Mission
The mission of the Histocompatibility and Engraftment Monitoring Core is to provide high quality histocompatibility services to all investigators in the Feinberg School of Medicine and the larger Northwestern University Research community.

This includes providing consultation on all aspects of the histocompatibility testing in transplantation, autoimmunity, infectious diseases, and allergy. The core’s mission is also to develop state-of-the-art assays to improve donor selection and post-transplant monitoring for solid organ and stem cell transplantation.

About the Histocompatibility and Engraftment Monitoring Core
At the Histocompatibility & Engraftment Monitoring Core of the Comprehensive Transplant Center, our mission it to:
• Provide high-quality histocompatibility services to all investigators in the Feinberg School of Medicine and the larger Northwestern University research community
• Develop state-of-the-art assays to improve donor selection and post-transplant monitoring for solid organ and stem cell transplantation
• Provide consultation on all aspects of histocompatibility testing in transplantation, autoimmunity, infectious diseases and allergy

The core is under the direction of co-directors David F Pinelli, PhD, F(ACHI) and Anat Tambur, PhD, DMD, F(ACHI), and associate director Aleksandar Senev, MD, PhD, F(EBTI), S(ACHI). The core also includes a laboratory manager, two supervisors, post-doctoral directors in training, and senior and junior technologists with extensive experience in tests related to solid organ and stem cell transplantation.

The Transplant Immunology Laboratory is accredited by the American Society for Histocompatibility and Immunogenetics, and Dr. Pinelli and Dr. Tambur are certified by the American College of Histocompatibility and Immunogenetics as laboratory directors and clinical consultants.

Services
The Histocompatibility and Engraftment Monitoring Core currently provides the following services to the investigators of the CTC as well as other investigators in Northwestern University. Investigators will be responsible for the costs incurred for their projects.

• HLA typing for class I and class II antigens
  o Low/intermediate resolution by SSO Labtype
  o High resolution by Next Generation Sequencing (NGS)
• HLA class I and class II antibody assessment
  o PRA analysis and CPRA calculations
  o Single Antigen Bead (SAB) assays by Luminex
  o Single Antigen High Definition Bead assays by flow cytometry
  o Titration studies for antibody strength assessment
• T and B Lymphocyte flow cytometric crossmatch
  o Donor-Specific
  o Surrogate crossmatch for Shared Epitope analysis and other investigations
• Engraftment monitoring with 21 genetic markers using STR analysis

Getting Started
To discuss starting a project using the services of the Histocompatibility Core of the Comprehensive Transplant Center, please contact:

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