molecular pharmaceutics

editorial

Biodistribution of Nanomedicines

This special issue of *Molecular Pharmaceutics* describes the distribution of candidates for nanomedicine in reviews and original contributions to the literature. With growing interest and emphasis on the clinical translation of such constructs, it is imperative that their biodistribution be understood. Throughout this issue, case studies of well-characterized nanomaterials offer insight into this important area.

This issue comes on the heels of the 7th International Symposium on Polymer Therapeutics hosted by the Center of Investigation of Principe Felipe in Valencia, Spain. Like pedestrians traveling through Santiago Calatrava's creations in Valencia's new City of Arts and Sciences (shown on the front cover), some of the architectures move with a purpose. Examples include integrin-targeted PAMAM dendrimers from Brechbiel's group, alendronate-decorated copolymers of HPMA from Kopeček's laboratory, and constructs targeted to hyaluronan or the hyaluronan receptor, CD44, from Szoka's laboratory. Other constructs meander. Alexis focuses on polymer blend nanoparticles. The wanderings of our own triazine dendrimers appear to be impacted by the number and size of PEG chains. Li discusses the pharmacokinetics in more general terms. Dobrovolskaia and co-workers from the Nanotechnology Characterization Laboratory describe interactions of nanoparticles with the immune system. Amiji describes paclitaxel-loaded polymer blends in a breast cancer model.

The metric that we, as guest editors, use to judge whether a project like this one is successful largely derives from who agrees to contribute. To this end, we are pleased with the outcome. We would be remiss if we did not acknowledge the guidance of Ms. Kim Barrett of *Molecular Pharmaceutics* or the efforts of Ms. Julie Farrar who assembled the cover. Enjoy the read!

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MP800083A

10.1021/mp800083a CCC: $40.75
Published on Web 08/04/2008