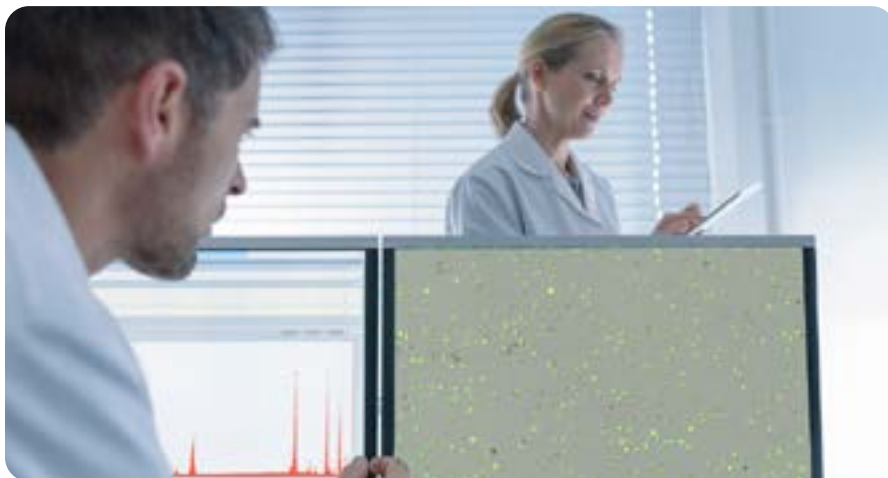


For Cellometer, Cellaca and Celigo cell counting and image cytometry systems



This document lists publications, authored or co-authored by Revvity*, describing the use of Cellometer™, Cellaca™ or Celigo™ cell counters and image cytometry systems.

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* Nexcelom's cell counting and image cytometry products are now part of Revvity's portfolio.

1. 3D Cell Models

Celigo Image Cytometer

High-Throughput 3D Tumor Spheroid Screening Method for Cancer Drug Discovery Using Celigo Image Cytometry.

Kessel S, Cribbes S, Déry O, Kuksin D, Sincoff E, Qiu J, Chan LL-Y. [Journal of Laboratory Automation 2016;22:454-465.](#)

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Cribbes S, Kessel S, McMenemy S, Qiu J, Chan LL-Y. [SLAS Discovery 2017;22:547-557.](#)

Optical Coherence Tomography Detects Necrotic Regions and Volumetrically Quantifies Multicellular Tumor Spheroids.

Huang Y, Wang S, Guo Q, Kessel S, Rubino J, Chan LL-Y, Li P, Liu Y, Qiu J, Zhou C. [Cancer Research 2017;77:6011-6020.](#)

Real-Time Apoptosis and Viability High-Throughput Screening of 3D Multicellular Tumor Spheroids Using the Celigo Image Cytometer.

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Automated Assessment of Cancer Drug Efficacy On Breast Tumor Spheroids in Aggrewell™400 Plates Using Image Cytometry.

Mukundan S, Bell J, Teryek M, Hernandez C, Love AC, Parekkadan B, Chan LL-Y. [Journal of Fluorescence 2022.](#)

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

Zurowski D, Patel S, Hui D, Ka M, Hernandez C, Love AC, Lin B, Moore A, Chan LL-Y. [SLAS Discovery 2023;28:65-72.](#)

Characterization and comparison of hypoxia inducing factors on tumor growth and metastasis between two- and three-dimensional cancer models.

Chan LL-Y, Kessel SL, Lin B, Juncker-Jensen A, Weingarten P. [SLAS Discovery 2024;29:59-65.](#)

2. Brewing, Biofuel, and Small Cells

Cellometer Cell Counters

Direct concentration and viability measurement of yeast in corn mash using a novel imaging cytometry method.

Chan LL, Lyettefi EJ, Pirani A, Smith T, Qiu J, Lin B. [Journal of Industrial Microbiology & Biotechnology 2011;38:1109-1115.](#)

Novel image cytometric method for detection of physiological and metabolic changes in *Saccharomyces cerevisiae*.

Chan LL, Kury A, Wilkinson A, Berkes C, Pirani A. [J. Ind. Microbio. Biotech. 2012;39:1615-1623.](#)

Rapid quantification of pathogenic fungi by Cellometer image-based cytometry.

Berkes CA, Chan LLY, Wilkinson A, Paradis B. [Journal of Microbiological Methods 2012 Dec:468-476.](#)

Automated quantification of budding *Saccharomyces cerevisiae* using a novel image cytometry method.

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Measuring Lager and Ale Yeast Viability and Vitality Using Fluorescence-Based Image Cytometry.

Chan LL-Y, Driscoll D, Kuksin D, Saldi S. [MBAA TQ 2016;53:49-54.](#)

A novel concentration and viability detection method for *Brettanomyces* using the Cellometer image cytometry.

Martyniak B, Bolton J, Kuksin D, Shahin SM, Chan LL-Y. [Journal of Industrial Microbiology & Biotechnology 2017;44:119-128.](#)

Monitoring *Brettanomyces* Concentration, Viability, and Pseudohyphae Percentage During Propagation and Fermentation Using the Cellometer X2 Image Cytometer.

Martyniak B, Bolton J, Kuksin D, Purseglove SM, Chan LL-Y. [MBAA TQ 2018;55:2-7.](#)

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Rapid cell counting and viability detection method of *Escherichia coli* Nissle using image cytometry.

Perry M, McDonald M, Lund A, Nikrad M, Wong D, Rice WL, Chan LL-Y. [Journal of Microbiological Methods 2022;192:106381.](#)

A novel image-based method for simultaneous counting of *Lactobacillus* and *Saccharomyces* in mixed culture fermentation.

Williamson C, Kennedy K, Bhattacharya S, Patel S, Perry J, Bolton J, Perkins LB, Chan LL-Y. [Journal of Industrial Microbiology & Biotechnology 2023;50:1-8.](#)

3. Cell Counting Science and Standards

Cellometer Cell Counters

Rapid Image-based Cytometry for Comparison of Fluorescent Viability Staining Methods.

Chan LL, Wilkinson AR, Paradis BD, Lai N. [Journal of Fluorescence 2012;22:1301-1311.](#)

Morphological observation and analysis using automated image cytometry for the comparison of trypan blue and fluorescence-based viability detection method.

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Assessment of Cell Viability with Single-, Dual-, and Multi-Staining Methods Using Image Cytometry.

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Observation and quantification of the morphological effect of trypan blue rupturing dead or dying cells.

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Practical application of cell counting method performance evaluation and comparison derived from the ISO Cell Counting Standards Part 1 and 2.

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Cellaca MX High-throughput Cell Counter

Characterization of a novel high-throughput, high-speed and high-precision plate-based image cytometric cell counting method.

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4. Cell Line Development and Bioprocessing

Celigo Image Cytometer

Novel high-throughput cell-based hybridoma screening methodology using the Celigo Image Cytometer.

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A novel image-based cytometry method for autophagy detection in living cells.

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A novel method for kinetic measurements of rare cell proliferation using Cellometer image-based cytometry.

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Contribution of serine, folate and glycine metabolism to the ATP, NADPH and purine requirements of cancer cells.

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Wang J, Ma X, Jones HM, Chan LL-Y, Song F, Zhang W, Bae-Jump VL, Zhou C. [Journal of Translational Medicine 2014;12:1-11.](#)

Investigation of macrophage differentiation and cytokine production in an undergraduate immunology laboratory.

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Image cytometry as an alternative to flow cytometry for the transplant histocompatibility crossmatch assay.

Ramon DS, Franks T, Jaramillo A, Paradis BD, Chan LL-Y. [HLA Immune Response Genetics 2019;93:436-444.](#)

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A Multiplex Assay to Simultaneously Monitor Apoptosis and Necrosis Using the Cellaca® PLX Image Cytometer.

Pierce M, Huang Y, Lin A, Nitta CF, Kuksin D, Lin B, Chan LL-Y. [Journal of Fluorescence 2024. Journal of Immunological Methods 2024;524.](#)

6. Immuno-oncology, Cell and Gene Therapy

Cellometer Cell Counters

Accurate measurement of peripheral blood mononuclear cell concentration using image cytometry to eliminate RBC-induced counting error.

Chan LLY, Laverty DJ, Smith T, Nejad P, Hei H, Gandhi R, Kuksin D, Qiu J. [Journal of Immunological Methods 2013;388:25-32.](#)

A Novel Method for Assessment of Natural Killer Cell Cytotoxicity Using Image Cytometry.

Somanchi SS, McCulley KJ, Somanchi A, Chan LL, Lee DA. [PLoS One 2015;10:1-15.](#)

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Visualization and quantification of NK cell-mediated cytotoxicity over extended time periods by image cytometry.

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Cellaca MX High-Throughput Cell Counter

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

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7. Regenerative Medicine and Others

Cellometer Cell Counters

Automated Enumeration and Viability Measurement of Canine Stromal Vascular Fraction Cells Using Fluorescence-Based Image Cytometry Method.

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Discriminating Multiplexed GFP Reporters in Primary Articular Chondrocyte Cultures Using Image Cytometry.

Chan LL-Y, Huang J, Hagiwara Y, Aguila L, Rowe D. [Journal of Fluorescence 2014;24:1041-1053.](#)

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Celigo Image Cytometer

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8. Virology

Celigo Image Cytometer

A high-throughput inhibition assay to study MERS-CoV antibody interactions using image cytometry.

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