

## Special Issue

# Advanced Technologies for Orthopedic Repair and Regeneration

### Message from the Guest Editors

Advanced technologies are revolutionizing the treatment of orthopedic conditions, offering increasingly effective and personalized solutions for the repair and regeneration of bone and cartilage tissues. Among the most promising innovations are regenerative medicine, 3D printing, smart biomaterials, and immunoengineering.

This Special Issue focuses on the application of cutting-edge technologies—such as 3D printing, bioactive materials, and predictive modeling—for orthopedic repair and regeneration. Particular emphasis is placed on strategies that are quantitative, minimally invasive, and translational, with the goal of developing disruptive, patient-specific therapeutic approaches that restore musculoskeletal function.

We welcome original research articles, short communications, clinical studies, case reports, and review papers spanning from basic science to clinical application. Submissions should explore innovative and integrative approaches to enhance bone and cartilage regeneration while improving clinical outcomes.

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### Guest Editors

Dr. Adriano Braile  
Dr. Mariantonia Braile  
Prof. Dr. Giuseppe Toro

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### Deadline for manuscript submissions

31 August 2026



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### Editor-in-Chief

Prof. Dr. Anthony Guiseppi-Elie

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