Press release
For Immediate release
Continuous measurement of cell monolayer barrier function (TEER) using membrane inserts in multiple wells
Troy, NY, October 4, 2013

Applied BioPhysics Inc. Announces the ECIS Trans Filter Adapter

Applied BioPhysics Inc. manufactures ECIS® (Electric Cell-Substrate Impedance Sensing) instruments and arrays for monitoring the behavior of cells in tissue culture. The new ECIS® trans Filter adapter enables the continuous measurement of cell monolayer barrier function (TEER) using membrane inserts in multiple wells.

Manufacturer of biological and drug research instruments, Applied BioPhysics Inc., announces the new ECIS® trans Filter adapter. The adapter enables continuous electrical monitoring of the barrier function of cells grown in culture.

ECIS® (Electric Cell-substrate Impedance Sensing) is a label-free, non-invasive method to electronically monitor, in real-time, cells grown in tissue culture. ECIS® monitors morphological changes, cell locomotion, and other behaviors directed by the cell's cytoskeleton. The new trans Filter adapter accommodates standard twenty four well membrane inserts from a broad

range of manufacturers. The adapter holds up to eight inserts, and with two adapter devices connected to the ECIS® data acquisition system, up to sixteen filters can be followed independently. Dedicated software presents real-time, continuous measurement of TEER in ohm-cm^2.

In the standard ECIS® culture plates, cells are exposed to media only from their apical sides. With the ECI® trans Filter adapter, cells on a membrane can access media on both the basolateral and apical sides and thereby more closely experience their *in vivo* environment.

Other ECIS® applications include measurements of cell migration, endothelial barrier function, extravasation of normal cell layers by metastatic cells, signal transduction, cell-ECM interactions, cytotoxicity, cytopathic effects of viral infections and cell proliferation.

The trans Filter array and the ECIS® measurement system will be on display at the NAVBO Oct. 20 – 24, 2013, Cape Cod, MA and the American Society for Cell Biology, Dec. 14 – 18, 2013, New Orleans, LA.

About Applied BioPhysics Inc.

ECIS® technology was invented by Drs. Ivar Giaever and Charles R. Keese while working at General Electric Corporate Research and Development, but its commercial potential was not explored, as it fell outside of GE's core interests. In 1991, as the applications of the technology became more apparent, Drs Giaever and Keese formed Applied BioPhysics, Inc. as a private company to develop, commercialize and market ECIS® and other biophysical technologies. Applied BioPhysics is located next to the Rensselaer Polytechnic Institute campus, where several collaborative research projects are ongoing in the academic laboratories.

Instruments are located throughout the United States as well as in Asia and Europe. Customers include Johns Hopkins University, The University of Tokyo, Vanderbilt University, Brown University, Genentech and Allergan to mention a few. Drs. Giaever and Keese continue to develop new innovations to enhance ECIS®, including an automated wound healing assay and a device to study the behavior of cells under flow conditions both of which are now commercially available.

For further information contact:

Wendy Ladouceur
Applied BioPhysics
185 Jordan Road
Troy, NY 12180
Ph: 1-866-301-ECIS (3247)
Fax 518-880-6860
ladouceur@biophysics.com

For technical questions:

Dr. Christian Renken
Applied BioPhysics
185 Jordan Road
Troy, NY 12180
Ph: 1-866-301-ECIS (3247)
Fax 518-880-6860
renken@biophysics.com