first UNESCO-EGU-ESA GIFT workshop, to be held from 26–28 February 2014 in Port Elizabeth, South Africa, the European Space Agency and the Africa Earth Observatory Network will be offering support and expertise and the Nelson Mandela Metropolitan University will be hosting the workshop. The Local Organizing Committee also includes experts from the University of Free State, the University of Namibia, the University of Witswaterstrand and the International Geoscience Educators Organization of the International Union of Geological Sciences. To reflect on one of the most pressing societal issues and the release of the 5th Assessment Report of the IPCC, the first workshop will be on Climate Change and Human Adaptation.

With preparations already underway for this first African workshop, all those involved are looking forward to a successful event that will become a sustainable part of teacher education in Africa.

Carlo Laj, Sarah Gaines and Jane Robb
Chair of the EGU Committee on Education, Assistant Program Specialist at UNESCO and EGU Educational Fellow, respectively

Taking part in GIFT

A report by teacher Abigail Morton

"After reviewing the numerous applications, your application has been selected to receive the travel award, stipend, and registration for this meeting. Congratulations!"

I had to read it several times before it sank in. A few weeks earlier, I had been sifting through e-mails at work. I scanned through the newsletter from NESTA (the National Earth Sciences Teachers Association in the USA) and something caught my eye just as I went to delete it: the EGU was having its annual General Assembly in Vienna, and one person would be chosen to attend the Geoscience Information For Teachers (GIFT) workshop portion of the conference, paid for by the William Goree Award. In the interest of full disclosure, I spent nine of my formative years in Europe, and have longed to return since I left in 1991. I had to throw my hat in the ring; this felt too good to be true.

In fact, I was in disbelief up until my actual arrival in Vienna. The conference began with a meet-and-greet at the Natural History Museum. I was thrilled to finally meet programme directors Carlo Laj, chairman of the EGU Committee on Education, and Stephen Macko, with whom I'd been corresponding for months. I quickly lost my group when I couldn't tear myself away from the astonishing rock and mineral specimens in the museum's geology rooms. I found the group just in time for a special tour of the museum's roof, which provided stunning views of beautiful Vienna. While chatting with the other teachers in the GIFT programme, I was fortunate to meet with three Einstein Fellows, the "other Americans" in the programme. I was fascinated to learn about their fellowship, which brings educators from around the country to Washington DC to improve national science education policies through the lens of their classroom experience. Each attendee was thrilled to receive a beautiful Dierke Atlas, which has since provided me hours of reading entertainment. (I'm sure I'm not the only one with a map fetish.)

While talking to Carlo, I got a better understanding of the award that allowed me to attend. The award, sponsored in memory of William C. Goree, is designed to give teachers opportunities to expand and broaden their scientific background, which they can then bring back to the classroom. Goree was the co-founder of 2G Enterprises with

Abigail Morton participated in this year's EGU GIFT workshop in Vienna.

Bill Goodman and he had designed and produced superconducting rock magnetometers. Professional accomplishments aside, it was touching to hear so many kind words about Bill Goree, who passed away in 2007. Hearing about what a great person he was made me feel all the more honored to have received the award in his name.

We started bright and early the next morning at the conference centre. Having already attended several NESTA conferences in the US, I don't know why I was so surprised at the sheer size of the conference. There were several thousand attendees. I had spotted countless EGU name tags on the train through the city, and even a few in our tiny hotel across town. I was buzzing with energy and ready to take it all in.

Over the next three days, I was a sponge. The overarching topic of the GIFT workshop was Natural Hazards. The presenters covered every possible angle: types of hazards, from tsunamis to solar disturbances, and the science behind them; the human impact, which dictates the difference between hazards and disasters; what is avoidable, especially given the uncertainty of nature; and our responsibilities as science educators to disseminate this

information. We even heard from the insurance industry on the economic consequences of these global events. Jean-Luc Berenguer and François Tilquin ran a workshop where we designed and built models of buildings that could withstand tectonic motion. Although the setup was too elaborate for me to recreate exactly in my classroom, it did inspire me to create a similar (if simpler) activity for my own students.

Stefan Rahmstorf of the Potsdam Institute for Climate Impact Research spoke about the increase of extreme weather events due to climate change. In his lecture, he showed the graphs of warming trends that we've all seen; what set his apart was that he then adjusted the graphs for other interferences such as El Niño and solar activity, and the results were still clearly trending in the same direction. I was reminded of his talk and its relevance when Vienna itself and regions further north were flooded just one month later. Later, while researching for current events lessons in meteorology, I realised Stefan was the go-to scientist for the media – his name was everywhere. Had I not had a flight to catch directly after the programme's end, I could have attended the optional tour of Flood Protection in Vienna that would have made the following month's events even better understood.

On the second day of the workshop, we were treated to a visit from a genuine celebrity in the geology world: Franco Barberi. Everyone in the room was familiar with his connection to the unfortunate L'Aquila earthquake in 2009, as evidenced by the reverent silence and camera-flashes of the audience. Barberi discussed the risk assessment of Mt. Vesuvius. It was fascinating to realise the number of unpredictable variables that factor in to volcanic eruption hazards, such as wind direction, that can make the difference between life and death. Hearing him speak in person only served to verify my convictions that he is an outstanding scientist whose October 2012 conviction was shocking and wrong.

I took copious notes through every lecture, and have since referenced my dog-eared notebook several times to find website addresses, analogies and case studies. I have many new landslide video clips to use in lectures, thanks to Bruce Malamud. I will be comparing ocean studies to space exploration, as Norma Crosby taught me. I will use the story of the Nice Airport expansion to illustrate the potential devastation of submarine landslides, as Angelo Camerlenghi did. And I will definitely have my students produce their own silent short films to teach Earth science concepts!

The poster session was a feast of new ideas. I wanted to stay by my poster to explain it, as I had hands-on material to accompany it; I also wanted to absorb and record as much as I could from other participants' posters. I took an in-between approach, scribbling notes and snapping pictures as often as I could manage. A group of teachers from Poland showed their students' extensive travels doing independent expeditions to places like the Sahara Desert and the Himalayas. Talking to them motivated me to look into creating a geology field trip to Iceland with my own students. Teachers from Italy and Japan were able to take their students to sites of very recent tectonic events. The evening was a priceless opportunity to network with my fellow teachers, and served as a nice visual "shopping trip" for new ideas. I only regret that it didn't last longer.

Looking through my journal of the trip, the word "inspired" stands out several times. In the US over the past decade or so, there has been a small, yet unfortunate movement of both science denial and demonisation of teachers. It was refreshing and, yes, inspiring just to be in the company of thousands of science professionals and consider myself a peer. I felt honored to hear top scientists in their field share their research with us. It motivated me to seek new conferences, and even present my own workshops. The aptly-acronymed GIFT has helped me grow a new limb, professionally; now it's up to me to discover new ways to use it.

Abigail Morton

Teacher at Woburn Memorial High School and participant in the 2013 GIFT workshop at the EGU General Assembly

More information

If you would like to get involved in GIFT, please check the EGU website for more information: http://www.egu.eu/outreach/gift/

The William Goree Award is a travel grant sponsored jointly by the 2G Enterprise company in the US and EDUGEA, a non-profit educational association in France. Selection of the awardee is made via NESTA.