Celebrating the 2nd anniversary of *Biomaterials Translational*

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December 2022 marks the 2nd anniversary of the foundation of *Biomaterials Translational*. The birth of our journal occurred in the middle of the coronavirus disease 2019 (COVID-19) pandemic. Despite the enormous disruption of human life and global interactions, the launch of *Biomaterials Translational* has drawn great attention from peers in the research fields of biomaterials science and translational medicine. Over the past 2 years, *Biomaterials Translational* has published nine issues with a total of 71 articles, including 17 research papers, 39 literature reviews, 15 viewpoint essays and editorials. The website can be visited at http://www.biomat-trans.com/, with 17,205 views of articles and 32,207 downloads (up to December 21, 2022). Both citations and journal website visits have increased significantly since *Biomaterials Translational* was first included in PubMed in July 2022.

In addition, *Biomaterials Translational* has also hosted 10 virtual forums over the 2 years. The topics cover a wide spectrum of translational research on biomaterials and related areas, including hydrogels, additive manufacturing, biodegradable metal (magnesium), drug delivery, microneedles, skeletal interoception and stem cell research. Over 20,000 audience members attended these online forums through our virtual broadcast platforms. We will continue our efforts to use this journal and the forum as a bridge to connect scientists and engineers in biomaterials research to clinicians from the frontiers of biomedicine.

In this issue, we include articles that focus on different aspects of biomaterials research. It remains a great challenge to connect a transdermal artificial prosthesis to the bony structure of an amputated limb due to the skin wound which may cause mechanical failure and infection. Giusto et al.[1] report a method of optimising soft tissue in-growth *in vivo* by using additive layer-manufactured porous flanges that are tested in an ovine model. Fan et al.[2] review the development of H_2S-releasing biomaterials in clinical medicine, in particular the potential applications to wound healing, cardioprotection and other conditions. Osteochondral defect animal models are critical for the studies of biomaterial-assisted osteochondral repair. Wang et al.[3] review osteoarthritis animal models for assessments of osteochondral regeneration using novel biomaterials. The benefits, limitations, surgical procedures, and the use of novel biomaterial applications on osteochondral defects are discussed.[3] Skeletal stem cells are spatially distributed in the growth plate, periosteum, and bone marrow of long bones, as well as in craniofacial bones. In the review '*New perspective of skeletal stem cells*', Yuan et al.[4] discuss the use of fluorescence-activated cell sorting, lineage tracing, and single-cell sequencing, which have been used to map the lineage of skeletal stem cells. Several signalling pathways to regulate the skeletal stem cell niche are also highlighted.

There are also two viewpoint essays in this issue. The first discusses skeletal interoception as an emerging area for musculoskeletal research.[5] This is in response to our recent forum entitled '*Skeletal interoception regulation in bone homeostasis and disorders*', highlighting the importance of recent research on central nervous system control and regulation of the skeleton through sensory and sympathetic nerves. The second discusses a recent report of the application of engineered exosomes for future gene-editing therapy.[6]

Many experts have declared that COVID-19 is moving from a pandemic to an endemic state. At this moment, we indeed can see the light at the end of the tunnel, largely thanks to global awareness and collaboration, the unprecedented rapid development of COVID-19 vaccines, the success of new anti-COVID-19 drugs, and the effective treatment plans developed over the years. However, we shall not forget the lessons we have learned over the past three years from

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this global war against COVID-19: (1) science and modern medicine are the key to defeat any disease; (2) policy making should ONLY rely on science and validated information; (3) barrier-free communication can greatly accelerate the research and development of new medicine and medical tools; and finally, (4) our biggest enemy is not any disease, instead, it is human IGNORANCE and ARROGANCE. If we do not learn these lessons, the health and human tragedy and the economic crisis caused by COVID-19 will all be in vain! Dear readers, as true believers of science, we won't let that happen!

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