

## INVITED SPEAKERS

### **Nobel Laureate Lectures:**

**Aaron Ciechanover** (Nobel Prize in Chemistry 2004; Technion – Israel Institute of Technology, Haifa, Israel): TBA

**Svante Pääbo** (Nobel Prize in Physiology and Medicine 2022; Max Planck Institute for Evolutionary Anthropology in Leipzig, Germany): Archaic genomes

**Richard Roberts** (Nobel Prize in Physiology and Medicine 1993; Northeastern University, Boston, MA, USA & New England Biolabs, Ipswich, MA, USA): The many roles of DNA methylation in bacteria

**Gregg Semenza** (Nobel Prize in Physiology and Medicine 2019; Johns Hopkins School of Medicine, Baltimore, MD, USA): Targeting hypoxia-inducible factors for cancer therapy.

### **Conference Distinguished Lecture:**

**Manfred Kayser** (Erasmus University Medical Center Rotterdam, Rotterdam, Netherlands): Genetic research to improve forensic practice: the last 20 years

### **ISABS Lecture:**

**John Ioannidis** (Stanford University, Stanford, CA, USA): Science, scientists, and scientific publications: the quest for reproducible and useful research

### **Moses Samuel Schanfield Memorial Session on Forensic Genetics**

**Frederick Bieber** (Harvard University, Cambridge, MA, USA): A close view of forensic genetic genealogy: Successes, challenges, and misapplications of genealogists

**Bruce Budowle** (Department of Forensic Medicine, University of Helsinki, Helsinki, Finland, and Forensic Science Institute, Radford University, Radford, VA, USA): Enhancing human identification with a well-structured forensic investigative genetic genealogy program.

**Mitchell Holland** (Pennsylvania State University, State College, PA, USA): Sequencing ten thousand mitogenomes: Challenges of interpreting the data.

**Walther Parson** (Medical University of Innsbruck, Austria): From forensic genetics to forensic genomics

**Antti Sajantila** (University of Helsinki, Helsinki, Finland): Bridging forensic virology and archaeo-virology

**Susan Walsh** (Perdue School of Science, Indianapolis, IN, USA): From a skull to a face using Forensic DNA phenotyping.

**Henry Lee** (College of Criminal Justice and Forensic Sciences, University of New Haven, West Haven, CT, USA; Henry C. Lee Institute, West Haven, CT, USA): Use and Abuse of Genetics Evidence in Court

### **Mayo Clinic Lectures in Translational Medicine Program:**

**Zvia Agur** (Institute for Medical BioMathematics, Tel Aviv, Israel): Why do COVID patients die?

**Julie G. Allickson** (Mayo Clinic College of Medicine and Science and Mayo Clinic Center for Regenerative Biotherapeutics, Rochester, MN, USA): How we streamline operations for commercial success with execution of early phase clinical trials

**Atta Behfar** (Mayo Clinic, Rochester, MN, USA): Translation of a scalable exosome platform: From ideation to clinical trial applications

**Zwi Bernemann** (University of Antwerp, Antwerp, Belgium): Dendritic cell vaccination in cancer and autoimmune disease

**Kapil Bharti** (National Institutes of Health, Bethesda, MD, USA): Developing an autologous iPSC cell-based therapy for age-related macular degeneration

**Jung Kyoong Choi** (Korea Advanced Institute of Science and Technology (KAIST), Daejeon, Korea): Immunogenomic AI for cancer immunotherapy and diagnosis

**Henry Erlich** (Children's Hospital Oakland Research Institute, Oakland, CA, USA): In silico sequence, size selection and haplotyping using Oxford Nanopore applied to non-invasive prenatal testing of hemoglobinopathies

**Christopher Evans** (Mayo Clinic, Rochester, MN, USA): Progress in clinical translation of gene therapy for osteoarthritis.

**Robert Ferris** (University of Pittsburgh Medical Center, Pittsburgh, PA, USA): Developing innovative therapies and matching treatment intensity for head and neck cancer patients

**Arezou A. Ghazani** (Harvard Medical School and Brigham and Women's Hospital, Boston, MA, USA): Advances in genomic medicine: Genomics, data science and precision health

**Massimiliano Gnecci** (University of Pavia, Pavia, Italy): Induced pluripotent stem cells for personalized risk stratification and therapy in patients with cardiac disease; Mesenchymal stromal cell secretome for heart repair

**Mateja Hajdinjak** (Max Planck Institute for Evolutionary Anthropology, Leipzig, Germany): Zooming into late Neandertal populations with new genomic data

**Robert Hariri** (Weill Medical College, Cornell University, New York, NY; Celularity, Florian Park, NJ, USA): Stem cell therapies for human health and aging

**Tae Hyun Hwang** (Mayo Clinic, Jacksonville, FL, USA): AI-driven 3D modeling and analysis of tumor immune microenvironment and live cell imaging

**Manolis Kellis** (Massachusetts Institute of Technology, The Broad Institute, Cambridge, MA, USA): AI for genomic medicine and therapeutic development

**Saad Kenderian** (Mayo Clinic College of Medicine and Science, Rochester, MN, USA): Chimeric antigen receptor T cell therapy: where are we now and in 2030.

**Toomas Kivisild** (Catholic University Leuven, Leuven, Belgium): Formation of local population structure in North Europe during and after plague pandemics

**Guido Kroemer** (Université de Paris, Sorbonne Université, Institut Gustave Roussy, Hôpital Européen Georges Pompidou): Stress hormones interfering with cancer immunosurveillance

**Gordan Lauc** (Faculty of Pharmacy and Biochemistry, University of Zagreb and Genos, Ltd., Zagreb, Croatia): Glycan biomarkers for personalized preventive healthcare

**Nathan LeBrasseur** (Mayo Clinic College of Medicine and Science, Rochester, MN, USA): Targeting cellular senescence for healthy aging

**David Lott** (Mayo Clinic College of Medicine and Science, Phoenix, AZ, USA): Translational tissue engineering

**Jorge Mallea** (Mayo Clinic College of Medicine and Science, Jacksonville, FL, USA): Machine perfusion: A platform for organ repair and regeneration

**Shai Meretzki** (Bonus BioGroup, Haifa, Israel): Advancing the future of regenerative medicine: Cells and tissue priming for successful translation of effective and accessible therapies

**Eskeatnaf Mulugeta** (Erasmus University Medical Center Rotterdam, Rotterdam, Netherlands): Forensic solutions by single-cell genomic and epigenomic approaches

**Giuseppe Orlando** (Wake Forest University School of Medicine): Mitochondrial transplantation as a strategy to increase organ donor pool

**Dragan Primorac** (ISABS & St. Catherine Specialty Hospital, Zagreb, Croatia; Universities of Split, Osijek and Rijeka, Croatia; Eberly College of Science, The Pennsylvania State University, University Park, State College, PA, USA; The Henry C. Lee College of Criminal Justice and Forensic Sciences, University of New Haven, West Haven, CT, USA; Regiomed Kliniken, Coburg, Germany): Understanding molecular effect of micro-fragmented adipose tissue (MFAT) and mesenchymal stromal cell (MSC) therapy of osteoarthritis

**Elizabeth Rosado Balmayor** (MERLN Institute, Maastricht, The Netherlands): Messenger RNA to induce tissue healing

**Thomas Salinas** (Mayo Clinic, Rochester, MN, USA): Updates in oral/systemic health and reconstruction of craniofacial defects

**Ron van Schalk** (Erasmus University, Rotterdam, Netherlands): Pharmacogenetics: do YOU have your DNA passport for medication?

**Nidhi Shah** (Dartmouth Hitchcock Medical Center, Lebanon, NH, USA): Newborn genome sequencing

**Nikolaos Skartsis** (Mayo Clinic College of Medicine and Science, Rochester, MN, USA): Gene-edited Treg therapies

**Doris Taylor** (Organmet Bio, Inc., Houston, TX, USA): Bioengineering human heart failure solutions in 2024: Genes, proteins, organs

**Serena Tucci** (Yale University, New Haven, CT, USA): Genomic legacy of archaic hominid introgression

**Samuel Volchenboun** (The University of Chicago Medicine, Chicago, IL, USA): Data for the common good: Transforming health through data

**Peter Wehling** (Duke University, NC, USA and Dr. Wehling & Partner, Düsseldorf, Germany): Secretome-based therapy in chronic pain/OA patients and sports Injury - Biology, clinical results and cases

**Laurence Zitvogel** (Institut Gustave Roussy, Villejuif, France): The dirty secret of cancer immunotherapy