

WELCOME TO THE FOURTEENTH ISABS CONFERENCE ON APPLIED GENETICS AND MAYO CLINIC LECTURES IN TRANSLATIONAL MEDICINE!

Dear Colleague,

We invite you to join us at the 14th ISABS and Mayo Clinic Conference: Advances in Application of Artificial Intelligence in Precision Medicine, **Dubrovnik, Croatia, June 15-19, 2026**. The conference is the next in a series of biennial events organized by the International Society for Applied Biological Sciences (ISABS), a society dedicated to promoting applied molecular biology (www.isabs.hr).

Since initiating the series in 1997, we have strived to focus and broaden the scope of the conferences. The focus has been on applying cutting-edge analytical methodology in forensic science. In 2003, programs in forensic medicine and in cellular and molecular medicine ran in parallel with the introductory and closing sessions held jointly. The Cellular and Molecular Medicine program was co-organized with the Mayo Clinic, Rochester, Minnesota, USA. Since 2007, we have broadened the area of interest by the introduction of molecular anthropology that, in large part, shares the methodology with forensic genetics. In 2009, we introduced selected topics from individualized medicine, another applied discipline based on the advances in mapping the human genome. In 2011, we included the most recent and most interesting topics in molecular medicine. In 2013, we included genetics applied to the crossing of forensic science, anthropology, and translational medicine. Mayo Clinic again, same as in the past ten years, joined our efforts. It provided a critical link to the cutting-edge clinical applications of genetics. The overall effort culminated in the incorporation of individualized medicine as the third cornerstone, together with forensic and anthropological genetics. We feel this integration of the three areas, united by technology and applicative intent, provides an unprecedented opportunity for further progress in every respect. In the clinical part of the conference, topics covered the latest achievements in regenerative medicine, gene and cell therapy, individualized medicine, new molecular procedures, and methodology for early detection of cancer, the clinical importance of circulating tumor cells, and immune therapy in cancer treatments. In 2015, we introduced up-to-date results in genomics of individualized medicine, a program in anthropological genetics concerning ancient and modern human genome history, and human genetic history of the continents, and a forensic genetics program with special emphasis on new knowledge in Next Generation Sequencing (NGS) in forensics, DNA investigative intelligence, and advancements in forensic DNA routine. At the 10th ISABS conference's jubilee in Split in 2017, the Nobel Spirit session took place for the first time. This jubilee conference marked a breakthrough towards regenerative medicine and microbiome analysis in forensics, anthropology and medicine, and in 2019, we continued with the same "Nobel

Spirit" achievements. The program in 2024 covered Whole Genome Sequencing for Implementation of Precision Medicine, Gene and Cellular Therapy, Immunotherapy, Pharmacogenomics, Tissue Engineering, Artificial Intelligence in Clinical Medicine, Dendritic Cell Vaccination, Forensic Genetic Genealogy, etc. "Nobel Spirit" provided a forum for the four Nobel laureates to stimulate public discussion on the role of science in solving global health issues, acute regional problems such as brain drain, demographic decline, and cultural and social change.

Together with several conference regulars, this year 2026, will bring many new and exciting names, including Nobel Prize laureates Gregg Semenza and Thomas Südhof. We are pleased that it will be more interesting than ever, and it will include the following topics: AI for Clinical Decision Support, AI-Powered Multi-Omics Integration for Precision Medicine – AI in Precision Oncology, AI-Driven Innovation in Tissue Engineering and Regenerative Therapies, and The Future of AI in Precision Medicine: Ethical, Legal, and Social Implications. Satellite Symposium, Moses Schanfield Memorial Symposium on Artificial Intelligence in Forensic and Anthropological Genetics includes topics: AI in Forensic Reconstruction, AI-Driven Forensic Genomics, AI for Ancestry Inference, and Justice by Design: Ethics of AI in Forensics.

This year, the fifth "Nobel Spirit" will provide a forum for the Nobel laureates to stimulate public discussion on advances in the application of artificial intelligence in precision medicine.

As before, the conference is structured to allow close interaction of the international faculty and attendees. We continue to have traditional Young Investigator Awards and High School Student Future Scientist Awards. Together with formal presentations, there will be meet-the-professor sessions, a gala dinner, and other social occasions meant to enhance opportunities for scientific intercourse, but also to introduce the participants to the town of Dubrovnik, one of the most prominent tourist destinations in the Mediterranean Sea; it carries the appellation of the pearl of the Adriatic. With its remarkable history, Dubrovnik is a city that leaves nobody unmoved, so delighted by its beauty, George Bernard Shaw said, "Those who seek paradise on Earth should come to Dubrovnik". Discover and enjoy the beauties of Croatia, the mild climate, the crystal clear and warm sea, beautiful beaches, virgin nature, and the rich history and cultural heritage. And, above all, enjoy Croatia's warm and friendly people.

We look forward to seeing you in Dubrovnik!

Dragan Primorac
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Program/Conference Directors