

Multiplexing FLIM for High Content Screening Applications

Qiyin Fang

Canada Research Chair in Biophotonics
McMaster University
Canada

In high content screening (HCS) of drug leads, throughput is a critical requirement. We developed a FLIM technique, which utilizes lenslet arrays and a multiplexing confocal scanning process. This technique achieves high throughput without sacrificing resolution, ideal for HCS. The performance of the system in terms of cross-talk, lifetime estimation, and resolution is characterized through live cell imaging experiments.