

JAMES RENNIE BEQUEST

REPORT ON CONFERENCE

Conference Title: International Conference in Yeast Genetics and Molecular Biology

Travel Dates: 7-12 July, 2003

Location: Gothenburg, Sweden

Group Member(s): Philip Jordan

Aims: Enhance presentation skills.
Acquire a more broad understanding of yeast genetics and molecular biology.
Develop professional relationships with people from other institutes for correspondence and collaboration.

OUTCOME (not less than 300 words):-

XXI International Conference on Yeast Genetics and Molecular Biology (YEAST2003) Göteborg, Sweden - July 7-12, 2003

The Yeast2003 Conference was a well-organised, informative and exciting six day event. One thousand one hundred people attended the Yeast2003 conference that included 800 poster presentations and almost 200 oral presentations. Below I will give a brief summary of the sessions that I attended each day and describe what I learnt from each.

Monday, 7 July 2003:

At the opening ceremony it was amazing to see how many people were attending the conference. The opening ceremony itself was basically an information session for the conference to help everything run smoothly and also give a brief history of the international yeast community together with the outlook to the future for the community.

A tribute to a man who was one of the forefathers in yeast genetics, Ira Herskowitz followed the opening ceremony. Ira was responsible for much of the work that revealed the mechanisms behind mating-type switching in budding yeast *Saccharomyces cerevisiae*.

The Ira Herskowitz tribute was followed by seminars prepared by Gerald Fink and Dennis Thiele. Fink discussed fungal pathogens, and the adhesin genes involved in infection. Thiele talked about the essential copper transportation mechanism in yeast and mammals and stipulated the potential role of a copper protein for delivering the potent anti-cancer drug cisplatin.

The opening session was followed by dinner and drinks, which allowed the conference to take on a more relaxed environment and gave an opportunity to communicate with other participants.

Tuesday, 8 July 2003:

The morning session involved four seminars based on the collective title 'Chromosomes and Nucleus'. This was one of the most interesting sessions for me. The first seminar by Kim Nasmyth, who is an Old University of Edinburgh student, was based on his work with chromosome segregation and the cohesin protein complex. I communicate with people from Kim Nasmyth's laboratory in regards to my PhD. so it was great to hear him present his work. Phil Hieter also talked about chromosome segregation but he focussed on the kinetochore protein complex. Trisher Davis then gave an interesting talk about using Fluorescence resonance energy transfer (FRET) to assess interactions of the spindle pole body that is also important for chromosome and nuclear bipolar migration. Finally Rodney Rothstein discussed his recent work that analyses DNA repair and recombination in-vivo via fluorescent microscopy.

After the morning seminars, I attended a workshop based titled 'Control of cell growth and cell division'. The workshop was very interesting and I learnt a lot about meiotic regulation, the meiotic spindle pole body, DNA damage checkpoints and chromosome segregation.

I then had to stand by the poster presentation of my work while others observed the posters displayed. I had a number of people approach me that were interested in my work and ask me questions. Poster sessions were run each day between workshops and the afternoon seminars and I got a lot of experience presenting my work from this.

Following the poster session was another series of four seminars. This session was also one of the most interesting sessions for me, it was entitled 'Genomes and Functional Analysis'. Firstly Charlie Boone discussed his groups work on synthetic genetic array (SGA) analysis. This was extremely interesting for me as I have used SGA data for my PhD. project and I now correspond with Charlie Boone and I am acquiring results from him prior to publication. Michael Snyder presented about work based on protein and DNA chips to characterise the proteome and genome. Peter Philippsen, Bernard Dujon and Hans Ronne spoke about the genetic relationship between *S. cerevisiae* and other yeast/fungal species and the research avenues that are or could be taken.

Wednesday, 9 July 2003:

The morning session entitled 'Yeast and Human' involved four seminars. This session was very interesting however not with great relevance to my PhD. work. The most interesting seminars were based on aging (Leonard Guarente) and Prions (Reed Wickner).

I then attended the workshop entitled 'Beyond functional analysis: systems biology'. Some of this session was very interesting talking about the transcriptional regulation network of *S. cerevisiae* and other systems biology approaches in budding yeast. A number of talks were very mathematical and hard to follow, but it made me appreciate the importance of mathematical models to help simplify and interpret large-scale data sets.

The afternoon session of seminars was entitled 'Control of Growth and Proliferation'. This session was of moderate interest to me and I learnt a great deal about the genes that control growth of yeast and maintain genome integrity.

Thursday, 10 July 2003:

The first series of seminars were not of great interest to me, it was entitled 'Shaping the Yeast Cell'. The session was basically explaining different mechanisms involved in cell division and cell shaping.

I then attended a workshop that was extremely interesting to me called 'Chromosomes: replication, recombination, repair'. This workshop was very relevant to my PhD. project and enjoyed it very much. Among many presentations I learnt about different genes involved in DNA replication as well as genes involved in DNA repair and recombination.

After the workshop, many participants went on a boat cruise to Marstrand Island. We had a lovely meal in an old Viking fortress on Marstrand Island. We got to use big knives and drink wine out of horns!

Friday, 11 July 2003:

I did not attend the morning series of seminars entitled 'Compartmenting the Cell' as it was not of interest to me and I was pretty tired from the night before.

I did however attend a workshop based on 'Systematic assessment of function'. The workshop topic was very interesting as I have utilised data from a number of genome-wide screens for my PhD project, and my experimental work utilises genomic screening itself.

The afternoon seminars, 'Controlling Transcriptome and Proteome' was of moderate interest to me. The seminars basically explored a number of control mechanisms of transcription and translation of DNA to protein.

That evening participants attended the Liseberg Amusement Park, which was great fun!

Saturday, 12 July 2003:

The final day of the conference involved two sessions of seminars entitled 'The Dynamics of Cellular Signalling' and 'Towards Understanding the Whole Cell' respectively. The first series of seminars were not that interesting to me, they basically discussed sensing systems of yeast. The second lot of seminars were again not of great interest, but the final seminar (Roger Brent) was based on quite an ambitious outlook for the yeast community and the way we share data.

Closing Statement:

The conference was a fantastic opportunity for me and I enjoyed it thoroughly. I learnt a lot, improved my presentation skills and developed many useful professional relationships. Finally, I would like to thank the Rennie Bequest for giving me the opportunity to attend such an important event that will only benefit my career as a geneticist.

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