

## Donor Testing

*Highlighted items indicate where Fairfax Cryobank is the only sperm bank performing this test or using a more sensitive testing methodology (NAT by PCR)*

### GENETIC DISEASE TESTING

#### ALL DONORS

- Chromosome Analysis (karyotype)
- Cystic Fibrosis (at least 86 mutations).
  - Now by gene sequencing since Jan 2017
- Hemoglobin Electrophoresis
- Beta Thalassemia by gene sequencing since Jan 2017
- Alpha Thalassemia by genotyping since 2015
- Spinal Muscular Atrophy (SMA) on all new donors since 2008
- All diseases listed below for all new donors by gene sequencing since Jan 2017

#### DONOR OF ASHKENAZI JEWISH ANCESTRY

- Tay Sachs disease
- Canavan disease
- Gaucher disease
- Bloom syndrome
- Fanconi-Amemia Type-C
- Niemann-Pick Type A
- Mucopolipidosis Type IV
- Familial Dysautonomia
- Maple Syrup Urine Type 1B and Type 3
- Familial Hyperinsulinism Type 1 ABCC8 related
- Usher Syndrome Type 1F and Type3
- Glycogen Storage Disease Type-1A
- Joubert Syndrome
- Walker Warburg Syndrome
- Nemaline Myopathy NEB related

#### DONORS OF FRENCH CANADIAN ANCESTRY

- Tay Sachs disease (upgraded to gene sequencing Jan 2017)

#### DONORS OF ASIAN, MIDDLE EASTERN OR MEDITERRANEAN ANCESTRY

- Beta Thalassemia by hemoglobin electrophoresis
  - Gene sequencing added Jan 2017
- Alpha Thalassemia by hemoglobin electrophoresis
  - Genotyping added 2015

#### DONORS OF AFRICAN, BLACK AMERICAN ANCESTRY

- Sickle Cell disease by gene sequencing since Jan 2017
- Other hemoglobinopathies by Hemoglobin Electrophoresis

### INFECTIOUS DISEASE TESTING

#### SEROLOGICAL TESTING

- HIV-1 and HIV-2 antibody
- Hepatitis B surface antigen and core antibody
- Hepatitis C antibody
- Cytomegalovirus (CMV) antibody
- Syphilis (RPR)
- HTLV-I and II antibody

#### POLYMERASE CHAIN REACTION (PCR)

- NAT TESTING
- HIV 1
- HIV 2
- HTLV I & II
- HCV
- Chlamydia
- Gonococcus
- Cytomegalovirus
- Herpes simplex virus 1 & 2 (HSV)
- Human papillomavirus (HPV)

*All infectious disease testing is repeated every 6 months plus all donors undergo an extensive physical*

