

**20-21
November
2025**

Program



INTERNATIONAL CONFERENCE

The 42nd ANNUAL SCIENTIFIC SESSION OF THE ROMANIAN SOCIETY FOR CELL BIOLOGY

under the aegis of the Romanian Academy
dedicated to the Researcher and Designer's Day

A hybrid event - online and onsite - 8, B. P. Hasdeu Street, Bucharest
organized by Institute of Cellular Biology and Pathology "Nicolae Simionescu"
Bucharest Branch of Romanian Society for Cell Biology and
Section of Biological Sciences of the Romanian Academy



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by

Institute of Cellular Biology and Pathology “Nicolae Simionescu”
Bucharest branch of Romanian Society for Cell Biology (RSCB)

and

Section of Biological Sciences of the Romanian Academy

Dedicated to the Researcher's and Designer's Day

20-21 November 2025

Locations: online (Zoom) and onsite at ICBP “Nicolae Simionescu”

8, Bogdan Petriceicu Haşdeu Street, Bucharest 050568, Romania

Organizing and Scientific Committee

- **Acad. Maya SIMIONESCU**, President of RSCB
- **Dr. Anca V. GAFENCU**, President of Bucharest RSCB Branch
- **Dr. Loredan S. NICULESCU**, General Secretary of RSCB
- **Prof. Cătălina G. PISOSCHI**, President of RSCB Craiova Branch
- **Prof. Tudor C. BADEA**, President of RSCB Braşov Branch
- **Assoc. Prof. Vlad-Alexandru TOMA**, President of RSCB Cluj Branch
- **Prof. Anca HERMENEAN**, President of RSCB Arad Branch

Motto: Together we can find ideas... and good ideas change the world

Dear Colleagues,

We are delighted to invite you to attend the upcoming International Conference, **the 42nd Annual Scientific Session of the Romanian Society for Cell Biology (RSCB)** held under the auspices of the Romanian Academy.

The Conference is dedicated to “the Researchers and Designer’s Day”.

The event will take place on 20 - 21 November 2025 as a hybrid gathering, both onsite and online, and will be hosted in the Aula George Palade of ICBP-NS.

The conference is intended to be a celebration of our everlasting desire to understand the wonders of the nature, outside and within us, and to share ideas, experiences, get inspiration and build bridges between fields and generations of researchers.

The program includes 10 scientific sessions comprising

- Keynote lectures
- Round Table on *Pathophysiology and Molecular Interactions*
- Round Table on *Modulation of chronic inflammatory response polarization and amplitude by a vertebrate-specific gene: RGC-32*
- Round Table on *Omics Approaches in Molecular Pathology*
- Young Scientists presentations
- Short Communications (ePosters)
- General Assembly of RSCB members

As shown below, the program covers a large diversity of scientific topics, an expression of the development of cellular and molecular biology nowadays.

This year, there will be presented 25 papers and 15 ePosters by 53 participants.

We are lucky to have in our Society excellent senior scientists and numerous young and talented investigators.

We look forward to your valuable participation and appreciate your time and consideration.

Maya Simionescu

and the Organizing Committee

PROGRAM

Day One – Thursday, 20 November 2025

9:30 - 10:15 Opening session

- Acad. Maya SIMIONESCU, President, RSCB
- Acad. Marius ANDRUH, Vice-president of the Romanian Academy
- **Book launch event:** *NICOLAE SIMIONESCU – ARHITECTUL ȘCOLII ROMÂNEȘTI DE BIOLOGIE CELULARĂ*, Ion Longin Popescu

10:15 - 10:45 Scientific Session 1

Chair: Acad. Maya SIMIONESCU

Keynote lecture

- Prof. Kyriakos KYPREOS, ICBP-NS, Bucharest and University of Patras, Greece - *Unmet Cardiovascular Risk beyond LDL-C: Insights into Contributing Factors*

10:45 - 11:00 Coffee break

11:00 - 12:00 Scientific Session 2

Chairs: Prof. Carmen E. COTRUTZ and Assoc. Prof. Vlad-Alexandru TOMA

Round Table - *Pathophysiology and Molecular Interactions*

- Darius D. RUS, Babes-Bolyai University, Cluj-Napoca - *Non-Enzymatic Sugar Association Leads to Structural and Functional Modification in Haemoproteins*
- Marta ANATOLIE, Institute of Animal Physiology and Genetics, Czech Academy of Science, Libechov, Czech Republic - *From Endomitosis to Aberrant Chromosome Pairing: Cellular Mechanisms Driving Clonal Reproduction and Male Sterility in Fish Hybrid Complexes*
- Doinița TEMELIE-OLINICI, "Grigore T. Popa" University of Medicine and Pharmacy Iași - *The Role of IL-6 in Activating the "Molecular Scar" of Psoriasis*
- Kriti PATHAK, Promega GmbH - *NanoLuc[®] Luciferase: A New Era of Gene and Protein Reporter Technologies*

12:00 - 13:00 Lunch break

13:00 - 14:30 Scientific Session 3

Chairs: **Acad. Anca V. SIMA** and **Dr. Camelia S. STANCU**

Young Scientists Communications

- **Teodora BARBĂLATĂ**, Postdoc, ICBP-NS, Bucharest - *Overexpression of Endogenous Apolipoprotein A-I and Paraoxonase 1 Genes in the Liver of apoE^{-/-} Mice by CRISPR/dCas9: an Approach to Impede Atherosclerosis Progression*
- **Marius MULȚESCU**, Ph.D. student, ICBP-NS, Bucharest - *Human Apolipoprotein A-II Modulates the Mitochondrial Respiration in Endothelial Cells*
- **Mihaela G. TURTOI**, Postdoc, ICBP-NS - *Nanodelivery of Bioactive Natural Products to Inhibit Endothelial-to-Mesenchymal Transition: A Novel Therapeutic Strategy for Atherosclerosis*
- **Ruxandra ANTON**, Ph.D. student, ICBP-NS, Bucharest - *Targeted Nanoparticles for Hsp90 Inhibitors Delivery to Fibrotic Cardiac Tissue*
- **Diana V. UȚĂ**, Ph.D. student, ICBP-NS, Bucharest - *Preliminary Data Evaluating the TLR4 Inhibition as a Strategy to Mitigate Diabetic Foot Syndrome*
- **Paul-Ștefan PANAITESCU**, Ph.D. student, "Iuliu Hatieganu" University of Medicine and Pharmacy Cluj-Napoca - *Effect of Gut Microbiota-Derived Metabolite TMAO on Neurodegeneration, Inflammation, Oxidative Stress and Motor Function in Animal Models of Parkinson's Disease*
- **Răzvan-Geo ANTEMIE**, Ph.D. student, "Iuliu Hatieganu" University of Medicine and Pharmacy Cluj-Napoca - *In Vitro Evaluation of the Antioxidant Activity of Polyphenol Quinazolin-4(3h)-One and Catechol Hydrazinyl-Thiazole Derivatives on a Selection of Cell Lines*
- **Ioana REDNIC**, Ph.D. student, University of Medicine and Pharmacy of Craiova - *Antioxidant and Neuroprotective Perspectives of Some Edible Fruit's Extracts Based on a Comparative Phytochemical Profiling and Bioactivity*
- **Bianca SOCEANU**, Ph.D. student, "Grigore T. Popa" University of Medicine and Pharmacy Iași - *The Role of Bioactive Molecular Components of Human Milk in Regulating Cellular Processes*

14:30 - 14:45 Coffee break

14:45 - 15:30 Scientific Session 4

Chairs: **Prof. Anca HERMENEAN** and **Dr. Anca V. GAFENCU**

Short Communications Session (e-Posters) - Part 1

- **Laura M. DĂIAN** et al., ICBP-NS, Bucharest - *Preliminary Dynamics of β -Cell Adjustment to Reduced Mass and Diet-Related Stress*
- **Elena M. LAMBĂ** et al., ICBP-NS, Bucharest - *Sweet Habits: Shaping Pancreatic β -cell Adaptation*
- **Mădălina DUMITRESCU** et al., ICBP-NS, Bucharest - *Expression of Apolipoprotein E4 by Adenovirus-Mediated Gene Transfer to ApoE Deficient Mice Modulates the Properties of HDL in a Dose Dependent Way*
- **Ioana M. FENYO** et al., ICBP-NS, Bucharest - *Apolipoprotein A1 is involved in glucose homeostasis*
- **Nino MARQUÉ** et al., Institut Agro Rennes-Angers, Rennes, France - *Peroxidase Activity of Hemoglobin Subjected to Glycative Stress by Measuring Peroxidase Activity and Molecular Changes in Hemoproteins in a High-Sugar Concentration Microenvironment*
- **Claudia-Andreea MOLDOVEANU** et al., Babes-Bolyai University, Cluj-Napoca - *Matrix Metalloproteinases as Early Biomarkers in Parkinson's Disease*
- **Mihaela BALAȘ** et al., Faculty of Biology, University of Bucharest - *Exploring the Biological Effects of EuTiO_2 Nanoscintillator-Mediated Radio-Photodynamic Therapy in Breast Cancer Cells*

15:30 - 15:45 Coffee break

15:45 - 17:00 Scientific Session 5

Chairs: **Prof. Tudor BADEA** and **Acad. Ileana MÂNDUȚEANU**

Round Table - Modulation of chronic inflammatory response polarization and amplitude by a vertebrate-specific gene: RGC-32

- **Tudor BADEA**, Transylvania University Brașov - *Response Gene to Complement 32 - a Modulator of Inflammatory Responses in Mice and Humans*
- **Sonia VLAICU**, University of Maryland School of Medicine, Baltimore, USA - *The Role of Response Gene to Complement-32 in Atherogenesis*
- **Alexandru TATOMIR**, University of Maryland School of Medicine, Baltimore, USA - *RGC-32 as a new factor regulating reactive astrocytosis in neuroinflammation*
- **Horea RUS**, University of Maryland School of Medicine, Baltimore, USA - *RGC-32 is a Biomarker of Disease Activity and Treatment Response in Multiple Sclerosis*

Day Two – Friday, 21 November 2025

9:30 - 10:00 Scientific Session 6

Chair: **Dr. Felicia ANTOHE**

- **Rostyslav BILYY**, ICBP-NS, Bucharest - *Seeing the Invisible: Imaging Neutrophil-Derived ROS in Tumor and Inflammatory Tissues?*

10:00 - 10:20 Scientific Session 7

Chairs: **Dr. Irina TITORENCU** and **Dr. Elena BUTOI**

Short Communications Session (e-Posters) - Part 2

- **Raluca ȚUȚUIANU** et al., ICBP-NS, Bucharest - *Characterization and Biological Assessment of Sturgeon-Derived Collagen Porous Scaffolds for Soft Tissue Engineering*
- **Sergiu-Marian VATAMANU** et al., ICBP-NS, Bucharest - *Establishment and Characterization of Human Gingival Fibroblast Cultures*
- **Ana-Maria ROȘCA** et al., ICBP-NS, Bucharest - *Composites Based on Collagen, Chondroitin Sulfate, and Sage Oil with Potential Use in Dentistry*
- **Daniela-Mădălina GHEȚU** et al., ICBP-NS, Bucharest - *Phenoxazine Counteracts High-Glucose-Induced Alterations of Human Mitochondrial Genes: Results on Cardiac Organoids*

10:20 - 10:30 Coffee break

10:30 - 11:45 Scientific Session 8

Chairs: **Prof. Ioana STREAȚĂ** and **Prof. Cătălina G. PISOSCHI**

Round Table - Omics Approaches in Molecular Pathology

- **Ioana STREAȚĂ**, University of Medicine and Pharmacy of Craiova - *Multiomics Assessment in Rare Diseases*
- **Anca-Lelia RIZA** and **Mihai G. NETEA**, University of Medicine and Pharmacy of Craiova - *Functional Genomics in Sepsis*
- **Daniel PIRICI**, University of Medicine and Pharmacy of Craiova - *Water channel aquaporin 4 modulates amyloid deposits and cognitive performance in a transgenic animal model for Alzheimer's disease*
- **Adrian FRANTEA**, University of Medicine and Pharmacy of Craiova - *Dual Transcriptome – Proteome Analysis Reveals Distinct Immune Endotypes in Sepsis*

- **Răzvan PLEȘEA**, University of Medicine and Pharmacy of Craiova - *Genotype and Phenotype Correlations in Breast Cancer - Single Center Experience*

11:45 - 12:00 Coffee break

12:00 - 12:30 Scientific Session 9

Chair: **Acad. Maya SIMIONESCU**

Keynote lecture

- **Prof. Anca D. DOBRIAN**, Department of Biomedical and Translational Sciences, Eastern Virginia Medical School at Old Dominion University, Norfolk, VA USA- *Extracellular Vesicles: from cellular sentinels to mediators of the biology of adversity*

12:30 - 12:50 Scientific Session 10

Chair: **Dr. Manuela CĂLIN**

Short Communications Session (e-Posters) - Part 3

- **Carmen NECULACHI** et al, ICBP-NS, Bucharest - *MiR-210 Deficiency Enhances Pro-Inflammatory Activation and Disrupts M2 Macrophage Differentiation in Murine Models*
- **Cătălina MARINESCU-COLAN** et al., ICBP-NS, Bucharest - *From Cancer to Infarcted Hearts: GLIPR1 as a Detrimental Regulator in Activated Cells*
- **Gabriela TANKO** et al., ICBP-NS, Bucharest - *An R Shiny-Based Platform for Automated Quantitative Analysis of Insulin Granule on Electron Micrographs*
- **Alexandra VÎLCU** et al., ICBP-NS, Bucharest - *Exploring the Role of Mitochondrial Dysfunction in Cardiac Hypertrophy in an Experimental Model of Atherosclerotic Cardiovascular Disease; Evaluation of the Therapeutic Potential of MTP-131*

12:50 - 13:00 Coffee break

13:00 - 13:30 General Assembly of RSCB members

- 2025 Reports of RSCB Branches
- 2025 Financial Report for RSCB
- Proposals for 2026 Scientific Meeting of RSCB
- Varia Topics
- Final Conclusions and Remarks: Presidents of RSCB Branches



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