

SEMINAR INVITATION

„Progress in Reagents for Multicolor Microscopy and Flow Cytometry“

SPEAKER: Kelly Lundsten (Biolegend)

As technology for cell-based research advances in sensitivity, resolution and multiparametric analysis, common problems still plague the reagents involved in imaging and flow cytometry applications.

For microscopy applications, antibody validation across tissue type, sample preparation condition and imaging platform is foremost. However, there are also limitations in the use of species-based secondary detection to amplify signal. The fluorescent polymer Brilliant Violet™ 421 and its family of tandem fluorophores were introduced to enable multicolor flow cytometry applications but BV421™ has proved quite useful as a direct conjugate for imaging applications as well.

We'll discuss verifying antibodies for utility in ICC vs IHC, their use as direct conjugates to overcome these issues with secondary detection as well as the availability of newer and improved fluorophores. Also, from the technology perspective for both flow cytometry and microscopy instrumentation, the limited spectral efficiency of photomultiplier tubes and cameras has been the most significant limitation to multiplexing.

PMTs and cameras lose efficiency past 750nm emissions. However, we'll discuss a new instrument, the Aurora from Cytex, that utilizes avalanche photodiodes rather than PMTs, an advancement which has the potential to change the limitations of reagents and number of parameters possible for multiplexing in flow cytometry.

DATE : Thursday 26.04.2018, 10.00 - 11.30

**LOCATION : Med Uni Vienna, Anna Spiegel Gebäude
Seminarraum Ebene 3**

**HOST : Dr. Marion Gröger (CF Imaging)
Dr. Andreas Spittler (CF Flow Cytometry)**

As the seminar will end around lunchtime, we will provide sandwiches and beverages to continue discussions in a relaxed atmosphere.

Please register until 19.04.2018: andreas.spittler@meduniwien.ac.at