

Erica M. Hall

Resources made available to me by the University of Georgia libraries have nurtured my research project from beginning to end. The birth of my project, in fact, came to be from an article accessible from the GALILEO databases.

Since reading Richard Preston's The Hot Zone in my middle school years, I have had an undying interest in infectious diseases. Naturally I was thrilled to find infectious disease literature through GIL, such as Laurie Garrett's The Coming Plague and McCormick et. al., Virus Hunters of the CDC, and even more so to find professors at the University of Georgia researching evolutionary genetics—my major—in the context of infectious diseases. An interview with Dr. Jessica Kissinger, now my research mentor, brought her research idea to my attention, and soon I was investigating the subject of the Ossorio et. al. paper, “Mitochondrial-like DNA Sequences Flanked by Direct and Inverted Repeats in the Nuclear Genome of *Toxoplasma gondii*.”

The advances in technology in the fields of genetics and computers automatically allowed me the ability to perform a comprehensive analysis of the nuclear sequences of mitochondrial origin, known as NUMTs. The nuclear genome of *Toxoplasma gondii*, the important human parasite with which I work, has been sequenced and is accessible. In addition, the myriad of bioinformatics tools have been instrumental to me throughout my research project. But how did I find out about, learn how to use, and decide which ones would be best for my particular research interests? Again, GALILEO stepped in, allowing me access to the papers on the designs and uses of such computer programs. Beyond gaining basic knowledge on the programs from these papers, much of the fine-tuning to my specific research was trial and error. One fortunate aspect of computational

research is the ease and lack of expense of fixing such errors. My experimental research in order to confirm my computational findings, however, was not quite as tractable.

Analogous to my computational research, my experimental confirmations and biological interpretations of computer output required a good working knowledge of evolutionary biology in general, my organism's biology, and a familiarity of lab techniques—both general and specific to *Toxoplasma gondii*. Because of the nature of computational research, my resources were accessible through GALILEO—I did not need textbooks on UNIX or PERL programming (though these surely would aid future bioinformatics research, in that I may need to write my own unique programs) that could be accessed through GIL. I did need GIL for accessing text on evolutionary processes, *Toxoplasma gondii* background, and established experimental techniques. Although I did reference these texts fairly extensively, I utilized published papers available through GALILEO (almost always via the Web of Science database) even more so, as especially in the scientific field, the newest discoveries and techniques are being presented in manuscripts, not texts, due to the much shorter time from submission to publication. In doing so I gain a more detailed and up-to-date background on the biology of my organism. This method allows specificity to the level of gaining information on genome comparisons and contrasts within the Apicomplexan family, to which *Toxoplasma gondii* belongs, (Wilson and Williamson, 1997) and even on the biology of the organelle within my organism that forms a focal point of my research, the mitochondrion. I am especially grateful for the access to new and specific concepts in considering a particular transfer mechanism for my project. Due to a collaborator's input and manuscript recommendations (Yu and Gabriel, 1999), we found a previously unknown possibility

which we had not yet investigated. This transfer mechanism possibility forms a very important part of my research project.

I have been researching my project for a year and intend to complete my thesis upon this research. Early in the project, my research mentor invited Ian Thomas to discuss the library resources with the lab as a meeting. I have very much benefited from his explanations of GALILEO/Web of Science, GIL, Google Scholar, and general web searching. I have not yet used Endnote, which he also explained in depth, but as I am currently writing my thesis, I will be using it the in the very near future and I am sure I will appreciate the session Ian Thomas gave our lab. The libraries' vast resources and options have helped me enormously in my research, and knowing how to utilize them early on was critical. My research would not have come about if the Ossario et. al. research were not accessible, and would not have continued without the constant input from resources and colleagues alike. I am thankful that the University of Georgia can have a system that allows undergraduates to conduct important and innovative research, and I will always be grateful to have had such a wonderful opportunity.

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