



## U-PGx summer school

“Towards pharmacogenomics in clinic”

Date: August, 20 – 23, 2018

Venue: Bundesinstitut für Arzneimittel und Medizinprodukte (Federal Institute for Drugs and Medical Devices), Kurt-Georg-Kiesinger-Allee 3, Bonn

Registration opens August, 20<sup>th</sup> 2018 at 12:00

Programme:

August, 20<sup>th</sup> 2018      12:30 pm to 16:15 pm

August, 21<sup>st</sup> 2018      8:45 am to 16:15 pm

August, 22<sup>nd</sup> 2018      8:45 am to 16:15 pm

5:00 pm social event at Bundeskunsthalle, Bonn (visit and dinner)

August, 23<sup>rd</sup> 2018      8:45 am to 16:15 pm

Topics of U-PGx summer school:

Day 1, Monday August 20<sup>th</sup>

- Participants will get an overview on the principles of pharmacogenetics influencing drug metabolism, in phase-I and phase-II enzymes, transporters, and HLA genes, and the impact on drug efficacy and safety



## Day 2, Tuesday August 21<sup>st</sup>

- Participants will get an overview on phenotype classification of poor, intermediate, extensive and ultra-rapid metabolisers, and the implications on drug dosing
- Participants will get an overview on importance of HLA genes and genetic variants influencing adverse drug reactions
- Participants will be introduced to currently available pharmacogenetic treatment guidelines such as CPIC or DPWG, and the principles of pharmacogenetics information dissemination with open access databases like pharmGKB
- Participants will work hands-on on cases and learning specific situations or clinical context in which patients might benefit from genotyping and when genotyping should be done
- Participants will get an overview on current relevant pharmacogenetic diagnostic techniques (arrays, real-time PCR, Sequencing, NGS) to understand different types of test results and allele classifications

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## Day 3, Wednesday, August 22<sup>nd</sup>

- Participants will work hands-on on patient cases to understand specific metabolizer phenotypes in clinical and therapeutic decisions
- Participants will get an overview on ethical and legal aspects of pharmacogenetics
- Participants will work hands-on on cases how to deal with different concepts of data protection, genetic diagnostic, informed consent and data storage
- Participants will get an overview on clinical impact of polymorphisms in anion and cation transporters



Day 3, Wednesday, August 22<sup>nd</sup>

Social event at Bundeskunsthalle (Friedrich-Ebert-Allee 4; 53113 Bonn), Bonn

Visit “The Playground Project” and successive dinner at Restaurant Speisesaal

Day 4, Thursday, August 23<sup>rd</sup>

- Participants will get an overview on the clinical impact of the CYP2D6 polymorphism
- Participants will get an overview on the clinical use and integration of pharmacogenetic guided therapy and current examples from one U-PGx study centre
- Participants will work hands-on on cases how to integrate pharmacogenetics information in clinical decision making, embedding pharmacogenetic information in other parameters of personalised medicine such as age, renal function, drug-drug interactions



List of speakers in order of sequence:

- Prof. Dr. Julia Stingl, Head Research Division and Vicepresident of the Federal Institute for Drugs and Medical Devices, Germany
- Dr. Evira Tsermpini, Department of Pharmacy, School of Health Sciences, University of Patras, Greece
- Dr. Richard Turner, Department of Molecular & Clinical Pharmacology, University of Liverpool, UK
- Dr. Jesse Swen, Department of Clinical Pharmacy & Toxicology, Leiden University Medical Center, Leiden, The Netherlands
- Prof. Dr. Vita Dolzan, Pharmacogenetics Laboratory, Institute of Biochemistry, Faculty of Medicine, University of Ljubljana, Slovenia
- Dr. Leigh Jackson, Faculty of Health and Human Sciences, Plymouth University, Plymouth, UK
- Prof. Dr. Jürgen Brockmöller, Department of Clinical Pharmacology, University Gottingen, Germany
- Prof. Dr. David Gurwitz, Department of Human Molecular Genetics & Biochemistry, Sackler Faculty of Medicine, Tel-Aviv University, Israel
- Dr. Erika Cecchin, Experimental & Clinical Pharmacology, Centro Di Riferimento Oncologico - National Cancer Center, Aviano, Italy