Amnis Experiment Design Document

Name:
Lab:
E-mail:
Phone:

The ImageStream is a high-speed automated microscope that captures images in flow and numerically quantifies cellular morphology and the intensity, location and co-location of fluorescent probes within tens of thousands of cells per sample. This technology thus provides objective and statistically robust presentation of image-based data. Please read the sample preparation guide and answer the following questions related to the experiment you plan to try on the instrument during the demonstration.

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

	Translocation of signaling molecules
	Molecular co-localization
	Internalization / phagocytosis
	Sub-cellular localization
	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):

Luminex
complexity simplified.

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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 (1-10):

Expected number of cells per sample (minimum 1 million cells per test):

Expected frequency of rarest cell of interest:

Biologic positive control:

Biologic negative control:

Luminex

complexity simplified.