Simulations Plus presents: The Advanced GastroPlus™ DMPK and Clinical Pharmacology Workshop



March 2 - 3, 2017 in San Diego, California

Simulations Plus, the industry's leading provider of simulation and modeling software for drug discovery and development, will be hosting its "Advanced GastroPlus™ DMPK and Clinical Pharmacology Workshop" in San Diego, California on March 2 - 3, 2017.

This 2-day hands-on course will provide an in-depth knowledge of the theories and application of state-of-the-art simulation and modeling software as it applies to problems facing DMPK and Clinical PK/PD scientists dealing with complex effects on drug absorption, pharmacokinetics, pharmacodynamics, and drug-drug interactions. A combination of presentations and interactive examples, taken from actual industry experience, will illustrate how to recognize and deal with the multiple interacting phenomena that affect the absorption, PBPK/PD, and DDIs of particular drugs, dosing routes, and dosage forms in different populations.

This is an advanced course – a prerequisite is familiarity with setting up and running basic GastroPlus simulations, including database and support file structures, basic inputs for physicochemical and formulation parameters, and basic physiology options for human and animal simulations, as these items will not be covered in this course due to time constraints. If you are not yet familiar with all of these concepts, you can gain the required familiarity in our "Introductory GastroPlus[™] Simulation and Modeling Workshop" that will be held immediately preceding this workshop.



Attendance for this event is limited, so register today!

Science + Software = Success 42505 10th Street West • Lancaster, CA 93534 • USA • phone: +1-661-723-7723 fax: +1-661-723-5524 • email: info@simulations-plus.com • www.simulations-plus.com • NASDAQ: SLP

Who should attend?

This workshop is appropriate for scientists working in preclinical and clinical pharmacokinetics and pharmacodynamics who want an in-depth understanding of how the highly interactive processes of absorption (passive and carrier-mediated), metabolism in the gut and other tissues, and whole-body distribution affect PK and PD. Although the course will use GastroPlus for all case studies, the guiding principles will be taught in a software-independent manner. Class size is limited to encourage interaction with the course instructors and among attendees. Past GastroPlus workshop attendees have commented that the interaction and networking among industry, government, and academic scientists is an important and valuable part of the experience!

What will you learn?

Upon completion of this course, you should have an understanding of the interactions that exist among the various mechanistic phenomena affecting drug absorption, pharmacokinetics (employing both compartmental PK and physiologically based pharmacokinetics - PBPK), pharmacodynamics, and DDIs. You should be able to decide when a mechanistic absorption/PBPK model is more appropriate for building your PD models. And you should be able to communicate readily with the groups that produce both preclinical and clinical data to express your data needs as well as present your results clearly back to them and to project leaders and management.

You will gain experience with:

- screening small compound libraries for absorption (transcellular & paracellular) from chemical structure and *in vitro* data.
- recognizing when to use PBPK vs. standard compartmental PK models
- predicting first-in-human doses with available preclinical and in vitro data (IVIVE)
- using *in vitro* data to define whole-body, permeability-limited models to simulate tissue uptake (transporter-based IVIVE)
- tracking parent and metabolite concentrations through multiple pathways, in plasma and tissues
- defining inputs to simulate prodrug/drug exposure
- assessing the potential for biliary excretion and modeling enterohepatic circulation
- building PBPK/PD models using simulated target tissue concentrations
- predicting drug-drug interactions for various situations (e.g., auto-inhibition)
- simulating populations including selected mixes of ages, gender ratios, and ethnicities
- predicting pediatric exposure from adult PBPK models
- understanding optimization methods, objective function weighting, and constraints

How will the workshop operate?

All presentation slides will be available in electronic format. Laptop computers will be provided with GastroPlus™ preloaded along with all data files needed to run the case studies.

Continental breakfast, refreshment breaks, and lunch will be provided each day.

Where will this be held?





A limited number of discounted rooms will be available for attendees of the workshop at:

The Catamaran Resort Hotel and Spa

3999 Mission Boulevard San Diego, CA 92109 (858) 488-1081





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REGISTRATION FORM

Attendance is limited • Please register by February 13, 2017

Please fill in this form and return to Renee Bouche (renee@simulations-plus.com) Fax: +1-661-723-5524 To register by phone, please call Renee at +1-661-723-7723 ext. 227

The Advanced GastroPlus[™] DMPK and Clinical Pharmacology Workshop March 2 - 3, 2017 in San Diego, California

Title: Professor / Dr. / Mr. /	Mrs. / Miss / Ms.	
FIRST NAME:		
LAST NAME:	COMPANY:	
POSITION:	DEPARTMENT:	
ADDRESS:		
TELEPHONE:	EMAIL:	
PURCHASE ORDER NO. (if ap	plicable]:	
continental breakfast, refreshme optional modules, is available afte	200 per person (industry) and USD \$600 (academic) an ent breaks, and lunch each day. Also, a one (1) month sing er the workshop. ncluded with registration, but special room rates are avail	le-user license to GastroPlus with all
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	e prior to February 13, 2017 will be eligible for an 80% refund. Refu credit card transactions. Substitutions are allowed up to 10 days l	
Payment Terms: Following completion must be paid in full prior to the start o	and return of the registration form, the total fee must be paid with f the workshop.	nin 30 days of receipt of invoice. All fees

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