



## **Saima HASHIM**

### **Home Country**

Pakistan

### **Degree**

Post-Doctoral Research  
in Weed Genomics

### **Expertise**

Molecular Mechanism of  
Herbicide Resistance in  
Weeds

### **Research Focus**

Genomics of Weedy  
Species

### **Host University**

Ohio State University,  
United States

### **Fellowship Awarded**

2010

Saima Hashim was born and raised in Peshawar, Pakistan. Her mother, a district education officer, and her father, who served in the Pakistani air force, supported Saima's academic aspirations as well as those of her elder sister and younger brother. In her leisure time she is interested in nature and history, particularly the evolutionary stages of humankind, and she loves to observe other cultures while travelling. She also likes reading, cooking and listening to music. As an active volunteer in various NGOs related to social causes, and a supporter of women's programs in her home town, she aspires to help make the world a better place. Saima is married to a biotechnologist, and they have one daughter and one son.

After receiving a gold medal for academic achievement while studying for her master's degree in agriculture, Saima was subsequently offered a teaching position in her own department at the Agricultural University Peshawar in Pakistan. At Ohio State University in the United States, where she is now enrolled in post-doctoral agricultural research, her focus is on the genomics of weedy species, and in weed ecology.

Saima points out that the discovery of herbicides revolutionized weed management and boosted a high level of yield benefits all over the globe. Until the recent past, chemical weed control was considered the most effective weed control measure. However, repeated use over decades of the same herbicides eventually resulted in the development of herbicide-resistant weed biotypes. This phenomenon has alarming implications for farmers. In her research, Saima is trying to find the cause and the solution to this situation in our natural and agro ecosystems.

Saima feels that weeds need to be managed wisely in harmony with our natural environment, and she believes that nature has its own way of balancing the things it has purposely created. Her research on the genomic study of weed species and how they are related to crop plants, if successful, may enable scientists to develop more comprehensive weed management strategies to combat the herbicide-resistance problem as well as the potential threat of genes escaping from genetically modified herbicide-resistant crops into their weedy relatives. As well, the results of her research may aid sustainable crop production.

Saima plans to teach at the Agricultural University Peshawar in Pakistan.