

GWIS Travel Award Report

Lidza Kalifa, Spring 2008

The Graduate Women In Science Travel Award made it possible for me to attend the Gordon Research Conference on Mutagenesis. This year's conference was held at Magdalen College in Oxford, England on July 20 – 25. The topics focused on mechanisms of DNA replication, repair, and damage tolerance that result in DNA mutations in organisms from *E. coli* to humans. The conference was organized into oral presentations, poster sessions, and evening social hours.

One of the specific aims of my thesis focuses on the mitochondrial base excision repair pathway. I am currently investigating the effects of deletion of *RAD27* on mitochondrial DNA stability in yeast, and have recently localized Rad27p and the mouse homolog FEN1 to the mitochondrial compartment of yeast and mice, respectively. I had the opportunity to present this work during one of the poster sessions. During this time I was able to discuss my work with several people, many of whom provided valuable critiques and possible future experiments.

This meeting also provided me with the opportunity to meet Dr. Bruce Demple from Harvard University. We were able to spend some time discussing our shared interest in the mechanisms of mitochondrial base excision repair, and we have now established a collaboration between our laboratories to study exonucleases involved in this process.

Overall the Mutagenesis conference was a wonderful opportunity to discuss current topics in my field of general interest as well as present my research at an international level. I gained valuable experience interacting with other scientists and discussing my research as well as other topics in my field. I gratefully acknowledge the support I received from the Graduate Women In Science organization as well as additional support from the Gordon Research Conference Carl Storm Fellowship, which also made my attendance at this conference possible.