

Contents lists available at ScienceDirect

Journal of Controlled Release

journal homepage: www.elsevier.com/locate/jconrel



Editorial



Since its advent in the 1950s, the field of drug delivery has provided numerous state-of-the-art technologies that enhance drug convenience, safety and effectiveness. However, clinical development of new drug delivery technologies that meet expectations has become sluggish over the past couple of decades, which motivated a number of established leaders and young scientists in the field to convene and initiate a discussion to scrutinize this reality. The embodiment of this discussion was the "Korean Academy and Technology Symposium (KAST) for Young Scientists in Drug Delivery" where distinction between true achievements and hype built upon unsubstantiated assumptions was made. This special issue of JCR was organized to share the spirit of this meeting and to challenge young scientists to boldly and critically face the reality, so that they can bring about truly transformational innovation to the areas of unmet medical need.

We start this issue with embracing the uncomfortable truth of nanotechnology that has long taken an unquestioned throne of the drug delivery realm. The JCR Editor-in-Chief, Kinam Park, while painfully walking through the current stagnation, provides insightful considerations and lessons to young scientists who are to reinvigorate the field. The following reviews confront and debunk long-standing dogmas that may have weak clinical or biological connections, or provide new perspectives to engineering drug delivery vehicles. The rest of the issue consists of original research articles resulting from multi-disciplinary efforts among scientists, engineers and clinicians, reflecting the theme shared through the KAST symposium. We hope that this special issue of JCR serves to reorient the field, opening the door to the next era of drug delivery technologies that effectively solve some of our most serious clinical problems.

Jung Soo Suk, Junghae Suh, Honggang Cui, Anthony J. Kim, Seulki Lee, Yoon Yeo