Speakers: Helen Barnett (Lancaster University)

Date: 14/05/2024 at 13:15 in 4 West 1.7 (Wolfson Lecture Theatre)

Title: Joint TITE-CRM: A Design for Dose Finding Studies for Therapies with Late-Onset Safety and Activity Outcomes

## Abstract:

In Phase I/II dose-finding trials, the objective is to find the Optimal Biological Dose (OBD), a dose that is both safe and shows sufficient activity that maximizes some optimality criterion based on safety and activity. In cancer, treatment is typically given over several cycles, complicating the identification of the OBD as both toxicity and activity outcomes may occur at any point throughout the follow up of multiple cycles. This talk will present and assess the Joint TITE-CRM, a model-based design for late onset toxicities and activity based on the well-known TITE-CRM. This new design is found to be superior to the currently available alternative designs that account for late onset bivariate outcomes, as well as being both intuitive and computationally feasible.