

Special Issue

Translational Research in Dentistry: Latest Advancements and Prospects

Message from the Guest Editor

Translational research has emerged as a pillar of innovation in modern dentistry, effectively bridging the gap between laboratory discoveries and their application in clinical settings. This dynamic field integrates interdisciplinary knowledge from biomedical sciences, materials engineering, molecular biology, and clinical practice to accelerate the development of novel diagnostics, therapeutics, and regenerative strategies. As the demand for personalized and minimally invasive dental care grows, translational research plays a pivotal role in transforming promising scientific breakthroughs into viable solutions that enhance patient outcomes. Recent advances in stem cell therapies, biomimetic materials, digital dentistry, and microbiome research are reshaping the landscape of oral health care. Technologies such as 3D bioprinting, AI-driven diagnostics, and gene editing are no longer theoretical but are rapidly progressing toward clinical translation. This Special Issue invites high-quality contributions that highlight cutting-edge research, clinical trials, technological innovations, and future directions in translational dentistry.

Guest Editor

Dr. Roberta Gasparro

Department of Neuroscience, Reproductive Science and Dentistry,
University of Naples Federico II, 80131 Naples, Italy

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

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About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,
20133 Milano, Italy

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