

Report to the Tinker Foundation

Martha T Muse Prize for Science and Policy in Antarctica

Submitted by the Scientific Committee on Antarctic Research
By Dr Renuka Badhe on 20th May 2013

1. Brief Overview

This narrative report summarises the activities and accomplishments of the Martha T. Muse Prize for Science and Policy in Antarctica in the year 2012, as administered by the Scientific Committee on Antarctic Research (SCAR) for the Tinker Foundation.

The Prize was established by the Tinker Foundation in honour of its long-time leader Ms. Martha Twitchell Muse, and as a lasting legacy of the International Polar Year 2007- 2008 (IPY). Each year over (initially) a five-year period a Prize-winner will be selected and awarded \$100,000 of unrestricted funds by the Tinker Foundation. The Prize is to recognize an early to mid-career researcher, in any field of Antarctic science or policy, who has demonstrated exceptional capabilities and the potential for significant creativity and leadership in the future. The Prize-winner can be from any country and work in any field of Antarctic science or policy. The goal is to recognize outstanding and important work being done by the individual and to call attention to the importance of understanding Antarctica in the Earth system. The provision of this substantial, unrestricted financial prize will allow the recipient to pursue intellectual, scientific, and/or personal activities at a critical time in his or her career. The goal is to identify tomorrow's leaders of Antarctic science and policy and improve the chances of them realizing their potential.

2. Project Activities

The main activities undertaken in 2012 were:

- Maintenance of the Prize website (www.museprize.org)
- Selection of the members of the Prize Selection Committee (two of whom rotate off each year), and Chair of the Selection Committee (once every three years)
- Promotion and publicity of the Prize by the use of traditional advertising (through the journals Nature, Polar Record and Antarctic Science), mailing lists (National Academy of Sciences mailing list, SCAR mailing lists, listservers etc.) and e-mailings to individuals.
- Compilation and assignment of Nominations in advance of the Selection Committee Meeting, including the design of the evaluation forms etc. required and the development of the procedures involved in selecting a Prize-winner.
- Organisation and running of the Selection Committee Meeting – held at

- the Redpath museum, Montreal via IPY Montreal)
- Organisation and running of the Prize and associated Ceremonies for 2012 – held at the SCAR Open Science Conference, Portland, USA

3. Project Accomplishments of the Prize (2009-12)

The major accomplishments of the first four years of the Prize were the establishment and continuation of the Prize and the infrastructure required (e.g. website, Selection Committee) that culminated in the selection of the Prize Winners: Professor Steven Chown from Stellenbosch University in South Africa, Associate Professor Helen Fricker, Scripps Institute of Oceanography, USA; Dr Jose Xavier, Institute of Marine Research, Coimbra, Portugal, and Dr Steve Rintoul, CSIRO Fellow, CSIRO Marine and Atmospheric Research, Australia.

4. Internal/External Factors Influencing Project and Problems Encountered

SCAR has been coordinating Antarctic research and providing advice to policy makers since 1958. This provided a strong base of contacts and experience within the SCAR Secretariat that was essential in setting up the Prize. However, as recognized in an earlier report, SCAR had less experience in social sciences. Since 2010, the SCAR Social Sciences Action Group has been active, and one of its members (Daniela Liggett) is a member of the Martha Muse Selection Committee for 2010-12.

External partners (e.g. the Antarctic Treaty Secretariat, the Scott Polar Research Institute, the IPY, various National Antarctic and/or Polar Programs) were also engaged to reach out to the full extent of the Antarctic community for advertisement and dissemination of information regarding the Prize.

In the 2012 cycle, one Committee member resigned a few days before the Selection Committee meeting due to personal health issues, however the Committee agreed that for the 2012 round, they would divide the extra nominees from the 6th member, and continue with 5 members as an extraordinary case for 2012 only.

Other adjustments to the website were also made to improve efficiency based on feedback received from the Committee members, SCAR Executive Committee, and others.

5. Unanticipated Results

There were no unanticipated results in 2012.

6. Target Audience

The target audience are the many researchers, policy makers and educators involved in Antarctic science and the conservation of Antarctica. By helping the careers of key individuals it is hoped that the Prize will also have an influence by increasing awareness of Antarctic matters to the general public and others.

7. Short-term Impact of the Project (2009 – 12)

Since 2009, the Prize has gained esteem both within the Antarctic community and the general scientific community. This is underlined by the Prize ceremonies, which have been held at extremely prestigious conferences aimed at both the Antarctic and the non-Antarctic community. The 2010 Ceremony was held at the American Geophysical Union conference in San Francisco, attended by more than 18,400 people from around the world. Similarly, the 2011 Ceremony was held at the World Conference on Marine Biodiversity (WCMB), and the Martha Muse Prize Ceremony was held with the Opening Ceremony of the WCMB, sharing the platform with Jean-Michel Cousteau, amongst others. The 2012 Ceremony was held at the SCAR Open Science Conference, which is the biggest Antarctic Science and Policy Conference and attracted participants from more than 40 countries.

The Prize has certainly had a positive effect on all the Prize Winners' careers. In particular since two of the winners, Professor Chown and Dr Xavier are from South Africa and Portugal respectively, rather than one of the traditional "big players" in Antarctic research this has been seen in a very positive light by both scientists and the media. In 2012, Prof Chown accepted the position of Head, School of Biological Sciences, Monash University, Australia.

8. Longer-term Effects of the Project

The Martha T Muse Prize is intended to be a lasting legacy of the IPY. The goal of the Prize is to provide recognition of the important work being done by key individuals and to call attention to the significance of understanding Antarctica in a time of change.

In 2012, planning began for the first SCAR Horizon Scanning event. All Muse Prize winners were invited to be a part of the planning committee. They are also expected to play a major role in the actual Horizon Scan itself, with each winner leading a session during the Horizon Scan retreat (workshop).

9. Project Publications (and other products)

A short handout with details of the Prize, several pull-up type posters, etc

have been prepared to be used at various relevant Conferences and meetings. For the 2012 SCAR Open Science Conference, volunteer T-shirts were partially sponsored, which included the name of the Prize and the website being widely displayed within the conference. Other merchandise is currently under review to further increase advertising. A logo is being designed at the Tinker Foundation, which will further enhance the memory and legacy of the Prize.

A poster was presented at IPY 2012 and was also displayed at the SCAR meetings in Portland, which included a section highlighting the first three winners. A pdf of the poster is attached with this report. A paper was presented at the SCAR Delegates meeting, and a pdf of the paper is provided with this report.

As a part of the next project proposal for the Muse Prize (2013 onwards) submitted to the Tinker Foundation, an internal review of the Prize activities was carried out in SCAR. This internal review invited present and past members of the Selection Committee, SCAR Chief officers of all standing groups, research programs. A visual summary of this review is available here: <https://docs.google.com/forms/d/1hxyxY2wCZRga1yU8NZaYHxyAbf32NgKp2GYow8IPteA/viewanalytics>

An analysis of these results was presented in the project proposal (for 2013-) submitted to the Foundation in Feb 2013, and the full responses are given in the Excel spreadsheet attached with this report.

Action on matters raised in the internal review is already planned for or taking place in the 2013 cycle.

10. Project's Value as a Model or Demonstration of New Techniques

Even at this early stage some of the lessons learnt from this project have been utilized by SCAR, for example some of the procedures for rating the Martha T. Muse Prize Nominations are being used in the SCAR Medals and Awards schemes.

11. Project Personnel

Administrative Organisation

Since 2010, Dr Renuka Badhe and Mrs Rosemary Nash have been responsible for administering the Prize.

The activities have included:

- Design and maintenance of the prize website (www.museprize.org), social

networking sites like Facebook, LinkedIn, Twitter, Google+, etc.

- Promotion and publicity of the prize, including advertising in journals, mailings, announcements, etc.

- Creation and maintenance of the six-member Selection committee, development of evaluation forms, checklists, guidelines etc.

- Administrative support associated with the Selection Committee meetings, conference calls, associated meeting reports, financial management of the project, etc.

On occasion, advice was also provided by the SCAR President, Dr Mahlon “Chuck” Kennicutt, and Dr Mike Sparrow, Executive Director, SCAR.

Selection Committee

The Selection Committee for the Prize consists of six members of the Antarctic community representing as highly respected and diverse backgrounds (geopolitically, by discipline and by gender) as possible. For the year 2012, committee consisted of:

Dr Ian Allison, Australia. Background in glaciology, climate policy, Antarctic Treaty (Member 2009, **Chair** 2012, 2013, 2014)

Dr Daniela Liggett, Germany, New Zealand. Background in environmental management, Antarctic tourism, co-chair of the SCAR Social Science Action Group (2010, 2011, 2012)

Dr Alexander Klepikov, Russia. Background in physical oceanography of the Southern Ocean, polar ocean modelling, and polar climate dynamics (2010, 2011, 2012)

Prof John Turner, United Kingdom. Background includes the synoptic and mesoscale weather systems of the polar regions, Antarctic precipitation, sea ice variability and the impact of the Antarctic ‘ozone hole’ (2011, 2012, 2013)

Dr Roberta Marinelli, USA. Background includes biological oceanography, ocean acidification, education and outreach. She is currently the Director of the Wrigley Institute for Environmental Studies. (2012, 2013, 2014)

Renate Rennie, Chair, Tinker Foundation has also taken an active role in the proceedings, including attending the Selection Committee Meetings, and the Prize Ceremonies as her schedule permits. For 2012, Ms Rennie participated in both the Selection Committee (day 1 only) and the Prize Ceremony at the SCAR Open Science Conference, Portland USA.

12. Project Budget

The original project budget proved to be a reasonable estimate of the costs involved, though as agreed with Renate Rennie, a modified budget was approved for years 3-5 of the Prize in 2011. In summary the improvements to the original budget for the three years (2011-13) are:

- an increase in the advertising budget for high impact journals, and their websites to \$10k to allow the targeting of additional audiences.
- an increase in the travel budget for the committee meeting to \$21,000. Because of the location of some of the committee meetings, flight costs were more expensive than originally envisaged and it was suggested that the members of the committee should be allowed to travel premium economy rather than taking the cheapest economy seats. Two days rather than one are also required for the Selection Committee to make the final selection of the Prize Winner.
- An increase from two weeks to four weeks staff time to deal with evaluation forms, checklists, guidelines and dealings with the new selection committee (including conference calls and associated meeting reports), reviewing award expenditures, mainlining award records and assessing the performance of the system.
- Addition of a merchandise budget, \$5k for mugs, mousemats, etc to help in additional advertising of the Prize
- Addition of a merchandise and stationery budget (\$2k) for the Selection Committee members, as well as provision for one special meal for all Committee members and associated staff helping with the meeting admin (\$2k).
- Addition of a budget for award venue, food, and related costs of ceremony (\$10k) and a budget for an Award Commemoration Dinner (\$5k).

13. Project Impact on the Administrative Organisation, SCAR

SCAR's Mission is "to be the leading independent organisation for facilitating and coordinating Antarctic and Southern Ocean research, and for identifying issues emerging from greater scientific understanding of the region that should be brought to the attention of policy makers". As part of this mission, recognizing and encouraging the leaders in Antarctic science and policy of the future plays a strong part and thus the ideals behind the Martha T. Muse Prize resonate strongly with SCAR's aims.

14. Project Activities Beyond Grant Period

The application for the next tranche of the Prize funding has been submitted to the Tinker Foundation. Two additional applications have been made (1) Muse Fellows colloquium, 2014 and (2) Antarctic Science Horizon Scan.