**University of Pennsylvania**

**Human Immunology Core Facility - Equipment**

The Human Immunology Core (HIC) facility (directed by Dr. Eline T. Luning Prak) has dedicated staff to perform sample processing and a blanket IRB protocol for obtaining mononuclear cells from healthy apheresis donors for control experiments. The HIC has temperature-monitored -80 and liquid nitrogen freezers (MVE) and refrigerators (Emanate), for the storage of processed samples and reagents, and an MVE cryocart for manipulation of samples that are stored in liquid nitrogen. The HIC has instruments for protein-based assays including a Simoa digital ELISA (Quanterix HD-X) instrument for ultra-sensitive detection, FlexMAP 3000 and Bio-Rad instruments for multiplex Luminex assays, a CTL ImmunoSpot S3 for ELISPOT reader, and a conventional ELISA plate reader. The HIC uses the following equipment for immune repertoire profiling: Illumina MiSeq, Chromium controller instrument (for single cell sequencing work), Qubit (for nucleic acid quantitation) and a UV gel documentation system (Bio-Rad).