

# AAI IMMUNOLOGY2023™ Pocket Program

Workshops, Poster Presentations, Talks, and Expanded Solutions

For over 20 years, BioLegend has enabled legendary discovery. Now as part of a greater Life Science and Diagnostic company, we are thrilled to offer you expanded capabilities to advance your immunology breakthroughs.

Browse through this pocket program to learn about our scheduled workshops, poster presentations, talks, and events at the AAI IMMUNOLOGY2023<sup>™</sup> conference, and discover how our 29,000 cutting-edge antibodies and reagents combine with our newest solutions to make a difference in your lab.

Visit us at Booth #6011.

Learn more at www.biolegend.com

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# Join our events at AAI

# **EVENTS** Friday, May 12

#### Lefrançois-BioLegend Memorial Award Presentation

8:00–9:30 a.m.	Level 2, Room 202B
	Awarding Alexandria Wells, PhD,
	Postdoctoral Fellow, NIAID, NIH

#### AAI-BioLegend Herzenberg Award Presentation and Lecture

12:30–1:30 p.m.	Level 2, Room 202A
	Awarding Shane Crotty, PhD,
	La Jolla Institute for Immunology

#### Workshop

1:45–2:30 p.m.	Exhibitor Workshop Room 2
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Modulating levels of cell surface CD6 regulates effector T cell activity and Treg development

Jeanette Ampudia, Associate Director, Immunology & Research Operations at Equillium Bio, Inc.

# IMMUNOLOGY2023™

#### **Poster Presentations**

2:30-3:45 p.m.

#### Abstract ID #3287

Deep phenotypic and functional characterization of NK cells during NK-mediated cytotoxicity

Rebecca Nickle, PhD, Technical Applications Scientist, BioLegend

#### Abstract ID #379

A new antibody for the study of human CD157 expression and function

Susannah Kassmer, Scientist II, Cell Analysis, BioLegend

#### **In-booth Presentations**

2:55–3:10 p.m.	From single reagents to pre-optimized panels: solutions for flexible flow cytometry analysis
	Ekaterina Zvezdova, PhD, Technical Service Manager, BioLegend
3:15–3:30 p.m.	Multiomic single-cell analysis, a new suite of
	tools to characterize cell physiology

## EVENTS Saturday, May 13

#### Workshop

12:30–1:15 p.m.

Exhibitor Workshop Room 2 (Lunch provided)

Stimulation with a superagonistic anti-CD28 antibody shows Treg expansion and provides an *in vitro* model for immunotherapeutic research

Rebecca Nickle, PhD, Technical Applications Scientist, BioLegend

#### Talk (Block Symposium)

12:45–1:00 p.m. Comparison of CAR-T cell-mediated cytotoxicity assays with suspension tumor cells using high-throughput plate-based image cytometry method

Leo Li-Ying Chan, PhD, Senior R&D Manager

#### **In-booth Presentations**

2:55–3:10 p.m.	T cell functional phenotyping on a single-cell scale using hydrogel microparticles
	Monika Kizerwetter, Biomedical Engineering PhD Candidate, Johns Hopkins University
3:15–3:30 p.m.	Deep phenotypic and functional characterization of NK cells during NK-mediated cytotoxicity

## **EVENTS** Sunday, May 14

#### **Poster Presentations**

2:30-3:45 p.m.

#### Abstract ID #158

Comparison of CAR-T cell-mediated cytotoxicity assays with suspension tumor cells using highthroughput plate-based image cytometry method

Leo Li-Ying Chan, PhD, Senior R&D Manager

#### Abstract ID #392

# Cell identity, count, and viability for critical quality attributes using the Cellaca® PLX image cytometer

Leo Li-Ying Chan, PhD, Senior R&D Manager and Carolina Franco-Nitta, PhD, Consumables/Reagent Development Manager

#### Abstract ID #414

A rapid and high-throughput T cell immunophenotyping assay for cellular therapy bioprocessing using the Cellaca® PLX image cytometer

Leo Li-Ying Chan, PhD, Senior R&D Manager and Carolina Franco-Nitta, PhD, Consumables/Reagent Development Manager

#### Abstract ID #286

High-throughput method to analyze the cytotoxicity of CAR-T cells in a 3D tumor spheroid model using image cytometry

Leo Li-Ying Chan, PhD, Senior R&D Manager and Samir Patel, PhD, Application Scientist

#### **Poster Presentations (continued)**

2:30-3:45 p.m.

#### Abstract ID #311

Characterization and comparison of acridine orange/propidium iodide and acridine/DAPI viability detection methods for cell and gene therapy development

Leo Li-Ying Chan, PhD, Senior R&D Manager and Yongyang Huang, PhD, R&D Scientist

#### **In-booth Presentations**

2:55–3:10 p.m.	Protein extraction efficiency of Bead Ruptor Elite™ bead mill homogenizer and detection of total and phosphorylated proteins by HTRF® immunoassay Rodney J. Nash, PhD, Chief Scientific Officer
3:15–3:30 p.m.	A rapid and high-throughput T cell immunophenotyping assay for cellular therapy bioprocess using the Cellaca® PLX image cytometer
	Bo Lin, PhD, Consultant Product Portfolio
7:00–10:00 p.m.	AAI IMMUNOLOGY2023 <sup>™</sup> Gala Event At the National Museum of American History

### Visit us at Booth #6011 to learn how

SOLUTIONS	Learn more about our expanded solutions Cellular Analysis
Flow Cytometry Products	We provide thousands of antibody and fluorophore combinations to build the ideal panel to phenotype and understand your cells.
TotalSeq™ Oligo- Conjugated Antibodies for Multiomics	For single-cell and bulk multiomics, we provide TotalSeq <sup>™</sup> antibodies conjugated to oligonucleotide barcodes to add a new layer of protein detection to assays like scRNA-seq.
SOLUTIONS	Learn more about our expanded solutions Sample Preparation
Bead Ruptor Elite™ Bead Mill Homogenizer	The Bead Ruptor Elite™ is today's most advanced and powerful bead mill homogenizer. Uniquely designed to grind, lyse, and homogenize the most challenging samples, it saves you time and produces repeatable results.
MojoSort™	Our MojoSort™ cell separation system of magnetic bead-conjugated antibodies, buffers, and magnets

# we can accelerate your breakthroughs.

SOLUTIONS	Learn more about our expanded solutions Cell Culture and Bioprocessing
Cellaca® PLX and Reagents	Cellaca® PLX is a benchtop high-throughput cell counting solution for accurate measurements of small sample volumes to easily perform rapid subpopulation analysis for downstream processing. Optimized fluorescent reagents, plates, and slides to help ensure the best results from your image cytometry and cell counting systems.
Cellometer® and Cell Counting Reagents	Cellometer® instruments utilize dual-fluorescent and brightfield imaging to quickly and accurately identify and count individual cells. Cellometer® reagents are optimized to perform fluorescence-based cell counting and viability assays used to measure percent viability and enumerate live/dead cells.
Recombinant Proteins	We drive cell fates by providing stable, bioactive human, mouse, and rat recombinant proteins including cytokines, growth factors, and chemokines.
GMP and Cell-Vive™ Solutions	To ensure quality at every step of the bioprocessing workflow, we offer recombinant proteins, functional antibodies, and cell culture reagents produced under Current Good Manufacturing Practices (cGMP) for research and downstream manufacturing.

### SOLUTIONS

Mini ELISA Plate Reader™

#### **LEGENDplex**<sup>™</sup>

ELISA Kits and Sets

#### VICTOR<sup>®</sup> Nivo<sup>™</sup>

Alpha Assay Kits

#### HTRF® Assay Kits

Learn more about our expanded solutions **Immunoassays** 

Alongside ELISA kits, we offer the Mini ELISA Plate Reader<sup>™</sup>—a fast, compact instrument that can scan all 96 wells simultaneously to save you time and space at the lab bench.

Use a flow cytometer to measure multiple soluble cytokines, chemokines, and proteins simultaneously with our pre-defined or customized LEGENDplex<sup>™</sup> multiplex panels.

For researchers looking to quantify individual protein targets, we provide ELISAs in multiple formats that are compatible with biological samples like cell culture supernatant, serum, and plasma.

All the popular detection modes you need in the industry's smallest multimode reader footprint the VICTOR® Nivo™ is the perfect microplate reader for everyday biochemical and cell-based assays.

Fast results, high sensitivity, large dynamic range, and a compatibility with many sample types make Alpha technology an optimal choice for moving your research forward.

In recent years, steady improvements have made HTRF<sup>®</sup> the gold standard for time-resolved FRET. It has become rapid, homogeneous, easy to use and automate, allowing miniaturization and assay development.

## SOLUTIONS

CRISPR Immune Cell	
Screening Services	

Compound Screening Immune Cell Service— ImmuSignature™

Mixed Lymphocyte Reaction (MLR) ImmuSignature<sup>™</sup> Assay

T Cell Activation (TCA) ImmuSignature™ Assay Isolates the effect of compounds that promote or block cell proliferation and T cell activity through a rapid semi-automated and reproducible highthroughput assay.

Complement-Dependent Cytotoxicity (CDC) ImmuSignature™ Assay Enabling screening of antibody candidates for cancer immunotherapy to confirm complement-dependent activity and effectiveness.

Learn more about our expanded solutions Immune Cell Screening Services

Target identification assays using functional genomic CRISPR knockout screening in primary human immune cells to address clinically relevant biological questions.

ImmuSignature<sup>™</sup> screening platform is made up of standardized assays that leverage HTRF technology, extensive primary immune cell QC, and miniaturized semi-automated 384-well platform to provide rapid robust data sets.

Rapidly identify agents that modulate APCmediated T cell activation with a high-throughput assay.

### SOLUTIONS

#### Spatial Biology Imaging Reagents

#### In Vivo Imaging Systems

#### PhenoVue™ Cellular Imaging Reagents

#### PhenoPlate™ Microplates

#### **Celigo**®

Learn more about our expanded solutions **Microscopy and Spatial Biology** 

Enter a new era of spatial biology with BioLegend's reagents for traditional imaging applications, such as IHC/ICC, or advanced techniques involving multiplexed imaging of dozens of targets.

Our *in vivo* imaging solutions include the industry leading IVIS® optical platform, Quantum GX2 microCT system, and Vega® ultrasound scanner, as well as a comprehensive portfolio of IVISbrite™ bioluminescent and IVISense™ fluorescent reagents validated and optimized for your research applications.

Our suite of PhenoVue<sup>™</sup> cellular imaging reagents—including cell painting kits, organelle and cell compartment stains, fluorescent labeled secondary antibodies, and cell function reagents are validated and optimized for high content screening (HCS) to streamline your workflow.

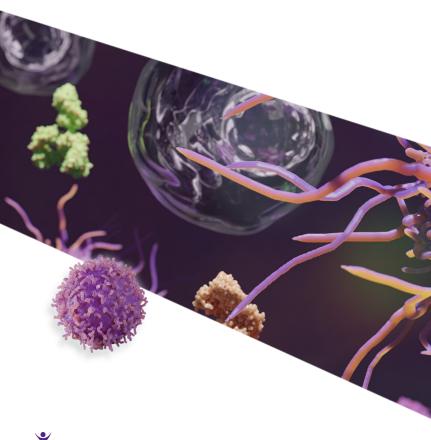
PhenoPlate<sup>™</sup> microplates have been engineered to deliver superior images and the highest quality data for high-content applications, complementing our proven HCS instruments, reagents, and image analysis software.

Celigo® is a plate-based benchtop brightfield and fluorescent imaging system designed for whole-well live-cell analysis and cell sample characterization. Learn more about our reagents at **biolegend.com** 





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