University of Basel
Department of Biomedical Engineering

Seminar Series:
Latest Breakthroughs in Biomedical Engineering Research

Location: DBE Science Lounge, Hegenheimermattweg 167C, 4123 Allschwil
Date & Time: Thursday 05.11.2026 | 16:30 – 17:30
Host: Prof. Ece Özkan Elsen

Developing and Evaluating AI-Based Imaging Measures for Clinical Trials

Dr. Alvaro Gomariz

Roche

Abstract

Medical images contain rich information about disease, but clinical assessment often reduces this to coarse and subjective scores. This talk will introduce our work on AI-based imaging measures across therapeutic areas, with a focus on colonoscopy video in inflammatory bowel disease. I will discuss how AI and expert annotations can lead to more granular characterization of disease, together with the challenges of developing and evaluating these measures for clinical research.

Biosketch

Alvaro Gomariz is Technical Lead for AI in inflammatory bowel disease at Roche, where he works on the development of imaging-based methods for clinical development. He holds a PhD in Computer Vision from ETH Zurich, and his research has focused broadly on extracting quantitative information from biomedical images and connecting it to biological and clinical questions across microscopy, ophthalmology, and endoscopy.