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Editorial

Tissue Engineering Is Under Way

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Tissue engineering involves biomaterials, stem cells, associated factors and construction technologies, and clinical translation. Researchers from around the world have put great effort into making breakthroughs in the translation and application of tissue engineering. In recent years within China, scholars in this field have conducted highly successful work, such as: artificial skin substitutes for burn therapy (Xiaobing Fu et al.: *In vitro* constitution and *in vivo* implantation of engineered skin constructs with sweat glands, *Biomaterials*); induced pluripotent stem cells (Qi Zhou et al.: Production of mice using iPS cells and tetraploid complementation, *Nature Protocols*); skin tissue engineering products (Yan Jin et al.: Electrospun fibrous mats with high porosity as potential scaffolds for skin tissue engineering, *Biomacromolecules*); tendon tissue engineering (Yilin Cao et al.: Repair of cranial bone defects with adipose-derived stem cells and coral scaffold in a canine model, *Biomaterials*); and nerve tissue engineered grafting (Mara Hvistendahl: China's push in tissue engineering, *Science*; Xiaosong Gu et al.: Neural tissue engineering options for peripheral nerve regeneration, *Biomaterials* [leading opinion]).

To promote the development of tissue engineering, this issue of our journal contains a special column on this topic, aiming to provide an important platform for international academic and technological exchanges. For this special column, we invited the following review articles: Noncoding RNAs and their potential therapeutic applications in tissue engineering (Xiaosong Gu et al., p. 3); Regenerative engineering for knee osteoarthritis treatment: Biomaterials and cell-based technologies (Cato T. Laurencin et al., p. 16); Recent progress in cartilage tissue engineering—Our experience and future directions (Yilin Cao et al., p. 28); Biophysical regulation of cell behavior—Cross talk between substrate stiffness and nanotopography (Kam W. Leong et al., p. 36); and Tethering of Gly-Arg-Gly-Asp-Ser-Pro-Lys peptides on Mg-doped hydroxyapatite (Alessandro Pistone et al., p. 55). With this platform, we hope that more colleagues around the world can work together to push forward the development of tissue engineering.

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