

## CRG Barcelona

Advanced Light Microscopy Unit

June 15, 2010

Starting from 10:00 am in several sessions of 1h

# Joint CYTOO-Leica Practical Workshop Automated High Content Analysis

**Using CYTOO's Cell Normalization Technology and New Leica HCS A Software  
for Fast and Reliable High Content Cell Analysis**

Reducing assay variability and developing efficient high throughput acquisition and image analysis methodologies are key in reaching high quality quantitative cell analysis both in fundamental cell biology and in a vast range of High Content Analysis (HCA) assays. This practical workshop will introduce researchers to a new powerful technology based on CYTOO's adhesive micropatterns which normalize cell architecture down to their internal organization as well as to the recently introduced software for highly automated image acquisition from Leica Microsystems. The combination of both tools enables efficient high-throughput HCA. The workshop will focus on the practical aspects of using micropatterned **CYTOOchips**<sup>™</sup> in a model "dose-response" drug assay. During the session, after a short presentation of the both technologies we will demonstrate how to (i) efficiently automate the image acquisition with cells plated on micropatterned CYTOOchips using **Leica HCS A** software controlling a Leica SP5 system; (ii) apply various image cell analysis algorithms to measure parameters of interest within individual cells (using ImageJ macros); (iii) obtain **statistically relevant data using only several dozens of cells**. The presented technologies could be used for various cell-based assays both for fixed and live cell imaging.

If you are interested in attending, please contact [timo.zimmermann@crg.es](mailto:timo.zimmermann@crg.es) to register.

