Current Topics**Recent Advances in Research on Particulate Formulations such as Lipoproteins, Liposomes, Extracellular Vesicles, and iPS-Derived Cells****Foreword**

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The 34th Annual Meeting of the Academy of Pharmaceutical Sciences and Technologies, Japan (APSTJ) was held in Toyama, Japan, May 16–18, 2019. In this meeting, we organized a joint symposium between the Pharmaceutical Society of Japan and APSTJ. The theme of the symposium was “Recent Advances in Research on Particulate Formulations such as Lipoproteins, Liposomes, Extracellular Vesicles, and iPS-Derived Cells.” We as organizers invited four major researchers in Japan, who each delivered excellent lectures. We further invited them to submit their review articles for publication in *Current Topics in Biological and Pharmaceutical Bulletin* and all invited speakers accepted our invitation.

In this Current Topics section, Dr. Yoshinobu Takakura and colleagues describe the application of small extracellular

vesicles for drug delivery. Dr. Hideyoshi Harashima and colleagues introduce some recent advances on lipid nanoparticles for cell-specific *in vivo* targeted delivery of nucleic acids. Drs. Tatsuya Murakami and Ryosuke Fukuda summarize their research with lipoprotein-based nanoparticulate formulations for the treatment of eye diseases. Dr. Hiroyuki Mizuguchi and colleagues introduce their research with human iPS cell-derived hepatocyte-like cells for cellular medicine.

These reviews provide an intimate understanding of recent advances in research on artificial and cell-derived particulate and cellular formulations. As the editors of this Current Topics, we sincerely thank all the authors for their valuable contributions.

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