ImageStream Experimental Evaluation Worksheet

Name:
Lab:
E-mail:
Phone:

This document will help you define your ImageStreatm evaluation experiment and help us guide your sample preparation and produce satisfying results.

The ***ImageStreamX*** is a high resolution high speed automated microscope that numerically quantifies cellular morphology and the intensity, location and co-location of fluorescent probes within tens of thousands of cells per sample. The ImageStream system can be equipped with 20x, 40x and 60x objectives to accommodate a wide range of microscopy experiments. It can also be equipped with optics that image the entire cell simultaneously in focus for accurate spot counting. This technology thus provides a wide range of objective and statistically robust microscopy applications. Please answer the following questions related to the experiment you plan to try on the instrument.

The type of application I wish to try (x all that apply):

	Translocation of signaling molecules
	Molecular co-localization
	Internalization / Phagocytosis
	Sub-cellular localization / Clustering
	Conjugate analysis / Cell fusion
	Apoptosis / Necrosis
	Autophagy
	Morphology-based cell classification
	Shape change
	Spot counting
	Cell cycle / Mitosis
	Flow confirmation / Artifact rejection
	Other (please describe):

These ImageStream features are important for my application (x all that apply):

	Numerical quantitation of imagery
	Automated image collection
	Large sample sizes and population statistics
	Rare event analysis by microscopy
	Other (please describe):

Briefly describe the purpose of the experiment and expected results:

Why is this application difficult to do with existing technologies I have access to?

Experimental details:

Cell Type:
Markers, dyes, probes to be used:
Have you used those probes before?
Number of samples:
Expected number of cells per sample:
Expected frequency of rarest cell of interest:
Biologic positive control:
Biologic negative control: