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Date: Friday, February 17, 2012

Location: WCH Room 205/206

Time: 11:10am

Quantitative Live-Cell Imaging: Increasing the possibilities with Cell-IQ

Abstract:

Cell-IQ is a fully integrated, automated cell culture and analysis system for short and long term studies. The system consists of an incubator, imaging optics and powerful intuitive software for data capture and processing. Cell-IQ has been used to study a wide range of applications in areas from drug discovery, routine and clinical assays, regenerative and translational medicine through to stem cell research. Key features include:

- Optimized incubator capable of short and long term cell studies, one image to a six week study
- Patented Cell-Secure lid delivering gas directly to microplate
- Independent gas feeds to two plate positions enabling comparative studies to be performed e.g. hypoxia
- Plate holder compatible with slides, dishes, flasks and microplates

- LED illumination for both phase and fluorescence imaging reducing external cell effects such as phototoxicity and photobleaching
- 2D and 3D imaging and dynamic z-stack maximizes the range of samples and culture conditions that can be monitored
- Automated analysis of multiple cellular parameters from label free phase contrast images and multi-label fluorescence images

The ability to analyze cellular behavior using phase contrast imaging makes Cell-IQ a truly label free technology. Cells or cellular structures are characterized and quantified by kinetically tracking changes in their morphology. Cell-IQ can benefit your research by increasing the content of the data generated from each and every experiment performed, while significantly reducing manual effort and assay costs.

Biography:

My research background focused on mechanisms of cancer development and metastasis from the molecular level to animal models leading to a broad background in molecular biology, cell biology, cell signaling and microscopy. After finishing my postdoctoral research at the University of Virginia, I joined TAP Biosystems in 2011 as an applications scientist for the Cell-IQ.