

A 5-day Workshop, taught by leading experts, presenting the basic concepts of pharmacokinetics with pharmaceutical and clinical applications.

**For Whom Intended** Pharmaceutical scientists, pharmacologists and other scientists, pharmacists, and physicians wishing to understand and apply pharmacokinetic principles in drug selection, drug development, protocol design, drug evaluation, drug registration and in the establishment of dosage regimens. Emphasis is placed on relating pharmacokinetics to underlying physiological processes, with a brief introduction to pharmacodynamics. Only limited exposure to pharmacokinetics is assumed.

**Workshop Content** The Workshop is divided into lectures and associated small group workshops, to reinforce the concepts, in which participants will solve practical problems.

A manual, comprising lecture outlines, derivations, together with problem sets with answers will be provided. **Participants should come with a scientific hand calculator.**

**Topics to be covered include:**

1. Physiological aspects of drug absorption, distribution and elimination.
2. Clearance concepts in pharmacokinetics.
3. Assessment of pharmacokinetic parameters, from plasma and urine data, following intravenous bolus, constant rate infusion and extravascular (oral) administration.
4. Assessment of rate and extent of drug absorption; bioavailability.
5. Multiple dosing.
6. Integration of physiological concepts with pharmacokinetics.
7. Interspecies scaling.
8. Distribution kinetics: introduction to assessment of parameters and consequences in pharmacokinetics.
9. Introduction to pharmacodynamics

*Participants will receive a certificate of attendance*

## MAIN ORGANISER

### MALCOLM ROWLAND

Malcolm Rowland is Professor Emeritus (Pharmacy), and member, Centre for Applied Pharmacokinetic Research, University of Manchester, England. His main research interests are in the physiological basis of pharmacokinetics and its application to drug discovery, development and use. He is the author of over 300 research articles, reviews and book chapters. Together with Dr. T.N. Tozer, Professor Rowland has written *Introduction to Pharmacokinetics and Pharmacodynamics: The Quantitative Basis of Drug Therapy*, 2007, and *Clinical Pharmacokinetics: Concepts and Applications* 4<sup>th</sup> ed, 2010.

## FACULTY

### Leon Aarons

School of Pharmacy, University of Manchester.

### Jeffrey K. Aronson

University Department of Primary Health Care, Oxford

### Theodor W. Guentert

F. Hoffmann-La Roche Limited, Basel  
School of Pharmacy, University of Basel

### Brian Houston

School of Pharmacy, University of Manchester

### Amin Rostami-Hodjegan

School of Pharmacy, University of Manchester

### Geoffrey Tucker

Medical School, University of Sheffield

**Consulting Hour.** Available each day for participants to consult with faculty; personal research questions welcomed.

## APPLICATION FORM

or apply online [www.pkworkshops.com](http://www.pkworkshops.com)

Name \_\_\_\_\_  
(Dr/Ms/Mr/..) First name Surname/Family name

Occupation \_\_\_\_\_

Institution or Company \_\_\_\_\_

Department \_\_\_\_\_

Work Postal Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

City Country

Postcode \_\_\_\_\_

Tel No. \_\_\_\_\_

Fax No. \_\_\_\_\_

Email address \_\_\_\_\_

**Total fee, including board and lodgings, and service: CHF4850 Swiss Francs per person.**

**Register BEFORE Friday 16<sup>th</sup> March for the reduced rate of CHF4450**

The Workshop is limited to 70 applicants.

The Workshop will be in English. Ability to understand and converse in English is essential.

A limited number of places, at a reduced fee, are available to academic persons. Further details are available upon request to Irene Sung

### Payment

Once you have successfully registered on the course, you will receive the bank transfer details in order to pay for your workshop attendance.

### The Sheiner/Rowland Advanced Course in Pharmacokinetics/ Pharmacodynamics Workshop

This is a similar 5 day workshop for those who have a good working knowledge of basic concepts in pharmacokinetics, pharmacodynamics and data analysis, and who wish to extend their technical knowledge further. For further information on this course visit [www.pkworkshops.com](http://www.pkworkshops.com) or log your interest with [irene.sung@pkworkshops.com](mailto:irene.sung@pkworkshops.com)

### TIMETABLE

The Workshop starts at 1800 hrs Sunday 8<sup>th</sup> July and finishes at 1230 hrs Friday 13<sup>th</sup> July.

### LOCATION OF WORKSHOP

Arosa Kulm Hotel (5 Star), Arosa, Switzerland, set in a mountain picturesque setting. The Hotel is well equipped, including an indoor swimming pool. Further details can be obtained from [www.arosakulm.ch](http://www.arosakulm.ch)

### ACCOMMODATION AND MEALS

Accommodation will be available through the nights of 8<sup>th</sup> -12<sup>th</sup> July 2012 at the Arosa Kulm Hotel, Arosa. **The costs of accommodation and all meals are included in the Workshop.**

### FREE TIME

The early afternoons are free for personal pursuits. If you decide to take walks in the surrounding mountainside please bring appropriate clothes.

### PUBLIC TRANSPORT

Arosa is readily reached by car. For those coming by air or rail there are regular trains to Arosa from Zurich via Chur. Exact details will be sent to participants. Swiss train timetable info available from [www.rail.ch](http://www.rail.ch)

### FEE

Total fee, including board and lodgings, **CHF4850 Swiss Francs** per person. **For booking conditions please refer to our website [www.pkworkshops.com](http://www.pkworkshops.com)**

Register **BEFORE Friday 16<sup>th</sup> March** for a reduced rate of **CHF4450**

### FURTHER ENQUIRIES

To: Mrs Irene Sung  
Email: [irene.sung@pkworkshops.com](mailto:irene.sung@pkworkshops.com)  
Fax: +44 161 766 2315

# A ONE WEEK WORKSHOP IN Basic Pharmacokinetics

## Arosa, Switzerland

## Sunday/Friday 8<sup>th</sup> – 13<sup>th</sup> July 2012

Organised by:

**Professor Malcolm Rowland**  
[www.pkworkshops.com](http://www.pkworkshops.com)