

Dr James Yun  
RCPA Travel Grant 2010

It was a great honour to receive 2010 RCPA Travel Grant for my doctoral studies at the University of Bern, Switzerland, under the supervision of Prof. Werner Pichler, a leading expert in the field of drug hypersensitivity. I considered this a 'once in a life time' opportunity as I was able to learn from encyclopaedic knowledge of Prof. Pichler. The Travel Grant was used primarily for relocating to Bern with my family. While it was a financially difficult decision, pursuing PhD in Europe allowed me to establish international networks with the experts in the field which I hope to expand in the future. My project explored how drugs interact with T cell receptors and HLA molecules, using allopurinol and HLA-B\*58:01 as a model. As a part of the project, I was able to learn various *in vitro* methods to study the role of T cells in drug hypersensitivity. Building on these foundations, I hope to establish *in vitro* diagnostic tests for drug hypersensitivity in Australian setting.

The peered reviewed publications that arose from my PhD are as follows:

1. **Yun J**, Marcaida MJ, Eriksson KK, Jamin H, Fontana S, Pichler WJ and Yerly D. Oxypurinol directly and immediately activates the drug-specific T cells via the preferential use of HLA-B\*58:01. *J Immunol* 2014;192:2984-93
2. **Yun J**, Mattsson J, Schnyder K, Fontana S, Largiader C, Pichler W and Yerly D. Allopurinol hypersensitivity is mediated by dose dependent oxypurinol-specific T cell response. *Clin Exp Allergy* 2013;43:1246-55
3. **Yun J**, Adam J, Yerly D and Pichler W. Human leukocyte antigens (HLA) associated drug hypersensitivity: consequences of drug binding to HLA. *Allergy* 2012;67:1338-46

1 & 2 are original articles and 3 is a review article.

Happy to be identified.