

**ECNP Network «Preclinical Data Forum»
Training Workshop for Young Scientists
“How to Make Preclinical Research Robust”**

3-5 July 2017 (Heidelberg, Germany)

Goal of the Workshop

This workshop aims to enhance awareness and to help junior scientists further developing their experimental skills, with prime focus on experimental design to generate high quality, robust, reproducible and relevant data.

Lecturers / Instructors / Moderators:

Anton Bespalov – PAASP (Heidelberg, Germany)
 Christoph Emmerich – PAASP (Heidelberg, Germany)
 Martien Kas – University of Groningen (Groningen, Netherlands)
 Martin Michel – Johannes Gutenberg University (Mainz, Germany)
 Thomas Steckler – Janssen (Beerse, Belgium)
 Kim Wever – Radboud University (Nijmegen, Netherlands)

AGENDA

Time	Topic	Lecturer / Instructor
Day 1		
July 3, 2017		
	Why are we talking about research rigor?	
13.00 – 13.30	Introductions, Agenda, Workshop objectives	Anton Bespalov
13.30 – 15.00	Origins of poor data robustness <ul style="list-style-type: none"> • Robustness vs reproducibility • Poorly designed and powered studies • Positive predictive value • Poor control over experimental conditions • Poor generalizability of research findings Open discussion: Who is in the greatest need of higher research quality standards – industry, academia, CROs, young scientists or mature researchers?	Thomas Steckler / Martin Michel
15.00 – 15.30	Coffee break & Networking	
15.30 - 16.30	From pre-specified endpoints to data analysis: Common mistakes and how this affects data robustness	Martin Michel
16.30 - 17.30	Systematic Reviews: a tool to identify factors important for research quality	Kim Wever
18.00 – 21.00	Dinner (Kulturbrauerei)	
Day 2		
July 4, 2017		
	What do we need to do to enhance research rigor?	
9.00 – 9.45	Journal Club: Examples of papers illustrating the need for higher standards in research rigor	Martien Kas

	Breakout group #1: Paper with exploratory research where a confirmatory study design standards would be more appropriate Breakout group #2: Paper with a data analysis example Breakout group #3: Paper illustrating pre-specified endpoints	
9.45 – 10.30	Reports from the Breakout groups	Martien Kas
10.30 – 10.45	Coffee break & Networking	
10.45 - 12.15	Identifying sources of bias, and assessing internal validity and risks of bias in primary studies (using SYRCLE's risk of bias tool)	Kim Wever
12.15 – 13.30	Lunch with the Expert Expert 1: Data analysis Expert 2: Systematic Reviews and meta-analysis Expert 3: In vitro	Anton Bespalov Kim Wever Christoph Emmerich
13.30 – 14.00	Beyond study design: Broad assessment of Risks of Bias (with reference to the first Open Discussion on Day 1)	Anton Bespalov
14.00 – 14.30	Open discussion: Exceptions when the standards discussed during the day cannot be implemented	Kim Wever
14.30 - 15.30	Culture of tolerating negative results: from identifying key stakeholders to real-life examples and implications	Anton Bespalov Thomas Steckler
15.00 – 15.30	Coffee break & Networking	
15.30 - 16.30	Study design (blinding, randomization, exploratory vs confirmatory research) – implementation challenges	Anton Bespalov
16.30 - 17.00	Open discussion: Use of lab journals – what they are and why are they important?	Anton Bespalov
17.00 – 17.30	Publication standards: ARRIVE guidelines Dinner (place to be announced – depends on weather)	Thomas Steckler
Day 3 July 5, 3017	How do we introduce the changes needed to enhance research rigor?	
9.00 – 10.00	Publication standards: Presenting data in publications	Martin Michel
10.00 – 10.30	Tools that an individual scientist can use (guidelines, recommendations, online repositories of information, software, etc.)	Kim Wever / Christoph Emmerich / Anton Bespalov
10.30 – 10.45	Coffee break & Networking	
10.45 – 11.30	Guided Brainstorming (in small groups accompanied by a lecturer / instructor): How to cope with the “negative” consequences of higher research quality standards (e.g. less positive data, lower chances to get published in a high IF journal, etc.)?	Martin Michel / Anton Bespalov / Thomas Steckler / Kim Wever / Christoph Emmerich
11.30 – 12.00	What will I change in my research practice after this Workshop?	Thomas Steckler / Anton Bespalov
12.00 – 13.00	Lunch with the participants sharing what they may change in their research practice Closing remarks & Adjourn	Anton Bespalov