## Epigenetics and Chromatin Remodelling in Development Keystone Resort, Keystone, Colorado, USA 19<sup>th</sup> –24<sup>th</sup> January 2006

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This Keystone Symposia meeting on Epigenetics and Chromatin Remodelling in Development was held in the Keystone Resort, in the Colorado Rockies. I was lucky enough to be able to attend and to have the opportunity to present my work on a poster. The conference was not huge, with some 230 attendees, but there were many well-known and respected scientists there and much interesting work presented.

The conference was organised so that there were 2 plenary sessions each day, over 4 days, and poster sessions on three of the evenings. The talks were well arranged so that the conference attendees had free time between 11am and 5pm, ample opportunity to hit the slopes and make the most of the fantastic skiing and snowboarding conditions in the area. It was my first time skiing so I used the time having lessons, and nervously trying out the green runs!

The Keynote address on the first evening before the main part of the conference began was by Azim Surani, well known for his work on imprinting and epigenetic reprogramming. His talk was entitled 'Epigenetic reprogramming in the Genome in the Embryo and Germ cells' and focused on changes in gene expression and chromatin structure during primodial germ cell specification. The other plenary sessions included 'Chromatin Structure and Function', 'Establishing Epigenetic Marks', 'Chromatin-Controlled Gene Regulation in Development', 'Nuclear positioning', 'Mechanisms of Cellular Memory', 'Cellular Plasticity and Tissue Reprogramming', 'Cancer Epigenetics', and 'Stem Cell Programming'. There were many good talks but some of the ones that stood out for me were C.David Allis' talk on the crystal structure of NURF301, which recognises tri-methylated lysine 4 on histone H3, and the concept of a 'molecular ruler' for interpreting the histone code; Steven Henikoff's talk on the replicationindependent incorporation of H3.3 into active chromatin; Laurie Jackson-Grusby's talk on an elegant genetic model of loss-of-imprinting that they have generated; Maarten Van Lohuizen's talk on the role polycomb repressors in the control of stem cell fate; and also the final talk by Wolf Reik on how physical interactions between regions of imprinted genes controls their expression. There were also several good short talks by students and young post-docs.

The three poster sessions after the evening sessions were very good, one reason being that there were less than 50 posters during each session, meaning that there was time to look at all of them in sufficient detail. I presented my poster on the third evening and found it a very useful experience. I got to talk to many people interested in what I am working on and had several useful suggestions and questions. I also had the opportunity

to discuss other people's work with them. This resulted in two potential collaborations being discussed, which I now hope to follow up on.

The organisation of the conference was excellent, with everything seeming to work seamlessly. Some of the entertainment organised for us (in case the great skiing wasn't enough) included a snow-shoeing trip to the top of a mountain. We were lucky enough to have a beautiful sunny day for the trip so the views from the top of the surrounding hills and valleys were absolutely magnificent. On the last night there was a disco featuring some truly classic tracks – another good opportunity to talk to people from different fields and different places in the world on an informal basis.

After the trip I spent a couple of days sightseeing in Denver and the surrounding area – a region I have never visited before so it was great to have a chance to look around. I would like to thank the organisers of the James Rennie Bequest fund for generously providing me with a travel grant which afforded me the opportunity to attend this excellent and exciting conference. I would also like to thank the organisers of the conference Renato Paro and Peter Fraser for doing a great job arranging the conference.