



Leica Applications Workshop Series – Tuesday 3rd September

Topic – Autonomous Microscopy Workflow

Autonomous Microscopy allows a highly economical operation for daily laboratory work that includes performing advanced experiments that would not be possible without automated procedures or considerable manual effort. A rare event detection workflow based on AI-powered microscopy implements Autonomous microscopy, enabling the automated detection of rare events (REs) without the need for human interaction and the complete automation of complex microscopic workflows. Within this autonomous workflow, low-resolution 2-dimensional (2D) overview images are generated in a first step, which are immediately transferred to the connected AI-based image processing (Aivia) system. This detects the rare events, previously defined by the operator, by means of a pixel classifier and sends the rare event coordinates back to the imaging system, which scans the rare events according to the operator's specifications, such as high-resolution and 3-dimensional (3D) data stacks. In this way, the generated data are: 1. highly specific to the object of interest, 2. available in a statistically relevant number due to automation.

Program:

Workshop Sessions* – Leica STELLARIS 8 and Navigator Operation

Session One	10:30-12:00
Session Two	13:30-15:00

*Both Sessions are identical

Workshop location Bessemer Building B118, South Kensington

To register for a workshop session please send details of Applications you are working with & Lab/ Group affiliation to: emmanuelle.steib@leica-microsystems.com