC Clinical Sciences Centre, Imperial School of Medicine, Hammersmith  
 Hospital, London W12 0NN, United Kingdom*
- 09:30-09:45  
**29** APRIL binding to BCMA activates a JNK2-FOXO3-GADD45 pathway and induces a G2/M cell growth  
 arrest in liver cells  
**Notas G.<sup>1</sup>, Alexaki V.I.<sup>1</sup>, Kampa M.<sup>1</sup>, Pelekanou V.<sup>1,2</sup>, Charalambopoulos I.<sup>3</sup>, Sabour-Alaoui S.<sup>4</sup>,  
 Padiaditakis I.<sup>3</sup>, Dessirier V.<sup>4</sup>, Gravanis A.<sup>3</sup>, Stathopoulos E.N.<sup>2</sup>, Tsapis A.<sup>4</sup>, Castanas E.<sup>1</sup>**  
<sup>1</sup> *Laboratory of Experimental Endocrinology, University of Crete, School of Medicine, Heraklion, Greece*  
<sup>2</sup> *Laboratory of Pathology, University of Crete, School of Medicine, Heraklion, Greece*  
<sup>3</sup> *Laboratory of Pharmacology, University of Crete, School of Medicine, Heraklion, Greece*  
<sup>4</sup> *Inserm, Paris, France/Université Paris-Diderot, Paris, France*
- 09:45-10:00  
**89** Phosphorylation of bacterial effector CagA may be required for induction of Matrix metalloproteinase-3  
 and -9 secretion by gastric epithelial cells in Helicobacter pylori experimental in vitro infection  
**Sougleri I., Papadakos K., Mentis A., Sgouras D.**  
*Laboratory of Medical Microbiology, Institut Pasteur Hellenique, Athens, Greece*
- 10:00-10:15  
**166** Transcriptional signature and signalling of membrane acting estrogens in breast cancer  
**Kampa M.<sup>1</sup>, Notas G.<sup>1</sup>, Pelekanou V.<sup>1,2</sup>, Troullinaki M.<sup>1</sup>, Lavredaki K.<sup>1</sup>, Stathopoulos E.N.<sup>2</sup>, Castanas E.<sup>1</sup>**  
<sup>1</sup> *Experimental Endocrinology, University of Crete, Heraklion, Greece*  
<sup>2</sup> *Department of Pathology, University of Crete, Heraklion, Greece*

10:15-10:45 **Lecture** *sponsored by Janssen Pharmaceuticals Inc.*

**Irini Katodrytou, Hematology Dept. Theageneio Hospital**

Proteasome inhibitors: From the molecular biology to the clinical application in hematological neoplasias

10:45-11:15 **Coffee break/Poster viewing**

11:15-13:15 **Session: Molecular Basis of Diseases***Chair: V. Kostourou-E. Papakonstanti*11:15-12:00 **Lecture****Aggeliki Malliri, Manchester U.K.**

Spatial regulation of Rac signalling in cell-cell adhesion

*Lecture sponsored by the EC Program Translational Potential (TransPOT) of the University of Crete Medical School*12:00-13:15 **Oral Presentations**

- 12:00-12:15 **94** FAK-heterozygous mice display enhanced pathological angiogenesis  
**Kostourou V.<sup>1</sup>, Lechertier T.<sup>2</sup>, Reynolds LE.<sup>2</sup>, Lees DM.<sup>2</sup>, Baker M.<sup>2</sup>, Jones D.<sup>2</sup>, Tavora B.<sup>2</sup>, Ramjaun AR.<sup>2</sup>, Birdsey G.<sup>3</sup>, Robinson S.<sup>2</sup>, Parsons M.<sup>4</sup>, Randi AM.<sup>3</sup>, Hart IR.<sup>2</sup>, Hodivala-Dilke KM.<sup>2</sup>**  
<sup>1</sup>BSRC Al. Fleming, 34 Fleming str., 166 72 Vari, Athens, Greece  
<sup>2</sup>Barts Cancer Institute – a CR-UK Centre of Excellence, Queen Mary University of London, Charterhouse Square, London, EC1M 6BQ  
<sup>3</sup>Imperial College London, Hammersmith Hospital, Du Cane Road, London W12 0NN, UK  
<sup>4</sup>Kings College London, Randall Division of Cell and Molecular Biophysics, New Hunts House, London, SE1 1UL, UK
- 12:15-12:30 **12** ERF haploinsufficiency causes complex craniosynostosis in mice and humans  
**Peraki I.<sup>1,2\*</sup>, Twigg S.<sup>3</sup>, Vorgia E.<sup>1,2\*</sup>, McGowan S.<sup>4</sup>, Fenwick A.<sup>3</sup>, Sharma V.<sup>3</sup>, Allegra M.<sup>1</sup>, Zaragkoulis A.<sup>2</sup>, Akha ES.<sup>5</sup>, Knight S.<sup>5</sup>, Lord H.<sup>6</sup>, Lester T.<sup>6</sup>, Wilkie A.<sup>3,7</sup>, Mavrothalassitis G.<sup>1,2</sup>**  
<sup>1</sup>Institute of Molecular Biology and Biotechnology, Foundation for Research and Technology-Hellas, and  
<sup>2</sup>School of Medicine, University of Crete and Heraklion, Crete, 71003, Greece. <sup>3</sup>Clinical Genetics Group,  
<sup>4</sup>Computational Biology Research Group Weatherall Institute of Molecular Medicine, University of Oxford, Oxford UK.  
<sup>5</sup>The Oxford Partnership Comprehensive Biomedical Research Centre, Wellcome Trust Centre for Human Genetics, University of Oxford, Oxford  
<sup>6</sup>Molecular Genetics Laboratory, and <sup>7</sup>Craniofacial Unit, Oxford University Hospitals NHS Trust, Oxford, UK  
\*Equal contribution
- 12:30-12:45 **6** Apolipoprotein A-I modulates Processes Associated with Diet-Induced Nonalcoholic Fatty Liver Disease in Mice  
**Karavia E.A.<sup>1</sup>, Papachristou D.J.<sup>2</sup>, Liopeta K.<sup>3</sup>, Triantafyllidou I.E.<sup>2</sup>, Dimitrakopoulos O.<sup>3</sup>, Kypreos K.E.<sup>1,4</sup>**  
<sup>1</sup> Pharmacology laboratory; Department of Medicine, University of Patras Medical School, Greece  
<sup>2</sup> Anatomy, Histology and Embryology laboratory, Department of Medicine, University of Patras Medical School, Greece  
<sup>3</sup> Microbiology clinic, Department of Medicine, University of Patras Medical School, Rio, TK. 26500, Greece  
<sup>4</sup> Address correspondence and reprint requests to Kyriakos E. Kypreos, University of Patras Medical School, Department of Medicine, Pharmacology Unit, Panepistimioupolis, Rio, TK. 26500, Greece. Email: kkypreos@med.upatras.gr; Tel: +302610969120.
- 12:45-13:00 **111** Effect of reconstituted HDLs on the migration of endothelial cells  
**Fotakis P.<sup>1,3</sup>, Valanti E.<sup>2</sup>, Beck M.<sup>1,3</sup>, Kardassis D.<sup>1</sup>, Zannis V.I.<sup>3</sup>, Sanoudou D.<sup>2</sup>**  
<sup>1</sup>Medical School, University of Crete, Heraklion, Greece  
<sup>2</sup>School of Medicine, University of Athens, Athens, Greece  
<sup>3</sup>Medical School, Boston University, Boston, USA
- 13:00-13:15 **57** Peptide Mimetics and Protein Mimicry in Drug Discovery and Design: Towards Clinical Investigation of Angiotensin and Myelin Mimetics. New Strategies in the Treatment of Hypertension and Multiple Sclerosis  
**Matsoukas J.**  
Department of Chemistry, University of Patras, Greece

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13:15-15:15 **Lunch break / Poster viewing**  
**HSBMB Business meeting**

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15:15-15:45 **Lecture**  
*Chair: A. Eliopoulos*

**Triantafyllos Chavakis, Dresden Germany**  
Leukocyte-endothelial interactions in inflammation

15:45-16:15 **Lecture**  
*Chair: D. Karagogeos*

**Francois Guillemot, London U.K.**  
Transcriptional regulation of stem cell activity in the adult brain

*Lecture sponsored by the EC Program Translational Potential (TransPOT) of the University of Crete Medical School*

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16:15-16:45 **Coffee Break/Poster viewing**

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16:45-18:00 **Parallel Session 1: Neurobiology**  
*Chair: K. Sidiropoulou – M. Grigoriou*

Main FORTH Auditorium

16:45-18:00 **Oral Presentations**

- 16:45-17:00  
**187** A novel mode of pluripotency  
**Karnavas T.<sup>1</sup>, Kotsoni A.<sup>1,2</sup>, DeGrigorio A.<sup>3</sup>, Stamou P.<sup>2</sup>, Kontoyiannis D.L.<sup>2</sup>, Rodriguez T.A.<sup>3</sup>, Remboutsika E.<sup>1,\*</sup>**  
<sup>1</sup>*Stem Cell Biology Laboratory, Institute of Molecular Biology and Genetics and*  
<sup>2</sup>*Institute of Immunology, BSRC Alexander Fleming, 34 Fleming Str., 16672 Vari-Attica, Greece*  
<sup>3</sup>*MRC-Clinical Sciences Centre, Faculty of Medicine, Imperial College London, Hammersmith Hospital Campus, Du Cane Rd., London W12 0NN, UK*
- 17:00-17:15  
**153** Glucocorticoid – independent regulation of cutaneous wound healing by Corticotrophin Releasing Hormone (CRH)  
**Rassouli O.<sup>1</sup>, Giannikaki E.<sup>2</sup>, Margioris A.N.<sup>1</sup>, Karalis K.P.<sup>3</sup>, Venihaki M.<sup>1</sup>**  
<sup>1</sup>*Department of Clinical Chemistry, School of Medicine, University of Crete, Greece*  
<sup>2</sup>*Department of Pathology, Venizeleio General Hospital, Heraklion, Crete, Greece*  
<sup>3</sup>*Developmental Biology Section, Biomedical Research Foundation of the Academy of Athens, Greece, Division of Endocrinology, Children's Hospital, Boston MA, USA*
- 17:15-17:30  
**164** Enhancement of BMP-Smad signaling responses by Rnf165/Ark2C E3 ubiquitin ligase mediates motor axon extension  
**Thymiakou E., Kelly C.E., Dixon J.E., Tanaka S., Jonathan Godwin J., Episkopou V.**  
*MRC Clinical Sciences Centre and Division of Brain Sciences, Faculty of Medicine, Imperial College London, Hammersmith Hospital Campus, London, UK*
- 17:30-17:45  
**37** INTRACELLULAR MEDIATORS OF CORTICAL INTERNEURON DEVELOPMENT  
**Tivodar S.<sup>1,2</sup>, Kalemaki K.<sup>1,2</sup>, Kunupa Z.<sup>1,2</sup>, Vidaki M.<sup>1,2</sup>, Tybulewicz V.<sup>3</sup>, Kessarar N.<sup>4</sup>, Pachnis V.<sup>5</sup>, Karagogeos D.<sup>1,2</sup>**  
<sup>1</sup>*Department of Basic Science, Faculty of Medicine, University of Crete, Heraklion, Greece*  
<sup>2</sup>*Institute of Molecular Biology & Biotechnology (IMBB, FORTH), Heraklion, Greece*  
<sup>3</sup>*Division of Immune Cell Biology, Medical Research Council, National Institute for Medical Research, London, UK*  
<sup>4</sup>*Wolfson Institute for Biomedical Research and Department of Cell & Developmental Biology, University College London, UK*  
<sup>5</sup>*Division of Molecular Neurobiology, Medical Research Council, National Institute for Medical Research, London, UK*
- 17:45-18:00  
**11** bHLH-O proteins are crucial for Drosophila neuroblast self-renewal and mediate Notch-induced overproliferation  
**Zacharioudaki E.<sup>1</sup>, Magadi S.S.<sup>1</sup>, Delidakis C.<sup>1,2</sup>**  
<sup>1</sup>*IMBB ITE, Heraklion, Greece*  
<sup>2</sup>*Department of Biology, University of Crete, Heraklion, Greece*

## 16:45-18:00 Oral Presentations

- 16:45-17:00  
14 Polysaccharide Deacetylases are involved in virulence and persistence of *Bacillus anthracis*  
**Balomenou S.**<sup>1,2,3,6</sup>, **Fouet A.**<sup>4,5,#</sup>, **Tzanodaskalaki M.**<sup>6</sup>, **Couture-Tosi E.**<sup>4,5</sup>, **Bouriotis V.**<sup>1,6\*</sup>, **Boneca I.G.**<sup>2,3\*</sup>  
<sup>1</sup>*Department of Biology, Enzyme Biotechnology Group, University of Crete, Greece*  
<sup>2</sup>*Groupe Biologie et génétique de la paroi bactérienne, Institut Pasteur, Paris, France*  
<sup>3</sup>*INSERM, équipe Avenir, Paris, France*  
<sup>4</sup>*Institut Pasteur, Unite Toxines et Pathogénie Bactériennes, 25-28 rue de Dr Roux, 75724 Paris Cedex 15, France,*  
<sup>5</sup>*CNRS URA 2172, Paris, France*  
<sup>6</sup>*Institute of Molecular Biology and Biotechnology, Heraklion, Crete, Greece*  
\* *These authors share senior authorship and correspondence*
- 17:00-17:15  
42 A bioenergetic mechanism from green algae for high yields of hydrogen production induced by meta-substituted dichlorophenols biodegradation  
**Papazi A.**<sup>1</sup> **Andronis E.**<sup>1</sup>, **Ioannidis N.E.**<sup>1</sup>, **Chaniotakis N.**<sup>2</sup>, **Kotzabasis K.**<sup>1</sup>  
<sup>1</sup>*Department of Biology, University of Crete, Heraklion, Crete, Greece*  
<sup>2</sup>*Department of Chemistry, University of Crete, Heraklion, Crete, Greece*
- 17:15-17:30  
93 Modern biotechnology for improving insecticide based control of insects  
**Vontas J., Balabanidou V., Morou E., Riga M., Tsakireli D., Pavlidi N.**  
*Department of Biology, University of Crete*
- 17:30-17:45  
41 Evaluation of transient gene knockdown techniques in the Lepidopteran non model insect *Sesamia nonagrioides*  
**Kontogiannatos D.**<sup>1</sup>, **Swevers L.**<sup>2</sup>, **Iatrou K.**<sup>2</sup>, **Kourti A.**<sup>1,\*</sup>  
<sup>1</sup>*Agricultural University of Athens, Department of Agricultural Biotechnology, Iera Odos 75, 11855, Athens, Greece*  
<sup>2</sup>*National Centre for Scientific Research "Demokritos", Institute of Biosciences & Applications, Insect Molecular Genetics and Biotechnology Group, Athens, Greece*  
\* *akourti@aua.gr*
- 17:45-18:00  
149 Antigen-specific therapeutic immunoadsorption for myasthenia gravis: addressing up-scaling and safety aspects  
**Lazaridis K.**<sup>1</sup>, **Kanellopoulos I.**<sup>1,2</sup>, **Evangelakou P.**<sup>1</sup>, **Trakas N.**<sup>1</sup>, **Tzartos S.J.**<sup>1,2</sup>  
<sup>1</sup>*Hellenic Pasteur Institute, Athens, Greece*  
<sup>2</sup>*Department of Pharmacy, University of Patras, Patras, Greece*

***Ceremony for the award of Honorary Doctoral Degree of the University of Crete Medical School to **Professor Florian Lang*****

Auditorium "Maria Manasaki", Student Social Center, University of Crete

- 18:45-19:00 Musical introduction**  
by the **Creta Brass Quartet**
- 19:00-19:05 Address by the Rector of the University of Crete**  
**Professor E. Stefanou**
- 19:05-19:10 Address by the Dean of the Medical School**  
**Professor A. Margioris**
- 19:10-19:25 Laudatio**  
by **Professor C. Stournaras**
- 19:25-19:30 Award of honorary doctoral degree to Professor F. Lang by the Rector**
- 19:30-20:15 SEKERIS LECTURE**  
**Professor Florian Lang, Tübingen Germany**  
The diverse functions of the serum & glucocorticoid inducible kinase SGK1
- 20:30 Reception Cocktail**





10:00-11:15 **Session: Biology of RNA**  
*Chair: K. Kalantidis - C. Stathopoulos*

10:00-10:30 **Lecture**

**Constantinos Stathopoulos, Patras Greece**  
 RNA biology for adaptors and the regulation of the translational apparatus

10:30-11:15 **Oral Presentations**

- 10:30-10:45 **191** miRNA:miRNA\* Duplex Prediction using a SVM approach  
**Karathanasis N.**<sup>1,3</sup>, **Armen P.A.**<sup>2</sup>, **Tsamardinos I.**<sup>2,3</sup>, **Poirazi P.**<sup>1</sup>  
<sup>1</sup>*Institute of Molecular Biology and Biotechnology, Foundation for Research and Technology - Hellas FORTH, Heraklion, Greece*  
<sup>2</sup>*Institute of Computer Science, Foundation for Research and Technology - Hellas FORTH, Heraklion, Greece*  
<sup>3</sup>*Department of Biology, University of Crete, Heraklion, Greece*  
<sup>4</sup>*Department of Computer Science, University of Crete, Heraklion, Greece*
- 10:45-11:00 **74** Enhancer of RNA interference -1-like-1: One more player in the RNA processing game of the chloroplast  
**Mermigka G.**<sup>1</sup>, **Vlatakis I.**<sup>1,2</sup>, **Helm J.**<sup>2</sup>, **Schumacher H.**<sup>2</sup>, **Dandoulaki M.**<sup>1</sup>, **Kalantidis K.**<sup>1,2</sup>  
<sup>1</sup>*Department of Biology, University of Crete, Heraklion, Crete, Greece*  
<sup>2</sup>*Institute of Molecular Biology and Biotechnology, Foundation for Research and Technology, Heraklion, Crete, Greece*
- 11:00-11:15 **103** Functional analysis of the RNAi response in transfected silkworm-derived Bm5 cells  
**Kolliopoulou A., Iatrou K., Swevers L.**  
*Insect Molecular Genetics & Biotechnology Group, Institute of Biosciences & Applications, National Centre for Scientific Research "Demokritos", Athens, Greece*
- 11:15-12:00 **Coffee break/ Poster viewing**

**12:00-13:30 Session: Model organisms**  
*Chair: D. Beis – N. Tavernarakis*

**12:00-12:30 Lecture**

**Spaink Herman, Leiden Netherlands**

High throughput screening of immune-related diseases in zebrafish

*Lecture sponsored by COST Action BM0804 (EuFishBiomed)*

**12:30-13:30 Oral Presentations**

- 12:30-12:45 **81** Atrial contractility affects the morphogenesis of the atrioventricular valve leaflets  
**Kalogirou S., Kefalos P., Beis D.**  
*Developmental Biology, Biomedical Research Foundation of the Academy of Athens, Greece*
- 12:45-13:00 **128** The role of MAGE-1 in mitochondrial function and ageing  
**Nikoletopoulou V., Charmpilas N., Tavernarakis N.**  
*Institute of Molecular Biology and Biotechnology, Foundation for Research and Technology-Hellas & Medical School, University of Crete, Heraklion, Crete, Greece*
- 13:00-13:15 **16** A novel AP3-dependent vacuolar degradation pathway for intrinsically unstable mutants of the UapA transporter: evidence for Golgi control for unfolded proteins  
**Kosti V., Diallinas G.**  
*Faculty of Biology, University of Athens, Panepistimioupolis, Athens 15781, Greece,  
 e-mail: diallina@biol.uoa.gr*
- 13:15-13:30 **18** Proteasome functionality is differentially regulated in reproductive vs. somatic tissues of *Drosophila* during ageing or stress  
**Tsakiri EN.<sup>1</sup>, Sykiotis GP.<sup>2</sup>, Papassideri IS.<sup>1</sup>, Terpos E.<sup>3</sup>, Dimopoulos MA.<sup>3</sup>, Gorgoulis, VG.<sup>4</sup>, Bohmann D.<sup>5</sup>, Trougakos IP.<sup>1</sup>**  
<sup>1</sup> *Department of Cell Biology and Biophysics, Faculty of Biology, University of Athens, Panepistimioupolis, Athens 15784, Greece*  
<sup>2</sup> *Division of Endocrinology, Department of Internal Medicine, University of Patras Medical School, Patras 26500, Greece*  
<sup>3</sup> *Department of Clinical Therapeutics, School of Medicine, University of Athens, Athens 11528, Greece*  
<sup>4</sup> *Department of Histology and Embryology, School of Medicine, University of Athens, Athens 11527, Greece*  
<sup>5</sup> *Department of Biomedical Genetics, University of Rochester Medical Center, Rochester, NY 14642, USA*

**13:30-14:00 Prizes Award - Closing ceremony**

## Regulation of gene expression

- 19** Peroxidation of vanadium suppresses Hras oncogene and MMP-2 expression by increasing ROS-mediated apoptosis  
**Petanidis S., Kioseoglou E., Salifoglou S.**  
*Laboratory of Inorganic Chemistry, Department of Chemical Engineering, Aristotle University of Thessaloniki, Thessaloniki 54124, Greece*
- 20** Molecular interactions of novel vanadium(V)-betaine-tetraperoxido species with the Hras oncogene in human lung adenocarcinoma A549 cells  
**Kioseoglou E., Petanidis S., Salifoglou S.**  
*Laboratory of Inorganic Chemistry, Department of Chemical Engineering, Aristotle University of Thessaloniki, Thessaloniki 54124, Greece*
- 28** ER $\alpha$ 36 inhibits LPS induced IL-6 production in monocytes via inhibition of NF $\kappa$ B activation in a GPR30 dependent manner  
**Deli A.<sup>1</sup>, Pelekanou V.<sup>1,2</sup>, Kampa M.<sup>1</sup>, Kiagiadaki F.<sup>1</sup>, Stathopoulos E.N.<sup>2</sup>, Castanas E.<sup>1</sup>, Notas G.<sup>1</sup>**  
<sup>1</sup>Laboratory of Experimental Endocrinology, University of Crete School of Medicine, Heraklion, Crete, Greece  
<sup>2</sup>Pathology Department, University of Crete School of Medicine, Heraklion, Crete, Greece
- 36** Differential expression of phenylpropanoid biosynthetic genes in red raspberry during water deficits  
**Efroze R.<sup>1</sup>, Morariu A.<sup>1</sup>, Ciobotari G.<sup>1</sup>, Caulet R.<sup>1</sup>, Pascu D.<sup>1</sup>, Brinza M.<sup>1</sup>, Negrea R.<sup>1</sup>, Sfichi-Duke L.<sup>1\*</sup>**  
<sup>1</sup>Department of Horticulture, University of Agricultural Science and Veterinary Medicine "Ion Ionescu de la Brad" Iasi, Romania, email: lianaduke@gmail.com
- 39** Effects of Bisphenol-A on the development, growth and sex ratio of the moth *Sesamia nonagrioides*  
**Michail X., Kontogiannatos D. and Kourti A.**  
*Department of Agricultural Biotechnology, Agricultural University of Athens, Iera Odos 75, akourti@aua.gr*
- 40** Study of photoperiodism and circadian clocks during diapause of *Sesamia nonagrioides* (Lepidoptera: Noctuidae)  
**Gkouvitsas T., Kontogiannatos D., Kourti A.**  
*Department of Agricultural Biotechnology, Agricultural University of Athens, Iera Odos 75, 11855, Athens, Greece*  
e-mail: akourti@aua.gr
- 44** Perinuclear mitochondria contain mtDNA-binding proteins responsible for paternal transmission in a system of obligatory biparental mtDNA inheritance  
**Kyriakou E.<sup>1</sup>, Kravariti L.<sup>1</sup>, Zouros E.<sup>2</sup>, Rodakis G.C.<sup>1</sup>**  
<sup>1</sup>Department of Biochemistry and Molecular Biology, Faculty of Biology, National and Kapodistrian University of Athens, 157 01 Athens  
<sup>2</sup>Department of Biology, University of Crete, 714 09, Heraklion, Crete
- 63** MAPK and CK1 are critical modulators of HIF-2 specific target gene activation in hepatoma cells  
**Befani C.<sup>1</sup>, Mylonis I.<sup>1</sup>, Georgoulas P.<sup>2</sup>, Simos G.<sup>1</sup> and Liakos P.<sup>1</sup>**  
<sup>1</sup> Laboratory of Biochemistry, Faculty of Medicine, University of Thessaly, Biopolis, 41110, Larissa  
<sup>2</sup> Laboratory of Nuclear Medicine, Faculty of Medicine, University of Thessaly, Biopolis, 41110, Larissa
- 73** Investigation of HIF-1 $\alpha$ /ARNT complex formation by the in situ proximity ligation assay (PLA) in HeLa cells  
**Kourti M.<sup>1</sup>, Mylonis I.<sup>1</sup>, Ikonomou G.<sup>1,2</sup>, Landegren U.<sup>2</sup> and G. Simos<sup>1</sup>**  
<sup>1</sup>Laboratory of Biochemistry, Medical School, University of Thessaly, Larissa, Greece  
<sup>2</sup>Department of Immunology, Genetics and Pathology, Uppsala University, Uppsala, Sweden
- 78** Spatiotemporal regulation of Hypoxia-Inducible Factor-1 $\alpha$   
**Mylonis I.<sup>1</sup>, Giakoumakis N.-N.<sup>2</sup>, Lygerou Z.<sup>2</sup> and G. Simos<sup>1</sup>**  
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<sup>2</sup>Laboratory of Biology, School of Medicine, University of Patras, Rio, Patras, Greece

## Regulation of gene expression

- 82** Regulation of the human ATP Binding Cassette Transporter A1 (ABCA1) gene expression by pro-inflammatory signaling pathways  
**Mosialou I., Kardassis D.**  
*Department of Biochemistry, University of Crete Medical School and Institute of Molecular Biology and Biotechnology of Crete, Heraklion, Greece 71003*
- 83** Regulation of genes involved in cholesterol and triglyceride metabolism by miR-122  
**Mosialou I., Kardassis D.**  
*Department of Biochemistry, University of Crete Medical School and Institute of Molecular Biology and Biotechnology of Crete, Heraklion, Greece 71003*
- 85** Intracellular localization of two PlCoup-TF variants in the early sea urchin embryo  
**Aivalioti M., Flytzanis C.N.**  
*Department of Biology, University of Patras, Patras 26504, Greece*
- 106** Semaphorin7a reverses the ERF-induced inhibition of EMT in Ras-dependent mouse mammary epithelial cells  
**Allegra M.<sup>1,2</sup>, Zaragkoulias A.<sup>1,2</sup>, Vorgia E.<sup>1,2</sup>, Ioannou M.<sup>2</sup>, Litos G.<sup>3</sup>, Beug H.<sup>3</sup> and Mavrothalassitis G.<sup>1,2</sup>**  
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<sup>2</sup> *IMBB, FORTH, Heraklion, Crete, 710 03, Greece*  
<sup>3</sup> *Institute of Molecular Pathology, Dr. Bohr-Gasse 7, 1030 Vienna, Austria*
- 117** Characterization of a lef8 knock-out BmNPV: functional elements and “rescue” implications  
**Ioannidis K., Swevers L., Iatrou K.**  
*Insect Molecular Genetics and Biotechnology Group, Institute of Biosciences and Applications, NCSR Demokritos, Greece*
- 118** DNA binding of the *Caenorhabditis elegans* unc-55 variants  
**Morakou-Korovesi G. and Flytzanis C.N.**  
*Department of Biology, University of Patras, Patras 26504, Greece*
- 120** Co-regulation of miR-155 and miR-146a upon macrophage activation and induction of endotoxin tolerance  
**Doxaki C.<sup>1</sup>, Eliopoulos A.<sup>2</sup>, Spilianakis C.<sup>2</sup> and Tsatsanis C.<sup>1</sup>**  
<sup>1</sup> *Dept of Clinical Chemistry Medical School University of Crete, Heraklion, Crete, Greece and*  
<sup>2</sup> *IMBB-FORTH, Heraklion, Crete, Greece*
- 134** ASSESSMENT OF IMATINIB ACTION ON MITOCHONDRIAL RESPIRATORY PATHWAY IN BCR-ABL(+) AND BCR-ABL(-) CELL LINES  
**Kyriazou A., Bonovolias I., Papadopoulou L. and Tsiftoglou A.\***  
*Laboratory of Pharmacology, Department of Pharmaceutical Sciences, Aristotle University of Thessaloniki (A.U.TH.), GR-54124, Thessaloniki, GREECE*  
*\*Correspondence should be addressed to Prof. Asterios S. Tsiftoglou: tsif@pharm.auth.gr*
- 145** The  $\Delta 133p53$  isoform in lung cancer  
**Fragou A.<sup>1</sup>, Tzimagiorgis G.<sup>1</sup>, Barbetakis N.<sup>2</sup>, Tsilikas C.<sup>2</sup>, Kouidou S.<sup>1</sup>**  
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<sup>2</sup> *Dept. of Pneumology/Dept. of Thoracic Surgery, Theagenion Anticancer Hospital, Thessaloniki, Greece*
- 173** The effect of the ENT-containing proteins, ECP2 and ECP7, in *Arabidopsis thaliana* responses to salt stress  
**Symeonidou A., Kaldis A., Vlachonasios K.**  
*Department of Botany, School of Biology, Faculty of Science, Aristotle University of Thessaloniki, 54124, Thessaloniki*
- 197** Deadenylases affect the expression of specific mRNAs and microRNAs in lung cancer  
**Maragozidis P.<sup>1,2</sup>, Papanastasi E.<sup>2</sup>, Gómez C.<sup>3</sup>, Del Vescovo V.<sup>4</sup>, Kerenidi T.<sup>1</sup>, Denti M.A.<sup>4</sup>, Gourgoulialis K.I.<sup>1</sup>, Balatsos N.A.A.<sup>2</sup>**  
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<sup>4</sup> *Centre for Integrative Biology, University of Trento, Trento, Italy*

## Systems Biology/Bioinformatics

- 69** **A novel bioinformatics tool that discriminates secretory from cytoplasmic proteins**  
**Orfanoudaki G.**<sup>1,2</sup>, **Chatzi K.**<sup>1,2</sup>, **Tsamardinos I.**<sup>3,4</sup> and **Economou A.**<sup>1,2</sup>  
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<sup>3</sup> *Computer Science Department, University of Crete, Heraklion, Greece*  
<sup>4</sup> *Institute of Computer Science (ICS), Foundation for Research and Technology-Hellas (FORTH), Heraklion, Greece*
- 102** **Rapid in vivo imaging of small model organisms by combining selective plane illumination microscopy and optical projection tomography**  
**Rieckher M.**<sup>1,2</sup>, **Zacharakis G.**<sup>2</sup>, **Ripoll J.**<sup>3</sup> and **Tavernarakis N.**<sup>4</sup>  
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<sup>4</sup> *Institute of Molecular Biology and Biotechnology (IMBB), Foundation of Research and Technology Hellas (FORTH), Heraklion, Greece*
- 199** **In silico analysis of Fluorescence Recovery After Photobleaching (FRAP) experiments for inference of protein dynamics**  
**Rapsomaniki M-A.**<sup>1,4</sup>, **Cinquemani E.**<sup>2</sup>, **Kotsantis P.**<sup>1</sup>, **Taraviras S.**<sup>3</sup>, **Lygeros J.**<sup>4</sup> and **Lygerou Z.**<sup>1</sup>  
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<sup>4</sup> *Institut für Automatik, ETH Zürich, 8092 Zürich, Switzerland*

## Functional genomics and proteomics

- 60** **Molecular and catalytic characterization of the herbicide-inducible glutathione transferases from *Phaseolus vulgaris***  
**Chronopoulou E.**<sup>1</sup>, **Madesis P.**<sup>2</sup>, **Asimakopoulou B.**<sup>1</sup>, **Tsaftaris A.**<sup>2,3</sup>, and **Labrou N.**<sup>1</sup>  
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<sup>3</sup> *Department of Genetics and Plant Breeding, School of Agriculture, Aristotle University of Thessaloniki, Thessaloniki, Greece*
- 92** **Towards Understanding Osteoarthritis Related Articular Chondrocyte Proteome**  
**Tsolis K.**<sup>1</sup>, **Aivaliotis M.**<sup>1</sup>, **Papanastasiou M.**<sup>1</sup>, **Orfanoudaki G.**<sup>1</sup>, **Papathanasiou I.**<sup>2</sup>, **Kostopoulou F.**<sup>2</sup>, **Tsezou A.**<sup>2</sup>, **Kalatzaki K.**<sup>3</sup>, **Zerbakis M.**<sup>3</sup>, **Economou A.**<sup>1</sup>  
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<sup>3</sup> *Department of Electronic and Computer Engineering, Technical University of Crete, Chania, Greece*
- 101** **The effect of the transcriptional regulators GCN5 and ADA2b to the protein expression of *Arabidopsis thaliana* seedlings**  
**Topouzis S.**<sup>1</sup>, **Samiotaki M.**<sup>2</sup>, **Poulios S.**<sup>1</sup>, **Panayotou G.**<sup>2</sup>, **Vlachonasios K.E.**<sup>1</sup>  
<sup>1</sup> *Department of Botany, School of Biology Aristotle University of Thessaloniki, Greece*  
<sup>2</sup> *Biomedical Sciences Research Center “Alexander Fleming”, Athens, Greece*
- 113** **Quantitative proteomic analysis of the Nutlin-3A effect in 3 different types of human lymphomas**  
**Psatha K.**<sup>1</sup>, **Drakos E.**<sup>2</sup>, **Rassidakis, G. Z.**<sup>1,2</sup>, **Aivaliotis M.**<sup>3,4</sup>  
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<sup>3</sup> *MPI, Martinsried, Germany*  
<sup>4</sup> *IMBB, FORTH, Heraklion, Greece*

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- 116** **Complexome dynamics during Type III protein secretion**  
**Aivaliotis M.<sup>1</sup>, Portaliou A.<sup>1,2</sup>, Balabanidou V.<sup>1,2</sup>, Kountourakis N.<sup>1</sup>, Chronaki D.<sup>1,2</sup>, Orfanoudaki G.<sup>1,2</sup>, Karamanou S.<sup>1</sup>, Economou A.<sup>1,2</sup>**  
<sup>1</sup>Institute of Molecular Biology and Biotechnology, FORTH and  
<sup>2</sup>Dpt of Biology, U. Crete, PO Box 1385, 71110, Heraklion, Crete, Greece
- 142** **Supervision of DNA damage-prone chromatin: function of ScRad9 DNA damage checkpoint protein and Aft1 transcription factor under unperturbed conditions**  
**Andreadis C.<sup>1,2</sup>, Fragiadakis G.S.<sup>1</sup>, Nikolau C.<sup>2</sup>, Gkouskou K.<sup>1</sup>, Alexandraki D.<sup>1,2</sup>**  
<sup>1</sup>Institute of Molecular Biology & Biotechnology, Foundation for Research and Technology-HELLAS  
<sup>2</sup>Department of Biology, University of Crete
- 158** **Molecular analysis of the effect of apolipoprotein E3 (apoE3) - containing HDL on endothelial cell (EC) apoptosis**  
**Valanti E.<sup>1</sup>, Fotakis P.<sup>2</sup>, Beck M.<sup>2</sup>, Kardasis D.<sup>2</sup>, Sanoudou D.<sup>1</sup>**  
<sup>1</sup>Department of Pharmacology, Medical School, University of Athens, Athens, Greece  
<sup>2</sup>Department of Biochemistry, Medical School, University of Crete, Crete, Greece
- 172** **The Escherichia coli Inner Membrane Peripherome**  
**Papanastasiou M.<sup>1</sup>, Orfanoudaki G.<sup>1,2</sup>, Koukaki M.<sup>1</sup>, Kountourakis N.<sup>1</sup>, Sardis M.F.<sup>1,2</sup>, Aivaliotis M.<sup>1</sup>, Karamanou S.<sup>1</sup>, and Economou A.<sup>1,2</sup>**  
<sup>1</sup>Inst of Molecular Biology & Biotechnology, FoRTH, Iraklio-Greece  
<sup>2</sup>Dept of Biology, UoC, Iraklio-Greece
- 177** **Initial studies for establishment of MS-based immunoassays for early diagnosis of Chronic Kidney Disease (CKD)**  
**Petropoulos A.D. and Vlahou A.**  
 Biomedical Research Foundation Academy of Athens, Biotechnology Division

## Cell organization and function

- 43** **Free fatty acids (FFAs) counterbalance the glucose-induced apoptosis of endothelial cells in vitro**  
**Gougoura S.G., Filliponi M.E., Koukoulis G.N**  
 Research Laboratory of Department of Endocrinology and Metabolic Diseases, School of Health Sciences, Faculty of Medicine, University of Thessaly, BIOPOLIS, Larissa, Greece
- 52** **Chk1 and Mps1 cooperate to correct merotelic kinetochore attachments in mitosis**  
**Petsalaki E., Zachos G.**  
 Department of Biology, University of Crete, Vassilika Vouton, Heraklion 70013, Greece
- 53** **An expansion of the chemiosmotic scheme for the energy production based in recent advances in in vivo probing**  
**Ioannidis N.E., Kotzabasis K.**  
 Department of Biology, University of Crete, Heraklion, Crete, Greece
- 76** **Previous chronic exogenous glucocorticoid administration in vivo does not affect functional characteristics and cellular lifespan of human skin fibroblasts in vitro**  
**Pratsinis H.<sup>1</sup>, Dimozi A.<sup>1</sup>, Pilichos K.<sup>2</sup>, Tsagarakis S.<sup>3</sup>, Yiacoimettis A.M.<sup>2</sup>, Kletsas D.<sup>1</sup>**  
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<sup>2</sup> Plastic Reconstructive Surgery Department, Oncology, IKA Hospital, Athens, Greece  
<sup>3</sup> Department of Endocrinology, Athens' Polyclinic Hospital, Athens, Greece
- 98** **Study of the role of the tyrosine kinase Btk29A in the development of the respiratory system of Drosophila melanogaster**  
**Tsikala G.<sup>1</sup>, Kandaraki A.<sup>2</sup>, Karagogeos D.<sup>1</sup>, Strigini M.<sup>1</sup>**  
<sup>1</sup> Institute of Molecular Biology and Biotechnology (IMBB), FORTH, Heraklion, Greece  
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- 129** Pharmacological assessment of horse chestnut seed extracts and its major constituent aescin in Caco-2 cell monolayer cultures  
**Spanakis M., Niopas I., Vizirianakis I.S.**  
*Department of Pharmacology and Pharmacognosy, School of Pharmacy, Aristotle University of Thessaloniki, GR-54124 Thessaloniki, Greece*
- 156** The role of hyaluronan and RHAMM receptor in fibrosarcoma cell proliferation  
**Kouvidi K., Berdiaki A., Nikitovic D., Krithinakis K., Tzanakakis G. N.**  
*University of Crete, Medical School, Department of Histology-Embryology, Heraklion, Greece*
- 160** Syndecan-2 is a key regulator of TGF beta / Smad2 mediated adhesion in fibrosarcoma cells  
**Mytilinaiou M.<sup>1</sup>, Bano A. <sup>1</sup>, Nikitovic D. <sup>1</sup>, Berdiaki A. <sup>1</sup>, Voudouri K. <sup>1</sup>, Kalogeraki A.<sup>2</sup>, Karamanos N.K.<sup>3</sup>, Tzanakakis G.N. <sup>1</sup>**  
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<sup>2</sup>*University of Crete, Medical School, Department of Pathology, Heraklion, Greece*  
<sup>3</sup>*University of Patras, Department of Chemistry, Laboratory of Biochemistry, Patras, Greece*
- 167** Leaving the cytoplasm: Secretory proteins targeting signals  
**Chatzi K.<sup>1,2</sup>, Orfanoudaki G.<sup>1,2</sup>, Sardis M.<sup>1,2</sup>, Koukaki M.<sup>2</sup>, Karamanou S.<sup>2</sup> and Economou A.<sup>1,2</sup>**  
<sup>1</sup>*Department of Biology, University of Crete, Crete, Greece*  
<sup>2</sup>*Institute of Molecular Biology and Biotechnology, Foundation of Research and Technology-Hellas, Crete, Greece*
- 174** The restricted and discontinuous pattern of Fras1/Frem proteins in the meningeal basement membrane indicates for functional compartmentalization of the pia  
**Makrygiannis A.M.<sup>1</sup>, Pavlakis E.<sup>2</sup>, Kalogeraki E.<sup>3</sup>, Katsougkri D.<sup>1</sup>, Pertou P.<sup>4</sup>, Chalepakis G.<sup>1</sup>**  
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<sup>3</sup>*George-August-University of Goettingen, Goettingen, Germany*  
<sup>4</sup>*The Cyprus Institute of Neurology and Genetics, Nicosia, Cyprus*
- 179** CHD4 is a RanGTP-dependent MAP that stabilizes microtubules and regulates bipolar spindle formation  
**Nakos K.<sup>1</sup>, Yokoyama H.<sup>2</sup>, Anagnostou D.<sup>1</sup>, Mattaj I.<sup>2</sup> and Koffa M.<sup>1</sup>**  
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<sup>2</sup>*European Molecular Biology Laboratory, Heidelberg, Germany*
- 193** Dental Cone Beam CT irradiation affect expression of molecules involved in maintenance of genome integrity  
**Louka M.<sup>1</sup>, Berkas L.<sup>2</sup>, Donta C.<sup>2</sup>, Boutou E.<sup>1</sup> and Vorgias CE.<sup>1</sup>**  
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<sup>2</sup>*Dept. of Oral Diagnosis & Radiology, Faculty of Dentistry, University of Athens, Athens, Greece*
- 194** Post-DNA damage dynamic binding of the licensing factor Cdt1 to chromatin is affected by interactions with Cdt2  
**Giakoumakis N.N.<sup>1</sup>, Kotsantis P.<sup>1</sup>, Giavrides T.<sup>1</sup>, Symeonidou IE.<sup>1</sup>, Colombelli J.<sup>2</sup>, Taraviras S.<sup>3</sup>, Lygerou Z.<sup>1</sup>**  
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<sup>3</sup>*Department of Physiology, School of Medicine, University of Patras, Greece*
- 35** The early testosterone-induced actin reorganization in colon cancer is independent of iAR signalling  
**Saad Alkahtani**  
*Department of Biology, Teachers College, King Saud University, Riyadh, Saudi Arabia*

## Stem cells

- 46** The generic mechanism of trophoblast stem cell differentiation by transcription inhibitor Erf  
**Vorgia E., Zaragkoulias A., Mavrothalassitis G.**  
*School of Medicine, University of Crete and IMBB-FORTH, Voutes, Heraklion, Crete, 71003, GREECE*
- 190** A novel role for Sox2 as a rheostat of epithelial to mesenchymal transition  
**Mandalos N.<sup>1</sup>, Poulou M.<sup>1</sup>, Karnavas Th.<sup>1</sup>, Rhinn M.<sup>2</sup>, Economides A.N.<sup>3</sup>, Dollé P.<sup>2</sup> and Remboutsika E.<sup>1,®</sup>**  
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<sup>3</sup>*Regeneron Pharmaceuticals, Tarrytown, New York, USA*

## Cellular Communication and Signaling

- 7** Palmitoylated peptide, having being derived from the carboxyl-terminal sequence of the integrin  $\alpha_{11b}$  cytoplasmic domain, inhibits talin binding to  $\alpha_{11b}\beta_3$ .  
**Gkourogianni A., Koloka V., Moussis V. Tsikaris V., Panou-Pomonis E., Sakarellos-Daitsiotis M., Tsoukatos D.C**  
*Department of Chemistry, University of Ioannina, Ioannina, Greece*
- 32** FAK/mTOR/p70S6K/PAK1-signaling controls the early testosterone-induced actin reorganization in colon cancer cells  
**Gu S.<sup>1</sup>, Kounenidakis M.<sup>2</sup>, Schmidt E-M.<sup>1</sup>, Alkahtani S.<sup>3</sup>, Alarifi S.<sup>4</sup>, Föller M.<sup>1,5</sup>, Lang F.<sup>1</sup> and Stournaras C.<sup>2</sup>**  
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<sup>(5)</sup> *Campell Family Institute for Breast Cancer Research, Ontario Cancer Institute, University Health Network (UHN), Toronto, Ontario, Canada*
- 34** Comparative proteomic analysis of yeast cells growing in nutrient conditions that activate or inhibit the TOR signaling pathway  
**Papageorgiou K.<sup>1,2</sup>, Parapouli M.<sup>2</sup>, Drainas C.<sup>2</sup>, Michaelidis T.M.<sup>1</sup>**  
<sup>1</sup>*Department of Biological Applications and Technologies, University of Ioannina, 45110 Ioannina*  
<sup>2</sup>*Department of Chemistry, University of Ioannina, 45110, Ioannina*
- 61** Analysis of the regulatory regions of the Drosophila Hey, a bHLH-O protein that is activated by Notch signalling  
**Georgiou P.<sup>1,2,3</sup>, Theodosiou M.<sup>1,2</sup>, Monastirioti M.<sup>1</sup> and Delidakis C.<sup>1,2</sup>**  
<sup>1</sup> *Institute of Molecular Biology & Biotechnology, FORTH, Heraklion, Greece*  
<sup>2</sup> *Dept. of Biology, University of Crete, Heraklion, Greece*  
<sup>3</sup> *present address: Dept of Human Genetics, Katholieke Univesiteit Leuven, Belgium*
- 75** Constitutive expression of cell membrane syndecans is differentially regulated by EGF and IGF receptors in breast cancer cells  
**Afratis N.<sup>1</sup>, Tsonis A.<sup>1</sup>, Skandalis S.S.<sup>1</sup>, Theocharis A.<sup>1</sup>, Kletsas D.<sup>2</sup>, Tzanakakis G.N.<sup>3</sup> and Karamanos N.K.<sup>1</sup>**  
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<sup>3</sup>*Department of Histology, Medical School, University of Crete, Heraklion, Greece*



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- 77** Androgen steroids Dehydroepiandrosterone and Testosterone differentially regulate prostate and colon cancer cells apoptosis through Nerve Growth Factor receptors  
**Anagnostopoulou V.<sup>1</sup>, Pediaditakis I.<sup>2</sup>, Schmidt E-M.<sup>3</sup>, Lang F3, Gravanis A.<sup>2</sup>, Charalampopoulos I.<sup>2</sup>, Stournaras C.<sup>1</sup>**  
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<sup>2</sup>Department of Pharmacology, Faculty of Medicine, University of Crete, Heraklion, Greece  
<sup>3</sup>Department of Physiology, University of Tuebingen, Tuebingen, Germany
- 88** Visualizing the secretion of bacterial effector CagA through the Type IV secretion system of *Helicobacter pylori* utilizing FLAsH technology  
**Papadakos K., Sougleri I., Mentis A., Sgouras D.**  
Laboratory of Medical Microbiology, Hellenic Pasteur Institute, Athens, Greece
- 90** Effects of interleukin-6 and its soluble receptor on the expression of IGF-I and IGFBP-3 in nasal polyps fibroblasts  
**Smirlaki I.<sup>1</sup>, Athanasiou S.D.<sup>1</sup>, Stathas Th.<sup>2</sup>, Naxakis S.<sup>2</sup>, Giannopoulou E.<sup>3</sup>, Aletras A.J.<sup>1</sup>**  
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<sup>2</sup>Department of Otorinolaryngology, Medical School, University of Patras  
<sup>3</sup>Department of Pharmacology, Medical School, University of Patras
- 114** Targeting EGFR and HER2 in colon cancer cells at the level of matrix macromolecules  
**Ellina M.-I.<sup>1</sup>, Bouris P.<sup>1</sup>, Kletsas D.<sup>2</sup>, Theocharis A. D.<sup>1</sup>, Karamanos N.K.<sup>1</sup>**  
<sup>1</sup>Laboratory of Biochemistry, Department of Chemistry, University of Patras, Patras 26110, Greece  
<sup>2</sup>Laboratory of Cell Proliferation and Ageing, Institute of Biology, National Center of Scientific Research "Demokritos", Athens, Greece
- 122** The role of insulin and cell metabolism in macrophage activation and M2 polarization  
**Ieronymaki E.<sup>1</sup>, Vergadi E.<sup>1</sup>, Vaporidi K.<sup>2</sup>, Margioris A.<sup>1</sup> and Tsatsanis C.<sup>1</sup>**  
<sup>1</sup>Dept of Clinical Chemistry and  
<sup>2</sup>Dept of Intensive Care Medicine, University of Crete Medical School, Heraklion, Crete, Greece
- 123** The hepatitis C virus (HCV) core protein modulates the Wnt/  $\beta$ -catenin pathway through genotype-specific mechanisms  
**Aicher S.<sup>1,2</sup>, Kakkanas A.<sup>1</sup>, Njouom R.<sup>3</sup>, Oprison G.<sup>4</sup>, Mavromara P.<sup>1</sup>**  
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<sup>3</sup>Centre Pasteur du Cameroun, Réseau International des Instituts Pasteur, Yaounde, Cameroon  
<sup>4</sup>NIRDMI Cantacuzino, Bucharest, Romania
- 125** Different ligand-CRF<sub>1</sub> receptor interactions differentially modulate the signaling properties of receptor  
**Spyridaki K.<sup>a</sup>, Gkountelias K.<sup>a</sup>, Tselios T.<sup>b</sup>, Karageorgos V.<sup>a</sup>, Liapakis G.<sup>a</sup>**  
<sup>a</sup>Department of Pharmacology, Faculty of Medicine, University of Crete, Voutes, Heraklion, Greece;  
<sup>b</sup>Department of Chemistry, University of Patras, Patras, Greece;
- 138** The role of FKBP<sub>s</sub> in the brine shrimp *Artemia*  
**Maniatsi S.<sup>1</sup>, Farmaki T.<sup>2</sup> and Abatzopoulos T.J.<sup>1</sup>**  
<sup>1</sup>Department of Genetics, Development & Molecular Biology, School of Biology, Aristotle University of Thessaloniki, 541 24, Greece.  
<sup>2</sup>Institute of Applied Biosciences, Centre for Research and Technology – Hellas 6th km Charilaou - Thermi rd. 570 01 Thermi Thessaloniki Greece.

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- 141** Study of Leishmania specific Atypical Lipid Phosphatases as putative virulence factors for parasite survival in mammalian host phagocytes  
**Kotopouli A.**<sup>1,3</sup>, **Papadaki A.**<sup>1</sup>, **Doukas A.**<sup>1</sup>, **Papadakos K.**<sup>3</sup>, **Sougleri I.**<sup>3</sup>, **Sgouras D.**<sup>3</sup>, **Galanopoulou D.**<sup>4</sup>, **Boleti H.**<sup>1,2</sup>  
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<sup>4</sup> Biochemistry laboratory, Chemistry Department, University of Athens
- 143** PAF is an inhibitor of insulin's antiplatelet activity in washed rabbit platelets  
**Mikellidi A.**<sup>1</sup>, **Stamatakis G.**<sup>2</sup>, **Fragopoulou E.**<sup>1</sup>, **Antonopoulou S.**<sup>1</sup>, **Demopoulos CA.**<sup>2</sup>, **Nomikos T.**<sup>1</sup>  
<sup>1</sup> Department of Science of Nutrition - Dietetics, Harokopio University of Athens, Greece  
<sup>2</sup> Department of Chemistry, National and Kapodistrian University of Athens
- 146** The role of glucosamine sulfate in the proliferation and glycosaminoglycan synthesis of nucleus pulposus intervertebral disc cells  
**Mavrogonatou E., Kletsas D.**  
 Laboratory of Cell Proliferation and Ageing, Institute of Biology, National Centre for Scientific Research "Demokritos", 153 10 Athens, Greece
- 148** Proteomic analysis of pathways regulated by the M3/6 dual-specificity phosphatase  
**Oehrl W., Samiotaki M., Cotsiki M., and Panayotou G.**  
 B.S.R.C. "Alexander Fleming", 34 Fleming Street, 16672-Vari, Greece
- 155** Spinophilin: a novel modulator of the  $\delta$ - and  $\mu$ -opioid receptor signalling  
**Papakostantinou M.-P., Fourla D.-D., Vrana S.M. and Georgoussi Z.**  
 Laboratory of Cellular Signalling and Molecular Pharmacology, Institute of Biology, National Centre for Scientific Research «Demokritos», 15310 Athens, Greece
- 157** ARSENITE-INDUCED PHOSPHORYLATION OF THE M3/6 DUAL-SPECIFICITY PHOSPHATASE AND ITS ROLE IN THE REGULATION OF THE JNK PATHWAY  
**Cotsiki M., Oehrl W., Samiotaki M. and Panayotou G.**  
 Biomedical Sciences Research Center "Alexander Fleming", 34 Fleming Street, 16672 Vari, Greece
- 161** Immunomodulation mediated by soluble MHC class II antigens  
**Bakela K.**<sup>1</sup>, **Grigoriou M.**<sup>1</sup>, **Gizeli E.**<sup>1,2</sup>, **Athanassakis I.**<sup>1</sup>  
<sup>1</sup>Dpt. of Biology, University of Crete, Heraklion, Crete, Greece  
<sup>2</sup>IMBB, FORTH, Heraklion, Crete, Greece
- 163** Opioid receptor induced neurite outgrowth is mediated by STAT5B activation through a Gai/o signalling pathway  
**Georganta E.M., Tsoutsi L. and Georgoussi Z.**  
 Laboratory of Cellular Signalling and Molecular Pharmacology, Institute of Biosciences and Applications, National Centre for Scientific Research «Demokritos», 15310 Ag. Paraskevi, Athens, Greece
- 165** Differential expression of the TNF-superfamily members APRIL and BAFF and their receptors (BAFFR, BCMA, TACI) in normal and tumoral tissues is linked to specific effects  
**Pelekanou V.**<sup>1,2</sup>, **Notas G.**<sup>2</sup>, **Alexaki V.-I.**<sup>2</sup>, **Kampa M.**<sup>2</sup>, **Lavredaki K.**<sup>2</sup>, **Stathopoulos E.N.**<sup>1</sup>, **Tsapis A.**<sup>3</sup>, **Castanas E.**<sup>2</sup>  
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<sup>3</sup>Institut National de la Santé de la Recherche Médicale Unité 976 and University Paris-Diderot, Paris, France
- 206** Modulation of dexamethasone-dependent transcription by the Epstein-Barr virus oncoprotein LMP1 signaling pathway  
**Kefalopoulou S.**<sup>1</sup>, **Mosialos G.**<sup>1</sup> and **Hatzivassiliou E.**<sup>2</sup>  
<sup>1</sup>School of Biology, Department of Genetics Developmental and Molecular Biology,  
<sup>2</sup>Medical School, Laboratory of Biological Chemistry, Aristotle University of Thessaloniki, 54124, Thessaloniki

## Structural Biology

- 9** **PBD forms a size adjustable preprotein binding trap**  
**Sardis, M.F.**<sup>1,2</sup>, **Chatzi K.**<sup>1,2</sup>, **Orfanoudaki G.**<sup>1,2</sup>, **Koukaki M.**<sup>1</sup>, **Karamanou S.**<sup>1</sup> and **Economou, A.**<sup>1,2,3</sup>  
<sup>1</sup>*Institute of Molecular Biology and Biotechnology-FORTH and*  
<sup>2</sup>*Department of Biology-University of Crete, PO Box 1385, Iraklio, Crete, Greece*  
<sup>3</sup>*For correspondence: E-mail: aeconomou@imbb.forth.gr, Telephone: +30-2810-391166; Fax: +30-2810-391950*
- 48** **APPLICATION OF NMR IN THE STRUCTURAL ANALYSIS OF DIFFERENT DOMAINS OF ANTHRAX LETHAL FACTOR METALLOPROTEASE**  
**Vourtsis D.**<sup>1</sup>, **Gkazonis P.V.**<sup>1</sup>, **Chasapis C.T.**<sup>1</sup>, **Bentrop D.**<sup>2</sup>, **Spyroulias G.A.**<sup>1</sup>  
<sup>1</sup>*Department of Pharmacy, University of Patras, GR-26504, Patras, Greece*  
<sup>2</sup>*Institute of Physiology II, University of Freiburg, D-79104 Freiburg, Germany*
- 49** **UNRAVELLING THE CONFORMATIONAL PLASTICITY OF THE EXTRACELLULAR DOMAIN OF A PROKARYOTIC nAChR HOMOLOGUE IN SOLUTION BY NMR**  
**Chasapis C.T.**<sup>1</sup>, **Argyriou A.**<sup>1</sup>, **Corringer P.-J.**<sup>2</sup>, **Bentrop D.**<sup>3</sup>, **Spyroulias G.A.**<sup>1</sup>  
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<sup>3</sup>*Institute of Physiology II, University of Freiburg, D-79104 Freiburg, Germany*
- 54** **A COMPARATIVE NMR STUDY OF THREE ALPHAVIRUS MACRO DOMAINS**  
**Tsika A.**<sup>1</sup>, **Melekis S.**<sup>1</sup>, **Chasapis C.T.**<sup>1</sup>, **Margiolaki I.**<sup>2</sup>, **Papageorgiou N.**<sup>3</sup>, **Coutard B.**<sup>3</sup>, **Bentrop D.**<sup>4</sup>, **Spyroulias G.A.**<sup>1</sup>  
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<sup>4</sup>*Institute of Physiology II, University of Freiburg, D-79104 Freiburg, Germany*
- 55** **EXPRESSION AND NMR ANALYSIS OF TWO DOMAINS OF RECOMBINANT LA PROTEIN FROM D. DISCOIDEUM**  
**Apostolidi M.**<sup>1</sup>, **Vourtsis D.J.**<sup>2</sup>, **Chasapis C.T.**<sup>2</sup>, **Stathopoulos C.**<sup>1</sup>, **Bentrop D.**<sup>3</sup>, **Spyroulias G.A.**<sup>2</sup>  
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<sup>3</sup>*Institute of Physiology II, University of Freiburg, D-79104 Freiburg, Germany*
- 96** **Modeling, substrate docking and mutational analysis identify residues essential for the function and specificity of the purine-cytosine transporter FcyB**  
**Kryptou E.**<sup>1</sup>, **Kosti V.**<sup>1</sup>, **Amillis S.**<sup>1</sup>, **Myriantopoulos V.**<sup>2</sup>, **Mikros E.**<sup>2</sup>, **Diallinas G.**<sup>1</sup>  
<sup>1</sup>*Faculty of Biology, National and Kapodistrian University of Athens, Athens*  
<sup>2</sup>*School of Pharmacy, National and Kapodistrian University of Athens, Athens*
- 131** **Structure-based design for novel mosquito repellents: correlations between ligand affinities for Anopheles gambiae odorant binding proteins, olfactory receptor signaling and in vivo behavioral responses**  
**Kythreoti G.**<sup>1</sup>, **Koussis K.**<sup>1</sup>, **Tsitoura P.**<sup>1</sup>, **Amaral-Psarris A.**<sup>1</sup>, **Tsitsanou K. E.**<sup>2</sup>, **Drakou C. E.**<sup>2</sup>, **Zographos S. E.**<sup>2</sup>, **Thireou T.**<sup>3</sup>, **Eliopoulos E.**<sup>3</sup>, **Kröber T.**<sup>4</sup>, **Guerin P.**<sup>4</sup>, **Iatrou K.**<sup>1</sup>  
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<sup>3</sup>*Agricultural University of Athens, Department of Agricultural Biotechnology, Athens, Greece*  
<sup>4</sup>*University of Neuchatel, Institute of Biology, Neuchatel, Switzerland*
- 171** **Hydrogen-Deuterium Exchange Mass Spectrometry as a tool for probing protein-protein interactions**  
**Papanastasiou M.**<sup>1</sup>, **Trelle M.B.**<sup>2</sup>, **Gouridis G.**<sup>1</sup>, **Karamanou S.**<sup>1</sup>, **Chatzi K.**<sup>1,2</sup>, **Famelis N.**<sup>1,2</sup>, **Jorgensen T.**<sup>2</sup> and **Economou A.**<sup>1,2</sup>  
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<sup>3</sup>*Dept of Biology, UoC, Iraklio-Greece*

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- 185** **Structure and dynamics of chaperone-preprotein recognition in the secretory pathway**  
**Famelis N.**<sup>1&2</sup>, **Gouridis G.**<sup>2</sup>, **Karamanou S.**<sup>2</sup>, **Martin S.**<sup>3</sup>, **Papanastasiou M.**<sup>2</sup>, **Trelle M.B.**<sup>4</sup>, **Kapeliou E.**<sup>5</sup>,  
**Aivaliotis M.**<sup>2</sup>, **Pergantis S.**<sup>5</sup>, **Capitani G.**<sup>3</sup>, **Jorgensen T.J.D.**<sup>4</sup>, **Economou A.**<sup>1&2</sup>  
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- 22** **CYSTEINE CATHEPSINS IN COLORECTAL CANCER**  
**Anestakis D.**<sup>1</sup>, **Argyragi M.**<sup>1</sup>, **Petanidis S.**<sup>2</sup>, **Salifoglou A.**<sup>2</sup>, **Iakovidou-Kritsi Z.**<sup>1</sup>  
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<sup>2</sup> Department of Chemical Engineering, School of Engineering, Aristotle University of Thessaloniki, Thessaloniki, Greece
- 24** **Study of the effect of CD40L on the lytic cycle of Herpes Simplex Virus type-1 (HSV-1)**  
**Vlachava V.M.**<sup>1</sup>, **Eliopoulos A.**<sup>2</sup>, **Sourvinos G.**<sup>1</sup>  
<sup>1</sup> Laboratory of Virology, Medical School, University of Crete, Heraklion, Crete  
<sup>2</sup> Molecular and Cellular Biology Laboratory, Medical School, University of Crete, Heraklion, Crete, Greece
- 27** **A common polymorphism in ER aminopeptidase 2 induces a specificity switch that leads to altered processing of antigenic peptides**  
**Evnouchidou I.**<sup>1</sup>, **Birtley J.**<sup>1</sup>, **Seregin S.**<sup>2</sup>, **Papakyriakou A.**<sup>1</sup>, **Zervoudi E.**<sup>1</sup>, **Samiotaki M.**<sup>3</sup>, **Panayotou G.**<sup>3</sup>,  
**Giasas P.**<sup>4</sup>, **Petrakis O.**<sup>5</sup>, **Georgiadis D.**<sup>5</sup>, **Amalfitano A.**<sup>2</sup>, **Saridakis E.**<sup>1</sup>, **Mavridis I.**<sup>1</sup> and **Stratikos E.**<sup>1</sup>  
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<sup>4</sup> Department of Biochemistry, Hellenic Pasteur Institute, 127 V. Sofias Ave., GR11521 Athens, Greece  
<sup>5</sup> Laboratory of Organic Chemistry, Chemistry Department, University of Athens, Athens, Greece
- 33** **VL30 retrotransposition induces epithelial-mesenchymal transition (EMT) and a cancer stem cell-like phenotype in epithelial mouse mammary cells HC11**  
**Thrasivoulou S.**<sup>1</sup>, **Markopoulos G.**<sup>1</sup>, **Noutsopoulos D.**<sup>1</sup>, **Mantziou S.**<sup>1</sup>, **Vartholomatos G.**<sup>2</sup>, **Kouklis P.**<sup>1</sup>,  
**Constantinou A.**<sup>3</sup> & **Tzavaras T.**<sup>1</sup>  
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<sup>2</sup> Hematology Laboratory, Unit of Molecular Biology, University Hospital of Ioannina, Ioannina, Greece  
<sup>3</sup> Department of Biological Sciences, Faculty of Pure and Applied Sciences, University of Cyprus, Cyprus
- 38** **Overexpression of serglycin promotes breast cancer cell aggressiveness and inhibits complement system activity**  
**Korpetinou A.**<sup>1</sup>, **Skandalis S.S.**<sup>1,2</sup>, **Moustakas A.**<sup>2</sup>, **Tveit H.**<sup>3</sup>, **Prydz K.**<sup>3</sup>, **Happonen K.**<sup>4</sup>, **Blom A.**<sup>4</sup>,  
**Noulas A.**<sup>5</sup>, **Karamanos N.K.**<sup>1</sup>, **Theocharis A.D.**<sup>1</sup>  
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<sup>5</sup> School of Medical Laboratories, TEI Larissa, Greece

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- 45** Tpl2 regulates NPM expression levels under genotoxic stress  
**Kanellis D.C.<sup>1</sup>, Tsihliis P.N.<sup>2</sup> & Eliopoulos A.G.<sup>1</sup>**  
<sup>1</sup> Molecular & Cellular Biology Laboratory, Division of Basic Sciences, University of Crete Medical School and Institute for Molecular Biology & Biotechnology, Foundation of Research & Technology Hellas, Heraklion, Crete, Greece  
<sup>2</sup> Molecular Oncology Research Institute, Tufts University School of Medicine, Boston, MA
- 50** Role of Profilin-1 in Bladder Cancer Aggressiveness  
**Frantzi M.<sup>1</sup>, Zoidakis J.<sup>1</sup>, Makridakis M.<sup>1</sup>, Bitsika V.<sup>1</sup>, Anagnou N.P.<sup>2,3</sup>, Roubelakis M.G.<sup>2</sup>, Vlahou A.<sup>1</sup>**  
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<sup>2</sup> Laboratory of Cell and Gene Therapy, Biomedical Research Foundation, Academy of Athens, Greece  
<sup>3</sup> Laboratory of Biology, University of Athens, School of Medicine, Greece
- 56** The cholesterol transporter ABCG1 is involved in inflammatory processes  
**Daniil G., Chroni A.**  
 Institute of Biosciences and Applications, National Center for Scientific Research "Demokritos", Athens
- 66** Phenotypic characterization of circulating tumor cells (CTCs) in triple negative breast cancer patients  
**Kallergi G.<sup>1</sup>, Markomanolaki H.<sup>1</sup>, Mavroudis D.<sup>2</sup>, Georgoulis V.<sup>2</sup>, Agelaki S.<sup>2</sup>**  
<sup>1</sup>Laboratory of Tumor Cell Biology, Medical School, University of Crete, Heraklion, Greece  
<sup>2</sup>Department of Medical Oncology, University General Hospital of Heraklion, Heraklion, Greece
- 68** Detection of intracellular and secreted MIF in leukemic cells – a novel player in the immune surveillance process  
**Georgouli M., Athanassakis I.**  
 Biology Department, University of Crete, Heraklion, Greece
- 71** The role of adhesion protein talin in wound angiogenesis and repair  
**Molyvdas\* A., Papageorgopoulou\* E., Monkley\*\* S., Critchley\*\* D. and Kostourou\* V.**  
 \*Laboratory of endothelial biology and pathophysiology, BSRC Al. Fleming, Vari, 16672 Greece  
 \*\*Department of Biochemistry, University of Leicester, Leicester LE1 9HN, UK
- 72** Investigation of the role of the membrane adhesion molecule TAG-1 during de- and remyelination processes in a toxic model of demyelination  
**Kastriti ME.<sup>1,2</sup>, Zoupi L.<sup>1,2</sup> and Karageos D.<sup>1,2</sup>**  
<sup>1</sup>Department of Basic Science, Faculty of Medicine, University of Crete  
<sup>2</sup>IMBB-FORTH, Heraklion, Crete
- 79** Mutation analysis of SPINK5 gene in a Greek patient with Netherton Syndrome  
**Sarri C.<sup>1</sup>, Vasilopoulos Y.<sup>1</sup>, Zafiriou E.<sup>2</sup>, Roussaki-Schulze A.<sup>2</sup>, Mamuris Z.<sup>1</sup>, Sarafidou T.<sup>1</sup>**  
<sup>1</sup>Department of Biochemistry and Biotechnology, University of Thessaly, Greece  
<sup>2</sup>Department of Dermatology, University General Hospital Larissa, University of Thessaly, Greece
- 91** The UV radiation suppresses the proteasome expression in human pterygium fibroblasts  
**Trilivas I.<sup>1</sup>, Drakouli S.<sup>2</sup>, Pharmakakis N.<sup>1</sup>, Aletras A.J.<sup>2</sup>**  
<sup>1</sup>Department of Ophthalmology, Medical School, University of Patras  
<sup>2</sup>Laboratory of Biochemistry, Department of Chemistry, University of Patras
- 95** Endothelial Talin is required for tumour growth and angiogenesis  
**Papageorgopoulou E.<sup>1</sup>, Monkley S.<sup>2</sup>, Critchley D.<sup>2</sup>, Fruttiger M.<sup>3</sup>, Kostourou V.<sup>1</sup>**  
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- 99** Investigation of the Growth/Differentiation Factor 5 gene in association with osteoarthritis of the spine in the Greek population  
**Athousaki A.<sup>1\*</sup>, Liva E.<sup>2\*</sup>, Palikyras S.<sup>1</sup>, Potamianou H.<sup>1</sup>, Ligda P.<sup>1</sup>, Karagiannidis I.<sup>1</sup>, Panagiotou I.<sup>2</sup>, Mystakidou K.<sup>2\*</sup>, Paschou P.<sup>1\*</sup>**  
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<sup>2</sup> Pain Relief and Palliative Care Unit, School of Medicine, National University of Athens, Athens, Greece  
 \*Equal contribution
- 100** Worldwide variation across TCF7L2: Implications for Type 2 Diabetes susceptibility around the world  
**Trivizakis G.<sup>1</sup>, Karagiannidis I.<sup>1</sup>, Papanas N.<sup>2</sup>, Theodoridis M.<sup>3</sup>, Papazoglou D.<sup>2</sup>, Maltezos E.<sup>2</sup>, Vargemezis V.<sup>3</sup>, Paschou P.<sup>1</sup>**  
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<sup>3</sup> Division of Nephrology, University Hospital of Alexandroupoli, Faculty of Medicine, Democritus University of Thrace, Alexandroupoli, Greece
- 104** Human Cytomegalovirus induces alterations in the expression profile of cellular miRNAs regulating the NFκB pathway to the benefit of viral replication  
**Goulidaki N.<sup>1</sup>, Palumbo T.<sup>2</sup>, Vorvis C.<sup>2</sup>, Spandidos D.A.<sup>1</sup>, Sourvinos G.<sup>1</sup>, Iliopoulos D.<sup>3</sup>**  
<sup>1</sup> Department of Virology, Faculty of Medicine, University of Crete, Heraklion, Crete, Greece  
<sup>2</sup> Department of Cancer Immunology & AIDS, Dana-Farber Cancer Institute, Harvard Medical School, Boston, USA  
<sup>3</sup> UCLA Center for Systems Biology, David Geffen School of Medicine, Los Angeles, USA
- 108** Role of the hydrophobic and charged residues in the 218 to 226 region of apoA-I in the biogenesis of HDL  
**Kateifides A.K.<sup>1,2</sup>, Fotakis P.<sup>1,2</sup>, Georgiadou G.<sup>3</sup>, Beck M.<sup>1,2</sup>, Chroni A.<sup>3</sup>, Stratikos E.<sup>3</sup>, Zannis V.I.<sup>2</sup>, Kardassis D.<sup>1</sup>**  
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<sup>2</sup> Medical School, Boston University, Boston, USA  
<sup>3</sup> National Center for Scientific Research "Demokritos", Athens, Greece
- 109** In vivo and in vitro properties of human apoA-IV  
**Duka A.<sup>1</sup>, Georgiadou D.<sup>2</sup>, Kateifides A.<sup>1,3</sup>, Fotakis P.<sup>1,3</sup>, Tzavlaki K.<sup>3</sup>, vonEckestein L.<sup>1</sup>, Stratikos E.<sup>2</sup>, Kardassis D.<sup>3</sup>, Zannis V.I.<sup>1</sup>**  
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<sup>2</sup> National Center for Scientific Research "Demokritos", Athens, Greece  
<sup>3</sup> Medical School, University of Crete, Heraklion, Greece
- 110** The effect of LCAT mutations and CTa in the biogenesis of HDL  
**Fotakis P.<sup>1,2</sup>, Kuivenhoven J.A.<sup>3</sup>, Zannis V.I.<sup>2</sup>, Kardassis D.<sup>1</sup>**  
<sup>1</sup> Medical School, University of Crete, Heraklion, Greece  
<sup>2</sup> Medical School, Boston University, Boston, USA  
<sup>3</sup> Department of Vascular Medicine, University of Amsterdam, Amsterdam, The Netherlands
- 133** Analysis of complement MBL2 gene polymorphism in a Greek population with Age-related Macular Degeneration  
**Zissi D. and Zarkadis IK**  
 Department of Biology, School of Medicine, University of Patras, 26500 Rion, Patras
- 135** Identification of mutations in STAT3 gene in two Greek patients with Hyper-IgE syndrome  
**Papanastasiou AD.<sup>1</sup>, Farmaki E.<sup>2</sup>, Attilakos A.<sup>3</sup> and Zarkadis IK.<sup>1</sup>**  
<sup>1</sup> Department of Biology, School of Medicine, University of Patras  
<sup>2</sup> Department of Paediatrics, School of Medicine, Aristotle University of Thessaloniki  
<sup>3</sup> Department of Paediatrics, School of Medicine, University of Athens

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- 147** CRH is expressed in the Human cervical carcinoma cells (HeLa), cervical adenocarcinomas and intraepithelial neoplasias and up-regulates the expression of FasL in vitro  
**Taliouri E.<sup>1</sup>, Vrekoussis T.<sup>1</sup>, Vergetaki A.<sup>1</sup>, Tselentierou E.<sup>2</sup>, Stamataki A.<sup>1</sup>, Stathopoulos E.<sup>2</sup>, Makrigiannakis A.<sup>1</sup>**  
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<sup>2</sup> Laboratory of Pathology, School of Medicine, University of Crete, Heraklion, Greece
- 152** DIFFERENTIAL EXPRESSION OF CRH, UCN, CRHR1 AND CRHR2 IN EUTOPIC AND ECTOPIC ENDOMETRIUM OF WOMEN WITH ENDOMETRIOSIS  
**Vergetaki A.<sup>1</sup>, Jeschke U.<sup>2</sup>, Vrekoussis T.<sup>2</sup>, Sabatini L.<sup>3</sup>, Taliouri E.<sup>1</sup>, Christoforaki V.<sup>1</sup>, Papakonstanti E.A.<sup>4</sup>, Makrigiannakis A.<sup>1\*</sup>**  
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<sup>3</sup> Centre for Reproductive Medicine, St Bartholomew's Hospital, London, United Kingdom  
<sup>4</sup> Department of Biochemistry, Medical School, University of Crete, Greece
- 170** New insights in actin II of Plasmodium berghei  
**Morgan RN., Andreadaki M., Louis C., Siden-Kiamos I.**  
 Institute of Molecular Biology and Biotechnology, Heraklion, Greece
- 175** Attenuation of basement membrane's barrier promotes inflammatory responses associated with fibrosis and infertility  
**Katsougri D.<sup>1</sup>, Pavlakis E.<sup>2</sup>, Makrygiannis A.M.<sup>1</sup>, Kalogeraki E.<sup>3</sup>, Chalepakis G.<sup>1</sup>**  
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<sup>2</sup> Max Planck Institute for Biophysical Chemistry, Goettingen, Germany  
<sup>3</sup> George-August-University of Goettingen, Goettingen, Germany
- 180** Akt2 deficiency modulates alveolar macrophage activation via induction of miR146 and protects from the development of acute lung injury  
**Vergadi E.<sup>1,2</sup>, Vaporidi K.<sup>2</sup>, Kondili E.<sup>2</sup>, Georgopoulos D.<sup>2</sup>, Tsatsanis C.<sup>1</sup>**  
<sup>1</sup> From the Department of Clinical Chemistry, University of Crete, Medical School, Heraklion, Greece  
<sup>2</sup> From the Department of Intensive Care, University of Crete, Medical School, Heraklion, Greece
- 181** NFκB modulates cellular miRNAs which are affected by Human Cytomegalovirus and mediate the virally induced NFκB activation  
**Goulidaki N.<sup>1</sup>, Palumbo T.<sup>2</sup>, Vorvis C.<sup>2</sup>, Spandidos D.A.<sup>1</sup>, Sourvinos G.<sup>1</sup>, Iliopoulos D.<sup>3</sup>**  
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<sup>2</sup> Department of Cancer Immunology & AIDS, Dana-Farber Cancer Institute, Harvard Medical School, Boston, USA  
<sup>3</sup> UCLA Center for Systems Biology, David Geffen School of Medicine, Los Angeles, USA
- 182** Expression of matrix macromolecules and functional properties of EGF responsive colon cancer cells are inhibited by Panitumumab  
**Gialeli Ch.<sup>1,4</sup>, Theocharis A.D.<sup>1</sup>, Kletsas D.<sup>2</sup>, Tzanakakis G.N.<sup>3</sup>, Karamanos N.K.<sup>1,4,\*</sup>**  
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<sup>3</sup> Department of Histology, Medical School, University of Crete, University of Crete, Heraklion, Greece  
<sup>4</sup> Foundation of Research and Technology, Institute of Chemical Engineering and High-Temperature Chemical Processes (FORTH/ICE-HT), 26500 Patras, Greece  
 \*E-mail: N.K.Karamanos@upatras.gr
- 184** Heat shock protein 70-deficient mice have abnormal hypothalamic-pituitary adrenal axis stress response  
**Georgopoulou A.<sup>1</sup>, Rassouli O.<sup>1</sup>, Karagianni E.<sup>1</sup>, Briassoulis G.<sup>2</sup>, Venihaki M.<sup>1</sup>**  
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<sup>2</sup> Department of ICU of Pediatrics, School of Medicine, University of Crete, Greece

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- 186** Attenuation of proinflammatory cytokine release in Hsp 70+/+ mice vs Hsp 70-/- mice following glutamine administration prior to LPS-induced sepsis  
**Plati I.<sup>1,2</sup>, Rassouli O.<sup>2</sup>, Venihaki M.<sup>2</sup>, and Briassoulis G.<sup>1</sup>**  
*Departments of ICU of Pediatrics<sup>1</sup> and Clinical Chemistry<sup>2</sup>,  
 School of Medicine, University of Crete, Greece*
- 189** The novel HCV core+1/ARF protein represses hepcidin promoter activity through transcription factor activator protein-1 in hepatoma cells  
**Kotta-Loizou I.<sup>1</sup>, Vassilaki N.<sup>1</sup>, Pissas G.<sup>1</sup>, Bartenschlager R.<sup>2</sup> and Mavromara P.<sup>1</sup>**  
<sup>1</sup>*Molecular Virology Laboratory, Hellenic Pasteur Institute, Athens, Greece*  
<sup>2</sup>*Department of Infectious Diseases, Molecular Virology, University Hospital Heidelberg, Heidelberg, Germany*
- 192** Low Oxygen Tension Enhances Hepatitis C Virus Replication  
**Vassilaki N.<sup>1,8</sup>, Kalliampakou K.I.<sup>1,8</sup>, Kotta-Loizou I.<sup>1</sup>, Befani C.<sup>2</sup>, Liakos P.<sup>2</sup>, Simos G.<sup>2</sup>, Mentis A.F.<sup>3</sup>, Kalliaropoulos A.<sup>3</sup>, Doumba P.P.<sup>4</sup>, Smirlis D.<sup>5</sup>, Bauhofer O.<sup>6</sup>, Poenisch M.<sup>6</sup>, Windisch M.P.<sup>7</sup>, Lee M.E.<sup>7</sup>, Koskinas J.<sup>4</sup>, Bartenschlager R.<sup>6</sup> and Mavromara P.<sup>1</sup>**  
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<sup>8</sup>*The first two authors contributed equally to this work and should be regarded as joint first authors*

## Model organisms

- 17** Chaperone-mediated stabilization and targeting of secretory proteins in Type III secretion system  
**Balabanidou V.<sup>1,2</sup>, Portalio A.<sup>1,2</sup>, Karamanou S.<sup>1</sup>, Aivaliotis M.<sup>1</sup> and Economou A.<sup>1,2</sup>**  
<sup>1</sup>*Institute of Molecular Biology and Biotechnology, FORTH and*  
<sup>2</sup>*Dpt of Biology, U. Crete, PO Box 1385, 71110, Iraklio, Crete, Greece*
- 26** Structure-function analysis of purine uptake in nitrogen-fixing rhizobacteria  
**Botou M.<sup>1</sup>, Papakostas K.<sup>1</sup>, Kalliampakou K.I.<sup>2</sup>, Flemetakis E.<sup>2</sup>, and Frillingos S.<sup>1</sup>**  
<sup>1</sup>*Laboratory of Biological Chemistry, University of Ioannina Medical School, Ioannina*  
<sup>2</sup>*Laboratory of Molecular Biology, Agricultural University of Athens, Athens, Greece*
- 80** Zebrafish as a model organism for the study of the cardiovascular system  
**Bournele D., Malissovass N., Anagianni S., Sarantis P., Roedel C., and Beis D.**  
*Developmental Biology, Biomedical Research Foundation Academy of Athens, Greece*
- 137** Autophagic degradation of key protein synthesis factors and ageing  
**Markaki M. and Tavernarakis N.**  
*Institute of Molecular Biology and Biotechnology, Foundation for Research and Technology-Hellas & Medical School, University of Crete, Heraklion, Crete, Greece*
- 139** Peptidyl-prolyl cis/trans Isomerases as Novel Regulators of Bacterial Cell Division  
**Dimou M.<sup>1</sup>, Skagia A.<sup>1</sup>, Zografou C.<sup>1</sup>, Vezyri E.<sup>1</sup>, Venieraki A.<sup>1</sup>, Fasseas C.<sup>2</sup>, Katinakis P.<sup>1</sup>**  
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<sup>2</sup>*Laboratory of Electron Microscopy, Department of Agricultural Biotechnology, Agricultural University of Athens, Iera Odos 75, 11855, Athens*



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- 140** **Imaging *C. elegans* fat stores with Third Harmonic Generation Microscopy**  
**Megalou E.V.<sup>1</sup>, Tserevelakis G.<sup>2,3</sup>, Filippidis G.<sup>2</sup>, Petanidou B.<sup>2,3</sup>, and Tavernarakis N.<sup>1</sup>**  
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<sup>2</sup>*Institute of Electronic Structure and Laser, Foundation for Research and Technology, Heraklion 71110, Crete, Greece*  
<sup>3</sup>*Physics Department, University of Crete, Heraklion 71003, Crete, Greece*
- 144** **Zelda, a gene essential for wing development in *Drosophila melanogaster***  
**Giannios P.<sup>1</sup>, Delidakis C.<sup>2</sup> and Tsitilou S.G.<sup>1</sup>**  
<sup>1</sup>*University of Athens, Department of Biochemistry & Molecular Biology, Panepistimiopolis Zografou, 15701, Athens, Greece*  
<sup>2</sup>*I.M.B.B., FORTH, Vassilika Vouton, 71110, Heraklion, Greece*
- 150** **Expression profile of genes related to growth and sex differentiation in adult zebrafish developed as larvae under three different temperature conditions**  
**Georga I.<sup>1</sup>, Koumoundouros G.<sup>2</sup>, Flytzanis CN.<sup>1</sup>**  
<sup>1</sup>*Department of Biology, University of Patras, Patras 26504, Greece*  
<sup>2</sup>*Department of Biology, University of Crete, Heraklion 71409, Greece*
- 151** **Growth rate and gene expression profiles in zebrafish larvae**  
**Kapsali A.<sup>1</sup>, Koinis A.<sup>1</sup>, Christou M.<sup>2</sup>, Koumoundouros G.<sup>2</sup> and Flytzanis CN<sup>1</sup>**  
<sup>1</sup>*Department of Biology, University of Patras, Patras 26504, Greece*  
<sup>2</sup>*Department of Biology, University of Crete, Heraklion 71409, Greece*
- 168** **Contribution of the immune system on lipid metabolism**  
**Moisidou M.<sup>1</sup>, Karaliota S.<sup>1</sup>, Kodela E.<sup>1</sup>, Karalis K.<sup>1,2</sup>**  
<sup>1</sup>*Biomedical Research Foundation of the Academy of Athens, Greece*  
<sup>2</sup>*Children's Hospital, Boston, MA*

## Neurobiology

- 30** **In vitro assessment of the effects of neurotoxic Fe(III) and Fe(III)-chelator species on rat hippocampal cultures**  
**Nday C., Tsave O., Malollari, G., Petanidis S., Salifoglou S.**  
*Laboratory of Inorganic Chemistry, Department of Chemical Engineering, Aristotle University of Thessaloniki, Thessaloniki 54124, Greece*
- 58** **Biophysical analysis of an apolipoprotein E4 variant associated with increased risk of late-onset Alzheimer's disease**  
**Argyri L.<sup>1</sup>, Stratikos E.<sup>2</sup>, Chroni A.<sup>1</sup>**  
<sup>1</sup>*Institute of Biosciences and Applications, <sup>2</sup>Protein Chemistry Lab, National Center for Scientific Research «Demokritos», Athens*
- 67** **The cell adhesion molecule TAG-1 is an important regulator of the olfactory bulb function in rodents**  
**Bastakis G.<sup>1</sup>, Savvaki M.<sup>1</sup>, Stamatakis A.<sup>2</sup>, Karagozeos D.<sup>1</sup>**  
<sup>1</sup>*Department of Basic Science, University of Crete Medical School and Institute of Molecular Biology and Biotechnology, Heraklion, Crete, Greece 711 10*  
<sup>2</sup>*Laboratory of Biology-Biochemistry, School of Nursing, University of Athens, Athens, Greece*
- 70** **Juxtaparanodal protein alterations upon EAE onset and throughout the different stages of the disease**  
**Zoupi L.<sup>1</sup>, Markoullis K.<sup>2</sup>, Kleopa K.A.<sup>2,3</sup> and Karagozeos D.<sup>1</sup>**  
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- 84** Expression of the extracellular domain of muscle-specific kinase and use as immunoadsorbent for the development of an antigen-specific therapy for myasthenia gravis  
**Skriapa L.**<sup>1,2</sup>, **Zisimopoulou P.**<sup>1</sup>, **Trakas N.**<sup>1</sup> and **Tzartos S.**<sup>1,2</sup>  
<sup>1</sup>Hellenic Pasteur Institute, Athens, Greece,  
<sup>2</sup>Department of Pharmacy, University of Patras, Rio, Greece
- 86** Neurofibromin's cell cycle-dependent nuclear shuttling requires PKC $\epsilon$  and Ran  
**Koliou X. and Mangoura D.**  
Basic Neurosciences Division, Biomedical Research Foundation of the Academy of Athens, Athens, Greece
- 107** Synthetic microneurotrophin BNN27 effectively compensates Nerve Growth Factor (NGF) in vitro and in vivo  
**Pediaditakis I.**<sup>1\*</sup>, **Efstathopoulos P.**<sup>1\*</sup>, **Daskalaki I.**<sup>1</sup>, **Charalampopoulos I.**<sup>1</sup>, **Gravanis A.**<sup>1,2</sup>  
<sup>1</sup> Dept. of Pharmacology, Faculty of Medicine, University of Crete,  
<sup>2</sup> Foundation of Research & Technology-Hellas, IESL-FORTH, Crete, Greece  
\* Equal contributors
- 115** Development of Diagnostic Assays for the Detection of Autoantibodies Against LRP4, a Novel Autoantigen in Myasthenia Gravis  
**Tsonis A.I.**<sup>1,2</sup>, **Zisimopoulou P.**<sup>1</sup>, **Evangelakou G.**<sup>1,2</sup>, **Mazaraki D.**<sup>1</sup>, **Tzartos J.**<sup>1</sup>, **Tzartos S.**<sup>1,2</sup>  
<sup>1</sup>Hellenic Pasteur Institute, Athens, Greece;  
<sup>2</sup>University of Patras, Patras, Greece;
- 121** Corticotropin Releasing hormone-deficient mice have abnormal pain response during inflammation  
**Karagianni E., Rassouli O., Margioris A.N., Venihaki M.**  
Department of Clinical Chemistry, Faculty of Medicine, University of Crete, Heraklion, Crete, Greece
- 127** Study of potential recovery of lead-induced disturbances in terms of anxiety/fear and brain AChE activity in adult mice after long-term metal withdrawal  
**Kouli A., Kokkosis G.A., Avgoustatos D., Linardaki Z., Constantinou C. and Margarity M.**  
Lab. of Human and Animal Physiology, Department of Biology, University of Patras, Greece
- 136** Effect of neurosteroids on contextual fear memory and hippocampal long-term potentiation  
**Tzortzi O.**<sup>1</sup>, **Papantwniou C.**<sup>1</sup>, **Chovsepian, A.**<sup>1</sup>, **Iordanidou P.**<sup>1</sup>, **Konstantoudaki, X.**<sup>1</sup>, **Efstathopoulos P.**<sup>2</sup>, **Charalampopoulos I.**<sup>2</sup>, **Gravanis A.**<sup>2</sup> and **Sidiropoulou K.**<sup>1,3</sup>  
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## Biotechnology

- 59** Potential of Rhizobium haloalkane-degrading dehalogenases in environmental remediation of polluted soils  
**Georgakis N.**<sup>1</sup>, **Flemetakis E.**<sup>2</sup>, **Efrose R.**<sup>3</sup> and **Labrou N.E.**<sup>1\*</sup>  
<sup>1</sup>Laboratory of Enzyme Technology, Department of Agricultural Biotechnology, Agricultural University of Athens, Iera Odos 75, 11855-Athens, Greece, email: lambrou@aua.gr  
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<sup>3</sup> Department of Experimental and Applied Biology, NIRDBS-Institute of Biological Research Iasi, Lascar Catargi 47, 700107 Iasi, Romania
- 62** Algae Enzymes and Proteins in Cosmetics Industry  
**Chatzikonstantinou M. and Labrou N.E.\***  
Laboratory of Enzyme Technology, Department of Agricultural Biotechnology, Agricultural University of Athens, Athens, Greece, lambrou@aua.gr

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- 65 Polysaccharide deacetylases from *Bacillus anthracis*: new targets for drug design applications**  
**Arnaouteli S.<sup>1</sup>, Balomenou S.<sup>1</sup>, Vollmer W.<sup>3</sup>, Bouriotis V.<sup>1,2</sup>**  
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<sup>3</sup>*Centre for Bacterial Cell Biology, Institute for Cell and Molecular Biosciences, Newcastle University, Richardson Road, Newcastle upon Tyne NE2 4AX, UK*
- 124 Genetic diversity and phylogeny of rhizobial strains in Romanian legumes**  
**Rosu C.<sup>1</sup>, Stedel C.<sup>1</sup>, Stefan A.<sup>2</sup>, Sirbu C.<sup>3</sup>, Gorgan L.<sup>2</sup>, Flemetakis E.<sup>4</sup>, Labrou N.E.<sup>5</sup> and Efrose R.<sup>1\*</sup>**  
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<sup>5</sup>*Laboratory of Enzyme Technology, Department of Agricultural Biotechnology, Agricultural University of Athens, Iera Odos 75, 11855-Athens, Greece*
- 130 Inhibition of MT1-MMP using antibodies against the hemopexin domain**  
**Rapti M., Basu B., Murphy G.**  
*Cancer Research UK, Cambridge Research Institute, Li ka Shing Centre, Cambridge, United Kingdom*
- 198 Toxicological assessment of pristine Multiwall-Carbon Nanotubes**  
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<sup>\*</sup>*E-mail: N.K.Karamanos@upatras.gr*
- 201 Positive genetic interactors of HMG2 identify a new set of genetic perturbations for improving sesquiterpene production in *Saccharomyces cerevisiae***  
**Ignea C.<sup>1</sup>, Trika F.A.<sup>2</sup>, Koutzelis I.<sup>3</sup>, Argiriou A.<sup>2</sup>, Kanellis A.K.<sup>4</sup>, Kampranis S.C.<sup>1,5</sup> and Makris A.M.<sup>2§</sup>**  
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<sup>4</sup>*Dept. of Pharmaceutical Sciences, Aristotle University of Thessaloniki*  
<sup>5</sup>*Department of Medicine, University of Crete*
- 202 Combinatorial biosynthesis for the production of functionalized terpenes in *Saccharomyces cerevisiae***  
**Ignea C.<sup>1</sup>, Loupasaki S.<sup>1</sup>, Kefalas P.<sup>1</sup>, Kanellis A.K.<sup>3</sup>, Makris A.M.<sup>2</sup> and Kampranis S.C.<sup>1,4</sup>**  
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<sup>2</sup>*Institute of Applied Biosciences/ CERTH, Thessaloniki*  
<sup>3</sup>*Dept. of Pharmaceutical Sciences, Aristotle University of Thessaloniki*  
<sup>4</sup>*Department of Medicine, University of Crete*
- 205 On the hunt for new insect repellents: the development of a cell-based screening platform with mosquito odorant receptors as molecular targets**  
**Tsitoura P.<sup>1</sup>, Koussis K.<sup>2</sup>, Amaral Psarris A.<sup>1</sup>, Iatrou K.<sup>1</sup>**  
<sup>1</sup>*Insect Molecular Genetics and Biotechnology Group, Institute of Biosciences and Applications, National Centre for Scientific Research 'Demokritos', Aghia Paraskevi Attikis, Athens, Greece*  
<sup>2</sup>*Institute of Molecular Biology and Biotechnology, Foundation for Research and Technology-Hellas, Heraklion, Crete, Greece*
- 204 Volatile compounds estimation, of fermented pomegranate juice with genetically characterized indigenous yeast strains**  
**Tsapournioti P.<sup>1</sup>, Parapouli M.<sup>1</sup>, Badeka A.<sup>2</sup>, Perisynakis A.<sup>1</sup>, Drainas C.<sup>1†</sup>**  
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<sup>2</sup>*Laboratory of Food Chemistry and Technology, Department of Chemistry, University of Ioannina, 451 10 Ioannina, Greece*

## RNA Biology

- 10** **Synthesis and potency of a spermidine analogue of chloramphenicol**  
**Kostopoulou O.N.<sup>1</sup>, Magoulas G.<sup>2</sup>, Papaioannou D.<sup>2</sup> and Kalpaxis D.L.<sup>1</sup>**  
<sup>1</sup>*Department of Biochemistry, School of Medicine, University of Patras, Greece*  
<sup>2</sup>*Laboratory of Synthetic Organic Chemistry, Department of Chemistry, University of Patras, Greece.*
- 13** **Bioenergetic cross-talk between RNA silencing and photosynthesis in plants**  
**Verret F.G.<sup>1</sup>, Ioannidis N.E.<sup>2</sup>, Kotakis X.<sup>2</sup>, Kotzabasis K.<sup>2</sup>, Kalantidis K.<sup>1&2</sup>**  
<sup>1</sup>*Institute of Molecular Biology and Biotechnology, Foundation for Research and Technology-Hellas, Heraklion, Greece*  
<sup>2</sup>*Department of Biology, University of Crete, Heraklion, Greece*
- 15** **Cloning and expression profiling of two isoforms of the novel human deadenylase PNLDC1**  
**Skeparnias I., Anastasakis D. and Stathopoulos C.**  
*Department of Biochemistry, School of Medicine, University of Patras, Patras, Greece*
- 23** **Persistent cyovirus infection in silkworm larvae: interactions with the RNAi machinery**  
**Kolliopoulou A.<sup>1</sup>, Iatrou K.<sup>1</sup>, Sun J.<sup>2</sup>, Swevers L.<sup>1</sup>**  
<sup>1</sup>*Institute of Biosciences and Applications, Athens, Greece*  
<sup>2</sup>*South China Agricultural University, Guangzhou, China*
- 87** **RNA silencing pathways may have a positive effect on Potato spindle tuber viroid infectivity in *Nicotiana benthamiana***  
**Dadami E.<sup>1,2</sup>, Katsarou K.<sup>1</sup>, Boutla A.<sup>1</sup>, Vrettos N.<sup>1,2</sup>, Tzortzakaki S.<sup>1</sup>, Karakasilioti I.<sup>1,2</sup>, and Kalantidis K.<sup>1,2</sup>**  
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<sup>2</sup>*Department of Biology, University of Crete, Heraklion, Crete, Greece*
- 162** **The role of ribosomal protein L39 as a possible quantitative trait locus in yeast heterosis**  
**Bougas A.<sup>1</sup>, Fridman E.<sup>2</sup>, Synetos D.<sup>1</sup>**  
<sup>1</sup>*Department of Biochemistry, School of Medicine, University of Patras, Patras, Greece*  
<sup>2</sup>*R. H. Smith Institute of Plant Sciences and Genetics, Faculty of Agricultural, Food Quality and Environmental Sciences, The Hebrew University of Jerusalem, Rehovot, Israel*
- 169** **Replication of Potato spindle tuber viroid RNA (PSTVd): Use of different extraction methods and growth conditions for the detection of viroid specific siRNAs**  
**Vogiatzaki E.<sup>1</sup>, Navakoudi E.<sup>1</sup>, Tzortzakaki S.<sup>2</sup>, Mylonaki M.<sup>1</sup>, Kalantidis K.<sup>1,2</sup>, Kotzabasis K.<sup>1</sup>, Tsagris M.<sup>1</sup>**  
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<sup>2</sup>*Institute of Molecular Biology and Biotechnology, Foundation of Research and Technology, Heraklion, Crete, Greece, tsagris@biology.uoc.gr, +30 2810 394367*
- 188** **Two isoforms of HCV core+1/ARF protein are expressed in the context of the HCV replicon system**  
**Kotta-Loizou I., Vassilaki N. and Mavromara P.**  
*Molecular Virology Laboratory, Hellenic Pasteur Institute, Athens, Greece*

## Metabolism of biomolecules

- 25** **Changes of polyamine levels in digestive gland of *Mytilus galloprovincialis* under cadmium stress**  
**Kournoutou G.G., Pytharopoulou S., Kalpaxis D.L.**  
*Department of Biochemistry, School of Medicine, University of Patras, Patras, Greece*
- 119** **Low grade inflammation is associated with the development of obesity but not with the levels of adiponectin in Greek population**  
**Dermitzaki E.<sup>1</sup>, Avgoustinaki P.<sup>1</sup>, Venihaki M.<sup>1,2</sup>, Chlouverakis G.<sup>3</sup>, Malliaraki N.<sup>2</sup>, Spiridaki E.<sup>1</sup>, Vagios E.<sup>1</sup>, Koksarakis G.<sup>1</sup>, Tsatsanis C.<sup>1,2</sup>, Margioris AN.<sup>1,2</sup>**  
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<sup>3</sup>*Lab Biostatistics, Department of Social Medicine, School of Medicine, University of Crete, Heraklion, Crete, Greece*
- 154** **NADPH-oxidoreductase is identified as NO synthase-like enzyme in *Tetrahymena thermophila***  
**Kanioura A.<sup>1,2</sup>, Koltzida P.<sup>1,2</sup>, Gkini E.<sup>1</sup>, Stamogiannos A.<sup>1</sup>, Tsiaila Z.<sup>2</sup>, Kakabakos S.<sup>2</sup>, Siafaka-Kapadai A.<sup>1</sup>**  
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