Special Issue

Advances in the Use of Machine Learning for Personalized Medicine

Message from the Guest Editor

The field of personalized medicine has been revolutionized by recent advancements in machine learning (ML), particularly with the emergence of large language models (LLMs) and other sophisticated AI technologies. These innovations are transforming healthcare decision-making, treatment planning, and patient care across various medical specialties. Historically, personalized medicine has evolved from a one-size-fits-all approach to increasingly tailored treatments based on individual patient characteristics. The integration of ML algorithms has accelerated this progression, enabling the analysis of vast and complex datasets to derive actionable insights for patient care. This Special Issue aims to explore cutting-edge ML applications in personalized medicine, with a particular focus on recent developments such as the use of LLMs in clinical decision support, AI-driven diagnostic tools, and predictive analytics for treatment optimization. We seek to highlight innovative research that demonstrates the potential of ML to enhance diagnostic accuracy, treatment efficacy, and patient outcomes.

Guest Editor

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Deadline for manuscript submissions

25 January 2026

Journal of Personalized Medicine

an Open Access Journal by MDPI

CiteScore 6.0
Indexed in PubMed

mdpi.com/si/217376

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mdpi.com/journal/jpm

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About the Journal

Message from the Editor-in-Chief

Journal of Personalized Medicine is one of the few journals that covers the diverse areas involved in the field, including research at basic, translational, and clinical levels. It focuses on "omics"-level studies that seek to define the basis of interindividual variation in susceptibility for a disease, its prognosis or definition of clinical
subsets, and response to therapy (pharmacogenomics). We are also interested in systems biology as it relates to interindividual variation, and research on new methodologies, informatics, and biostatistics, in the aforementioned areas.

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