

# JAMES RENNIE BEQUEST

## REPORT ON EXPEDITION/PROJECT/CONFERENCE

**Expedition/Project/  
Conference Title:**

Using Stem Cells to Model and Treat Human Disease

**Travel Dates:**

20-24 November 2013

**Location:**

Los Angeles, California, USA

**Group member(s):**

Chinnavuth Vatanashevanopakorn (s1054982)

**Aims:**

To present a scientific poster

To network with students and research scientists

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**OUTCOME (not less than 300 words):-**

The conference "Using Stem Cells to Model and Treat Human Disease", organised by Cell Press, was held in Cedars-Sinai Medical Center, Los Angeles, USA. There were approximately 300 participants, 5 plenary sessions and 2 poster sessions during the conference. This was a good opportunity for young researcher to present their work, learn from experts and share ideas with other scientists.

Talks in this conference were organised to fit the theme of each session, which are 'Modelling disease using stem cell', 'Organogenesis/in vivo reprogramming', 'Screening stem cells' and 'Stem cells in clinical trials'. I attended all sessions and was particularly interested in the disease modelling and clinical trials sessions. In the first session, induced pluripotent stem cells were shown by several well-known investigators in the field to be a fascinating *in vitro* tool for modelling diseases such as amyotrophic lateral sclerosis, schizophrenia and cardiomyopathy. One of the most interesting presentations amongst the audience was a concept of 'induced ageing' for modelling late onset disease using iPSC-based strategy. With this idea, relatively young iPSC-derived neurons can be aged and used for recapitulating degeneration processes occurred *in vivo*. The clinical trials session was mainly a discussion on current situation of stem cell trials for diseases such as coronary heart disease and age-related macular degeneration. Major hindrance on on-going trials and how to solve the problem were extensively discussed in the session.

The poster session was also extremely useful. I had an opportunity to present my poster entitled "Derivation of enkephalinergic medium spiny neurons from mouse embryonic stem cells". During the session, I received several suggestions/discussions, which helped me to address what needs to be added into my thesis to make a story complete. I had a chance to look at other posters and discussed findings with other researcher, which was a good experience for me to know what research project is being done by others in the field.

Another session that attracted many audience was 'meet the editor', which was moderated by a group on editors from Cell Press. Enquiries from audience on practical points for manuscript submission and its related processes were answered by editors. They gave an overview of how they select manuscripts for their journal. What is needed and what should be avoided for a manuscript that is likely to be accepted by the journals. It is very informative for me to know all tips on this before starting to write a scientific paper based on the findings I have from my PhD project.

In conclusion, this conference gave me a good chance to present my work, communicate and discuss with scientists who share the same interest. All of these are definitely useful for developing my future career. Lastly, I would like to thank the James Rennie Bequest for providing me a generous travel grant. Without this support, it would be inconvenient for me to attend this conference.