Sunday, February 19
5:30 PM – 7:00 PM
Room 9
LUMICKS

From Dynamic Single-Molecule Data To Direct Quantitative Insights Into Biological Mechanisms
The value of dynamic single-molecule research in providing direct insight into the molecular mechanisms of biology has been proven for many years. However, this realm of science has long been accessible only to experts that could build and operate complex instruments, had the knowledge to produce specific samples, and could develop sophisticated methods for analyzing the data.

The LUMICKS C-Trap enabled studying dynamic molecular mechanisms with a ready-to-go instrument. It uniquely correlates single-molecule force and fluorescence measurements to capture all molecular interactions in real time. With the release of biochemistry products, scripting library, and sharing platform an ecosystem was initiated with the aim to provide researchers with all the tools to do their research. We are now taking the next big step in this by launching Lakeview data analysis: a software platform that enables any scientist to instantaneously analyze their science – from raw data to quantitative insights into mechanisms with a couple of clicks.

In this talk we will present Lakeview and show how it can be used to organize, manage, and visualize all your dynamic single-molecule data on any laptop and PC. We will show how it enables automatic tracking of the location and dynamics of individual proteins on DNA and how that can be used to instantaneously visualize resulting data. From here you gain direct quantitative insights into biological mechanisms. And there is more to come!

Speaker
Trey Simpson, Application Scientist Manager, LUMICKS