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Editorial

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The current issue of the Journal contains articles that were presented on the occasion of Malcolm Rowland's 70th birthday at a meeting entitled "Pharmacokinetics: Spearheading Advances and Delivering the Science", held on October 5th 2009 at the Royal Pharmaceutical Society, London, UK. Malcolm has had a long and distinguished academic career and is regarded as one of the founding figures of Pharmacokinetics. Malcolm is currently Professor Emeritus of the School of Pharmacy and Pharmaceutical Sciences, University of Manchester, which he joined in 1975, after nearly 10 years on the faculty of the School of Pharmacy, University of California San Francisco. He holds honorary doctorates from the Universities of Poitiers (France) and Uppsala (Sweden), Honorary Memberships of the Royal College of Physicians (London) and American College of Clinical Pharmacology and has received various awards including the 1994 AAPS Research Achievement Award in Pharmacokinetics, Pharmacodynamics and Drug Metabolism, and the Millennial Pharmaceutical Scientist Award (FIP BPS, 2000). He is a past Vice-President of FIP (International Pharmaceutical Federation) and past President of the European Federation of Pharmaceutical Sciences.

Malcolm, together with Leslie Benet and Sidney Riegelman, was a founding editor of the Journal of Pharmacokinetics and Pharmacodynamics, which started life as the Journal of Pharmacokinetics and Biopharmaceutics in 1973, and he served as an editor until 2007, during which time the Journal went from strength to strength. As well as his many scientific achievements, Malcolm has always been committed to the training of pharmacokineticists and his many graduate students are now working in academia, the pharmaceutical industry or with regulatory authorities.

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Together with long-term colleague Tom Tozer, in 1980 he produced the seminal textbook on pharmacokinetics—Clinical Pharmacokinetics: Concepts and Applications—which has now gone into its fourth edition, and recently they have produced an introductory textbook—Introduction to Pharmacokinetics and Pharmacodynamics. In addition he has established European and USA workshops for teaching of both basic and advanced pharmacokinetics, the latter with the late Lewis Sheiner.

His main research interest is physiologically based pharmacokinetics and its application to drug discovery and development. He is the author of over 250 scientific publications and is among the Thomson ISIs top 250 most highly cited pharmacologists worldwide. Perhaps what he will be most remembered for is the development and application of the clearance concept to pharmacokinetics. Over a period of about 15 years he published a series of papers in the Journal of Pharmacokinetics and Biopharmaceutics (as it was then) outlining, initially the clearance concept [1] and then elaboration on the models used to describe the clearance process [2–7].

The current issue of the Journal contains six articles based on talks given at the symposium in October. Each represents the state of the art in their respective disciplines and each touches on Malcolm's contribution to that discipline. It is fitting, given the San Francisco connection, that Leslie Benet begins with a review of clearance concepts giving the history and bringing it up to date with some new ideas, particularly looking at the impact of transporters which were unknown in 1973. Mike Roberts builds on this theme, describing his work with Malcolm on the dispersion model for hepatic clearance, which they developed during a sabbatical that Mike spent in Manchester. Mike also describes Malcolm's work on physiologically based pharmacokinetic models, which has been a continuing theme of Malcolm's research over many years, particularly in the area of structure-pharmacokinetic relationships. Yuichi Sugiyama picks up on the theme of transporters and describes how using physiologically based pharmacokinetic modelling, in vitro data may be used to predict human pharmacokinetics. Sandy Pang, who was one of Malcolm's PhD students in San Francisco and worked on models of liver clearance, describes the application of PBPK modelling to metabolite kinetics and how it can explain the differences in kinetics between formed versus preformed metabolites, highlighting route of administration differences in metabolite profiles. Carl Peck, who came out of the clinical pharmacology program at San Francisco and spent a number of years at the FDA, discusses how quantitative clinical pharmacology has transformed drug regulation, highlighting how some of Malcolm's scientific contributions have aided the drug review process and regulatory decisions. Finally Don Stanski, also a graduate of the clinical pharmacology program in San Francisco, describes how PBPK modelling is being used in the pharmaceutical industry as a key component of drug development.

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