

Previous Research Experience Form

Over the past eight years my research interests and experience have followed a trajectory from biological and ecological research to policy and legal research to my current interest in international relations. The common thread of my research interests in these three distinct disciplines has been a personal commitment to scientific research as a means of identifying and solving environmental problems. The following statement traces this trajectory.

Biological/Ecological Research Experience:

I first participated in scientific research in 1995 while interning at Children's Hospital, Los Angeles in a pathology laboratory. I learned the process of conducting and interpreting Polymerase Chain Reaction (PCR) and Florescent in Situ Hybridization (FISH) experiments. Once I had demonstrated competence in each of these processes, I was asked to independently run an experiment designed to show the relative efficiencies of these two methodologies. Much of the research done in my laboratory focused on childhood diseases with environmental health related implications. This experience sparked my interest in environmental science and catalyzed my decision to pursue scientific research through higher education.

The following summer I continued with biological research as a laboratory technician at the U.C.L.A. Medical Center in an oncology laboratory. I performed routine cell cultures and assisted the primary technician as appropriate. Through this experience I gained valuable laboratory research skills which I could then apply to my emerging interest in ecological research.

While at university, I discovered my love for the outdoors. I decided to combine this passion with my love of scientific research and pursued field ecology and environmental science. In 1998 I participated in an eight week forestry field program through U.C. Berkeley. Over the course of the summer I learned various techniques for performing forest ecology research and analysis. The culmination of the program was a project requiring students to work in groups of four to design and orally defend a timber management plan for a specified forty acre research plot.

The following fall semester, I participated in the Tropical Biology and Geomorphology program in Moorea, French Polynesia through U.C. Berkeley. The program gave me the opportunity to design and carry out an independent field research project, write a formal scientific paper, and present my research at a symposium on the U.C. Berkeley campus at the end of the semester. My research focused on eradication of the gastropod *Melanoides tuberculata* from taro plantations in Moorea. My research suggested methods of creating unfavorable habitat conditions within the plantations to eradicate the pest. I did extensive field sampling as well as laboratory assays in order to complete this project. I received thirteen semester units of an A for this project, and my paper was subsequently published in Berkeley Scientific Journal.¹

My final semester as an undergraduate at U.C. Berkeley I performed a second ecological field research project for my senior honors thesis. I studied the habitat preferences of the invasive Chinese Mitten Crab on the Guadalupe River in San Jose, California. I performed the project independently, wrote up a formal scientific paper documenting my research, and received an A for my work.

Policy and Legal Research:

My first experience with policy research was over winter break of my sophomore year in college as an intern at Lorax Environmental Inc. in Los Angeles, CA. I was asked to independently research and compile a legislative history of environmental regulation with a focus on air and water law in the United States. I orally presented my findings to my colleagues and client in a professional meeting. I enjoyed and gained valuable library research and oral presentation skills from this experience; however it was not until four years later through additional research experience while working at Cantor Fitzgerald Environmental Brokerage Service that my interest was refocused into the policy arena.

¹ See list of publications at end of document

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While working as a broker for Cantor Fitzgerald, I not only brokered emission reduction credits, but also took on the job of researching policy in emerging emissions trading markets. I was responsible for making sure I understood the rules governing new markets, and was able to convey this information to my coworkers both verbally and through written reports. This experience was pivotal in directing my future research interests as I recognized both the importance of market mechanisms in solving environmental problems as well as many of their theoretical limitations.

As a master's student, I decided to explore the legal limitations of an international emissions trading system. My master's thesis entitled "Emissions Trading Under the Kyoto Protocol: NAFTA and WTO Concerns" will be published in the forthcoming Fall 2003 edition of *Georgetown International Environmental Law Review*. My research is a legal analysis of WTO and NAFTA member nation's ability to participate in the international emissions trading system established by the Kyoto Protocol. The central question discusses whether NAFTA obligations will prevent Canada from imposing a unilateral sanction on U.S. derived assigned amount units (AAUs).² In other words: can parties that are member to both the WTO/NAFTA and the Kyoto Protocol exclude other WTO/NAFTA members that are *not* Kyoto signatories from participating in the emissions trading market? I conclude that this is dependent on how AAUs are classified, if at all, by the WTO (i.e., goods, services, or negotiable instruments). Furthermore, I conclude that in the absence of binding precedent on WTO/NAFTA panel decisions, the answer remains speculative. The logical next step in pursuing this research is to design a framework whereby conflict between international agreements can be avoided through strategic domestic implementation of Kyoto's emissions trading system.

International Relations Research Experience:

My proposed doctoral research project will be my first experience with research within the discipline of international relations. I was drawn to this field because implementation theory is the most interesting and appropriate theoretical framework through which to further advance my previous research and make a meaningful contribution to the field and to society. My advisor, Professor Kate O'Neill is a leading scholar in IR theory, and I will rely heavily on her expertise to aid me in both designing my project, as well as navigating a course of study that arms me with the knowledge and methodological tools to successfully complete the project.

Publications

Jinnah, Sikina. Fall 2003. Emissions Trading Under the Kyoto Protocol: NAFTA and WTO Concerns. *Georgetown International Environmental Law Review* (Forthcoming)

Jinnah, Sikina. Fall 1999. Distribution and Abundance of Two Gastropods in Taro Plantations, Moorea, French Polynesia. *Berkeley Scientific*. Vol. 3

Presentations

"Distribution and Abundance of Two Gastropods in Taro Plantations, Moorea, French Polynesia."
Presented at the *Tropical Biology and Geomorphology Symposium*. U.C. Berkeley Winter 1998.

² AAUs are emission reduction credits that can be bought and sold between developed nations. 1AAU = the right to emit 1 ton of carbon dioxide