Graduate Women in Science Travel Award Report

Melanie Baker, Spring 2008

The GWIS Travel Award funded my attendance and travel to the 2008 RNA Society Meeting in Berlin, Germany. Attending this meeting was very exciting to me for several reasons. This is the first scientific meeting that I have attended, so I was looking forward to exposure to different aspects of RNA biology. Also, this was my first opportunity to present my research on an international scale in the form of an oral presentation, "G_{-1} addition to $tRNA^{His}$ is the only essential function of the multiple activities of $tRNA^{His}$ guanylyltransferase (Thg1) in *S. cerevisiae*". Finally, I had the opportunity to network with faculty, postdocs, and other grad students from a variety of universities.

My overall impression of the meeting was that the high quality of ongoing research in a variety of fields of RNA biology is staggering. I learned a great deal about different fields that included microRNA and small interfering RNA, mRNA splicing, 3' end formation, and viral RNA mechanisms, to name a few, and I realized that most of the approaches to each individual experimental question were unique and innovative. In addition, the scientists there were excited both about their own research as well as the research of others, and were very willing to offer comments and suggestions. Another important thing that I learned was that no matter how excellent or intriguing a set of results are, their impact depends on a clear, concise presentation.

My own oral presentation made me realize how difficult it truly is to present specific data clearly to an audience from different backgrounds in only 10 minutes. I described my research on a multifunctional, essential tRNA modifying enzyme ($tRNA^{His}$ guanylyltransferase, Thg1). The goal of my experiments was to determine the essential activity of Thg1 and also to ascribe functions to the residue that Thg1 adds to $tRNA^{His}$. I think that I was successful in conveying the main conclusions of my research. My talk yielded some interesting questions that made me consider the impact of Thg1 activity on various cellular pathways.

Most importantly, this meeting provided me with an environment to meet and interact with some of the leading scientists in the field of RNA research. I had the opportunity to speak with investigators whose research interested me and discuss the possibility of post-doc positions after I graduate. I also met other graduate students that were extremely excited about their work and science in general. In addition, I attended a mentor-mentee lunch where I gained insight from more experienced scientists about opportunities in academia. Finally, the Women in Science dinner was eye-opening because our discussion revealed that the discrepancy between the number of women that enter science as PhD students versus those that become full professors is truly a world-wide problem, and that the solution may not be so simple.

I am truly grateful to the Graduate Women in Science group and to my advisor, Eric Phizicky, for the opportunity to attend this meeting. During the conference, I was able to immerse myself in science and meet other researchers that share similar interests but have unique perspectives and experiences.