Diana Wall's response to the award of the SCAR President's Medal 2012

I was genuinely surprised when I first heard that I was to receive this award in recognition of my research on soil biodiversity in the Dry Valley ecosystems and scientific contributions to policy. To be in the company of other esteemed Antarctic scientists who have received the prestigious SCAR *President's Award for Outstanding Achievement in Antarctic Science* is an indeed an incredible honor and one for which I am very grateful.

For me, this award reflects the essence of Antarctic field research. From the first entry into the Dry Valleys by Robert F. Scott's expedition, Antarctic research has been about teams of people working together. All of us have benefitted from the findings of those who came before us. Their discoveries then and our research collaborations today lead us to examine the Dry Valleys in different ways; We test hypotheses and ask questions that we couldn't address in more temperate ecosystems such as hot deserts or the Arctic. This award is a symbol of the respect, enthusiasm for, and quality of scientific research that is generated by the Antarctic research community – I am grateful to be part of this community.

Another aspect of working in such a community is the number of incredible disciplinary experts that I have been lucky to work with in the field and at McMurdo Station, who contributed energy, ideas and knowledge towards a greater interdisciplinary understanding of the functioning of the Dry Valley ecosystem. And, not to forget my focus on soil biodiversity, perhaps I should acknowledge and also share this award with the major animal in the Dry Valleys, the roundworm nematode *Scottnema lindsayae* that was largely unknown when Ross Virginia (Dartmouth College) and I started working in Antarctica! Studies on this fascinating species and other invertebrates by legions of students and colleagues from many labs, have revealed physiological survival strategies, dispersal mechanisms, patterns of species distributions, role in biogeochemical cycling and potential responses to a warmer, wetter climate, all of which will be a basis for future scenarios of ecosystem change.

Will *Scottnema* and other biota survive? How will the terrestrial ecosystems of the interior respond? How will Antarctica and its biota be managed for the future? I think we all recognize that Antarctica terrestrial ecosystems are changing. This award affirms the need for scientists to inform policy makers, other scientists and the public, on why Antarctica matters and how changes will affect Antarctica. The activities of SCAR, its focus on research, synthesis and meetings among the international scientific community studying Antarctica and the Southern Ocean has never been more relevant. The communication of our knowledge through SCAR and through our individual activities is thus critical for the future conservation and management of Antarctica.

In accepting this award, I want to acknowledge the many people who have worked as part of the 'Worm herders' – numerous students, international collaborators, teachers, undergraduates; my colleagues on the McMurdo LTER, and of course, the many people that underpin the science – NSF and their contractors, the helicopter pilots of PHI, my home university (Colorado State University) and my family. Thank you all!