Dr. Darren Poole

Scientific Team Leader, Molecular Modalities Capabilities, GlaxoSmithKline

High-throughput and New Technologies

High throughput experimentation (HTE), as the name suggests, allows scientists to execute large numbers of experiments in parallel, with the aim of requiring lower "cost" or "effort" per experiment than traditional experimental techniques. The first half of the workshop will cover the development of high throughput chemistry from examples of combinatorial chemistry through to modern nanoscale synthesis for "Direct-to- Biology" applications, along with the importance of modern computational techniques and how these can be combined with HTE to deliver automated optimisation techniques and be applied to model building for predictive synthesis. The second half of the workshop will delve more into practical aspects of carrying out high throughput experimentation for chemistry, highlighting and identifying the range of equipment available (to suit all budgets!), and how experimental write-up can be greatly facilitated by a range of commercial or Open Access solutions.

By the end of this course, participants should have a strong understanding of the power of high throughput experimentation for chemistry, an idea of the practical requirements, and knowledge of how they can begin deploying these techniques in their own workflows.