Flow Cytometry Core Facility Policies And Procedures
(updated October 2008)

Policy on Infectious Agents (HIV, Hepatitis C, EBV, Bacteria, etc.)

While the FACSCalibur instrument used in the Creighton facility does not produce aerosols when analyzing samples, thus the infectious risk to the instrument operator is minimized. Unfortunately the FACS Aria instrument does produce aerosols with either analyzing or sorting samples. Therefore, to reduce the infectious risk to the instrument operator, we require that all samples must be routinely fixed prior to analysis unless prior consent has been obtained from the facility. While we do not require HIV, EBV or Hepatitis C testing of the person from whom the samples were derived, we do require that investigators inform the facility if the samples are derived from a known positive individual.

Policy on use of radiolabeled samples.

Radiolabeled samples may not be used in the facility at this time.

Policy on use of live cells.

Live cells may be a potential infectious agent themselves, or may be associated with an infectious agent. Therefore fixation is required for all samples prior to analysis in the facility.

There will be limited exceptions to this rule for:

1) Sorts in which the sorted population will be put back into culture or in vivo, or …
2) Experiments in which cell viability is being determined in the assay.

When live cells are to be run on the instrument, please inform Dr. Perry prior to and at the time of analysis. Samples containing live cells must be clearly identified as such prior to analysis.

Fixatives appropriate for flow cytometry are formaldehyde (1-10% in PBS), paraformdehyde (1-2% in PBS), and ethanol (70-90% 1 hour or longer). Due to its high autofluorescence, gluteraldehyde is not a good fixative for flow cytometry.

Policy on investigators running their own samples.

In general, all samples will be run by facility personnel. On the FACS Aria, all samples will be run by facility personnel. On the FACSCalibur, arrangements can be made to have samples run by individual investigators. We encourage investigators to run their own samples, as we believe this gives the investigator a better understanding and more control of their experiments and data, and also a better understanding of the limitations of the technology. However, individuals wanting to run their own samples need to be trained to run the FACSCalibur prior to running their own samples. Please speak with Dr. Perry to arrange training.

Policy recommendation for facility acknowledgment in publications.

It would be to the benefit of the facility and the Creighton research community in general if the contribution made by the Flow Cytometry Core Facility was acknowledged in publications that include data produced in the facility. A reprint containing this acknowledgment should be sent to the facility. Acknowledgment of the facility will also help us to obtain continued outside funding for the facility.