

2011 ADAPT Short Course

Population Modeling in Pharmacokinetics and Pharmacodynamics

September 1-2, 2011 ♦ Leipzig, Germany

Lecturers

David Z. D'Argenio, Ph.D.

University of Southern California, Los Angeles

Michael Weiss, Ph.D.

Martin Luther University Halle-Wittenberg, Halle (Saale)

Aims and Scope

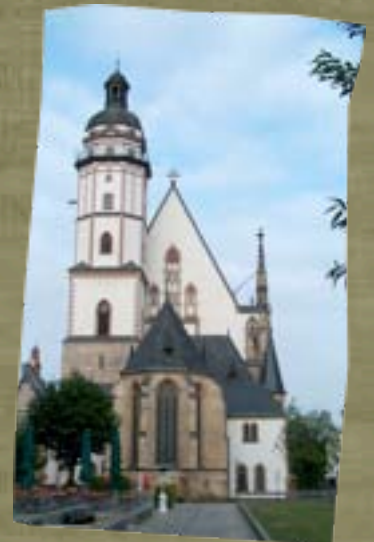
The Short Course is intended for basic and clinical research scientists who are actively involved in the application of modeling, computational and data analysis methods to problems involving drug kinetics and drug response. In this hands-on short course, background lectures and case studies will cover the following topics: population modeling; PK/PD models (indirect & target mediated response models); absorption modeling; modeling with covariates; recirculatory models.

Location

Park Hotel (*left picture below*), located in the historic town centre, 200 m from the main train station.

Registration

The number of participants at this two day short course is limited to 30 people. The registration fee for the short course is 180 Euro (acad/gov) or 400 Euro (industry), which includes lunches and dinner on the first evening. The cost of hotel accommodation (including breakfast) is 85 Euro per night.



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2011 ADAPT Short Course

Population Modeling in Pharmacokinetics and Pharmacodynamics using ADAPT 5

Leipzig, Germany
1-2 September, 2011

Course Instructors

David Z. D'Argenio, Ph.D.
University of Southern California
Los Angeles

Michael Weiss, Ph.D.
Martin Luther University Halle-Wittenberg
Halle(Saale)

With Support From

The Biomedical Simulations Resource, University of Southern California
Section of Pharmacokinetics, Martin Luther University



Preface

The Short Course is intended for basic and clinical research scientists who are actively involved in the application of modeling, computational and data analysis methods to problems involving drug kinetics and drug response. In this hands-on short course, background lectures and case studies will cover the following topics: population modeling; PK/PD models (indirect & target mediated response models); absorption modeling; physiologically-based models; modeling with covariates; population model validation.

It is hoped that this Short Course will give the participants a thorough exposure to the broad class of pharmacokinetic/ pharmacodynamic modeling and data analysis problems that can be solved using ADAPT 5.

David Z. D'Argenio
Los Angeles

Michael Weiss
Halle(Saale)



ADAPT Short Course Schedule

Thursday, 1 September 2011

8:30 Background: **Modeling with ADAPT 5**

9:45 Case Study: **Modeling Building (SIM)**

10:30 **Break**

10:45 Background: **Individual Estimation: Fundamentals**

11:45 Case Study: **WLS/ML/MAP Estimation (ID)**

12:30 **Lunch Break**



ADAPT Short Course Schedule

Thursday, 1 September 2011

- 13:30* Background: **Population Modeling: Fundamentals**
- 14:30* Case Study: **One Compartment Example (MLEM)**
- 15:15* **Break**
- 15:30* Case Study: **Estimation of Dissolution/Absorption Profiles (MLEM)**
- 16:15* Case Study: *Selected based on attendee interests*
- 17:00* **Adjourn**



ADAPT Short Course Schedule

Friday, 2 September 2011

9:00 Case Study: **Indirect Response PD Model (MLEM)**

9:45 Background: **Population Modeling with Covariates**

10:30 **Break**

10:45 Case Study: **Modeling Building with
Covariates (MLEM)**

11:45 Case Study: **Recirculatory Models of
Drug Disposition (MLEM)**

12:30 **Lunch Break**



ADAPT Short Course Schedule

Friday, 2 September 2011

- 13:30* Background : **Population Model Validation**
- 14:15* Case Study: **Target Mediate Drug Disposition
Models of Biologics (SIM/MLEM)**
- 14:45* **Break**
- 15:00* Case Study: **PK/PD Modeling Based on
Receptor Binding Kinetics (MLEM)**
- 15:30* Case Study: *Selected based on attendee interests*
- 16:00* **Adjourn**

