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Title/Description: 15th World Conference of Pharmacology (IUPHAR-2006) and Pharmacology of Adrenoceptors (satellite conference of IUPHAR main meeting)

Venue: Beijing, China

Dates: July 2-7 2006 (IUPHAR) and July 7-9 2006 (Adrenoceptor satellite meeting)

The purpose of the visit was to attend the IUPHAR conference and a satellite conference associated with the main IUPHAR meeting.

15th World Conference of Pharmacology (IUPHAR-2006)

Poster P360084

Title: Adrenoceptor mediated phosphorylation of AMPK differs between brown adipose tissue and skeletal muscle

Pharmacology of Adrenoceptors (satellite conference of IUPHAR main meeting)

Poster 12

Title: Proposed mechanism of activation of AMP-activated protein kinase by α_1 -adrenoceptors in L6 skeletal muscle cells

The two conferences I attended were excellent, and the output I have obtained from them immense in relation to my research. The main IUPHAR meeting attracted many high calibre researchers and the oral presentations I attended were diverse and very interesting. My current research has been focussed on adrenoceptor pharmacology in relation glucose uptake in insulin-sensitive tissues, and while at this conference there was comparatively little about adrenoceptors, there was a lot of information I obtained including pharmacology of other receptors, and some receptors and kinases which I was unaware of, which as a consequence I have just started to investigate in my own research in relation to glucose homeostasis since I have arrived back from China. The presentation made by Kerry Goralski (Canada Award Lecture winner) was in particular outstanding and very relevant to my studies. In the poster presentations, there was a section devoted to diabetes and metabolism which was excellent, and obtained some methodological procedures from some of these poster presentations which I plan to use in my own research. I was also able to talk informally to some of the other attendees about my own research in my poster presentation, which gave myself feedback about how other researchers view my work, and the future of these studies, which has now grown to include a lot of other approaches to my own work which I had not viewed before.

The adrenoceptor symposium far exceeded my expectations. This conference was limited to 150 people who research primarily on adrenoceptors and the quality of the presentations was brilliant. Some of the research that was shown in the presentations was very relevant to my own research and I have many more ideas on future research that I can follow up on in the near future. This conference was beneficial since it was relatively small. This allowed all the participants to meet each other in an informal setting (although we were at the Great Wall literally!) and allowed us all to communicate our research informally, which was great since many of the participants were well-renowned in the adrenoceptor pharmacology field and who I would not of had an opportunity to discuss research with otherwise. My poster presentation at this meeting was met with great interest including other people who have just commenced research involved with AMPK which I was presenting at this meeting. I obtained several contacts through my presentation and many more ideas regarding my own research which I hope to include in my current research. Prof Roger Summers gave an oral presentation at this meeting which included work of PhD student Masaaki Sato and myself (different from my poster presentations) and the feedback we received was important since we hope to write and submit a paper on this work before the end of the year. This was quite relevant since the feedback we received was applicable and some of the people at the conference may well be reviewers for the paper we hope to submit so this has helped us focus on what needs completing in this project and has resulted in a new line of research in relation to this project which we hope to continue (we have very preliminary data that I had limited time to complete while in Sweden in November last year) with existing collaborations we have at the Department of Physiology, Stockholm University with Prof Barbara Cannon, Prof Jan Nedergaard and Ass Prof Tore Bengtsson, who's laboratory I was at while undertaking the overseas component of my CJ Martin Fellowship. Prof Cannon and Nedergaard will be visiting Monash University in August this year where we can discuss this project in more detail.

Overall, I am very grateful to ASCEPT for providing myself with a Travel Grant to attend these two important conferences. I have learnt a great deal of more information which I would otherwise not have, and have numerous new ideas on future research that I would like to incorporate into my existing research, and have had my own research critically evaluated by the scientific community whose feedback has helped my further understanding of how my research fits into the wider scientific community and has altered some of my future research accordingly. This was the second time I had the opportunity to attend the IUPHAR

conference and the adrenoceptor satellite meeting of IUPHAR (previously in San Francisco 2002). I will look forward to the future meetings of IUPHAR with great anticipation since I really believe these conferences showcase the recent advances in pharmacology research to a wide variety of research interests and especially the adrenoceptor symposium which has been outstanding.