EDITORIAL

Cell powered biobots and more perspectives for IJB

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At the end of 2016, *International Journal of Bioprinting* (IJB) is able to estimate its first mock impact factor. Based on one issue published in 2015, the 2016 mock impact factor for IJB is calculated to be 6, excluding self-citations! This result is surprising, impressive and encouraging. However, this is just a beginning and more and more quality articles and reviews are needed in order to maintain it.

Tissue transplants and *in vitro* tissue models are common applications of bioprinting. Recently, a new application of bioprinting is emerging, namely cell powered biobots. Cell powered biobots are biohybridmotile microsystems that are made from freeform deposition of living cells and other materials. Cells are used to power the motility of the microsystem such as walking, swimming or flying, depending on design intent. Cells can also be genetically engineered for remote control. These battery-free dynamic microsystems may have unimaginable applications in biomedical science and engineering in future. We do welcome submissions from this interesting research area as well.

We would also like to take this opportunity to invite any person or organization to express their honest views on bioprinting, to share what they think are the crucial questions in bioprinting. These perspective or commentary papers can be shorter than a standard article but must convey a clearly outlined point of view. Bioprinting is a super exciting topic all over the world now. Many approaches and diverse focuses co-exist with one another. Some views are even opposing. Advancement in bioprinting is certainly important, but perspectives from other professions are equally important.

In this issue, there are 3 reviews, 4 original research articles and 1 perspective. Liew and Zhang review *in vitro* pre-vascularization strategies for tissue engineered constructs[1]. Whitford and Hoying review recent development in bioinks that support vascularization[2]. Lee *et al*. review recent bioprinter modifications for developing new cell printing systems[3]. Koch *et al*. present a parametric study of laser for laser-assisted bioprinting[4]. Murphy *et al*. report a solvent evaporation method to print polymer/bioactive glass composite scaffolds with stem cells incorporated[5]. Sing *et al*. investigate titanium/tantalum/ collagen-based biphasic implants for repairing osteochondral defects[6]. Liu *et al*. study the morphology of polycaprolactone scaffold made by electrohydrodynamic jetting[7]. Suntornnond provides a perspective on the role of support materials in bioprinting[8].

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