



**Romanian Society of Biochemistry  
and Molecular Biology**



# ***PROGRAM***

## **The Annual International Conference of the *Romanian Society of Biochemistry and Molecular Biology***

**Bucharest, 5-7th September, 2018**

**Romanian Academy Library, Heliade Radulescu Amphitheatre,  
Calea Victoriei 125, Bucharest**

- Session 1: Protein quality control in the endoplasmic reticulum
- Session 2: Functional genomics, proteomics and bioinformatics
- Session 3: Cellular and Molecular Biotechnologies for Medical Applications
- Session 4: Trends in Bio- and Nano-technologies
- Session 5: Trends in Melanoma Research
- Session 6: Drug development in Hepatitis B and C
- Session 7: Plant biochemistry
- Session 8: Presentations of selected posters

## Wednesday, September 5<sup>th</sup>

9<sup>00</sup>-10<sup>00</sup> Registration

10<sup>00</sup>-10<sup>15</sup> Welcome

10<sup>15</sup>-11<sup>00</sup> Keynote Speaker: **Johanna Rees**: “*Proteomic methods to identify protein interactions and protein microenvironments*” [KS 1]

11<sup>00</sup>-11<sup>20</sup> Coffee break & poster viewing

### 11<sup>20</sup>-14<sup>00</sup> Session 1: PROTEIN QUALITY CONTROL IN THE ENDOPLASMIC RETICULUM

Chair persons: **Johanna Rees, Stefana Petrescu**

11<sup>20</sup>-11<sup>40</sup> Stefana Petrescu: “*ER oxidative stress generates unconventional peptides efficient in immune recognition processes*” [OP 1.1]

11<sup>40</sup>- 12<sup>00</sup> Florentina Pena: “*Is the unfolded protein response (UPR) modulated by PDI (protein-disulfide isomerase) proteins?*” [OP 1.2]

12.<sup>00</sup>-12.<sup>20</sup> Gabriela Chiritoiu: “*Dynamics and solubility of EDEM1 interactors network*” [OP 1.3]

12.<sup>20</sup>- 12.<sup>40</sup> Cristian Munteanu: “*Quantitative glycoproteomics analysis of ER proteins in melanoma cells*” [OP 1.4]

12.<sup>40</sup>-14.<sup>00</sup> Lunch

14.<sup>00</sup>-14.<sup>45</sup>.Keynote Speaker: **Irina Armean**: “*Co-complex proteins: identification and interaction confidence evaluation*” [KS 2]

### 14<sup>45</sup>-16<sup>05</sup> Session 2:FUNCTIONAL GENOMICS, PROTEOMICS AND BIOINFORMATICS

Chair persons: **Irina Armean, Andrei Petrescu**

14.<sup>45</sup>- 15.<sup>05</sup> Daniel Sterbuleac: “*Protein-ligand interactions define the antitumour therapeutic potential of specific heag ion channel blockers: insights from a computational structural biology approach*” [OP 2.1]

15.<sup>05</sup>- 15.<sup>25</sup> Kulaga Anton: “*Comparative transcriptomics of longevity: methods of interspecies RNA-seq analysis*” [OP 2.2]

15.<sup>25</sup>-15.<sup>45</sup> Adina Milac: “*Dynamics-driven functionality as revealed by molecular simulations of soluble and membrane-bound proteins*” [OP 2.3]

15.<sup>45</sup>- 16.<sup>05</sup> Razvan Boiangiu: “*Nicotine metabolic genes in Arthrobacter: Pao1 vs Ak-yn10*” [OP 2.4]

16.<sup>05</sup>- 16.<sup>30</sup> Coffee break& poster viewing

### 16.<sup>30</sup>- 18.<sup>50</sup> Session 3: CELLULAR AND MOLECULAR BIOTECHNOLOGIES FOR MEDICAL APPLICATIONS

Chair Persons: **Sorin Tunaru, Ovidiu Sirbu**

16.<sup>30</sup>- 16.<sup>50</sup> Dana Copolovici: “*Smart products to penetrate difficult to transfect cells*” [OP 3.1]

- 16.<sup>50</sup>- 17.<sup>10</sup> Sorin Tunaru:“*G-protein coupled receptors (gpcr)-mediated biological effects of hydroxylated arachidonic acid (hete) metabolites*” [OP 3.2]
- 17.<sup>10</sup>- 17.<sup>30</sup> Crina Tiron:“*Sevoflurane modulate tumor growth: a molecular study*” [OP 3.3]
- 17.<sup>30</sup>- 17.<sup>50</sup> Mihaela Zlei:“*Flow cytometry data processing: a medical application and a learning tool (diagnostic instrument in acute leukemias and learning opportunity for T and B cell lymphopoiesis)*” [OP 3.4]
- 17.<sup>50</sup>- 18.<sup>10</sup>: Rodica Badea:“*Method of direct identification of protein tyrosine phosphatases that dephosphorylates specific phosphotyrosine residues*” [OP 3.5]
- 18.<sup>10</sup>- 18.<sup>30</sup>: Ovidiu Sirbu:“*Plasma microRNA expression profiles in Parkinson’s disease*” [OP 3.6]
- 18.<sup>30</sup>- 18.<sup>50</sup>: Mihaela Chivu-Economescu:“*Identification and validation of KRT17 as new therapeutic target in gastric cancer*” [OP 3.7]
- 19.<sup>00</sup>- Dinner

## Thursday, September 6th

- 9.<sup>30</sup>- 10.<sup>15</sup> Keynote Speaker: **Annette Damert** „*Composite retrotransposons in gibbons and great apes*” [KS 3]
- 10.<sup>15</sup>- 10.<sup>30</sup> Coffee break & poster viewing

## 10.<sup>30</sup>- 11.<sup>50</sup> Session 4: TRENDS IN BIO- AND NANO-TECHNOLOGIES

Chair persons: **Anca Roseanu, Marin Gheorghe**

- 10.<sup>30</sup>- 10.<sup>50</sup> Florin Jipa:“*Photonic biosystems developed by ultrafast lasers*” [OP 4.1]
- 10.<sup>50</sup>- 11.<sup>10</sup> Mihaela Trif:“*Poly (d,l-lactide-co-glycolide) nanoparticles. Effect of surface properties on their biocompatibility and intracellular fat*” [OP 4.2]
- 11.<sup>10</sup>- 11.<sup>30</sup> Marin Gheorghe:“*Sensitive elements based on carbon microfibres applied to microdevices fabricated with polydimethylsiloxane*” [OP 4.3]
- 11.<sup>30</sup>- 11.<sup>50</sup> Anca Oancea:“*New trends in using nanostructures and nanoparticles in (bio)materials functionalization*” [OP 4.4]

## 11.<sup>50</sup>- 13.<sup>10</sup> Session 5: TRENDS IN MELANOMA RESEARCH

Chair persons: **Robert Evans, Gabriela Negroiu**

- 11.<sup>50</sup>- 12.<sup>10</sup> Gabriela Negroiu:“*The exploitable potential of Tyrosinase related protein -2/Dopachrometautomerase in melanoma prognostic and therapy*” [OP 5.1]
- 12.<sup>10</sup>- 12.<sup>30</sup> Patricia Stanga:“*Melanoma associated fibroblasts-a brief review*” [OP5.2]
- 12.<sup>30</sup>- 12.<sup>50</sup> Constantin Caruntu:“*Neuroendocrine factors in melanoma*” [OP 5.3]

- 12.<sup>50</sup>- 13.<sup>10</sup>. Manuela Banciu:“Trojan horse therapies against cancer” [OP 5.4]  
13.<sup>10</sup>- 14.<sup>30</sup> Lunch  
14.<sup>30</sup>- 15.<sup>15</sup> Keynote Speaker: **Robert Evans, Patricia Evans**“Hereditary haemochromatosis – an advantageous disorder of iron metabolism?”[KS 4]

## 15.<sup>15</sup>- 16.<sup>35</sup> Session 6: DRUG DEVELOPMENT IN HEPATITIS B AND C

Chair persons: **Norica Nichita, Costin Popescu**

- 15.<sup>15</sup>- 15.<sup>35</sup> Norica Nichita:“Edible plants are suitable hosts for expression of complex viral antigens and potential development of an oral vaccine against hepatitis B and C viruses” [OP 6.1]  
15.<sup>35</sup>- 15.<sup>55</sup> Dan Otelea:“HCV treatment – from bedside to bench” [OP 6.2]  
15.<sup>55</sup>- 16.<sup>15</sup> Costin Popescu:“Identification of new inhibitors of Hepatitis C Virus NS2 protease activity using high throughput screening” [OP 6.3]  
16.<sup>15</sup>- 16.<sup>35</sup> Paula Florian:“Human lactoferrin-derived peptides with antiviral properties” [OP 6.4]  
16.<sup>35</sup>-17.<sup>00</sup> Coffee break & poster viewing

## 17.<sup>00</sup>-18.<sup>20</sup> Session 7: PLANT BIOCHEMISTRY

Chair persons: **Carmen Socaciu, Adela Pinte**

- 17.<sup>00</sup>-17.20 Carmen Socaciu: “Plant metabolomics: a new frontier, large scale phytochemistry” [OP 7.1]  
17.<sup>20</sup>-17.<sup>40</sup> Daniel Cruceriu:“*Calendula officinalis*: in vitro selective cytotoxic activities against breast cancer” [OP 7.2]  
17.<sup>40</sup>- 18.<sup>00</sup> Dumitrita Rugina:“Polyelectrolyte microcapsule as target and controlled delivery systems for biomedical applications” [OP 7.3]  
18.<sup>00</sup>- 18.<sup>20</sup> Cristina Tudor:“Bioaccessibility of carotenoids from two Romanian varieties of sea buckthorn berries” [OP 7.4]

## Friday, September 7th

- 9<sup>30</sup>- 10.<sup>00</sup> Poster viewing [P 1 – P 57]

## 9.<sup>30</sup>- 11.<sup>00</sup> Session 8: PRESENTATIONS OF SELECTED POSTERS

Chair persons: **Norica Nichita, Elena Ganea**

- 9.<sup>30</sup>-11.<sup>00</sup>: Authors of selected posters will give 5 minutes presentations [P1 – P 57]

- 11.<sup>00</sup>-11.<sup>30</sup> CONCLUDING REMARKS, AWARDS