

Liver Cell Isolation Project RESEARCH PROFILE

Background
Brief Description of Program: The study goal is to develop a human liver cell recovery and isolation process that yields high quality hepatocytes, stem cells, immune cells & other liver cells; optimizes techniques for cell preparation, histological evaluation & preservation; and allows these cells to be tested in pre-clinical models relevant to liver transplant. In addition, the study aims to fully characterize the frequency and function of all parenchymal & non- parenchymal hepatic cells, including immune cell populations, in healthy liver samples, as a benchmark to use as a comparison when targeting diseased livers using immunomodulatory agents.
Program: University Health Network, University of Toronto
Contact Person(s) & Contact Information: Contacts for livers: Dr. Ian McGilvray: (416) 666-5131, Agata Bartczak: (416) 419-4287, Sonya MacParland: (416) 320-8339
Offering Information: <ul style="list-style-type: none"> • Offer liver tissue for research on all donors with research consent where TGH or HSC has accepted liver for transplant. • TGLN-CSC will offer liver tissue for research to TGH-MOTC who will coordinate with Dr. McGilvary and/or Dr. MacParland • Liver tissue for research will be offered in accordance with the following algorithm <ol style="list-style-type: none"> 1. Adult donors: offer to Dr McGilvray for <u>Liver Cell Isolation</u> study first and if Dr McGilvray declines, offer to Dr MacParland for <u>Defining & Targeting Autoimmune Liver Disease</u> study. 2. Pediatric donors: offer to Dr MacParland for <u>Defining & Targeting Autoimmune Liver Disease</u> study first and if Dr MacParland declines, offer to Dr McGilvray for his <u>Liver Cell Isolation</u> study. • TGH-MOTC will notify TGLN-CSC upon acceptance and identify which study has been accepted.
Inclusion: Any liver (including pediatric grafts) accepted for transplant at UHN. Both NDD and DCD donors are acceptable.
Recovery
Method: No change to standard organ retrieval. Liver tissue will be recovered from the liver graft at the time of backbench preparation for transplant in accordance with institutional standards of organ preparation and with no safety implications for the recipient.
Time Requirements: None beyond standard organ recovery
Impact on Transplant/ Recovery Procedure: Procedure does not change from normal recovery procedure.
Effect on Body / Post-Mortem Care: None.
Consent Considerations: DOES require research consent from the donor NOK.
Recovery Personnel: Retrieval teams involved in abdominal recovery. Credentialing: As per PRC database.
Required Documentation: Documentation: As per usual documentation
Transportation: Process: As per routine. Pick up location: UHN