

***In situ* Cytometry as a Viable Technology in a Flow Core**

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The diverse nature of source materials, cell types and biological questions increases the demands on a flow cytometry core facility to apply equally diverse and creative approaches to address analytical challenges. The implementation of *In situ* imaging cytometry analysis can be used to generate valuable data regarding cell health, growth, functional characteristics and culture complexity that may not be captured using standard flow cytometry techniques. Sensitive cell types, such as adherent cells, primary cells or stem cells often cannot be removed from their culture vessel without the loss of important morphological information, undue physiologic stress or even complete destruction. The Celigo™ Cytometer allows the user to retrieve data for both adherent and non-adherent cell types with precision and accuracy. We have collected data from several users that have used the Celigo™ Cytometer as an open access resource to augment or as an alternative to standard flow cytometry. The experiments presented will identify correlations with flow cytometry data, as well as provide additional information that can only be determined *in situ*. Image analysis has been shown to be an important part of cellular analyses and can often be used to measure quantitative or qualitative changes occurring within a culture, *in vitro*. There is a substantial benefit to include an *in situ* imaging-based system as technology to support the scope of cellular analysis needed among a diverse user base.