Next Generation BBS Training Day



Do you speak statistics? how do you work as a statistician in a cross-functional team?

Date: Wednesday 6th December 2023

Offering 1: 08:30 – 12:30 CET Offering 2: 13:30 – 17:30 CET

Face to Face training only Venue: Roche

Facilitators: Achim Guettner (Novartis), Julie Jones (Novartis)

Why is this training of interest? Who should attend the training?

Decisions on projects are not made only from algorithms or based on the recommendation of statisticians. Well-balanced technical and non-technical skills, like communication and collaboration skills, are essential for a statistician to be successful in working as partners, and leading and influencing multi-disciplinary projects. Junior statisticians will benefit from the course as they receive guidance as to which non-technical skills to focus on, and experienced statisticians benefit by further developing their essential skills to excel in changing environments.

What is covered in the training? How is it conducted?

We would like to give guidance to statisticians on the non-technical skills that are important to be successful and influential in quantitative decision making.

In this face-to-face training, we demonstrate best practices through case studies of real world scenarios and interactive exercises based on the daily work of a statistician. The topics include: verbal and written communication, active listening, asking the right questions, using the right vocal tones for the situation, and visual communication. The second part of the course covers collaboration skills, working in a hybrid or virtual environment, the purpose and value of networking, self-awareness, receiving and providing feedback, and preparing for different types of meetings. The format incorporates opportunities for participants to share their experiences and learn from others too. This is a broad topic which could easily be a much longer training so references to further material (books, videos, online courses, etc) that we've found to be most useful for statisticians will be given as well.

We look forward to your participation!

Registration details to follow

Next Generation BBS Training Day



Go fastR: High Performance Computing with R

Date: Wednesday 6th December 2023

Offering 1: 08:30 – 12:30 CET Offering 2: 13:30 – 17:30 CET

Face to Face training only Venue: Roche

Facilitators: Michael Mayer (Posit), Lukas Widmer (Novartis)

Why is this training of interest? Who should attend the training?

Have you ever struggled with slow R code? Have you ever wondered how to make it go fastR and fully leverage the power of high performance compute (HPC) clusters? If yes, this training is for you! You will learn how to profile, optimize, and parallelize your code on your local machine, as well as how to parallelize it on HPC clusters. While we will provide example code for commonly-performed activities for trial design, such as simulation studies, bootstrapping and cross-validation, to get the most out of this training, we strongly encourage you to *bring your own (non-confidential) code to optimize on a Posit-provided HPC in the cloud* during the second half of the training. You will also get to pick our brains on how to best optimize your code.

What is covered in the training? How is it conducted?

The first half of the training is classroom-based with interactive exercises hosted on Posit Workbench connected to a cloud-based HPC cluster that participants will get access to. We cover the following topics:

Identifying bottlenecks in your R code, debugging, and optimizing

- Debugging R code & checking correctness
- Profiling R code to identify bottlenecks
- Optimizing bottlenecks: packages, vectorization, memory allocation

R parallelization on HPC clusters

- Amdahl's law and limits of achievable speed up
- Parallelizing work onto compute clusters via clusterMQ and batchtools
- Consistently loading code, packages, .libPaths() and options() on R workers
- Uncorrelated random number generation for parallel R code
- Debugging R code in batchtools and clusterMQ jobs

For the second half, we highly encourage you to bring your own code and attempt to optimize and parallelize it with the help of the course instructors. You can also try some of the provided examples and explore optimization and parallelization on the provided HPC cluster with those.

We look forward to your participation!

Registration details to follow

Next Generation BBS Training Day

The **Next Generation** committee organizes in-person meetings specifically dedicated to support the next generation in the pharmaceutical industry with a focus on soft skills, career development and networking.

Committee Members: Lars Andersen (Boehringer-Ingelheim), Joana Marques Barros (Idorsia), Muriel Buri (Roche), Youyou Hu (Roche), Antonella Mazzei (BMS), Kristina Weber (Roche), Lukas Andreas Widmer (Novartis), Olympia Papachristofi (Novartis).