

ImageStream Experimental Evaluation Worksheet

Name:
Lab:
E-mail:
Phone:

This document will help you define your ImageStream 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):

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

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

<input type="checkbox"/>	Numerical quantitation of imagery
<input type="checkbox"/>	Automated image collection
<input type="checkbox"/>	Large sample sizes and population statistics
<input type="checkbox"/>	Rare event analysis by microscopy
<input type="checkbox"/>	Other (please describe):

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Briefly describe the purpose of the experiment and expected results:

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

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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: