2022

December 8-9

43

IBPC

NICOLAE SIMIONESCU

"43 Years on the never-ending road of cardiovascular discoveries"

ANNUAL SCIENTIFIC SYMPOSIUM WITH INTERNATIONAL PARTICIPATION
under the aegis of the ROMANIAN ACADEMY

Romanian Academy Aula, December 8, 10 a.m.

IBPC "Nicolae Simionescu" Aula, December 9, 10 a.m.

Romanian Academy
Institute of Cellular Biology and Pathology
"Nicolae Simionescu"
- ICBP-NS -

Dear colleague,

We invite you to honour with your presence the

ICBP-NS ANNUAL SCIENTIFIC SYMPOSIUM
with international participation
held under the aegis of the
ROMANIAN ACADEMY

"43 years on the never-ending road of cardiovascular discoveries"

December 8-9, 2022

Opening will take place in the Aula of the Romanian Academy,
8th of December at 10 a.m.

We would be glad if you can join us at this anniversary event,
Acad. Maya Simionescu and ICBP-NS team

PROGRAM

Thursday, 8th of December, 2022
Aula of the Romanian Academy

10:00 Opening remarks

- ***Acad. Maya Simionescu**, Director of ICBP-NS*
- ***Acad. Ioan-Aurel Pop,** President of the Romanian Academy*
- ***Prof. Dr. Leonida Gherasim,** Honorary Member of the Romanian Academy*
- ***Prof. Dr. Dragos Vinereanu,** MC-AR, President of the Senate of "Carol Davila" University of Medicine and Pharmacy*
- ***Acad. Doina Popov,** Scientific Secretary of ICBP-NS (1992- 2016)*
- ***Dr. Vlad Alexandru Toma,** winner of the first postdoctoral research grant "Maya and Nicolae Simionescu", 2022*

10:45 Invited lecture

- ***Prof. Dr. Jean Askenasy** (Tel Aviv University, Member of the Romanian Academy): **Where to? The history of human life from the big bang to now (Incotro? Istoria vietii omului de la big-bang pana azi)***

11:30 Coffee break and Poster exhibition *(the hall of the Romanian Academy)*

12:00 Main achievements of ICBP in 2022 (Part 1)

- ***Acad. Maya Simionescu*** *(ICBP-NS Director)*
- ***Dr. Ileana Mânduțeanu, MC-AR*** *(Dept. of Biopathology and Therapy of Inflammation):* ***Molecular interactions between vascular cells and immune cells relevant for atherosclerosis evolution***
- ***Dr. Elena Butoi*** *(Lab. of Inflammation Research):* ***Parathyroid hormone produces dysfunction of human valvular cells***
- ***Dr. Manuela Călin*** *(Lab. of Medical and Pharmaceutical Bionanotechnologies):* ***Biomimetic nanocarriers for inflammation resolution in atherosclerosis***
- ***Acad. Anca Sima*** *(Dept. of Lipidomics):* ***Studies to improve lipid metabolism dysregulation: epigenetics, gene editing and bioactive natural compounds trials***
- ***Dr. Felicia Antohe*** *(Dept. of Proteomics):* ***Proteomics-based precision medicine in non-communicable diseases***
- ***Dr. Adriana Georgescu*** *(Dept. of Pathophysiology and Pharmacology):* ***Promising therapeutic strategies based on stem cell-derived extracellular vesicles and endothelial progenitor cells in cardiovascular disease***

14:00 End of the first day

Friday, 9th of December, 2022
Aula George Emil Palade, ICBP-NS

10:00 Main achievements of ICBP in 2022 (Part 2)

- ***Dr. Anca Gafencu*** *(Lab. of Gene Regulation and Molecular Therapies):* ***Molecular manipulations of the apolipoproteins for therapeutic purposes***
- ***Dr. Ana Vacaru*** *(Proiect BETAUPREG):* ***Stress models to study the impact of UPR activation on beta cells fate***
- ***Dr. Alexandrina Burlacu*** *(Lab. of Stem Cell Biology):* ***Mechanisms of cardiac adaptation to injury in aged mice; can stem cell therapy help?***
- ***Dr. Adrian Manea*** *(Lab. of Molecular and Cellular Pharmacology-Functional Genomics):* ***Pathophysiological role and potential therapeutic implications of histone methylation-related epigenetic pathways in atherosclerosis***
- ***Dr. Irina Titorencu*** *(Lab. of Cell and Tissue Engineering):* ***Mesenchymal stromal cells: tools for bone and skin repair***

11:30 Coffee break / Poster exhibition *(ICBP-NS hall)*

12:00 PhD Students presentations

- ***Teodora Barbălată:*** ***Increased plasma levels of miR-142-3p and mitochondrial DNA could predict unfavourable outcomes in patients after acute myocardial infarction***

- ***Razvan Macarie:*** ***Inflammatory mechanisms and extracellular matrix remodelling upon smooth muscle cells and macrophage cross-talk***
- ***Alexandra G. Lazar:*** ***Ursolic acid reduces atherosclerotic lesion progression in hypercholesterolemic apolipoprotein E-deficient mice by a mechanism involving decreased oxidative stress and inflammation***
- ***Gabriela Florea:*** ***Improvement of HDL particles induced by apolipoprotein A2 fragments***

13:00 Get-together to celebrate the 43rd Anniversary of ICBP-NS

15:00 The concluding Workshop "Achievements and perspectives of INNATE-MI project"

- ***Acad. Maya Simionescu ICBP-NS:*** ***More results - more questions. What's next? (Mai multe rezultate - mai multe intrebari. Ce urmeaza?)***
- ***Dr. Alexandru Schiopu University of Medicine, Pharmacy, Science and Technology, Târgu Mureș:*** **Blockade of S100A8/A9 in inflammatory cardiomyopathy – INNATE-MI and beyond** (Blocarea S100A8/A9 în cardiomiopatiile inflamatorii – INNATE-MI si perspective)

- ***Prof. Dragos Vinereanu, University Emergency Hospital Bucharest (UEHB)***
- ***Conf Dr. Roxana Rimbas, UEHB: The general development of the INNATE project - the human side*** *(Desfasurarea generala a proiectului INNATE - latura umana)*
- ***Dr. Ruxandra Danet, UEHB**: **Results and future prospects** (Rezultate si perspective de viitor)*
- ***Dr. Felicia Antohe, ICBP-NS**: **Proteomics of post myocardial infarction after short term blockade of alarmin S100A9***
- ***Dr. Elena Butoi, ICBP-NS**: **N2-anti-inflammatory neutrophils reprogram macrophages towards a pro-healing phenotype***
- ***Dr. Adrian Manea, ICBP-NS**: **Short-term pharmacological inhibition of alarmin S100A9 reduces NADPH oxidase expression and oxidative stress after myocardial infarction in mice***
- ***Dr. Mihai Bogdan Preda, ICBP-NS**: **The potential of mesenchymal stromal cell therapy for the treatment of acute myocardial infarction***

17:00 – End of Symposium

POSTERS

1. **Arterial vessel wall proteome alteration involved in the regulation of cell death mechanisms in atherosclerosis.** Uyy E, Suica VI, Boteanu RM, Ivan L, Antohe F.
2. **Cardiac alarmins as residual risk markers of atherosclerosis under lipid-lowering therapy.** Suica VI, Uyy E, Ivan L, Boteanu RM, Antohe F.
3. **Design of dual-targeted lipid nanoemulsions for vascular delivery of specialized pro-resolving lipid mediators.** Voicu G, Anghelache M, Deleanu M, Turtoi M, Safciuc F, Mânduțeanu I, Simionescu M, Călin M.
4. **Development of biomimetic nanocarriers for delivery of pro-resolving mediators to atherosclerotic plaque.** Anghelache M, Deleanu M, Anton R, Turtoi M, Voicu G, Mânduțeanu I, Simionescu M, Călin M.
5. **Endocrine disruptor bisphenol A impairs β-cells viability and function by activating a pro-apoptotic UPR.** Daian LM, Tanko G, Vacaru AM, Vacaru AM.

6. **Human dermal fibroblasts and bone marrow mesenchymal stromal cells display different characteristics when cultured in 3D settings.** Gheţu DM, Rosca AM, Tutuianu R, Pruna V, Simionescu M, Titorencu I.

7. **Microvesicle-related and circulating microRNAs as potential biomarkers of diabetic dyslipidemia.** Nemecz M, Stefan DS, Tanko G, Constantin A, Comarița IK, Georgescu A.

8. **Molecular signatures of valvular endothelial cells and monocytes cross-talk in early diabetic conditions.** Tucureanu M, Ciortan L, Manduteanu I.

9. **N1/N2 neutrophil subtypes differentially modulate cardiac fibroblast phenotype.** Gan AM, Cecoltan S, Vadana M, Ciortan L, Mihaila A, Tucureanu M, Macarie R, Simionescu M, Butoi E.

10. **Oscillating glucose induces the increase of inflammatory stress through Ninjurin-1 up-regulation and stimulation of transport proteins in human endothelial cells.** Toma L, Sanda GM, Stancu CS, Niculescu LS, Sima AV.

11. **Phytosomes with biologically active compounds from ginger rhizomes and rose hips have increased bioavailability and antioxidant and anti-inflammatory properties.** Deleanu M, Toma L, Sanda GM, Niculescu LS, Barbălată T, Sima AV, Suciu A, Alexandru G, Crişan I, Popescu M, Stancu CS.

12. **Residual hyperlipidemic stress under lipid lowering treatment may lead toward irreversible NAFLD.** Ivan L, Uyy E, Șuică VI, Boteanu RM, Antohe F.

13. **Short-term pharmacological inhibition of alarmin S100A9 reduces oxidative stress and inflammation after myocardial infarction in mice.** Vlad ML, Mares RG, Lazar AG, Manea SA, Preda MB, Simionescu M, Schiopu A, Manea A.

14. **Smooth muscle cells inflammation and secreted inflammatory mediators are increased upon the cross-talk with macrophages; modulatory effects of ficolin-2.** Macarie R, Tucureanu M, Ciortan L, Gan A, Butoi E, Mândușeanu I.

15. **Stem cell - derived extracellular vesicles reduce the expression of molecules involved in cardiac hypertrophy - in a model of human-induced pluripotent stem cell-derived cardiomyocytes.** Constantin A, Comarița IK, Alexandru N, Filippi A, Vîlcu A, Nemecz M, Georgescu A.

16. **The role of hypoxamiR-210 on macrophage behaviour.** Neculachi CA, Nastase-Rusu EG, Zaccagnini G, Martelli F, Burlacu A, Preda MB.

17. **Therapeutic potential of stem cell-derived extracellular vesicles on atherosclerosis-induced vascular dysfunction and its key molecular players.** Comarița IK, Vîlcu A, Constantin A, Safciuc F, Alexandru N, Nemecz M, Filippi A, Georgescu A.

18. **Transcriptional activation by CRISPR/dCas9 gene editing of endogenous apolipoprotein AI and paraoxonase 1 in enterocytes; beneficial effect on endothelial cell dysfunction.** Toma L, Barbălată T, Sanda GM, Niculescu LS, Sima AV, Stancu CS.

19. **Ursolic acid reduces inflammation and oxidative stress in the kidney of diabetic mice.** Lazar AG, Vlad ML, Manea A, Olariu L, Manea SA.