Special Issue

Artificial Intelligence in Reproductive Medicine: Challenges and New Perspectives

Message from the Guest Editors

Artificial Intelligence (AI) is rapidly transforming the field of reproductive medicine, offering unprecedented opportunities to enhance diagnostic accuracy, optimize treatment strategies, and personalize patient care. From embryo selection and endometrial assessment to predictive models for treatment outcomes and automated analysis of large-scale clinical datasets, Aldriven approaches are reshaping both research and clinical practice. Despite these advances, significant challenges remain: the need for standardized datasets, validation across diverse populations, transparency of algorithms, and careful consideration of ethical, legal, and societal implications. This Special Issue aims to bring together cutting-edge contributions that explore the integration of AI technologies into reproductive health. Topics include, but are not limited to, machine learning applications in assisted reproduction, natural language processing for clinical records, computer vision in embryology, predictive analytics for infertility treatments, as well as the regulatory and ethical frameworks required for safe implementation.

Guest Editors

Dr. Antonio Damato

Dr. Andrea Etrusco

Prof. Dr. Andrea Tinelli

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Bioengineering
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
bioengineering@mdpi.com

mdpi.com/journal/bioengineering





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Editor-in-Chief

Prof. Dr. Anthony Guiseppi-Elie Department of Biomedical Engineering, Texas A&M University, College Station, TX 77843, USA

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