



## Editorial

## Personalised medicines

Personalised medicine has become a by-word for the future of drug choice for individuals, selective clinical trials and drug delivery. In some quarters personalised medicine is seen as genomics driven, whereas there are some who believe that the concept, if it is to succeed and become more than mantra, requires more personalised dosage forms and their more thoughtful delivery. What role does pharmaceutics play in this brave new world? Pharmaceutics with its mission to invent and develop delivery systems which are safe and effective, cannot exist only as a technology: its practitioners must be aware of, and driven by, wider health care issues.

The journal recently published an excellent review by Wening and Breitzkreutz (2011) on the important topic of drug delivery in personalised medicine. It critically draws attention to the fact that personalised medicine means more than new drugs chosen against genetic profiling. It implies also an enhanced delivery of these agents to groups of patients, not least the varied paediatric and geriatric populations, as well as those in between! The review describes an array of delivery systems through which dosing can be made more attuned to individual patients than many existing forms of medication.

This indeed was one of the themes discussed at an LTS Academy Meeting on "Personalised medicines: unmet needs", held in May 2010 in New Orange, USA, which we organised and chaired. Professor Breitzkreutz presented there. In the present issue we publish several contributions which reflect some of the other issues discussed. There are two commentaries, one by Sadee (2011) on the genomic aspects of personalised medicine, one from ourselves (Florence and Lee, 2011) and papers from Friere et al. (2011), Crommelin et al. (2011), Knibbe and Danhof (2011). We trust that these are the precursor of many more, hence the call for papers below.

### 1. Call for papers in the area of personalised medicines

We hope that these papers and commentaries will encourage authors to contribute further papers to the *International Journal of Pharmaceutics*. We wish to promote debate in the role of our subject in personalised medicine and more widely in health care. We hope to attract papers on these topics. The challenge for us all is to play a

larger role in ensuring that patients benefit from the developments in pharmaceutics, biopharmaceutics and the other disciplines.

We will consider papers on the multifaceted dimensions of personalised medicine. This should act as a stimulus for the pharmaceutical community to harness the enormous strides made in life sciences, nanotechnology and nanoscience, information sciences and technologies to create a new framework for drug discovery, development, delivery, monitoring and regulation.

### References

- Crommelin, D., Storm, G., Luitjen, P., 2011. Personalized medicine through personalised medicines: time to integrate advanced, non-invasive imaging approaches and smart drug delivery systems. *Int. J. Pharmaceut.* 415, 5–8.
- Florence, A.T., Lee, V.H.L., 2011. More tailored drugs, more tailored delivery. *Int. J. Pharmaceut.* 415, 29–33.
- Friere, A.C., Basit, A.W., Choudhary, R., Piong, C.W., Merchant, H.A., 2011. Does sex matter? The influence of gender on gastrointestinal physiology and drug delivery. *Int. J. Pharmaceut.* 415, 15–28.
- Knibbe, C., Danhof, M., 2011. Individualized dosing regimens in children based on population PKPD modelling: are we ready for it? *Int. J. Pharmaceut.* 415, 9–14.
- Sadee, W., 2011. Genomics and personalised medicine. *Int. J. Pharmaceut.* 415, 2–4.
- Wening, K., Breitzkreutz, J., 2011. Oral drug delivery in personalized medicine: unmet needs and novel approaches. *Int. J. Pharmaceut.* 404, 1–9.

Co-guest Editor  
Vincent H.L. Lee\*

*The Chinese University of Hong Kong, School of Pharmacy, Faculty of Medicine, Shatin, N.T, Hong Kong, China*

Co-guest Editor, Editor-in-Chief  
Alexander T. Florence<sup>a,b</sup>

<sup>a</sup> *Professor Emeritus, University of London, 18 Marine Parade, City Quay, Dundee DD1 3BN, United Kingdom*

<sup>b</sup> *La Providence G, 7 rue Sincaire, 06300 NICE, France*

\* Corresponding author. Tel.: +852 2609 6862;  
fax: +852 2603 5295.

E-mail addresses: [vincent.lee@cuhk.edu.hk](mailto:vincent.lee@cuhk.edu.hk) (V.H.L. Lee), [ataylorflorence@aol.com](mailto:ataylorflorence@aol.com) (A.T. Florence)

Available online 23 March 2011