

# RNAi Screening Facility

## RNAi Screening Facility

The IMCB RNAi facility encompass RNAi screening using siRNA library provided by us, related equipments, TC room, expert advice and help.

The IMCB RNAi screening facility is embedded within [Frederic Bard's laboratory](#).

### Philosophy of IMCB RNAi screening center

\* **Open to researchers in Singapore**

\* **Do-it-yourself facility**

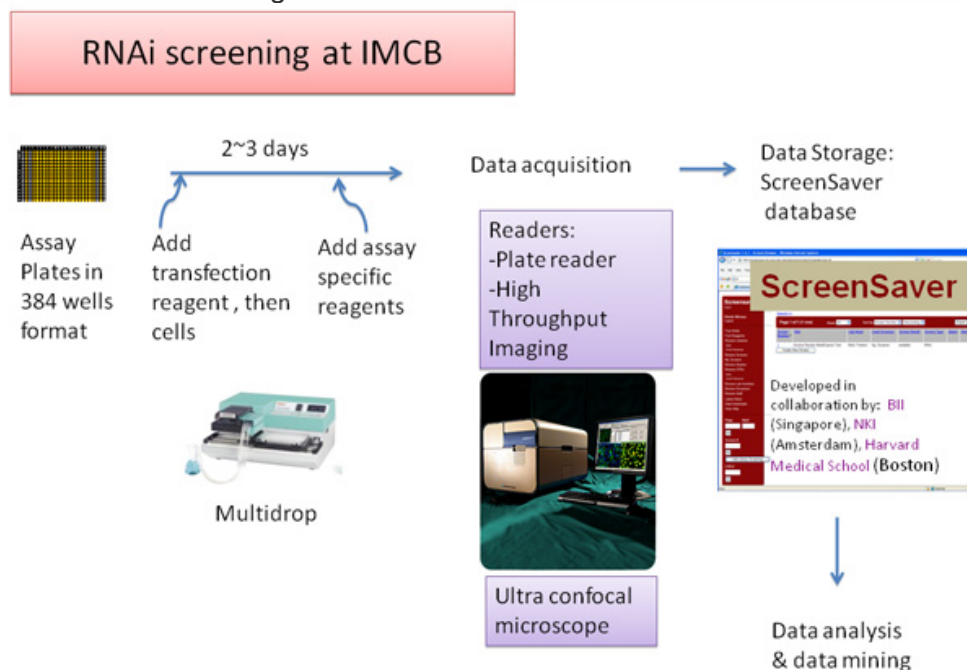
\* **Facility provides siRNA libraries in assay plates, screening equipment, Tissue Culture room and support.**

The overview of screening infrastructure includes:

1. [Screening facility workflow and equipments](#)
2. [List of siRNA Library](#)
3. [RNAi screen experiment support](#)
4. [Bioinformatic expert support](#)
5. [RNAi Global consortium](#)
6. [Contact persons](#)

## Screening facility workflow and equipments

Overview of screening workflow



Velocity Plates arraying :  
The siRNA assay plates are prepared with velocity plate arraying robot.



Assay preparation : The screener prepares his own reporter cell lines.



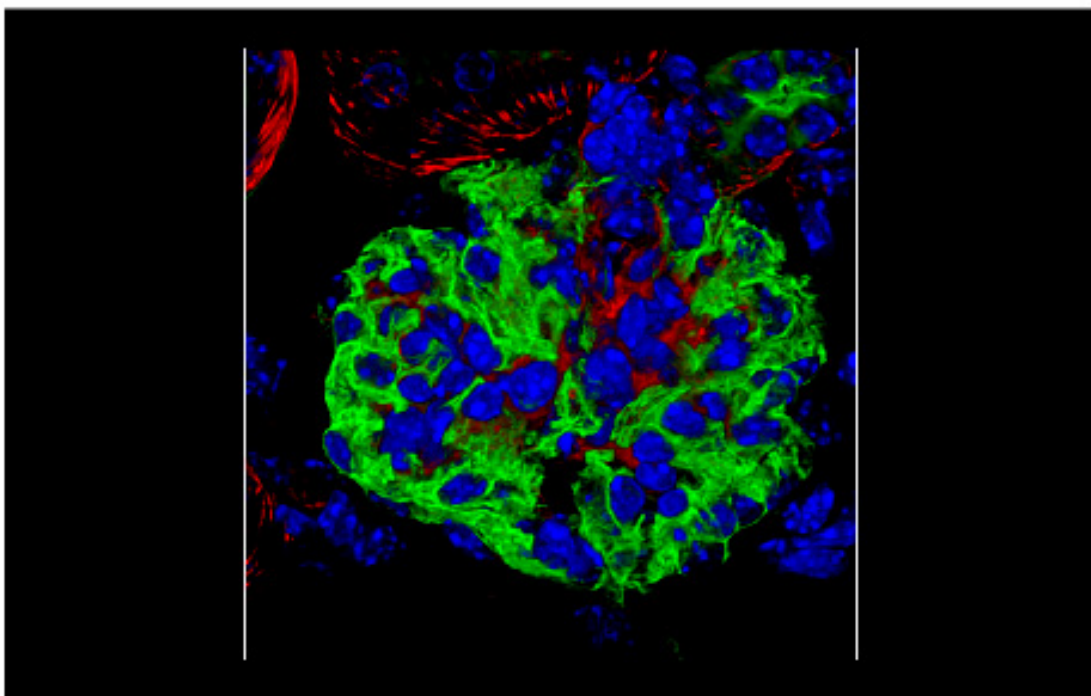
Multidrop :

The screener can distribute his cells into the siRNA assay plates with the multidrop.



Automated plate loading with Thermo robotic arm :

With bar code reading Interfaced with Ultra microscope



MDC ImageXpress Ultra :

The screener with imaging screens can utilise our ImageXpress ultra which is laser scanning confocal microscope with laser based auto-focusing and automated multicolor image acquisition (10x to 60x obj)

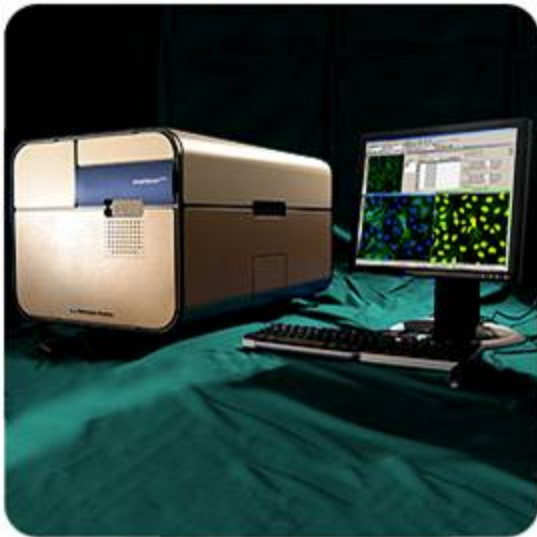
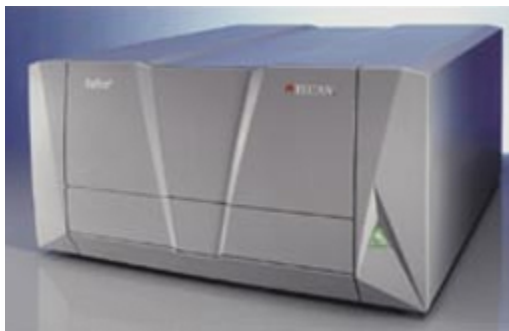


Plate Reader: Tecan Infinity 200

The screener with luminiscence and fluorescent assays can use plate reader to generate data readout of his results.



\* Other equipments available for use

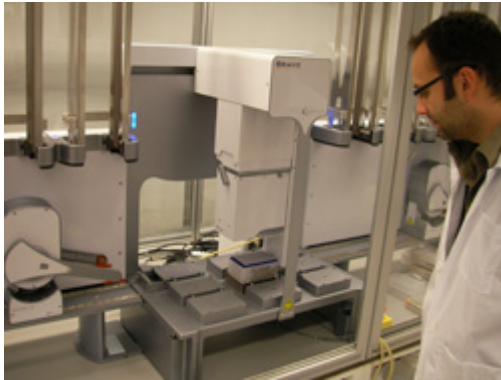
- >> Dedicated tissue culture room
- >> 1 Large TC hood
- >> Cell counter system
- >> 4 incubators
- >> Extra freezers and fridges
- >> Desk with image analysis computer

### List of siRNA Library

- >> Human kinome/phosphatome >> Mouse kinome
- >> Human genome
- >> Mouse full genome (available mid-2010)
- >> Human microRNA inhibitors
- >> Human microRNA mimicks

### RNAi screen experiment support

The screener can get expert help from FB lab personnel: Dimitri, Shin Yi and Joanne. They can help the screener at various stage like designing plate for experiment, assay preparation and data aquisition.

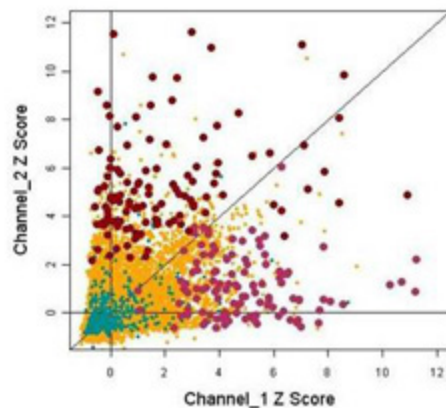


### Bioinformatic analysis support

The screener can get help in data analysis from FB lab personnel.



Sarawut WONGPHAYAK



**RNAi-Global:** a large collaborative effort to develop the RNAi screening technology IMCB has joined a consortium of laboratories involved in large-scale RNAi screening, the RNAi

Global Initiative. This collaborative effort fosters the development of scientific standards and know-how to address the specific challenges of performing these large-scale experiments and interpreting their results.



Please contact

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