

Integrated Single-Cell Functional Discovery with Beacon® — From Antibody Discovery to TCR Functional Screening



PLEASE JOIN US!

Join us for a focused lunch session as we take a deep dive into the Beacon Optofluidic platform and explore key workflows across Antibody Discovery and T Cell Profiling. We'll cover how researchers analyze live B and T cells in real time to identify high-affinity antibodies, characterize TCR specificity, and assess cellular function through direct functional readouts, including cytotoxicity, cytokine and cell surface profiling, cell–cell interactions, and clone recovery for downstream sequencing.

EVENT DETAILS

The Beacon platform sorts and analyzes tens of thousands of live cells using light-based sorting that preserves cell health and enables complex co-cultures. Cells are assayed in single-cell microfluidic chambers, capturing dynamic, longitudinal data at single-cell resolution, then recovered post-assay for scale-up or downstream molecular analysis. These capabilities accelerate development of therapeutics, diagnostics, and reagents, and reveal novel biomarkers.

Attendees will leave understanding:

- **Antibody Discovery & BCR/TCR Repertoire Analysis:** Sequencing B cells to develop antibodies against known and novel /unknown antigens in one day
- **Cell-Cell Interaction Analysis:** Characterizing T cell cytotoxicity, cytokine secretion, cell surface protein expression, and cell motility in live cell co-cultures to understand functionality of CARs/TCRs/BiTEs
- **Functional Biology & Spatial Biology:** A case study interrogating functional TCRs in a patient tumor and spatially mapping T cell receptors to understand cancer pathology

DATE & LOCATION

Wednesday, September 9th
12:00–1:00 PM EDT

Cancer and Genetics Research
Complex
Room CGRC-451

2033 Mowry Rd, Gainesville, FL 32610

REGISTER

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PRESENTERS



Joseph Valdez, Ph.D. | Technical Sales Manager

Dr. Valdez accelerates researchers' goals by translating their operations onto the Beacon. Dr. Valdez trained in molecular and cellular analysis in the field of oncology and holds deep experience in cutting-edge analytical methods.



Amanda M. Dossat, Ph.D. | Field Applications Scientist

Dr. Dossat brings a strong background in molecular biology and high-content confocal imaging. Dr. Dossat has applied these tools across neuroscience, immunology, oncology, and multi-omics research domains.