

## **DAVID SCHULTZ**

### **Statement of Interest**

I am interested in participating in WAS\*IS to develop skills in performing interdisciplinary research on the margins of meteorology and the social sciences. For several years I have considered starting research with an economic or societal relevance component, but have had difficulty identifying potential collaborators and the appropriate methods. WAS\*IS will put me in touch with energetic professionals outside of my field with whom I could collaborate on these projects, as well as future ones I might envision. Also, I hope to take lessons learned from this experience into consideration when training operational forecasters, which I do through presenting my scientific research to operational forecasters and being involved in training development with COMET and NOAA/WDTB.

I feel I should be chosen for WAS\*IS because I am a proven collaborator with numerous people (of the 50+ peer-reviewed scientific papers I have published, only seven are single-authored). I have also shown diversity in the topics I have researched, and I am looking for ways to further my interests in interdisciplinary research. I have challenged the status quo by asking whether some popular forecast techniques are appropriate for operational forecasting (e.g., conditional symmetric instability, moisture flux convergence). I am not afraid to delve into new research topics, seeking out collaborators or learning new material to accomplish my research goals. Finally, I see my projects through to completion and publish them in peer-reviewed journals.

My career goals are to continue pursuing excellence in my research on meteorology and operational forecasting. I hope to develop a more interdisciplinary research program, part of which focuses on societal and economic impacts of weather. I hope eventually to obtain a tenure-track faculty position at a research university in atmospheric science. WAS\*IS will give me the skills to pursue independent research at the boundaries between meteorology and social science. Given the growing importance of societal impacts on basic research and the need to show societal relevance, WAS\*IS will help me better define my research in a manner to integrate the societal impacts into the research.

I have several areas of interest that could be explored during the WAS\*IS research project.

- I participated in the Midatlantic Storms Conference in October 2002 as an invited speaker. A large focus of this conference was to bring together scientists, forecasters, and user groups to discuss ways to better communicate the uncertainty with East Coast snowstorms. Although everyone agreed that a better (and more probabilistic) approach was needed, implementing recommendations from that conference did not occur. I would like to be more active in developing a holistic approach from the forecaster to the user communities and the public in communicating uncertainty in forecasting, especially winter-weather forecast problems.
- I would like to study why some forecast techniques get readily adopted by forecasters, whereas others, which may be more useful and scientifically relevant, don't get adopted. Lessons learned from this research could be employed in developing training materials for forecasters.
- I would like to study the economic impact of winter weather, from the microscale to macroscale economics. Funding is available for severe-weather research, but much less is available for winter weather, which is perceived to be of lesser severity or impact. I feel that quite the opposite is true and would like to demonstrate that.