

# Pre-meeting Workshops

SATURDAY, SEPTEMBER 14, 2019 | Pre-meeting Workshop 1 | 8:00 AM – 12:00 PM

## *R Basics for Every Clinical Pharmacologist: Easily Create Reproducible Figures, Tables & Diagnostic Plots Using Tidyverse Libraries Such as Dplyr & Ggplot2*

### DEVELOPMENT TRACK

*Offers both CME & CPE Credit*

UAN #0238-0000-19-017-L01-P

ACPE – 3.5 CONTACT HOURS/APPLICATION-BASED

### CO-CHAIRS:

**Jennifer E. Hibma, PharmD**, Clinical Pharmacologist & Pharmacometrician, Pfizer Inc, Global Product Development, Global Pharmacometrics

**Gopichand Gottipati, PhD**, Reviewer, US Food & Drug Administration, OMPT/CDER/OTS/OCP

### TARGET AUDIENCE:

This Workshop will be useful for clinical pharmacologists from all business sectors, including academia, industry, regulatory and clinical who utilize principles of data science in research. In addition, interprofessional learners from healthcare-related universities and trainee programs will develop techniques to maximize the value of their data through effective communication of results and diagnostics, including reproducible Rscripts.

### GOALS & OBJECTIVES:

Following the completion of this activity, the learner will be able to:

1. Apply R basics, i.e., reading data into R, accessing R packages, organizing and commenting R code, have a working knowledge of essential commands for a clinical pharmacologist;
2. Demonstrate the use of dplyr verbs to solve the most common data manipulation challenges;
3. Display pharmacokinetic and pharmacodynamic data in figures and tables for presentations, reports and manuscripts;
4. Design diagnostic plots for population pharmacokinetic/ pharmacodynamic analyses.

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8:00 – 8:30 AM

### Introduction to RStudio & Quick Overview of R Markdown

*Jennifer E. Hibma, PharmD, Clinical Pharmacologist & Pharmacometrician, Pfizer Inc, Global Product Development, Global Pharmacometrics*

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8:30 – 9:00 AM

### Data Manipulation Using Dplyr & Tidy With Hands-on Session

*Gopichand Gottipati, PhD, Reviewer, US Food & Drug Administration, OMPT/CDER/OTS/OCP*

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9:00 – 9:30 AM

### Ggplot2 for Data Visualization With Hands-on Session

*Ana Ruiz-Garcia, PharmD, PhD, Senior Director, Pfizer Inc, Global Pharmacometrics*

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9:30 – 10:00 AM / Break

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10:00 – 10:50 AM

### Noncompartmental Analysis Using R With Hands-on Session

*Beatriz Guglieri-Lopez, PharmD, PhD, Postdoctoral Fellow in Pharmacometrics & Clinical Pharmacology, Univ of Maryland Baltimore*

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10:50 – 11:40 AM

### Diagnostic Plots Using NONMEM Output File & R With Hands-on Session

*Alejandro Perez-Pitarch, PharmD, PhD, ORISE Fellow, US Food & Drug Administration*

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11:40 AM – 12:00 PM

### Faculty Panel Discussion, Questions & Answers, Learner Feedback & Evaluations