IMMUNOLOGY 2009 EXHIBITOR WORKSHOPS
Monday, May 11

Rapid MNC Enrichment Using Pall's New Purecell™ Select System

Pall Medical
2200 Northern Blvd. * East Hills, NY 11548 * Phone: 516-801-9858 * Fax: 516-801-9548
www.pall.com/

9:00 AM – 10:00 AM, Room 612
Presenter: Safa Karandish

The new Pall Purecell™ Select System is a rapid, easy to use, single use disposable for the isolation of Mononuclear cells (MNC) from whole blood and cord blood for cell based research. Inherent advantages over traditional density gradient methods include increased recovery, reproducibility, speed and ease of use. Study results comparing the Pall Purecell™ Select System to density gradient methods for isolation of MNC will be presented. Participants will walk away from the workshop with an awareness of how the Purecell™ Select System can fit into their current research applications and potential future use in clinical cell manufacturing processes.

How Dynabeads® Can Facilitate Your Cell Research

Invitrogen Corporation
5791 Van Allen Way * Carlsbad, CA 92008 * Phone: 800-955-6288 * Fax: 760-603-7229
Web: http://www.invitrogen.com

11:00 AM – 12:00 PM, Room 611
Presenter: Cenk Sumen, Ph.D.

Dynabeads® tube-based cell separation is the technology of choice for high yields of pure, viable, and functional cells. Cells are not subjected to the stress of being passed through a dense column or exposed to iron oxide. Dynabeads are coated with an inert polymer layer that prevents iron leakage. The FlowComp™ positive cell isolation system allows for the removal of the beads to further minimize the impact on cells and allow for downstream applications such as flow based assays or cell culture. Results from side-by-side comparisons of Dynabeads FlowComp positive isolation and Dynabeads Untouched™ negative isolation technologies with column-based methods show how this gentle and consistent isolation system gives higher yields, purity, and viability, hence healthier cells for more reliable downstream data. Combine Dynabeads tube-based cell separation with our cellular analysis products to easily isolate and characterize any cell type.

Next Generation Molecular Probes® Flow Cytometry Reagents from Invitrogen: Qdot® Nanocrystal Conjugates, Viability Detection, Cell Cycle and Proliferation Analysis

Invitrogen Corporation
5791 Van Allen Way * Carlsbad, CA 92008 * Phone: 800-955-6288 * Fax: 760-603-7229
Web: http://www.invitrogen.com

12:00 PM – 1:00 PM, Room 611
Presenter: Bill Godfrey, Ph.D.

This tutorial will focus on ways to increase multiplexing capability on nearly all flow cytometers using new Molecular Probes® technologies. Because of their relatively narrow, symmetrical emission, Qdot® nanocrystals are the clear choice for higher plexed assays. This tutorial will cover the practical aspects of Qdot® nanocrystal conjugate use, including optimal optical filter choices.. In addition, newer fluorescent reagents will be discussed that facilitate the ability of scientists to analyze cell function beyond immunophenotyping: Dead cell discrimination using SYTOX® AADvanced™ Dead Cell Stain – a dye with spectral properties similar to 7-AAD but with improved kinetics and lower CVs; newer LIVE/DEAD® Fixable Dead Cell Stain Kits to eliminate dead cells from intracellular staining assays for cytokine detection and phophorylation studies; and, live cell cycle analysis with Vybrant DyeCycle™ Ruby - detection in far red channels with little cytotoxicity. The presentation will also cover the latest applications using the novel Click-iT™ technology.

Multiplexed Immunoassays for Simultaneous Quantification of Guinea Pig Proteins

Invitrogen Corporation
5791 Van Allen Way * Carlsbad, CA 92008 * Phone: 800-955-6288 * Fax: 760-603-7229
Web: http://www.invitrogen.com

1:00 PM – 2:00 PM, Room 611
Presenter: Hans Beernink, Ph.D.

Guinea pigs has been the most commonly used preclinical model for chronic obstructive pulmonary disease (COPD) and asthma research. However, tools for biomarker studies in guinea pigs have been scarce. Using the Luminex xMAP® system, we have developed a novel immunoassay panel to monitor guinea-pig proteins from biological samples. The assay procedure is similar to traditional ELISA methods, and multiple markers can be quantified in such diverse sample types as serum, plasma, bronchial lavage fluid, and tissue culture supernatants. Quantification is achieved using recombinant guinea pig proteins for calibration. Assay performance and relevance to disease models will be discussed.

Considerations in Cytokine Assay Development

PBL Interferon Source
131 Ethel Road West, Suite 6 * Piscataway, NJ 08854 * Phone: 732-777-9123 * Fax: 732-777-9141
Web: http://www.interferonsource.com/

2:00 PM – 3:00 PM, Room 612
Presenter: Thomas Lavoie, Ph.D.

This tutorial will provide information on how to set up a cytokine assays with appropriate controls, tips and tricks for optimizing results, and how to make sense of the generated data. Topics such as choosing appropriate methods and standards and data analysis will also be covered.

A Novel Technology for Automated, In Situ Cell Imaging

Cyntellect, Inc.
6620 Mesa Ridge Road * San Diego, CA 92121 * Phone: 858-875-1632 * Fax: 858-550-1774
Web: www.cyntellect.com

3:00 PM – 4:00 PM, Room 611
Presenters: Paul DiGregorio, Sarah Kessel, Ianina Valenta, Michelle Zatcoff, Stella Redpath, Gary Bright, David Burns, and Fred Koller

The new iSCIP® (*in situ* Cell Imaging Platform) system from Cyntellect has been developed to address current limitations in live cell imaging and processing. The iSCIP combines high quality optics with powerful software for accurate cell analysis. The iSCIP is a bench top device which can very rapidly identify, and analyze cells *in situ* in tissue-culture flasks, in multi-well plates and even in Petri dishes using brightfield and fluorescence detection. The iSCIP is particularly useful for adherent cells, as these cells can be directly counted and analyzed in the flask or multiwall plate without any need for trypsinization or labeling. The iSCIP platform has utility in many areas of cell biology study including cell culture management including clonal selection, drug discovery and development and toxicology. Applications of the iSCIP include cell proliferation assays, apoptosis assays, assays for cell health including growth curves and viability and also assays for cell classification, or changes in morphology.Cells can be counted *in situ* without stains, fixatives, or harvesting, assay time and costs are reduced without compromising data quality. The ability to count cells at any time point without sacrificing them allows researchers to optimize experimental conditions and use cells for other purposes. Finally, high quality images of cells may be archived at any time point, allowing future visual analysis of any screening “hits.”

Optimizing Flow Cytometric Analysis of Intracellular Targets

eBioscience, Inc.
10255 Science Enter Drive * San Diego, CA 92121 * Phone: 888-999-1371 * Fax: 858-642-2046
Web: http://www.ebioscience.com/

4:00 PM – 5:00 PM, Room 612
Presenters: Castle Funatake and Matthew Schifano

The power of flow cytometry to detect and quantify protein expression at the single-cell level extends beyond antigens expressed on the cell surface. As the potential of multicolor flow cytometry grows, the ability to accurately determine intracellular protein expression, including cytokines, cytoplasmic proteins and nuclear proteins, becomes increasingly important. However, experimental conditions, techniques and controls conventionally employed for surface proteins are not always suitable for detection of intracellular targets. Optimizing experimental setup is fundamental to allow reliable interpretation of intracellular staining results. Among the topics covered will be: appropriate controls to use for intracellular targets, choice of staining buffer and optimizing fluorochrome selection. eBioscience offers a wide range of reagents and support products for intracellular staining and flow cytometry, including a diverse selection of products for analysis of cytokines and transcription factors.