

**TARGET DISCOVERY  
AND  
VALIDATION**

**EARLY TRANSLATION  
AND  
PROOF OF MECHANISM**

**LATER TRANSLATION**

**PRECLINICAL AND CLINICAL DEVELOPMENT CAPABILITIES**

**GENOMICS**

- Next Generation Sequencing
- High Density SNP arrays
- Expression Profiling
- Proteomics
- Bioinformatics and Computational Biology

**FUNCTIONAL GENOMICS**

- shRNA lentiviral libraries
- siRNA high-throughput screening
- High content imaging

**TISSUE BANKS**

- Biospecimens with cancer tissue from 11,000 patients
- Victorian Cancer Biobank collaborations

**GENETICALLY ENGINEERED  
MOUSE MODELS OF CANCER**

- Solid tumours
- Haematological

**DRUG EVALUATION**

- in-vitro testing
- in-vivo testing
- small molecules
- biologics

**DRUG DISCOVERY**

- CRC to Cancer Therapeutics

**PRE-CLINICAL IMAGING**

- PET
- Ultrasound
- Tracer development

**MOLECULAR IMAGING**

- 6000 PET scans per annum
- Nuclear medicine specialists
- FDG, FLT, FCH, FET, Novel tracers

**BIOMARKERS**

- Tissue
- Plasma/Serum
- IHC, DNA, RNA, Protein
- ctDNA

**MOLECULAR PATHOLOGY**

- NATA ISO 15189:2012 accreditation
- Defined mutations or polymorphism testing
- Pharmacogenetic testing
- Screening for unknown mutations

**CELL THERAPIES**

- GMP cell production facility
- Gene therapy

**HUMAN IMMUNOLOGY AND  
TRANSLATIONAL RESEARCH  
LABORATORY**

- Immune biomarker studies

**CLINICAL TRIALS UNIT**

- Research nurses, data managers and trial coordinators
- >100 active trials

**MOLECULAR IMAGING CRO SERVICES**

- Multi-site PET studies

**PHASE I UNIT**

- Dedicated Phase I beds
- All tumour streams
- Experienced phase I coordinators

**BIostatISTICS AND CLINICAL TRIALS**

- Cooperative Groups
- Multisite trial management
- Biostatisticians