all citizens have the right to vote on issues in the United States, they need to be critical thinkers and well educated.

So, how can we as science researchers help in this movement? The best thing we can do is share our expertise. As it turns out, teachers across the nation are always looking for experts in the sciences to speak in the classroom and help their students with science-exploration topics - especially they look for atmospheric scientists! Because climate change is talked about frequently in the media, the atmosphere is becoming a popular classroom topic. Atmospheric researchers are more important than ever, so it is a great time to be involved!

If you are ready to lend your expertise to the movement, or if you are looking for an outreach component to satisfy requirements of a research grant, there is a way to connect yourself to local educators. Go to www.nationallabday.org and click on "I'm a scientist." You can register yourself, and the website will provide you a list of educators in your area looking for volunteer experts.

If we want the public to be better informed about issues in atmospheric sciences, it begins in our schools. Researchers have the best information and a responsibility to ensure the public is aware of these issues. The National Lab Day website is one way for you to get involved!

Interview with Aristita Busuioc

Hans von Storch

Dr. Aristita Busuioc

Dr. Aristita Busuioc was born in 1950 in Romania. She studied mathematics at the University of Craiova (1969-1974) and she has been working at the National Institute of Meteorology and Hydrology (now National Meteorological Administration), Bucharest, since 1974. In 1997 she received her Ph.D. in Mathematics. In 1988 she became the leader of the "Dynamical Climatology Group" and in 2006, the head of the Climatology Division, until December 2009. Her scientific interests are related to climate variability and climate change, especially statistical downscaling models. She has been involved in various EU projects (as participant or team leader). She has published about 70 articles, 17 of them in international peer-reviewed ISI journals. She was awarded with the Stefan Hepites prize of the Romanian Academy. She also participated in the Fourth IPCC Report as Lead Author, she has been editor in chief of the Romanian Journal of Meteorology, a member of the Editorial Consulting Committee of the "The Open Atmospheric Science," and a Senior Associate to the ICTP in Trieste (2004-2009).

How did the change from an authoritarian political regime to a democratic one affect science in Romania?

The most important change was related to the fact that the Romanian scientists were at last free to collaborate with any Western scientific institution. In this way we could become involved in many European projects and enjoy research stays at prestigious European research institutes. On the other hand, we could participate in various scientific meetings to present our results and to exchange experiences with other scientists from all over the world.

There are still not many women among the "higher" ranks, such as professors, department heads and the like. Is meteorology and climate science still "male territory"?

To obtain the highest scientific degrees (such as professor or senior scientist) there is no difference but the management positions such as director are still "male territory."

About 20 years ago, you were suddenly confronted with the possibility of travelling, particularly to the west. This must have been a rather different world. How did you experience this, and which effect did it have on your research activity?

My first long trip was a research stay at the Max Planck Institute for Meteorology in Hamburg. This was a very big challenge. First, from a technical point of view, I had to work with big computers, but I was lucky to have very nice colleagues who helped me very much. From a scientific point of view, this visit practically changed my career. I learned about global climate models and especially about climate change projection on local scale (statistical downscaling) and then I used this expertise during all my research activity. These fields were new in that time in Romania. All the other international collaborations were practically related to this field.

What would you consider to be the two most significant achievements in your career?

I consider that the most significant achievement in my career is related to the development of the climate research field in Romania (development of complex statistical method for analysis of regional climate variability, validation of the global/regional climate models and climate change projection using statistical downscaling models). The second important achievement is my participation in the Fourth IPCC Report as Lead Author of the Working Group 1 contribution.

When you look back in time, what have been the most significant, exciting or surprising developments in atmospheric science?

I consider the assessment of the uncertainty of local/regional climate change estimates using the ensemble of multi-model approach started in the EU ENSEMBLES project one of them. But maybe the most exciting one, from my point of view, is one of the main objectives included in the High Level Declaration of the World Climate Conference-3 (Geneva 2009) which is to develop the inter-annual and multi-decadal climate predictions.

What constitutes "good" science?

It is very difficult to answer this question. In my opinion, "good" science means performing science based only on "science rules" answering (with scientific tools) to the needs of society as well as possible. But of course this depends on the scientific field. Unfortunatly, in the case of atmospheric science it cannot meet all the needs of society with scientific arguments, and these needs are very high. I do not like the speculations.

What is the subjective element in scientific practice? Does culture matter? What is the role of instinct?

In atmospheric science in general, but especially in climate research, the instinct is very important. For example, to perform an efficient statistical analysis of climatological data, the choice of data set and method is firstly based on instinct but then the scientific culture also helps you with this.