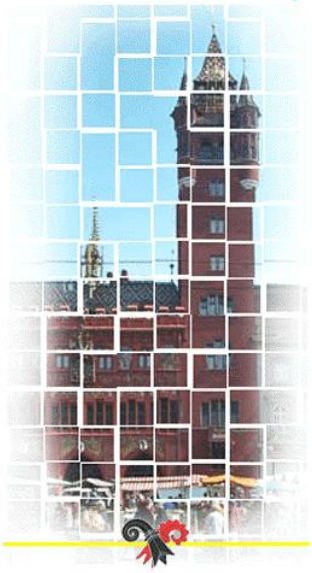
First announcement of **BBS Seminar:**

AI in Clinical Research and Drug Development

and BBS General Assembly



Wed, 25 September 2024, 13:00-17:45
D-BSSE (ETH) & virtual

The application of artificial intelligence (AI) has generated significant excitement due to its potential to automate processes and extract valuable insights from complex datasets. This seminar offers an introduction to AI methodologies, a discussion of the benefits and limitations of AI solutions, and a series of informative case studies. The program features eminent statisticians, data scientists, and medical doctors from academia, pharmaceutical companies, university hospitals, and regulatory agencies.

Participation is free of charge. Please register via the following link **HERE**.

Location: Department of Biosystems Science and Engineering (D-BSSE)
ETH, BSS building E27, Klingelbergstrasse 48, Basel (directions)

	Session 1: AI for automation - chair: Marcel Wolbers (Roche)
13:00	**Welcome & scene setting** - Lilla di Scala (Johnson&Johnson) & Marcel Wolbers (Roche)
13:10	**Generative AI: Transforming automation in biostatistics** - Ercan Sükür (Roche)
13:40	**Case studies on automation** - **Assessing Generative AI's capability in systematic literature reviews, a case study** - Cindy Tong & Nikos Takatzoglou (Johnson & Johnson) - **Using AI agents to optimize the EU HTA process: An industry perspective** – Seye Abogunrin (Roche) - **A deep learning approach to private data sharing of medical images using conditional generative adversarial networks** - Sajanth Subramaniam (Novartis)
14:25	**Coffee Break**
	Session 2: AI for science & regulation - chair: Giusi Moffa (University of Basel)
14:50	**Leveraging generative AI approaches for small data settings in clinical research –** Harald Binder (University of Freiburg)
15:20	**Case studies** - **Unlocking the Code: Harnessing Machine Learning to Predict Treatment Resistance in Lung Cancer Patients** - Fabian Kreimendahl (Johnson & Johnson**)** - **A deep learning model for automated total metabolic tumor volume quantification in patients with FDG-avid lymphomas** – Tao Xu (Roche) - **Benefits, challenges and development of clinical AI-products in Neuroradiology** - Kristine Blackham (University Hospital Basel)
16:05	**"Regulator-in-the-loop": How to integrate new ML based technologies in the regulatory landscape** - Nicolas Perez (Swissmedic 4.0)
16:35	**Panel discussion** with all speakers, moderated by Jenny Devenport (Roche)
17:05	**BBS general assembly (until 17:45)**

Organizing committee: Marcel Wolbers (Roche), Jenny Devenport (Roche), Dominik Heinzmann (Roche), Kristina Weber (Roche), Lilla Di Scala (Johnson & Johnson), Marco Cattaneo (University Hospital Basel), Andreas Ziegler (Cardio-CARE Davos), Jack Kuipers (ETH Zurich - D-BSSE), Giusi Moffa (University Basel) on behalf of the BBS. **Contact for questions**: marcel.wolbers@roche.com.