

# 8<sup>th</sup> Congress of the Hellenic Society of Gene Therapy and Regenerative Medicine



HELLENIC SOCIETY  
OF GENE THERAPY AND  
REGENERATIVE MEDICINE  
[www.generegther.gr](http://www.generegther.gr)

30-01  
MAY JUNE  
2025

**PRELIMINARY  
PROGRAM**

Cotsen Hall  
American School of  
Classical Studies  
**ATHENS • GREECE**

[www.hsgtrm2025.gr](http://www.hsgtrm2025.gr)



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## Congress Website

[www.hsgtrm2025.gr](http://www.hsgtrm2025.gr)



e-mail: [info@generegther.gr](mailto:info@generegther.gr)  
web: [www.generegther.gr](http://www.generegther.gr)



## Welcome note

*Dear Colleagues,*

*On behalf of the Organizing and Scientific Committees, it is my great pleasure to welcome you to the forthcoming **8th Annual Meeting of the Hellenic Society of Gene Therapy and Regenerative Medicine**, which will take place in **Athens, Greece on May 30-June 1, 2025**.*

*As in previous years, distinguished scientists and researchers from Greece and Europe have been invited to participate and present the most recent advances in diverse cutting-edge fields within the area of Gene & Cell Therapy and Regenerative Medicine. We look forward to an international forum that will offer ample networking opportunities with high-level scientists from Greece and abroad.*

*The meeting intends to bring together researchers, clinicians, representatives of pharmaceutical companies, postdoctoral scientists and undergraduate or postgraduate students, and to create an all-inclusive environment for cross-communication and the development of fruitful collaborations.*

*The main axes of the meeting revolve around topics such as cancer immunotherapy with CAR-T or non-engineered T-lymphocytes, the therapeutic use of exosomes, the prospects of cord blood banks in regenerative medicine and updates in gene editing. Clinical advances and future challenges in the field of gene therapy for hearing disorders or rare hematological diseases will be presented. The educational program includes the presentation of state-of-the-art tools in the fields of biomaterials, nanoparticles, genomics and the creation of stem cell models for the study of important, so far incurable, diseases. At the same time, the oral and poster sessions will provide an opportunity for young scientists to present their research and interact.*

*The Board of Directors of the HSGTRM is pleased to announce the participation of two internationally leading scientists who will deliver keynote lectures: Professor Douglas Higgs of the University of Oxford on the regulation of gene expression during erythropoiesis in health and disease, and Professor Jacob Hanna from the Weizmann Institute who will present pioneering studies in ex vivo embryogenesis.*

*This year, we will have the great honor to host in the meeting Mr. Terry Pyrovolakis to share with us his tireless and inspiring efforts for development of a new gene therapy for*



*Spastic Paraplegia Type 50, the rare disease from which his son suffers. The journey is still ongoing as his new company, Elpida Therapeutics, hopes to save the lives of many more children with rare diseases.*

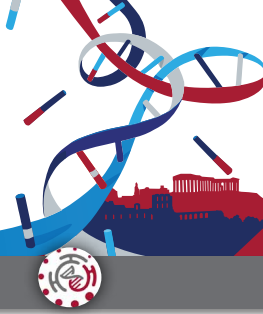
*An important innovation for 2025 is integration within the program of the 1st Young Investigators Forum organized by young scientists, postdoctoral fellows and doctoral candidates, members of HSGTRM. It will take place at the beginning of the meeting on May 30, 2025 and we hope that it evolves into a yearly add-on for promotion of the research of young scientists, members of HSGTRM, and for preparation of the next generation of the Society's leadership.*

*Your active participation and support are prerequisites for the success of the meeting and we look forward to seeing you in Athens.*

*Sincerely,*

**Rebecca Matsas**

*President of Board of Directors*



**ATHENS, May 30th - June 1st, 2025**

## PRELIMINARY PROGRAM

Friday, May 30, 2025

9:00-13:00 **Young Investigators Forum**

9:00-10:45 **Young Investigators Forum - Session 1:  
Decoding Molecular Mechanisms in Health and Disease**

**Chair:** Foteini Vasilopoulou, Angelos Matheakakis,  
Alexandra Stamatopoulou

**CRISPR Screens in Vivo: Uncovering Liver Fibrosis Modulators**  
*Georgios Kalamakis*

**HCV infection and treatment with Direct-Acting Antivirals (DAAs): The role of  
exosomal cargo in the development of liver disease**  
*Eirini Karamichali*

**Human brain organoids: understanding the role of the “niche” in neurogenesis**  
*Yasemi Koutmani*

**Cellular and molecular drivers of normal and perturbed neutrophil development**  
*Christina Simoglou Karali*

10:45-11:15 **Coffee Break**

11:15-13:00 **Young Investigators Forum - Session 2:  
Advances in Cellular and Gene Therapy**

**Chair:** Chrysoula Pantazi, Kyriaki Paschoudi, Afroditi Katsarou

**Optimized constructs and the potential of sequential CARs in LBCL**  
*Anne Marijn Kramer*

**HLA-G+ induced T-Regulatory Cells (iG-Tregs) for GvHD Prevention:  
From Pre-Clinical Evaluation to First-in-human Phase I/II Clinical Trial**  
*Panagiota Christofi*

**Gene therapy approaches for the treatment of hemoglobinopathies  
and cervical cancer**  
*Ekati Drakopoulou*

**In vivo lentiviral gene therapy for distal urea cycle defects**  
*Loukia Touramanidou*

13:00-14:00 **Light Lunch Break**



Friday, May 30, 2025

14:00-16:00 **Session 1: Cell therapies and Immunotherapies**

**Chair:** Anastasia Papadopoulou, Maria Themeli

In vivo site-specific engineering to reprogram T cells

*William A. Nyberg*

CAR-T Point-of-Care therapy in Greece

*Anna Vardi*

Towards next generation of safe, more effective and accessible CART cell therapy

*Maria Themeli*

Umbilical cord blood in transplantation and regenerative medicine

*Helen Papadaki*

16:00-16:30 **Coffee break**

16:30-18:30 **Session 2: Gene Therapy: Innovations and Clinical Breakthroughs**

**Chair:** Nicholas Anagnou, Florentia Papastefanaki

Advancing biological treatment for inner ear disorders:  
current promises and future challenges

*Aziz El-Amraoui*

Gene therapy in  $\beta$  thalassemia

*Evangelia Yannaki*

Gene therapy in DBA

*Susana Navarro Ordonez*

AAV: a gene therapeutic for rare lung diseases

*Maria Limberis*

18:30-18:45 **Short Break**

18:45-19:15 **Special Lecture**

**Chair:** Ioanna Sakellari

Multiple Myeloma in the era of advanced therapies: a shifting treatment paradigm

*Evangelos Terpos*

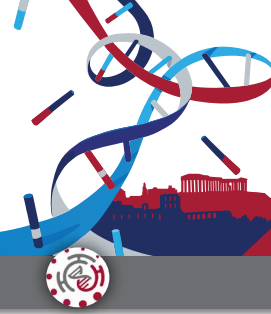
19:15-20:15 **Keynote Lecture**

**Chair:** Rebecca Matsas, Achilleas Gravanis

Synthetic Ex Utero Embryogenesis: from Naive Pluripotent Cells to Complete  
Developmental Models

*Jacob Hanna*

20:15 **Welcome Reception**



**ATHENS, May 30th - June 1st, 2025**

**Saturday, May 31, 2025**

08:15-09:00 **Working Group**

09:00-10:30 **Educational Program**

**Chair: Era Taoufik, Maria Roubelakis**

**Biomaterials and soft robotics for regenerative medicine**

*Dimitrios Tzeranis*

**Nanoparticles in Drug Development: Design, Formulation and Applications**

*Natassa Pippa*

**Stem cells for brain disease modeling**

*Florentia Papastefanaki*

10:30-11:00 **Coffee Break**

11:00-11:45 **Special Lecture**

**Chair: Era Taoufik**

**Bioprinting for construction of tissues and organs**

*Ioanna Zergioti*

11:45-12:45 **Oral Presentations**

**Chair: Panagiotis Politis, Dimitra Thomaidou**

12:45-13:30 **Special Lecture**

**Chair: Stelios Michalakis, Achilles Anagnostopoulos**

**Journey To Cure Michael**

*Terry Pirovolakis*

13:30-14:15 **Light Lunch Break**

14:15-15:30 **Poster Presentations**



**Saturday, May 31, 2025**

**15:30-17:30 Session 3: Genome Editing: Balancing Safety and Efficacy in Therapeutics**

**Chair: Nikoleta Psatha, Stelios Michalakis**

**Engineered VLP Platform for Delivery of Gene Editors: Targeting Inherited Retinal Disorders**

*Gil Westmeyer*

**Genome editing to enable toxin-free HSC transplantation**

*Lukas Jeker*

**Therapeutic genome editing for the treatment of hemoglobinopathies**

*Panayiotis Antoniou*

**Linking CRISPR-Cas9 double-strand break profiles to gene editing precision with BreakTag**

*Vasileios Roukos*

**17:30-18:00 Coffee break**

**18:00-19:00 Keynote Lecture**

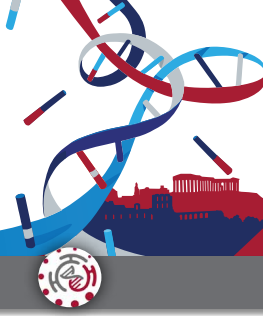
**Chair: Evangelia Yannaki, Nikoleta Psatha**

**Switching genes on and off during erythropoiesis**

*Douglas Higgs*

**19:00-19:45 General Assembly**





**ATHENS, May 30th - June 1st, 2025**

**Sunday, June 1, 2025**

08:30-09:00 **Working Group**

09:00-11:00 **Session 4: Research advances towards therapies of brain disorders**

**Chair:** Rebecca Matsas, Ioannis Charalambopoulos

**iNets:** Human Neural Networks for Neurodegenerative Disease Research and Therapy Development

*Marian Hruska-Plochan*

**Autophagy-targeted therapy to counteract  $\alpha$ -Synucleinopathy: From rodents to non-human primates**

*Maria Xylouri*

**Cell reprogramming as a therapy for Hydrocephalus**

*Stavros Taraviras*

**Neuronal cell survival in vascularized retinal organoids**

*Volker Busskamp*

11:00-11:30 **Coffee break**

11:30-13:00 **Oral Presentations**

**Chair:** Maria Gaitanou, Eleni Katsantoni

13:00-14:00 **Light Lunch Break**

14:00-15:30 **Session 5: Extracellular vesicles in diagnosis and therapy**

**Chair:** Maria Roubelakis, Helen Papadaki

**EVS from fetal sources for regenerative medicine applications**

*Michela Pozzobon*

**The versatile roles of EVs in diagnosis, treatment and development of cancer**

*George Giamas*

**Extracellular Vesicles in the pathogenesis and treatment of Myelodysplastic Syndromes**

*Charalampos Pontikoglou*

15:30-16:30 **Awards-Concluding Remarks and Meeting Closing**

**Rebecca Matsas, Maria Roubelakis**



## Chairs - Speakers

- Achilleas Anagnostopoulos** Past Head, Gene and Cell Therapy Centre, HSCT Unit, Haematology Department, George Papanikolaou Hospital, Thessaloniki, Greece
- Nicholas Anagnou** MD, PhD, Professor of Biology, University of Athens School of Medicine and Head, Laboratory of Cell and Gene Therapy, Foundation for Biomedical Research of the Academy of Athens (IIBEAA), Athens, Greece
- Panayiotis Antoniou** Clinical Medical Manager - Rare Disease, Novo Nordisk, Greece
- Volker Busskamp** Professor for Degenerative Retinal Diseases, University of Bonn, Department of Ophthalmology, Bonn, Germany
- Ioannis Charalambopoulos** Professor of Pharmacology, Medical School, University of Crete & Researcher at the Institute of Molecular Biology and Biotechnology (IMBB), Foundation for Research and Technology Hellas (FORTH), Heraklion, Crete, Greece
- Panagiota Christofi** Gene and Cell Therapy Center, Hematology Department – Hematopoietic Cell Transplantation Unit, “George Papanikolaou” Hospital, Thessaloniki, Greece. Institute of Cell Therapy, University of Patras, Rio, Greece
- Ekati Drakopoulou** Laboratory of Cell and Gene Therapy, Biomedical Research Foundation of the Academy of Athens, Athens, Greece
- Aziz El Amraoui** PhD, Progressive Sensory Disorders, Pathophysiology and Therapy Unit, Université Paris Cité, Institut Pasteur, AP-HP, Inserm, CNRS, Fondation Pour l' Audition, Institut de l'Audition, IHU reConnect, Paris, France
- Maria Gaitanou** Researcher B, Laboratory of Cellular and Molecular Neurobiology-Stem Cells, Department of Neurobiology, Hellenic Pasteur Institute, Athens, Greece
- George Giamas** Professor of Cancer Cell Signalling, Zhejiang Chinese Medical University, Director of International Oncology Institute, Hangzhou, China, University of Sussex, School of Life Sciences, Department of Biochemistry and Biomedicine, Brighton, UK, Visiting Professor: Imperial College, Faculty of Medicine, London, UK
- Achilleas Gravanis** Professor of Pharmacology, School of Medicine University of Crete and IMBB-FORTH, Heraklion, Crete, Greece; Affiliated Research Professor, Center of Drug Discovery, Northeastern University, Boston, MA, USA
- Jacob Hanna** MD, PhD, Professor of Stem Cell Biology and Synthetic Embryology Department of Molecular Genetics Weizmann Institute of Science, Israel
- Douglas Higgs** FRS, Emeritus Professor of Haematology, MRC Weatherall Institute of Molecular Medicine, University of Oxford, John Radcliffe Hospital Headington, Oxford, UK
- Marian Hruska-Plochan** PhD; Scientific Business Developer, MaxWell Biosystems, Zurich, Switzerland; Visiting Scholar, Marsala Lab, Sanford Consortium, UCSD, San Diego, CA, USA
- Lukas Jeker** MD, PhD, Assistant Professor, Experimental Transplantation Immunology & Nephrology Department of Biomedicine, Basel University Hospital and University of Basel, Switzerland
- Georgios Kalamakis** Postdoctoral Research Fellow, Department of Biosystems Science and Engineering, ETH/Novartis BioMedical Research, Basel, Switzerland

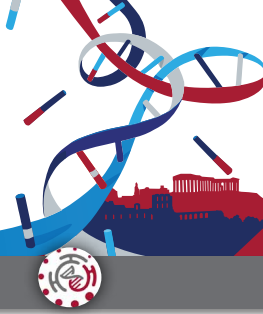
## Chairs - Speakers

<b>Eirini Karamichali</b>	Molecular Virology Laboratory, Hellenic Pasteur Institute. Molecular Microbiology & Immunology Lab, Department of Biomedical Sciences, University of West Attica, Athens, Greece
<b>Eleni Katsantoni</b>	PhD, Investigator C, Biomedical Research Foundation, Academy of Athens, Greece
<b>Afroditi Katsarou</b>	PhD student, Department of Hematology, Amsterdam University Medical Center, The Netherlands
<b>Yasemi Koutmani</b>	Postdoctoral Research Scientist, Biomedical Research Foundation, Academy of Athens, Greece
<b>Anne Marijn Kramer</b>	Stanford University & Amsterdam University Medical Centers, The Netherlands
<b>Maria Limberis</b>	Editor, Human Gene Therapy Journal
<b>Rebecca Matsas</b>	PhD, Research Director, Laboratory of Cellular and Molecular Neurobiology -Stem Cells, Department of Neurobiology, Hellenic Pasteur Institute, Athens, Greece
<b>Aggelos Matheakakis</b>	PhD student, Haemopoiesis Research Lab, School of Medicine, University of Crete, Greece Hematologist, University Hospital of Heraklion, Crete, Greece
<b>Stelios Michalakis</b>	Professor, Department of Ophthalmology, University Hospital, LMU, Munich, Germany
<b>Susana Navarro Ordonez</b>	Project leader as Researcher in public research organisation, Division of Hematopoietic Innovative Therapies, Biomedical Innovation Unit. Centro de Investigaciones Energéticas, Medioambientales y Tecnológicas (CIEMAT), Madrid, Spain. Centro de Investigación Biomédica en Red de Enfermedades Raras (CIBERER), Advanced Therapies Unit, Instituto de Investigación Sanitaria Fundación Jiménez Díaz (IIS-FJD, UAM), Madrid, Spain
<b>William A. Nyberg</b>	PhD, Assistant Professor, Center for Hematology and Regenerative Medicine, Department of Medicine, Huddinge Karolinska Institutet, Stockholm, Sweden
<b>Chrysoula Pantazi</b>	PhD student, Gene and Cell Therapy Center, Hematology Department-HCT Unit, "G. Papanikolaou" Hospital, Thessaloniki, Greece
<b>Eleni Papadaki</b>	MD, PhD, Professor of Haematology, University of Crete School of Medicine, Head of the Department of Haematology, University Hospital of Heraklion, Heraklion, Crete, Greece
<b>Anastasia Papadopoulou</b>	Assistant Professor of Immunobiology, Department of Genetics, Development and Molecular Biology, School of Biology, Aristotle University of Thessaloniki, Thessaloniki, Greece
<b>Florentia Papastefanaki</b>	PhD, Staff Research Scientist, Laboratory of Cellular and Molecular Neurobiology – Stem Cells, Human Embryonic and Induced Pluripotent Stem Cell Unit, Hellenic Pasteur Institute, Athens, Greece
<b>Kyriaki Paschoudi</b>	PhD student, School of Biology, Aristotle University of Thessaloniki, Greece Gene and Cell Therapy Center, Hematology Department-HCT Unit, "G. Papanikolaou" Hospital, Thessaloniki, Greece



## Chairs - Speakers

<b>Natassa Pippa</b>	Assistant Professor, Section of Pharmaceutical Technology, Department of Pharmacy, National and Kapodistrian University of Athens, Greece
<b>Terry Pirovolakis</b>	CEO & Founder Main 1.833.3ELPIDA, Canada
<b>Panagiotis Politis</b>	PhD, Researcher B', Center of Basic Research, Biomedical Research Foundation of the Academy of Athens, Athens, Greece
<b>Charalampos Pontikoglou</b>	Associate Professor of Hematology, University of Crete School of Medicine, University Hospital of Heraklion, Heraklion, Crete, Greece
<b>Michela Pozzobon</b>	PhD, Associate Professor in Applied Biology, PI of Stem Cells and Regenerative Medicine Lab, Department of Women's and Children's Health, University of Padova, Padova, Italy
<b>Nikoleta Psatha</b>	PhD, Assistant Professor, Department of Genetics, Development and Molecular Biology, School of Biology, Aristotle University of Thessaloniki, Greece
<b>Maria Roubelakis</b>	Associate Professor of Biology and Regenerative Medicine, Laboratory of Biology, School of Medicine, National and Kapodistrian University of Athens, Affiliated Research Scientist, Biomedical Research Foundation, Academy of Athens, Greece
<b>Vasileios Roukos</b>	Assistant Professor of Biology, Department of Medicine, University of Patras, Greece
<b>Ioanna Sakellari</b>	Haematologist, Director and Head, Haematology Department - BMT Unit, "G. Papanikolaou" Hospital, Thessaloniki, Greece
<b>Christina Simoglou Karali</b>	Postdoctoral Research Fellow, School of Medicine, National and Kapodistrian University of Athens, Greece
<b>Alexandra Stamatopoulou</b>	PhD student, Laboratory of Biology, School of Medicine, National and Kapodistrian University of Athens, Greece
<b>Era Taoufik</b>	Neuroimmunologist, Principal Investigator, Hellenic Pasteur Institute, Athens, Greece
<b>Stavros Taraviras</b>	Professor of Physiology, Department of Physiology, Medical School, University of Patras, Greece
<b>Evangelos Terpos</b>	Professor of Hematology, Director of Stem Cell Transplantation Unit, Department of Clinical Therapeutics, School of Medicine, National and Kapodistrian University of Athens, Alexandra General Hospital, Athens
<b>Maria Themeli</b>	Assistant Professor, Department of Haematology, Amsterdam University, Medical Centers, Location VUmc, Cancer Center Amsterdam, The Netherlands
<b>Dimitra Thomaidou</b>	Research Director Department of Neurobiology Hellenic Pasteur Institute, Athens, Greece
<b>Loukia Touramanidou</b>	MD, Institute of Child Health, University College London (UCL), UK
<b>Dimitrios Tzeranis</b>	Assistant Professor, University of Crete & Affiliated Faculty Member, IMBB-FORTH



## Chairs - Speakers

<b>Anna Vardi</b>	MD, MSc, PhD, Hematologist, Hematology Department - HCT Unit, "G. Papanikolaou" Hospital, Thessaloniki, Greece
<b>Foteini Vasilopoulou</b>	Postdoctoral scientist, Laboratory of Cellular and Molecular Neurobiology -Stem Cells, Department of Neurobiology, Hellenic Pasteur Institute, Athens, Greece
<b>Gil Westmeyer</b>	MD, Chair of Neurobiological Engineering, TUM School of Natural Sciences & TUM School of Medicine, Technical University of Munich (TUM); Director, Institute for Synthetic Biomedicine, Helmholtz, Munich; Munich Institute of Biomedical Engineering (MIBE), Munich, Germany
<b>Maria Xylouri</b>	PhD, Investigator Assistant Professor Level, Center of Clinical, Experimental Surgery, & Translational Research, Biomedical Research Foundation of the Academy of Athens (BRFAA), Athens, Greece
<b>Evangelia Yannaki</b>	Director, Gene and Cell Therapy Center, Hematology Department-HCT Unit, "G. Papanikolaou" Hospital, Thessaloniki, Greece, Affiliate Professor, University of Washington, Seattle, USA
<b>Ioanna Zergioti</b>	Professor, Physics Department, National Technical University of Athens, PhosPrint, Athens, Greece



## General Information

The **8th Congress of the Hellenic Society of Gene Therapy and Regenerative Medicine** will take place at Cotsen Hall - American School of Classical Studies in Athens, Greece on **May 30th - June 1st, 2025**. The Congress will be held only with physical presence of all participants, Speakers, Chairs and Delegates.

## Registration

In order to register for the **8th Congress of the Hellenic Society of Gene Therapy and Regenerative Medicine**, please visit the Congress website [www.hsgtrm2025.gr](http://www.hsgtrm2025.gr) and fill in the Registration Form.

Category	NON MEMBERS of the HSGTRM	MEMBERS of the HSGTRM
Doctors	140 €	120 €
Biologists, Biochemists, other Medical Professionals	80 €	60 €
Doctors in Residency, Postdoctoral Fellows	80 €	50 €
Nurses, Technologists	40 €	-
Undergraduate Students, Postgraduate Students, PhD Students	Free Participation	Free Participation

\* The above costs are subject to VAT 24%.

Registration includes:

- Entrance in the Exhibition Area and Attendance of the Congress
- Certificate of Attendance

## Congress Secretariat



### Congress World

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