

## Meet the Staff: Silvia Secchi

Silvia Secchi came to CARD after obtaining her first economics degree in Italy and a master's degree in agricultural economics at the University of Reading in the United Kingdom. She came to Iowa State University to pursue her doctorate and became a graduate assistant for CARD director Bruce Babcock. When a position opened up in the Resource and Environmental Policy (REP) Division of CARD, it seemed a perfect fit for the newly graduated Dr. Secchi. "I am really interested in biology," she says, "and if I had not gone into economics, I would have become a biologist. Environmental economics is a great way to combine the two disciplines."

In the REP division, Silvia works as part of a team of scientists and specialists under the direction of division head Cathy Kling. She says she has found the environment at CARD to be supportive. "I think it's great that there are so many high-quality researchers in the REP division," she says, "and Cathy really deserves credit for this."

Silvia complements the economics modeling of her colleagues on such issues as water quality related to agriculture by making sure the models are grounded in the realities of the natural sciences, and by managing spatial issues and Geographical Information Systems analysis. Currently, the division is working on a

large-scale project to model the effects of agricultural practices on the water quality of the Upper Mississippi and Gulf of Mexico. "We are also adapting these large-scale models to smaller-scale watersheds to analyze problems of water quality in several watersheds in Iowa," she says.

Another project, in collaboration with Iowa State University professor of economics Joe Herriges, attempts to assess how residential property values in rural Iowa are affected by the residences' proximity to livestock facilities. This kind of scientific study is an example of how research at CARD draws from other disciplines on campus in order to address high-profile problems both within and outside the state of Iowa. Silvia says this multidisciplinary approach is important to her. "Environmental and resource economists really need to have some grasp of the natural sciences or their modeling makes no sense," she says, "so I am glad there are so many people here, both within CARD and across campus, who know about the way the natural world works. I really like working with them."

Silvia's graduate work at CARD included analysis of antibiotic resistance issues, and she says the topic continues to interest her. "As we use antibiotics to improve our health, we cause bacteria resistant to antibiotics to develop," she says,



*Silvia Secchi*

"and so we reduce the efficacy of future antibiotic treatment. The more antibiotics we use today, the less effective they'll be in the future." Silvia says that the problem has implications for research and development in public health, for livestock production (since antibiotics are used on livestock, too), and for international agreements (since bacteria move across state and national boundaries).

Silvia is originally from the Italian island of Sardinia. She met her husband, Steve, at Iowa State when they were both students. The couple is expecting their first child, a girl, in June. She says that "BB" (before baby), she and her husband enjoyed traveling, birdwatching, and shopping for antiques. But her pregnancy may slow her down a bit this spring. "These days I am not very mobile, so outside of work I enjoy cooking, playing with my cats, or reading a novel." ♦