

EDITORIAL

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Bringing our genomes to medicine – the 2026 human genome meeting

George P. Patrinos^{1,2,3*}, Juergen K. V. Reichardt⁴, Piero Carninci^{5,6}, Ada Hamosh⁷, Christina Mitropoulou^{3,8} and Vasilis Vasilou⁹

The 2026 Human Genome Meeting (HGM; www.hugo-hgm2026.org) will take place at the Zappeion Megaron Conference Center, April 21–24, 2026 in Athens, Greece (Fig. 1). The theme of the HGM2026 “Bringing our Genomes to Medicine” reflects the focus on various aspects of genome-stratified medicine and therapeutic interventions, including but not limited to large-scale sequencing projects, population genomics, pharmacogenomics, polypharmacy, clinical implementation of precision therapeutics, including genome editing, genome informatics, genome-exposome/microbiome interactions, public health genomics, ethics in genomics, health economics, single cell-genomics, functional genomics and others.

The Human Genome Organization (HUGO; www.hugo-international.org) is an international organization of scientists involved in various aspects of human genetics and genomics. Currently, HUGO has over 2,000 members, from across 92 countries with a mission to promote international collaborative efforts to study the human genome and its variation, as well as related issues raised by our increasing knowledge of the structure and function of the human genome. The main purpose of HUGO is to ensure that the benefits of our increased

understanding of the human genome, its variation, function, and interactions accrue to all. This can only be achieved by ensuring that all world populations are represented, that education about genetics and genomics and the ability to incorporate it into medicine is available around the world and the people who are sequenced have access to genetic counselling to understand the implications of their variants.

HUGO also organizes the HGM, a series of annual scientific conferences for the broad community of genetic and genomic researchers, allowing them not only to enrich their knowledge about the recent genomics findings across complementary fields, but also to interact with industry partners, including startups and biotechnology and pharmaceutical companies and fellow scientists, providing an excellent networking opportunity for established and young investigators. HGM centers on a stimulating and interesting program of plenary lectures, symposia, workshops, training, poster presentations, public lectures, satellite meetings and social events (gala dinner in landmark locations, historical site visits and laboratory tours). Participation of investigators, and especially young investigators, from low- and

*Correspondence:

George P. Patrinos
general.director@pasteur.gr

¹Hellenic Pasteur Institute, 127, Vassilisis Sophias avenue, GR-115 21, Athens, Greece

²School of Health Sciences, Department of Pharmacy, Laboratory of Pharmacogenomics and Individualized Therapy, University of Patras, Patras, Greece

³College of Medicine and Health Sciences, Department of Genetics and Genomics, Zayed Center for Health Sciences, United Arab Emirates University, Al-Ain, Abu Dhabi, UAE

⁴Australian Institute of Tropical health and Medicine, James Cook University, Smithfield, QLD, Australia

⁵Human Technopole, via Rita Levi Montalcini 1, Milan, Italy

⁶RIKEN Center for Integrative Medical Science, Tsurumi, Yokohama, Kanagawa, Japan

⁷Department of Genetic Medicine, Johns Hopkins University, Baltimore, MD, USA

⁸The Golden Helix Foundation, London, UK

⁹Department of Environmental Health Sciences, Yale School of Public Health, Yale University, New Haven, CT, USA



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Fig. 1 The HGM 2026 logo and banner. The HGM2026 logo features the historical Greek landmarks, such as the Parthenon, the caryatids, the traditional island church and the kotinos (the wreath made of olive branches that was given as a prize to the ancient Olympic Games' winners), while the banner features the Parthenon, the sea and the olive tree, reminiscent of the quote from the renowned Greek poet Odysseas Elytis (1981 Nobel Prize in Literature): "If you dismantle Greece, in the end you will see that you are left with an olive tree, a vineyard and a ship. Which means that with these you can rebuild it."

Table 1 Overview of scientific sessions at HGM 2026

• Precision Therapeutics, Nucleic Acids and RNA Therapeutics
• Noncoding RNAs in Human Diseases
• Single Cell Genomics in Human Physiology and Diseases
• AI and Machine Learning in Human Genomics
• Health Economics in Genomic Medicine
• Genome regulations in Three Dimensions (3D genomes)
• Integrating Genome and Exposome for Precision Health
• New Approaches to and Ethical Challenges of Health Data Sharing and Digital Governance
• Advances in Psychiatric Genomics
• Polypharmacy and Pharmacogenomics
• Rare Diseases: from Genomics to Patients
• Precision Oncology: Genomics and Epigenomics of Cancer
• Advances and Controversies in Genomic Newborn Screening
• Epigenetics and Transgenerational Inheritance in Human Health
• Large-scale Genome Projects and The Human Pangenome
• Ancient Genomes and Human Ancestry
• Ethics/ELSI

middle-income countries is encouraged and supported by grants intended for travel support.

This HGM 2026 will bring together renowned scientists—particularly geneticists—as well as experts in the exposome, microbiome, and genome–environment interactions, alongside clinicians, early-career researchers, and other professionals, in Athens, Greece.

We have planned prominent keynote lectures, plenary lectures in several scientific sessions addressing advances in genomic research with a focus on diversity, and fruitful discussions to promote exchange of data and ideas (Table 1).

Drawing on a truly broad-reaching and international line up of experts, HGM 2026 promises to be both a dynamic forum for scientific exchange and a unique opportunity to bring together global expertise, with the ultimate aim of advancing Precision Medicine and other genomics- and RNA-based therapeutics, which will be

progressively implemented in healthcare settings. The scientific program covers a wide range of topics, spanning from system biology and epigenomics to genomic technologies and applications; from conventional and nucleic acids-based drugs discovery to gene therapy, pharmacogenomics and polypharmacy; from computation genomics and bioinformatics to genetic and genomic databases, including single cell approaches, aiming to share the most up-to-date research trends, results, information and databases which often sparks off new collaboration opportunities. Also, working together with the HUGO sub-committees, there will also be meetings specially catered for discussions of ethics, genomics education and other topics that impact on society. In addition, HGM 2026 will bring in educational workshops and sessions for students and early-career scientists, including opportunities to present their work, receive mentoring, and participate in corporate lectures and workshops. A specific day prepared for students, trainees, and early career scientists will occur on April 21 at the Hellenic Pasteur Institute.

Abstracts submitted for presentation at HGM 2026 will be published in a special issue of *Human Genomics* (the official journal of HUGO), ensuring broad dissemination of the research presented at the meeting.

Finally, the HGM 2026 will be associated with related satellite events, namely the Personalized Medicine Conference, organized in Greece since 2021 as part of the Genome of Greece project (www.gogreece.org.gr), and the Greek National DNA Day (April 25, 2026).

The HGM 2026 conference organizing activities are facilitated by the Regional office of the Golden Helix Foundation (www.goldenhelix.org) for Eastern Europe and the Mediterranean, bringing in its large international network of the Genomic Medicine Alliance (www.genomicmedicinealliance.org) with over 2100 members in 70 countries and a long experience of genomic medicine



Fig. 2 The Zappeion Megaron conference center, the historical venue of the HGM 2026, originally built for the first modern Olympic Games in Athens in 1896

conference organization in more than 22 countries worldwide.

The venue, Zappeion Megaron, is a large, palatial building situated next to the National Gardens of Athens in the very heart of Athens (Fig. 2). It is generally used for important meetings and official ceremonies and is one of the city's most renowned landmarks, as the first building to be erected specifically for the revival of the Olympic Games in the modern world in 1896, by the designer of the Austrian Parliament Building.

Athens is a modern and vibrant cosmopolitan city of over 5 million people and unique in the world. An historic city where the ancient, the old and the modern is harmoniously blended, a city surrounded by mountains and splashed by the Aegean Sea, a city known as the cradle of democracy, civilization, philosophy, arts, and home of one of Europe's busiest ports, in summary one of the most vibrant and attractive cities in the world with rich attractions, night life and gastronomy. As such, given also the mild climate in April at the time of the HGM 2026,

it is an excellent opportunity to complement a comprehensive update on the most recent developments in Precision Medicine and Genomics along with a memorable visit to an historic city in a perfect time of the year where the temperature is mild and the sea warm and inviting.

Together, these components promise an inspiring and memorable event. We look forward to welcoming you to Athens for HGM 2026 next April.

Declarations

Competing interests

VV serves as the Editor-in-Chief, GPP, JKVR, as Executive Associate Editors, and PC as member of Senior Advisory Board of the Human Genomics journal. AH, and CM declare no competing interests.

Published online: 14 August 2025

Publisher's note

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.