

A Workshop, presenting advanced aspects and applications of pharmacokinetics, pharmacodynamics and kinetic/dynamic data analysis in the medical and pharmaceutical sciences

**For whom intended** The Workshop is designed for those who have a good working knowledge of basic concepts in pharmacokinetics, pharmacodynamics and data analysis and who now wish to extend their knowledge further. Emphasis will be placed on relating pharmacokinetics and pharmacodynamics to underlying physiological processes and to pharmacodynamics, and on the analysis and modelling of pharmacokinetic and pharmacodynamic data.

**Workshop content** The mornings will be devoted to lectures; the afternoons to small-group workshops led by experienced tutors, in which participants will solve practical problems and develop an appreciation for the techniques and approaches discussed in the lectures. The participants are encouraged to raise questions from their experience for discussion: time is specifically reserved for such informal discussions .

A book, comprising lecture outlines, derivations, problem sets with answers, and additional reading material will be provided. *Participants should come with a scientific hand calculator.*

**Topics to be covered include:**

- **Empirical models for pharmacokinetics and pharmacodynamics**
- **Mechanistic models for pharmacokinetics (compartmental, physiological) and pharmacodynamics (receptor theory) and combined PKPD (immediate and delayed effects)**
- **Data analysis techniques for empirical or mechanistic modeling: point estimates, confidence intervals, hypothesis tests**
- **Population pharmacokinetics and pharmacodynamics**
- **Disease progress and drug action modeling**
- **Optimal design**

## FACULTY

**Leon Aarons** is Professor of Pharmacometrics in the School of Pharmacy and Pharmaceutical Sciences, University of Manchester, UK. His research interests are in population and physiologically based pharmacokinetics

**Nick Holford** is Professor of Clinical Pharmacology at the University of Auckland, Auckland, New Zealand. His main interests are PKPD modelling. His main interests are PKPD modelling. He has a particular interest in describing disease progression and the influence of drug treatments on disease.

**Mats Karlsson** is Professor of Pharmacometrics at the Faculty of Pharmacy, Uppsala University, Sweden. He leads a multi-disciplinary research group of more than 30 scientists. His research interests focus on methodological aspects of non-linear mixed effects model building and applications of PKPD modelling in drug development and drug usage.

**France Mentré** is Professor of Biostatistics at the University Paris Diderot (Paris 7), France. She heads an INSERM research team on Biostatistical Modelling and Pharmacometrics. She has worked on development and application of methods for nonlinear mixed-effects models in pharmacokinetics and pharmacodynamics for more than 20 years. Her main research areas in this field are optimal design, model evaluation and anti-infective agents.

**Stephen Duffull** is Professor of Clinical Pharmacy at the University of Otago, Dunedin, New Zealand. He runs a modelling and simulation lab within the School of Pharmacy. Research interests include optimal design, MCMC methods particularly in clinical toxicology and the influence of obesity on PKPD. He has been involved in the area of PKPD and nonlinear mixed effects modelling for more than 15 years.

## APPLICATION FORM

*please typewrite or complete in BLOCK CAPITALS*

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

Qualifications  
\_\_\_\_\_

Occupation  
\_\_\_\_\_

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

Department  
\_\_\_\_\_

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

*City Country*

Postcode \_\_\_\_\_

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

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

Email Address: \_\_\_\_\_

Have you attended other pharmacokinetic workshops  
( Yes / No )

If yes, please list  
\_\_\_\_\_  
\_\_\_\_\_

Total fee, including board and lodgings, and service:  
**CHF4950** Swiss Francs.

Register **BEFORE Friday 27<sup>th</sup> January 2012** for the reduced rate of **CHF4550**

The Workshop is limited to 60 applicants only. 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 –  
Email: [irene.sung@pkworkshops.com](mailto:irene.sung@pkworkshops.com)

### Payment

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

### Basic Workshop

For those who do not have the requisite background for the advanced workshop, and who wish to acquire it, a similarly structured workshop on basic approaches in pharmacokinetics will be offered 8th-13<sup>th</sup> July 2012 organised by Professor Malcolm Rowland. For information, please contact [irene.sung@pkworkshops.com](mailto:irene.sung@pkworkshops.com) or visit [www.pkworkshops.com](http://www.pkworkshops.com)

### TIMETABLE

The Workshop starts at 17.00 Sunday 25<sup>th</sup> March and finishes at 12.00 Friday 30<sup>th</sup> March.

### LOCATION OF WORKSHOP

Hotel Waldhaus (5 star), Sils-Maria, Engadin Valley, Switzerland. A picturesque and tranquil setting close to St. Moritz. The hotel has an indoor swimming pool, sauna and indoor tennis court.

### ACCOMMODATION AND MEALS

Accommodation will be available through the nights of 25<sup>th</sup> to 30<sup>th</sup> March 2012 at Hotel Waldhaus. Each room has a private bathroom. **The costs of accommodation and all meals are included in the Workshop.**

### FREE TIME

The early afternoons are free for personal pursuits.

### PUBLIC TRANSPORTATION

The Engadin Valley is readily reached by car. For those coming by air or rail there are regular trains to St. Moritz from Zurich via Chur. Exact details and timetables can be found at [www.rail.ch](http://www.rail.ch)

**CAR PARKING** - A car park is available within the grounds of Hotel Waldhaus.

### FEE

Total fee, including board and lodgings, **CHF4950 swiss francs** per person. **For booking conditions please refer to our website [www.pkworkshops.com](http://www.pkworkshops.com)**

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### FURTHER ENQUIRIES

Email: [irene.sung@pkworkshops.com](mailto:irene.sung@pkworkshops.com)  
[www.pkworkshops.com](http://www.pkworkshops.com)

# ONE WEEK WORKSHOP IN THE SHEINER/ROWLAND ADVANCED COURSE IN PHARMACOKINETICS/ PHARMACODYNAMICS

Sils-Maria, Switzerland

Sunday / Friday

25<sup>th</sup> to 30<sup>th</sup> March 2012

Organised by:

**Professor Leon Aarons**  
**University of Manchester**

[www.pkworkshops.com](http://www.pkworkshops.com)