

## **WAS\*IS application interest statement**

My interest in the WAS\*IS workshop stems from my direct work with both public outreach and cutting-edge meteorological research. My primary goal of attending WAS\*IS is to get invaluable feedback regarding methods for connecting my two worlds. I graduated from the University of Oklahoma in 2007 with a Bachelor's Degree in Meteorology and am currently pursuing a Masters of Science in Meteorology. While one aspect of integrating meteorology and social science is creating better understanding among scientists, it is also essential to consider how non-meteorologists perceive the information we provide. As the science of meteorology becomes more precise and better able to anticipate severe weather, it is of special importance to me to determine improved ways of educating the public about severe weather safety.

Since the dedication of the National Weather Center in Fall 2006, I have volunteered many hours and offered more than two hundred guided tours to well over a thousand people. Most of them were non-meteorologists, and they ranged in age from small children to the elderly. It is challenging to explain to the general public complex meteorological concepts in a concise and understandable way. In many of these tours, I have found that visitors reveal their misunderstandings about severe weather, and with my help have come to better understand meteorology, and some have even redesigned their family emergency plans. In this way I have directly contributed to their improved understanding of the science of meteorology.

My work as graduate research assistant with the National Severe Storms Laboratory's (NSSL) Warning Research and Development Division (WRDD) has permitted me to observe from within how new products are developed within the meteorological community. My interest in the public perception of severe weather started with my involvement with the Severe Hazards Analysis and Verification Experiment (SHAVE), where we directly contacted the public in order to get high-resolution meteorological data on real-time severe weather events. Then the data was used to verify our developing products.

My thesis involves determining probabilities of severe weather hazards, such as hail, based upon specific storm types. Ultimately, these probabilities will be automatically determined and implemented in the Hazardous Weather Testbed (HWT) for its probabilistic hazard experimentation. This experiment focuses on adding hazard and uncertainty information into warnings that could be issued to end-users who are responsible for collective public safety, such as emergency managers, hospital management, and large venue managers.

WRDD has developed a graphical product that could eventually provide these probabilities. But the next step lies with getting feedback from the end-users in order to implement the best product designed specifically for their use.

My goal is to bring to the WAS\*IS workshop my unique meteorological training and public contact experience, and take back with me the sociological principles that I learn, in order to apply them specifically to my interest in public safety notification during severe weather events. The contacts made, the knowledge gained, and the experience acquired at WAS\*IS will enhance my education, improve my current work within the National Severe Storms Laboratory, give insights to my Master's thesis, provide input to me in my continued outreach to the visitors at the National Weather Center, and help me to guide others towards the WAS\*IS vision.