Are you looking to develop novel therapies?

The Walter and Eliza Hall Institute’s High-Throughput Chemical Screening Facility has everything in place to help you through the early stages of drug discovery and development:

**Scientific team**
- Dr Ian Street
  - Laboratory head
- Dr Kurt Lackovic
  - Business Development Manager
- Dr Hendrik Falk
  - Senior research officer
- Dr Kym Lowes
  - Senior research officer

**Our group**
- Embedded in the Systems Biology and Personalised Medicine division
- Opportunities for project support and follow-up available
- Extensive experience in academic & industry collaborations

**Compound libraries**
- 250,000 diverse, “lead-like” small molecules
- Synthetically amenable structures
- High diversity as per Tanimoto dissimilarity analysis (T<0.85)
- 89% of the compounds are Lipinski compliant
- Open access intellectual property policy:
  - Full transfer of IP rights to customer
- Stored in dedicated state-of-the-art compound management facility
- Boutique libraries of known drugs, kinase inhibitors and epigenetic modulators

**Our technologies**
- Established technologies for biochemical assays include:
  - Alphascreen®
  - Time-resolved fluorescence
    - DELFIA® and LANCE®
  - Fluorescence polarisation
  - FRET
  - Radiometric detection
  - High content imaging: BD Pathway 855, PE Operetta:
    - Automated fluorescence imaging
    - Laser autofocus
    - Environmental control
    - On-board liquid handling
    - Confocal imaging

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Medicinal chemistry at the institute

The medicinal chemistry team at the Walter and Eliza Hall Institute is housed in state-of-the-art laboratories at two of the institute’s sites (Parkville and Bundoora). Individuals within the team are named inventors of more than 6 compounds that have progressed to clinical trials.

Scientific team

- **Professor David Huang**
  - Division & Laboratory head, Chemical Biology division
- **Dr Chris Burns**
  - Laboratory head, Chemical Biology division
- **Dr Guillame Lessene**
  - Laboratory head, Chemical Biology division
- **Dr Ethan Goddard-Borger**
  - Laboratory head, Chemical Biology division

Experienced medicinal chemistry team

The institute has extensive experience and a proven track record in:

- Organic synthesis and medicinal chemistry
- Rational structure-based drug design
- Lead optimisation
- Commercially focused research
- Protection of intellectual property
- Collaborative research (including pharmaceutical and biotechnology companies)
- Multiple target and therapeutic areas

Our technologies continued

- **Cellular assays:**
  - Wide range of reporter genes:
    - Including: luciferases, fluorescent proteins, alkaline phosphatases
  - Measurement of cellular responses
    - Including: cell-surface antigen expression, cytokine expression, cell proliferation and cytotoxicity, ion channel activity
- **BRET**
- **ELISA**
- **Mechanism of action studies:** Surface Plasmon Resonance (SPR) on a BIAcore® 4000
- **Multiplexed biomarker detection:** Meso Scale Discovery SECTOR® Imager 6000
- **Roche xCELLigence label free platform**

Automation

- **PerkinElmer Minitrak IX robotic liquid handler**
- **Hamilton Microlab STAR liquid handling workstation**
- **PerkinElmer Janus liquid handler**
- **PerkinElmer FlexDrop IV dispenser**
- **Cell-incubation with robotic access**
- **Scalability:** 96 / 384 / 1536 well formats