

# **Automated Deep Profiling of**

## Human Immune Cells using Mass Cytometry

### When: Tuesday, April 3<sup>rd</sup>, 2018 @ 12:00pm – 1:00pm Where: 658W Borwell (Borwell Research Building)

#### sponsored by DartLab – Immune Monitoring Flow Cytometry Shared Resource

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PLEASE RSVP @ <a href="https://goo.gl/GWSG3q">https://goo.gl/GWSG3q</a>; lunch will be provided

Speakers:

Bruce Bagwell, MD, Ph. D – President, Verity Software House

#### Greg Stelzer, Ph. D – Director – Mass Cytometry Market Dev., Fluidigm

<u>Abstract</u>: The human hematopoietic cell population is a complex and dynamic system composed of morphologically and functionally diverse cell types. Mass cytometry combines the single cell analysis capability with the selectivity of mass spectrometry. Using antibodies conjugated to heavy metal isotopes, it enables quantitative analysis of high dimensional data on single cell level without confounding fluorescence overlap. With a significant increase in the number of simultaneous parameters measured, there is a need for computational tools to easily process and automate analysis of high-dimensional single-cell mass cytometry data.

- we will introduce the **Maxpar® Human Immune Monitoring Panel Kit**, a <u>29-marker panel</u> designed to characterize immune cell types in human peripheral blood.
- we will also describe a bioanalytical system developed to characterize the major immune cell subsets with data acquired on a Helios<sup>™</sup> mass cytometer (a CyTOF System) and paired with an automated analysis software developed by Verity.



