

Kick-off: FIGON DMD – Virtual Series

Date: Tuesday, September 15th

Time: 10:00 am - 12:00 pm (CEST)

Location: Online (WebinarTV)

Registration: Required

Organizing partners: n/a

Program:

- 10:00 am – 10:30 am **Opening by FIGON President:**
Prof. dr. Anke-Hilse Maitland-van der Zee,
Professor Precision Medicine in Respiratory Disease at
Amsterdam UMC, location AMC
- 10:30 am - 11:00 am **Future Affordable and Sustainable Therapies**
Clémence Ross-van Dorp,
Ambassador for the Life, Science & Health sector
- 11:00 am – 12:00 pm **Ariënslecture: Physiologically-Based Pharmacokinetic
modelling**
Ariëns Awardee: *Professor Malcolm Rowland,*
Ph.D., D.Sc University of Manchester, U.K.

Abstract:

Pharmacokinetics (PK) and pharmacodynamics (PD) form scientific cornerstones of the dose-response relationship. At the start of my career PK was exclusively descriptive: administer a drug and measure and describe what happened to it with time. The why was not addressed. That had to change and become more mechanistic and predictive. The solution was physiologically based pharmacokinetics (PBPK), a systems, holistic, view of events occurring in the body overlaid on which are drug specific information. Conceptualised grossly by Theorell in 1937, progress in PBPK was initially very slow and limited exclusively to academia but the theoretical principles and technologies continued to be laid down in the '70s through the '90s. Realising the benefits, serious engagement by industry and regulatory agencies then followed such that today PBPK is an indispensable component in the optimal design, selection, development, evaluation and clinical use of new medicines. Linking PBPK with quantitative system pharmacology is the natural way forward. My presentation is a personal account of the journey from academic concept to universal application.