

## **Research / Senior Scientist – Certara UK, Simcyp Division**

**Closing Date for Applications:** Midnight (UK time) Friday, 30<sup>th</sup> August 2019

**Line of Management:** Head of Mechanistic Modelling

**Position Type:** Full Time

**Holiday Entitlement:** 25 days, plus statutory bank holidays

**Salary:** £34,000 - £45,000 per annum dependent on qualifications and experience (plus discretionary bonus, pension contribution, health scheme *etc.*)

**Location:** Sheffield, UK

### **Job Overview:**

We have an immediate opening for a highly motivated research / senior scientist with good working knowledge of Bayesian inference algorithms development for multilevel statistical models and mathematical modelling of physiological systems. The successful candidate will assist with the development of deterministic or stochastic methods and algorithms applicable to systems pharmacology/biology models used in safety and efficacy assessment of small and large molecules within the Simcyp Simulators. Candidates should have experience in applied mathematics, biostatistics and data analysis. Ideally, this should be in pharmacokinetics-, toxicokinetics- and/or pharmacodynamics- related areas. In particular, candidates should have hand-on experience in development of optimisation methods and algorithms and capable of dealing with complex numerical problems including non-linear mixed effect models. The successful candidate is expected to keep abreast of the latest scientific developments, disseminate research results, and actively engage with peers and clients within industry, academia and regulatory agencies.

The successful candidate will join an internationally recognised, multidisciplinary research team, providing opportunities for further development of knowledge and skills. The candidate will undertake novel research projects to expand further the capabilities of the Simcyp Simulators, which require a high level of attention to detail, good oral and written communication skills, and the ability to liaise effectively with the software developers. Further, the candidate is expected to provide on-going customer support and education related to the use of the Simulators and to act as tutor on the Company's well-known educational workshops. The post does not include routine laboratory or clinical work.

We offer a unique and exciting mix of academic and commercial environments which encourage regular attendance at scientific meetings as part of our continuous education programmes.

### **Requirements:**

#### **Essential**

- PhD in pharmaceutical sciences, applied mathematics, statistics, bioengineering, control or chemical engineering or related fields with at least two years of practical experience.
- In-depth understanding and hands-on experience in modelling and simulation principles, statistical data analysis and stochastic optimisation algorithms
- Good working knowledge of common or specialised modelling and simulation platforms, such as Matlab, R, Phoenix, Simcyp, etc
- Proven track record of publications in high impact factor journals
- Excellent record of communication skills, as evident by presentation at scientific meetings, and good interpersonal and organizational skills

#### **Desirable**

- Knowledge of *in vitro* to *in vivo* extrapolation (IVIVE) techniques
- Awareness of R&D process in pharmaceutical companies

- Awareness of good software engineering practices

**Company Overview:**

Simcyp is part of Certara, a company which combines sophisticated research and development informatics with the power of predictive science methodologies to span the drug development spectrum and offer pharma a previously unavailable 'end-to-end' solution in the quest for improving human health. The Simcyp team conducts cutting-edge research and provides consultancy, knowledge integration tools, algorithms, modelling solutions and databases (implemented in its globally-recognised Simcyp Population-based Simulator) for a client base of major blue-chip pharmaceutical and biotechnology organisations. Simcyp focuses, in particular, on gathering information required for the modelling and simulation (M&S) of the individual time-course and fate of drugs. We are on course to become the global industry standard, consequently, there is a continuous requirement for high quality people to join us, help in our expansion and share in our success.

**Applications:** Please apply via our [workforcenow.adp.com](http://workforcenow.adp.com)