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The “Tinker-Muse Prize for Science and Policy in Antarctica” is a US$ 100,000 unrestricted award presented to an individual in the fields of Antarctic science and/or policy who has demonstrated potential for sustained and significant contributions that will enhance the understanding and/or preservation of Antarctica. The Tinker Foundation’s goal is to establish a prestigious award that recognizes excellence in Antarctic research by honouring someone in the early to mid-stages of his or her career. The Prize is inspired by Martha T. Muse’s passion for Antarctica and is a legacy of the International Polar Year 2007-2008.

The prize-winner can be from any country and work in any field of Antarctic science and/or policy. The goal is to provide recognition of the important work being done by the individual and to call attention to the significance of understanding Antarctica in a time of change.
The Prize is awarded by the Tinker Foundation and administered by the Scientific Committee on Antarctic Research (SCAR).

About

The Tinker-Muse Prize is awarded to individuals who have demonstrated excellence in Antarctic science or policy and who show clear potential for sustained and significant contributions that enhance our understanding of Antarctic science or policy and promote Antarctica's preservation for future generations.

The Tinker Foundation wished to establish a prestigious award recognizing excellence in Antarctic science or policy by honouring someone in the early- to mid-stages of their career. The Tinker-Muse Prize was inspired by Martha T. Muse's passion for Antarctica and was established in her honour. It is a legacy of the International Polar Year 2007-2008.

Individuals are nominated for recognition by members of the Antarctic community of scientists and policy makers. The goal is to recognize the leaders of tomorrow and to enhance the impact and scope of their leadership in the future.

The Tinker Foundation

The Tinker Foundation was founded in 1959 by Dr. Edward Larocque Tinker in support of the Iberian tradition in the Old and New Worlds and continues to reflect this linguistic and geographical focus today. The Foundation awards grants to organizations and institutions concerned with the affairs of Latin America, Spain, and Portugal. Over time, the Foundation developed a specific interest in Antarctica. The Foundation’s grants support the study of public policy and the search for innovative solutions to some of the environmental, economic, political, and social problems facing these areas today. The Foundation has long been committed to advancing education. It no longer accepts new proposals for Antarctic projects but continues to fund the Tinker-Muse Prize.

For more information, visit the Tinker website.

Martha T Muse

Martha Twitchell Muse was a founding director of the Tinker Foundation in 1959 and subsequently served in various capacities, becoming Executive Director in 1965 and President in 1968. She became Chairman of the Board of Directors in 1975 at the Foundation’s incorporation, a position she retained until her retirement in 2008.

Ms. Muse provided outstanding leadership over her years of service, both to the Tinker Foundation and others. She was the first woman to be elected to the Board of Trustees of Columbia University and served as a director on the boards of several organizations, including the Americas Society, the Council of the Americas, and the Spanish Institute. Her directorships included the New York Stock Exchange; the Cuba Policy Foundation; and many corporate directorships, including the American Smelting and Refining Company, the Bank of New York, ACF Industries (formerly named the American Car and Foundry Company), Sterling Drug Inc., Associated Dry Goods Inc., May Department
Stores, and Irving Bank and Trust Company. In addition to her directorships, Ms. Muse was also a member of the Council on Foreign Relations, the Inter-American Dialogue, and the US–Spain Council. For her many contributions to the field of Latin American and Iberian relations, she received various awards, including the Orden al Mérito por Servicios Distinguidos en el Grado de la Gran Cruz (Merit Order for Distinguished Services in the Rank of the Great Cross) from Peru, the Order of the Southern Cross from Brazil, the Order of Bernardo O’Higgins from Chile, and the Orden de Mayo al Mérito (May Order of Merit) from Argentina.

In 2009 the Tinker Foundation celebrated its 50th anniversary and, at this time, recognized the leadership of Ms. Muse as she retired from the Foundation by establishing the Muse Prize in her honour.

Martha Muse passed away on 9th February 2014.

International Polar Year

International Polar Year (IPY) 2007–2008 was an intense, coordinated field campaign of polar observations, research, and analysis. It was one of the largest collaborative science programmes ever attempted, involving more than 200 projects and people from more than 60 nations. The ambitious agenda had a distinctly multidisciplinary approach, incorporating activities in the physical, biological, and social sciences and including a large education component. Themes included improving understanding of the status of the environment, change in the environment and social systems, global linkages, new frontiers in science, the polar regions as a unique vantage point, and the human dimension.

This IPY followed in a long tradition of polar scientific collaboration and achievement, dating back to the first IPY 150 years ago in 1882–1883, a second IPY in 1932–1933, and the International Geophysical Year in 1957–1958.

SCAR

Formed in 1958, the Scientific Committee on Antarctic Research (SCAR) is an interdisciplinary body of the International Council for Science (ICSU), and currently includes 43 member countries and 9 ICSU unions. SCAR’s mission is to advance Antarctic research, including observations from Antarctica, and to promote scientific knowledge, understanding and education on any aspect of the Antarctic region. To this end, SCAR is charged with initiating, developing and coordinating high quality international scientific research in the Antarctic region (including the Southern Ocean), and on the role of the Antarctic region in the Earth system. It acts as the main international exchange of Antarctic information within the scientific community.

In addition to carrying out its primary scientific role, SCAR also provides objective and independent scientific advice and information to the Antarctic Treaty System and other organizations such as the UNFCCC (United Nations Framework Convention on Climate Change) and IPCC (Intergovernmental Panel on Climate Change) on issues of science and conservation affecting the management of Antarctica and the Southern Ocean, and on the role of the Antarctic region in the Earth system.

SCAR strives to include new members, as countries not yet engaged develop an increasing interest in Antarctic science. At regular intervals, SCAR evaluates its achievements and adjusts its structure and strategy to improve its functioning and accommodate emerging issues. Involvement in SCAR science is open to all.
The Prize

The “Tinker-Muse Prize for Science and Policy in Antarctica” is a US$ 100,000 unrestricted award presented to an individual in the fields of Antarctic science and/or policy who has demonstrated excellence in Antarctic science and/or policy and who show clear potential for sustained and significant contributions that will enhance our understanding of Antarctic science or policy and promote Antarctica’s preservation for future generations.

The Tinker Foundation’s goal is to establish a prestigious award that recognizes excellence in Antarctic research by honouring someone in the early to mid-stages of his or her career. The Prize is inspired by Martha T. Muse’s passion for Antarctica and is a legacy of the International Polar Year 2007-2008.

The prize-winner can be from any country and work in any field of Antarctic science and/or policy. The goal is to provide recognition of the important work being done by the individual and to call attention to the significance of understanding Antarctica in a time of change.

Prize Administration

The Tinker-Muse Prize is administered by the Scientific Committee on Antarctic Research (SCAR).

SCAR is responsible for the coordination of the nominations, organizing the selection committee and their meetings, dispersing of award funding, liaising with nominators, communications about the prize, and the Award presentation and lecture.

The call for nominations is usually launched in January every year, with nominations due in May. The selection committee usually meets in-person in June or July and the announcement of the recipient is made in August.

The Muse-Prize award ceremony is held at the SCAR Open Science Conference in even-numbered years, and at a conference of the recipient’s choice in odd-numbered years.

Muse Colloquium

The 1st Martha T. Muse Fellows Colloquium - April 22, 2014; Queenstown, NZ
"What will Antarctica and the Southern Ocean look like in 2065?"

Many forecasters and futurists tell us that in 2065:
• the world’s human population will be 8.5 billion,
• atmospheric CO₂ levels will exceed 650 ppm under a business as usual scenario,
• the Arctic ocean will be ice free in August and September,
• average global temperature will 4°C warmer than in 2000,
• ocean pH will be less than 8.2, and
• sea level will be ~26 cm higher than in 1990.

What will these dramatic changes to Planet Earth mean for the world’s last great wilderness and a bellwether of global change – Antarctica and the Southern Ocean? To speculate about this future world and the ramifications for human societies, the “1st Martha T. Muse Colloquium” convened a panel of the Martha Muse Prize Awardees and Guests to address the topic “Beyond the Horizon – Antarctica and the Southern Ocean 2065” in Queenstown, New Zealand on Tuesday, April 22, 2014. The Colloquium was part of the “1st SCAR
Antarctic and Southern Ocean Horizon Scan (http://www.scar.org/horizonscanning/) that assembled around 80 of the world’s leading Antarctic scientists, policymakers, and logistics science funders to develop a collective community view of the most timely, urgent and compelling scientific questions that need to be addressed in the next two decades.

The Colloquium panel included Marta T. Muse Prize Fellows Steven Chown (terrestrial ecologist and policy adviser), Monash University, Melbourne, Australia; Helen Fricker (glaciologist and satellite observational specialist), University of California, San Diego, USA; José Xavier (marine biologist ecologist and marine mammals expert), University of Coimbra and the British Antarctic Survey, Portugal/UK; Steve Rintoul, (physical oceanographic modeller and observationalist) CSIRO, Australia; and Martin Siegert (glaciologist and geologist), University of Bristol, UK. The Muse Fellows were joined on the panel by local experts Neil Gilbert (policy adviser and Antarctic governance expert), Antarctica New Zealand, and Gary Wilson (marine geologist and geophysicist and paleoclimate expert), Director of the New Zealand Antarctic Research Institute (NZARI). The Muse Colloquium was made widely available on the web via YouTube.

Media and Documents

2008 US National Research Council Report on the process to establish the Muse Prize

Yearly reports on the administration of the Tinker-Muse Prize:
2015 Martha T Muse Prize Committee Meeting Report
2014 Martha T Muse Prize Committee Meeting Report
2013 Martha T Muse Prize Committee Meeting Report
2012 Martha T Muse Prize Committee Meeting Report
2011 Martha T Muse Prize Committee Meeting Report
2010 Martha T Muse Prize Committee Meeting Report
2009 Martha T Muse Prize Committee Meeting Report

Current Tinker-Muse Prize Advert:
2017 Tinker-Muse advert (2017_Tinker-Muse_Advert.pdf)
Print advert in Nature (2 March issue) and Nature Geoscience (April issue)
(Nature_print_advert_2017_proof.pdf)
Print advert in Science, 10 February 2017 (Science_print_advert_2017_proof.pdf)
(All in SCAR – Admin Assistant > Muse Prize > Adverts > Adverts 2017)

Website Advertising Banners:
Banner on Antarctic Science / Polar Record website 2017
(Muse_Prize_banner_2017_complete.gif)
Banner on Antarctic Science / Polar Record website 2016
(Muse_Prize_banner_2016_complete.gif)
Banner on Antarctic Science / Polar Record website 2015
(Muse_Prize_banner_2015_complete.gif)
Banner on ICSU website, 2013 (Muse_Prize_bannerRICSU_website_2013.jpg)
Banner on Nature website, 2011 (Muse_banner_728x90_Nature_website_2011.gif)
(All in SCAR – Admin Assistant > Muse Prize > Adverts > Website banners)

Award Press Releases:
Muse Prize Award to Timothy Naish - press release, July 2014
(Muse_Press_Release_2014.pdf)
Muse Prize Award to Martin Siegert - press release, July 2013
(Muse_Press_Release_2013_colour.pdf)
Muse Prize Award to Steven Chown - press release, December 2009
(Muse_PressRelease_09.pdf)
(All in SCAR – Admin Assistant > Muse Prize > Press Releases)

Roller Banners:
Tinker-Muse Prize roller banner 2016 (Muse_Prize_rollerr_baner_2016_proof.pdf)
Selection Committee

Selection Committee members serve for up to three years with some portion of the committee being renewed each year. Members are not eligible for reappointment after completion of their service, other than promotion to chair. The chair plays a critical role, providing longer-term memory and leadership to the Selection Committee, and is eligible for reappointment for an additional three years, if approved by the Tinker Foundation. No Selection Committee member shall serve for more than a total of six years in any combination of capacities.
In its deliberations of nominees, the Selection Committee should, by its selections, ensure the following goals:

- Promotion of IPY’s goals;
- Consideration of the wide range of disciplinary and interdisciplinary Antarctic science and policy topics over time;
- Enhancement of the diversity and perspectives brought to bear on Antarctic issues;
- Illustration of the importance of international collaboration in Antarctic science and policy.

Committee deliberations are to be in closed session. The chair will report the prize winner recommended by the Selection Committee, to SCAR and the Tinker Foundation so that the Foundation can review the selection process and outcome and announce the winner.

Peter Barrett - Committee Chair (2015-17, member since 2013)

Peter Barrett was Founding Director (1972-2007) of the Antarctic Research Centre, Victoria University of Wellington, New Zealand, where he continues as Emeritus Professor of Geology. His early geological studies took him from Auckland University to Ohio State University, where he studied the Late Paleozoic Gondwana strata in the Transantarctic Mountains (1964-69). Since 1974 he has led a series of offshore drilling projects for a history of Antarctic climate and ice sheet behaviour since its inception around 34 million years ago. Recently he has become interested in the perspective that climate change on geological time scales offers on future climate change. From 1998-2004 he was New Zealand’s representative on the Antarctic Treaty System’s Committee on Environmental Protection. In 2006 Peter was inaugural recipient of the SCAR President’s Medal for Outstanding Achievement in Antarctic Science, and in 2011 was elected an Honorary Fellow of the Geological Society of London.

Kathleen Conlan - (2015-17)

Kathleen Conlan studies polar and deep-sea benthic community patterns and responses to change. Recent studies have been on the enrichment effects of deep submarine canyons in Australia, a benthic hotspot for grey whales in the Canadian Arctic and community responses to ice scour, seafloor methane venting, icebergs and sewage treatment in the Arctic and Antarctic. As a scientist at the Canadian Museum of Nature, Conlan actively popularizes science to increase an appreciation of and a desire to conserve the natural world. Conlan has represented Canada at SCAR since 1998 and was Chief Officer of the Standing Scientific Group, Life Sciences over 2008-2012.

Vazira Martazinova - (2015-17)

Professor and Head of the Department of Climate Research and Long-term Forecast, Ukrainian Hydrometeorological Institute, Kiev, Ukraine. She received her PhD in meteorology from the Hydrometeorological Centre of the USSR, Moscow, Russia and Dr. Sci. in Physics of Atmosphere from the Usikov Institute of Radiophysics and Electronics, Kharkiv, Ukraine. Her studies focus on the changes of the large-scale atmospheric circulation in 20th-21st centuries and the development of physical-statistical models of the long-term forecast of weather. The basis of this model of the long-term forecast is a new “floating analogue” approach that she proposed. For the last ten years, Prof Martazinova has been the scientific head of National Antarctic Scientific Center of Ukraine in the study of climate change and weather over the Antarctic, and meteorological studies in the Ukrainian Antarctic station Faraday-Vernadsky. She has developed the methods of seasonal prediction of temperature and total ozone over the Antarctic. Members of her scientific team have spent several winters at the Ukraine Antarctic station. Prof. Martazinova served as the Expert of the

Ronald Buss de Souza - (2016-)

Ronald Souza holds a permanent position as a senior researcher at the Brazilian National Institute for Space Research (INPE), heading INPE’s Southern Regional Centre for Space Research. He received his PhD in Oceanography from the University of Southampton / National Oceanography Centre, Southampton (NOCS), UK in 2000. His experience is concentrated in the field of Physical Oceanography, focusing on mesoscale processes. He acts mainly on the following subjects: ocean remote sensing, South Atlantic and Southern Ocean oceanography, air-sea interaction and fisheries remote sensing. From 2007 to 2016, he was the head of the Antarctic Program of INPE. He is the Brazilian representative for the Polar Space Task Group (PSTG) of the World Meteorological Organization (WMO) and the representative of INPE in the Brazilian national committees of GOOS (Global Ocean Observing System) and GLOSS (Global Sea Level Observing System). He has participated in many cruises onboard research vessels in the Southwestern Atlantic, Indian and Southern oceans. He is a founding member of the Brazilian National Science and Technology Institute of the Cryosphere and heads the Centre of Ocean-Atmosphere-Cryosphere Interactions of this institute.

Catherine Ritz - (2017-)

Catherine Ritz, obtained a PhD in geophysics in 1992 at the University of Grenoble, France. She is senior Scientist (Directeur de Recherche) in the CNRS at LGGE (Laboratoire de Glaciologie et Géophysique de l’Environnement) where she is the head of the ice sheet modelling group. Her research interest concerns ice sheet modelling and she has developed 3D, thermomechanically coupled models that simulate the evolution of ice sheets under various climatic conditions. The time scales of interest ranged from century (for IPCC-like projections) up to 400k years (for paleostudies). This model has been applied to present ice sheets, such as Greenland and Antarctica, but also to the past ice sheets that covered part of the northern hemisphere during the glacial periods. She also participated in ice cores interpretation (dating, ice origin) and in continuation of this topic, she is involved in the selection of a very old ice drilling site by both modelling approach and associated geophysical observations.

Sanjay Chaturvedi - (2017-)

Dr. Sanjay Chaturvedi is Professor of Political Science at the Centre for the Study of Geopolitics, Panjab University, India. He specializes in theories and practices of Geopolitics and IR, with special reference to Polar Regions and the Indian Ocean Region. He was awarded the Nehru Centenary British Fellowship to pursue post-doctoral research on the political geography and geopolitics of the Polar Regions at the Scott Polar Research Institute (SPRI), University of Cambridge, UK (December 1991 to January 1993), which was followed by a highly coveted Leverhulme Research Grant of £55,000 (June 1993 to June 1995). While at SPRI, in 1994, he visited Antarctica, lecturing on board MS Alla Tarasova (Quark Expeditions, Canada). Chaturvedi is the Regional Editor of The Polar Journal (Routledge) and Member, International Executive Committee (ex officio) of the SCAR Antarctic Humanities and Social Sciences Expert Group (Geopolitics). He was invited to deliver the Keynote on ‘Antarctic Science and Policy Advice in a Changing World’, the central theme of the SCAR Open Science Conference at University of Portland, USA, on 16 July 2012. He has recently been invited as a Keynote Speaker at the SCAR Antarctic Humanities and Social Sciences Expert Group Conference, ‘Depths and Surfaces’, to be held at University of Tasmania, Hobart, 5-7 July 2017. He is the author of The Polar Regions: A Political Geography (Chichester: John
Wiley & Sons, 1996) and Dawning of Antarctica: A Geopolitical Analysis (New Delhi: Segment, 1990). Chaturvedi is a Member of the Core Group of Experts on Antarctica and the Southern Ocean Affairs, constituted by the Ministry of Earth Sciences, Government of India, since its inception in 2004. He has served on the Indian delegation to the Antarctic Treaty Consultative Meetings (ATCMs). Chaturvedi has pursued policy-oriented research on the Polar Regions, especially Antarctica, since early 1980s.

Past Committee Members

Diane McKnight (USA) - chair 2009-11
Ian Allison (Australia) – member 2009-10; chair 2012-14
Angelika Brandt (Germany) – member 2009-11
Olav Orheim (Norway) – member 2009
Rasik Ravindra (India) – member 2009-10
José Retamales (Chile) – member 2009
Alexander Klepikov (Russia) – member 2010-12 and 2014
Daniela Liggett (New Zealand) – member 2010-12
M Y Choe (Korea) – member 2011
John Turner (UK) – member 2011-14
Roberta Marinelli (USA) – member 2012-14
Mauricio Mata (Brazil) – member 2013-15
Dongmin Jin (Korea) – member 2013 and 2015-16
Steven Chown (2009 prize winner) – member 2015-16

Award Recipients

The Tinker Foundation, together with the Scientific Committee on Antarctic Research (SCAR), is pleased to highlight the recipients of the Tinker-Muse Prize. These individuals were awarded this prize for their demonstrated excellence in Antarctic science or policy, as well as their clear potential for sustained and significant contributions that enhance our understanding of Antarctic science or policy and promote Antarctica’s preservation for future generations.

2016 - Rob DeConto (USA)
For his outstanding work on past and future Antarctic climate and for research integrating geological data with modelling to reveal likely consequences for future sea level rise from ice sheet melt.

2015 - Valérie Masson-Delmotte (France)
For her work on the characterization, quantification and understanding of past changes in climate and water cycle, translating the isotopic data to paleo-temperature records.

2014 - Tim Naish (New Zealand)
For his outstanding research in understanding Antarctica’s response to past and present climate change and the role of Antarctica’s ice sheets in global sea-level change through time

2013 - Martin Siegert (UK)
For his innovative research on Antarctic subglacial lakes and the reconstruction of Antarctic glacial history.

2012 - Steve Rintoul (Australia)
For his profound contribution to our scientific understanding of the Southern Ocean and of Antarctica’s role in the global system.

2011 - José Xavier (Portugal)
For his outstanding research on the predator-prey dynamics that sustain populations of albatrosses, penguins and other top predators in the Southern Ocean.
2010 - Helen Fricker (USA)
For her discovery of active sub-glacial lakes, showing that these lakes form dynamic hydrologic systems, where one lake can drain into another in a short period of time.

2009 - Steven Chown (South Africa)
For his outstanding research and provision of world-renowned advice to the Antarctic Treaty System. He is a widely published and cited authority on invasive species and the effect of climate change and human interactions on Antarctica.

For a brief bio and a recording of the award presentation and lecture, click on the recipients names.

Rob DeConto

The 2016 Tinker-Muse Prize for Science and Policy in Antarctica has been awarded to Professor Robert DeConto, University of Massachusetts-Amherst. This recognition comes for his outstanding work on past and future Antarctic climate and for research integrating geological data with modelling to reveal likely consequences for future sea level rise from ice sheet melt. Rob’s pioneering data-model integration strategy was key to the success of the ANDRILL programme, central to the SCAR Antarctic Climate Evolution (ACE) and Past Antarctic Ice Sheet Evolution (PAIS) scientific research programmes, and eventually adapted by the International Ocean Drilling Program’s (IODP) science plan with an emphasis on the role of the South Polar region in climate evolution and sea level history. Over the last decade, Rob has worked with colleagues to build on this basic methodology in a series of influential papers, incorporating new and significant ice loss processes that provide improved comparisons between model results and geological data, with recent models predicting a doubling in the amount of sea level rise by the end of the century and beyond, compared with the 2013 assessment by Intergovernmental Panel on Climate Change.

Award Ceremony and Lecture
Professor De Conto’s homepage at the University of Massachusetts, Amherst, USA.

Valérie Masson-Delmotte

Dr Valérie Masson-Delmotte has been awarded the 2015 Martha T. Muse Prize for Science and Policy in Antarctica for her work on the characterization, quantification and understanding of past changes in climate and water cycle, translating the isotopic data to paleo-temperature records. Dr Masson has used combinations of the water isotope data to interpret the transport route for the moisture reaching Antarctica and elevation changes of the deep drill sites in Antarctica. She has an interdisciplinary profile in isotopic geochemistry, glaciology, climate modelling and paleoclimatology. She has also contributed to the paleoclimate chapters of two IPCC reports: as Lead Author of IPCC AR4 and as Coordinating Lead Author of IPCC AR5. Her leadership roles in major international Antarctic collaborations include the IGBP-PAGES International Partnerships in Ice Core Sciences (IPICS) and with the International Association of Cryospheric Sciences (IACS). Her research prizes include the prestigious 2013 Prix Irène Joliot Curie for “Scientific woman of the year” and she was recognised as “Highly cited scientist” by Thomson Reuters (2014). She is currently head of the scientific and technical council of LSCE (Laboratoire des Sciences du Climat et de l’Environnement) at CEA (Commissariat à l’énergie atomique et aux énergies alternatives). Dr Masson would like to acknowledge her research on Antarctic ice cores could not have been possible without the support of the French Polar Institute (IPEV).
Tim Naish

Professor Tim Naish has been awarded the 2014 Muse Prize, for his outstanding research in understanding Antarctica’s response to past and present climate change and the role of Antarctica’s ice sheets in global sea-level change through time. He led the first season of the ambitious and highly successful Antarctic Drilling Program (ANDRILL) where his international team pioneered innovative drilling technology to obtain sedimentary records of the past 13 million years, paving the way for further successful drilling in previously inaccessible ice-covered areas. As Chair of the ANDRILL Steering Committee, he continued to be actively involved in overseeing the programme, including securing funding for the next phase. More recently, he has played an influential role in the process of translating science into policy as a lead author on the Paleoclimate chapter of the 5th Assessment Report of the Intergovernmental Panel on Climate Change. He is currently Director of the Antarctic Research Centre, Victoria University of Wellington, which continues to develop and has more than trebled its capacity under his direction.

Martin Siegert

Professor Martin Siegert of the University of Bristol has been awarded the 2013 Muse Prize for his innovative research on Antarctic subglacial lakes and the reconstruction of Antarctic glacial history. His research in this field is multidisciplinary and collaborative, and has received significant world-wide attention, which Prof Siegert has cultivated to promote public awareness of Antarctic earth and environmental sciences. He has maintained a successful and diverse research programme, involving multiple multidisciplinary international collaborations. His work has supported the development of early-career scientists (e.g. his airborne geophysics research, and his convening of major international meetings), international collaborations (e.g. the ICECAP and subglacial lakes activities) and the public understanding of science (through outreach work on subglacial lakes, and in international symposia).

Steve Rintoul
Dr Stephen Rintoul, a physical oceanographer from CSIRO Marine and Atmospheric Research in Hobart, Australia, has been awarded the prestigious 2012 Martha T. Muse Prize for Science and Policy in Antarctica for his outstanding research on the Southern Ocean. Dr Rintoul is also affiliated with the Antarctic Climate and Ecosystems Cooperative Research Centre and with the Centre for Australian Weather and Climate Research. Dr Rintoul's research has made a profound contribution to our scientific understanding of the Southern Ocean and of Antarctica's role in the global system. His work has provided new understanding of the structure, dynamics and variability of the Antarctic Circumpolar Current, the largest ocean current on Earth. He has also shown how the Southern Ocean circulation links the shallow and deep layers of the ocean to form a global network of ocean currents that strongly influences climate patterns. His research has provided new insights into the nature, causes and consequences of Southern Ocean change. Dr Rintoul's leadership has been critical to advancing coordinated international investigation of the Southern Ocean and to promoting long term Southern Ocean observing systems.

Award Ceremony and Lecture
(add link)
Dr Rintoul discusses his award and research on Youtube.

José Xavier

Dr. José Xavier from the Institute of Marine Research of the University of Coimbra in Portugal and the British Antarctic Survey in UK has been awarded the prestigious 2011 Martha T. Muse Prize for Science and Policy in Antarctica. Beginning with his doctoral research (Ph.D. Cambridge University, 2003), Dr. Xavier has conducted outstanding research on the predator-prey dynamics that sustain populations of albatrosses, penguins and other top predators in the Southern Ocean. One example of his leadership in this field is his recent publication of a comprehensive monograph on the prey of top predators that will be a great aid to many researchers. The Selection Committee of leading Antarctic scientists and policy makers also cited his leadership in the establishment of a new and thriving Antarctic research program in Portugal during the International Polar Year (IPY, 2007-2008) and in launching a highly successful educational program, LATITUDE 60! during the IPY.

Award Ceremony and Lecture
(add link)
Dr Xaviers homepage at University of Coimbra, Portugal.

Helen Fricker

An outstanding glaciologist, Associate Prof. Helen Fricker from Scripps Institution of Oceanography of the University of California-San Diego has been awarded the prestigious 2010 Martha T. Muse Prize for Science and Policy in Antarctica. Professor Fricker is widely recognized for her discovery of active subglacial lakes, and she has shown that these lakes form dynamic hydrologic systems, where one lake can drain into another in a short period of time. She is also known for her innovative research into Antarctic ice shelf mass budget processes such as iceberg calving and basal melting and
freezing. The Selection Committee of leading Antarctic scientists and policy makers cited her leadership in the application of remote sensing techniques using laser altimetry to detect current changes in the Antarctic ice sheet in response to rising sea level and climate variability and her individual activities promoting educational outreach about ice sheets of Antarctica.

Award Ceremony and Lecture
(add link)
Professor Fricker's homepage at Scripps Institution of Oceanography, USA.

Steven Chown

An outstanding researcher and world renowned advisor to the Antarctic Treaty System, Professor Steven Chown of Stellenbosch University, South Africa, has been named the inaugural recipient of the prestigious Martha T. Muse Prize for Science and Policy in Antarctica. Professor Chown is a widely published and cited authority on invasive species and the effect of climate change and human interactions on Antarctica. The Selection Committee of leading Antarctic scientists and policy makers cited his outstanding contributions to both science and policy in Antarctica. Professor Chown plays a critical role in Antarctic policy by leading the delegation of the Scientific Committee on Antarctic Research (SCAR) at the annual Antarctic Treaty Consultative Meetings (ATCMs). His advice and leadership has been pivotal in advising policy makers in a wide range of environmental stewardship issues before the ATCM's Committee on Environmental Protection.

Award Ceremony and Lecture
Professor Chown's homepage at the School of Biological Sciences, Monash University, Australia.

Nominations

Nominations should be submitted through the prize website. The nominees will be judged on the basis of the information supplied in the nomination and evaluated by the selection committee using defined Selection Criteria. Examples of activities in which a Tinker-Muse Prize winner might show promise of future leadership are given on the Eligibility section of this website. The nominator is strongly encouraged to follow the given format as it facilitates consideration of the nomination by the committee.

The Nomination Process

Full details of the requirements for a nomination are given in the Detailed Guidelines section. Nominators should ensure that the nomination documents are completed before proceeding to Online Nomination as these will need to be uploaded during the process. A full nomination includes the following steps:

Part I - Nomination Documents
The list given below should be uploaded as separate documents (minimum font size 10, preferably in PDF format) during the online nomination process:

1) Nomination Form - a single document containing:
   (a) a 2-page résumé or CV,
   (b) a 2-page summary of important publications,
   (c) a 1-page summary of outreach and communication activities.
2) Letter of Nomination
Nominator's letter, including an overview of the nominee’s activities and approach to communication of and leadership within Antarctic science and/or policy (not exceeding three pages in length).

3) Letters of Support
Up to three letters in support of the nomination (more than one letter of support per nomination is encouraged). Each letter should not exceed one page in length.

4) Further Detailed Information
Any further detailed information the nominator wishes to submit must be combined in a single document.

Part II - Online Nomination
Name of Nominator, their email, full postal address and phone number
Name of Nominee, their email, full postal address and phone number
Nomination Form and Letter of Nomination to be uploaded.
Additional Letters in Support of the nomination and Further Detailed Information to be uploaded, if present.

Only complete nomination packages will be considered. Nominators will not be notified of incomplete submissions and nominations will not be accepted after the nomination deadline.

Nomination packages for highly competitive candidates not selected for the Tinker-Muse Prize in a given year will be held for three years for possible consideration in subsequent years. If a nomination is carried forward, the selection committee will specifically request the nominator to submit a new cover letter and curriculum vitae and to update the nomination package with recent developments in the nominee's career. Nominees must still be under the age of 50 to be reconsidered. If nominators are not asked to submit a new letter, the selection committee did not feel the nomination would be highly competitive in the future and will not be carried over for future years.

Detailed Guidelines
The Tinker-Muse Prize nomination package is designed in line with the prize Selection Criteria. The nominees will be judged solely on the information provided in the nomination package (résumé with supporting documents, nomination letter, supporting letters) as given below.

The nominees should be less than 50 years on the closing date of nomination. Only under exceptional circumstances (e.g. maternity/paternity leave, career break, etc.) will nominees over 50 years be considered – please contact the SCAR Secretariat <info@scar.org> if you feel this to be the case.

A nominee should have an existing track record of sufficient depth and breadth to provide indications of future potential for success and leadership, allowing the selection committee to project, with reasonable assurance, that this person will remain in Antarctic science and/or policy as a career choice and become a leader in his or her field.

Nomination packages for highly competitive candidates not selected for the Tinker-Muse Prize in a given year will be held for three years for possible consideration in subsequent years. If a nomination is carried forward, the selection committee will specifically request the nominator to submit a new cover letter and curriculum vitae and to update the nomination package with recent developments in the nominee's career. Nominees must still be under the age of 50 to be reconsidered. If nominators are not asked to submit a new letter, the selection
committee did not feel the nomination would be highly competitive in the future and will not be carried over for future years.

The information below summarizes what is required to submit a nomination package for the Tinker-Muse Prize. The documents listed below need to be complete (preferably saved in PDF format) and ready to upload in advance of the online nomination process. It is important that the nominator follows the given format and page limits for the nomination, which will facilitate the consideration of the nomination.

The minimum font size for all documents, including letters of nomination and support, is 10 point.

1. The Nomination Form (one consolidated file – download template) consisting of:

   a) Two-page résumé which includes relevant details of the nominee’s career, beginning with a three-sentence summary of how the nominee fits the criteria and ideals of the Tinker-Muse Prize. The details provided should include the nominee’s date of birth, education, professional experience, honours and distinctions, research support (grants and fellowships) and should highlight service related to Antarctic research and/or policy and other leadership positions.

   b) Two-page summary of up to 10 publications/outputs, each with a two- to three-sentence explanation of their significance and impacts. The nominator is asked to emphasize those from the past five years, and to provide other representative examples from the previous period. A full list of publications may be provided separately as part the ‘further detailed information’ file described in (4) below. Citation summaries from Web of Science or Google Scholar may be included.

   c) One-page explanation of outreach initiatives and capacity-building activities with emphasis on the last five years. This should also include the total number of students supervised/mentored. Internet links to any blogs, video interviews, or any other online media to which the nominee contributes should be provided separately as part the ‘further detailed information’ file described in (4) below.

2. A letter of nomination is required from an individual familiar with the candidate’s achievements and future potential (the nominator), both of which should be explained succinctly in the letter. The purpose of the letter is to make a case for the candidate receiving the Tinker-Muse Prize based on the totality of the evidence presented, rather than a general commendation of the career of the candidate. The nomination letter must not exceed three single-spaced pages and must be in English. It should include a one-page overview of the nominee’s activities and approach to:
   - Communication of Antarctic science and/or policy within the broad Antarctic community and beyond, and
   - Leadership within Antarctic science and/or policy, with attention to the demonstration of commitment to advancing the international community.

3. Any further letter(s) of support for the nomination. Up to three additional letters of support from other individuals familiar with the nominee’s qualifications may be included in the nomination package. These letters should not exceed one page in length and must be in English. These additional letters must be significantly different in content from the nomination letter, further informing the selection committee of the nominee’s qualifications for the prize, and must not simply repeat the content of the nomination letter. It may therefore be useful for nominators to send copies of their own letter and nomination form to those providing additional letters of support, in order to avoid repetition. Letters in support of the nomination are to be submitted as separate files.

4. Further Detailed Information
   If the nominator wishes, any further detailed information on any of the above three can be uploaded as one consolidated file with the nomination.
Download a MS Word template of the Nomination Form here.

Once these files are ready, the nominator can proceed to the online nomination.

**Online Nomination**

The nominator should complete the online nomination process on the Tinker-Muse Prize website at [http://www.museprize.org/nomination/index.php](http://www.museprize.org/nomination/index.php) as follows:

- Enter Name of Nominator, their email, full postal address and phone number;
- Enter Name of Nominee, their email, full postal address and phone number;
- Upload the completed Nomination Form and Letter of Nomination;
- Upload the letters of support, and further detailed information, if available.

*In case of any doubts or queries, please contact the SCAR Secretariat <info@scar.org>*

**Eligibility**

A nominee should have an existing track record of sufficient depth and breadth to provide indications of future potential for success and leadership, allowing the selection committee to project, with reasonable assurance, that this person will remain in Antarctic science and/or policy as a career choice and become a leader in his or her field.

Nominees for the Tinker-Muse Prize should be capable of making a significant contribution in a field or topic that advances our understanding of Antarctic science and/or policy during their career. Exemplar activities in which a Tinker-Muse Prize winner might show promise of future leadership include - but are not limited to - the following areas:

- Studying the agreements, instruments, and conventions among nations that foster international cooperation, promote shared governance, and protect the environment of Antarctica.
- Advancing cross-disciplinary efforts to better understand Antarctica.
- Conducting investigations that advance our understanding of Antarctic systems and living resources as key components of the Earth system.
- Studying the unique characteristics and adaptations of Antarctic organisms.
- Defining the role of humans in change in the Antarctic environment and improving our ability to predict future outcomes, promote environmental stewardship, and inform management of the region.
- Studying the critical linkages between Antarctica and the planet as a whole.
- Addressing one or more of the themes embodied in the International Polar Year (IPY) 2007–2008.
- Contributing to public understanding and appreciation of Antarctica, its value, and its role in our lives.

The nominees should be **less than 50 years** on the closing date of nominations. Only under exceptional circumstances (e.g. maternity / paternity leave, career break, etc.) will nominees over 50 years be considered – please contact the SCAR Secretariat (<info@scar.org>) if you feel this is the case.

Nominations are open from any country, with nominations from South America, Asia, Russia, etc., especially encouraged.

Self nominations will not be considered.

Nomination packages for highly competitive candidates not selected for the Tinker-Muse Prize in a given year will be held for three years for possible consideration in subsequent years (provided the applicant is under 50 years of age in the following years). If a nomination is carried forward, the selection committee will ask the nominator to submit a new cover letter.
and curriculum vitae and to update the nomination package with recent developments in the nominee’s career.

Selection Criteria

Scientific / Policy Background and Professional Accomplishments [relative to career stage] (35% Total)
When evaluating the nominations, differences within the socio-cultural, political and economic context of different countries are taken into consideration. In the categories below, “evaluation” means a quantitative assessment, while “recognition” is a more qualitative assessment.

• **Career initiative and experience (10%)**
  This category recognizes the extent to which the nominee has taken advantage of professional opportunities and created his or her own opportunities to conduct scholarly Antarctic research and/or to promote and develop Antarctic policy. Note is made of the differences in accessing support and funding during the nominee’s career depending on, for example, national programmes, institutions and disciplines. Nominees are recognized for establishing and leading research, for working with colleagues from all levels, and promoting Antarctic research or policy within their field.

• **Outputs and achievements and trends over time (10%)**
  [e.g. publications, presentations, policy initiatives, awards]
  This category evaluates the quality and scope of the nominee’s productivity and the extent to which this has influenced the work of other researchers as well as impacted science or policy broadly. The differences in the nature of publications, other outputs and scholarship across scientific and policy disciplines is considered when evaluating this category.

• **High Impact Publications (5%)**
  This category evaluates the publications by the nominee that demonstrate the highest impact and/or paradigm-shifting contributions to Antarctic research and/or Antarctic policy.

• **Support and/or grants for research and policy proposals, and their trend over time (10%)**
  This category evaluates the nominee’s success in obtaining appropriate support for individual or collaborative initiatives in Antarctic research and/or policy development. Note is made of the base of support available to the nominee.

Leadership and Potential (35% Total)

• **Demonstrated leadership and organizational skills (10%)**
  This category recognizes the leadership that the nominee has demonstrated within the Antarctic community in initiating, implementing and advancing research and/or policy. Evidence of the nominee’s effectiveness as a leader will be considered.

• **Collaborative and team-building skills (15%)**
  This category evaluates the demonstrated ability of nominees to successfully collaborate with and mentor others in carrying out research and/or policy that advances knowledge about or management of the Antarctic. The nominee’s contribution towards the development of sustained international and multi-disciplinary collaborative efforts will also be evaluated.

• **Potential for further development (10%)**
  This category considers the potential for the nominee to continue and further develop his or her leadership role. It recognizes their capability to significantly advance Antarctic research and/or policy.
Communication and outreach activities and achievements (15% Total)

• **Communication and outreach (10%)**
  This category assesses the quality, effectiveness and creativity of the nominee’s communication and outreach activities. Communication and outreach includes the use of social media; interactions with press, radio and TV; direct interactions with the public and policy makers, schools and museums; and any other novel outreach methods. Where possible nominators should provide evaluation of the effectiveness of these activities. Evidence of evaluation will aid significantly in judging skill when considering the activities.

• **Evidence of working with diverse groups (5%)**
  This category assesses the extent and quality of interactions that the nominee has initiated to extend communications beyond his or her own community. This includes working with scientists and scholars from other disciplines, educators, policy makers, the public and the media.

International Collaboration and engagement (15% Total)

• **Demonstrated commitment to serve the worldwide community (10%)**
  This category recognizes the contribution of the nominee to international programmes and bodies. The selection committee will also consider presentations of research and educational materials through international networks, and participation in public discussions. Differences in opportunities for international travel are considered.

• **Commitment to the global impact of Antarctic science (5%)**
  Nominees are recognized for advancing understanding of the significance of Antarctic research and/or policy around the world. Examples of activities are: outreach to people in different regions that may not have Antarctic research programmes, and in different scholarly and policy arenas that are not involved in Antarctic research or policy.

**Online Nomination Form**

For guidance on how to complete the nomination process, including document requirements and templates, please go to the Detailed Guidelines page.

Before proceeding with the online nomination, you must have the Nomination Form (one consolidated file containing résumé, publications, outreach and communication activities) and the Letter of Nomination ready to upload, plus any additional letters of support and/or further detailed information.

*Embedded jot form*

**FAQ**

**Q: Are there age limits for the Nominees?**

**A:** A prize nominee should be in the early- to mid-stages of their career. Recognizing that there are institutional and regional variations in career pathways, the selection committee has defined an age limit of 50 years on the closing date of nomination. Only under exceptional circumstances (e.g. break in career due to maternity or paternity leave), will nominees over 50 years be considered – please contact the SCAR Secretariat ([info@scar.org](mailto:info@scar.org)) if you feel this is the case. Nominees for the Tinker-Muse Prize should be at a point in their career at which they are highly likely to serve as future leaders in advancing our understanding of Antarctic science and/or policy. The goal is to recognize now the leaders of tomorrow, and enhance the impact of their leadership activities in their field, and more broadly in Antarctic science and policy.
Q: Are self-nominations for the Prize allowed?
A: No - all nominations must be made by someone other than the nominee. Self nominations will not be considered.

Q: What criteria are used for assessing nominations and deciding on the winner?
A: There are a number of criteria on which nominees are assessed, covering their background and accomplishments, their leadership and potential for further development, their communication and outreach skills and achievements, and their contribution to international collaboration. See the Selection Criteria for information on each of the categories used in the evaluation process.

Q: Will more awards be made in future years?
A: The Tinker Foundation has supported the Muse Prize since 2009 and a renewal for another five years is being prepared to extend the Prize beyond 2017.

Q: If a nominee is not selected, can they be reconsidered?
A: Yes. Nomination packages for highly competitive candidates not selected for the Tinker-Muse Prize in a given year will be held for three years for possible consideration in subsequent years (provided the applicant is under 50 years of age in the following years). If a nomination is carried forward, the selection committee will specifically ask a nominator to submit a new cover letter and curriculum vitae and to update the nomination package with recent developments in the nominee’s career.

The Selection Committee may also feed back to nominators in cases where they feel a delay in resubmission would be of benefit, to allow the nomination to reflect further development and achievements of the nominee.

Detailed feedback is now provided to the nominator on their nominee’s evaluation. A nominator may consider this feedback and submit a new nomination package, provided the nominee meets the age limit criteria.

Please contact the SCAR Secretariat (info[at]scar.org) if you have further questions.

News

2017 Tinker-Muse Prize Open for Nominations

We are delighted to announce that the 2017 Tinker-Muse Prize is now open for nominations - see the Nominations page.

The “Tinker-Muse Prize for Science and Policy in Antarctica” is a USD $100,000 unrestricted award presented to an individual in the fields of Antarctic science and/or policy who has demonstrated potential for sustained and significant contributions that will enhance the understanding and/or preservation of Antarctica. The Prize is inspired by Martha T. Muse’s passion for Antarctica and is a legacy of the International Polar Year 2007-2008.

The prize-winner can be from any country and work in any field of Antarctic science and/or policy. The goal is to provide recognition of the important work being done by the individual and to call attention to the significance of understanding Antarctica in a time of change.

2016 Tinker-Muse Prize winner receives award at SCAR Open Science Conference, Kuala Lumpur, Malaysia
The Tinker-Muse Prize Award Ceremony 2016 was held at the Kuala Lumpur Convention Center, on Tuesday August 23rd as part of the 2016 SCAR Open Science Conference. The Chair of the Selection Committee, Professor Peter Barrett, provided some of the background to the selection of the 2016 Prize winner, while Renate Rennie, President of the Tinker Foundation, spoke about the importance of the award and its progress over the last 8 years. Professor Robert DeConto was then presented with the award by Renate Rennie.

As one of the Keynote Speakers at the Open science Conference, Professor DeConto delivered his acceptance lecture immediately after the Award ceremony entitled “Thresholds for the Birth and Death of an Ice Sheet”. The lecture covered his own background and collaborations, as well as providing an overview of the state of the art in development and use of coupled ice sheet-climate models, and their crucial role in understanding the contribution of the Antarctic to global climate.

A recording of the live webcast of the ceremony and the acceptance speech are available on YouTube.

Dr Ian Allison elected as fellow of Australian Academy of Science

Dr Ian Allison, long-time member and previous chair of the Tinker-Muse Prize selection committee, has been elected as a Fellow of the Australian Academy of Science.

The Australian Academy of Science is a Fellowship of Australia’s most distinguished scientists, elected by their peers for outstanding research that has pushed back the frontiers of knowledge. Only 20 Fellows are elected to the Academy each year.

During his long career with the Australian Antarctic Division (AAD), Ian has worked across a range of disciplines including glaciology, meteorology, oceanography, and ice-shelf–ocean interaction. A major focus of his research has been the role of Antarctica in the global climate system and its response to climate change.

For more information, see the news item on the AAD website.
Read Dr Ian Allison’s citation here.

Rob DeConto awarded 2016 Tinker-Muse Prize

The 2016 Tinker-Muse Prize for Science and Policy in Antarctica has been awarded to Professor Robert DeConto, University of Massachusetts-Amherst. This recognition comes for his outstanding work on past and future Antarctic climate and for research integrating geological data with modelling to reveal likely consequences for future sea level rise from ice sheet melt.

Rob DeConto’s background spans geology, oceanography, atmospheric science and glaciology. He studied at the University of Colorado in the late 1980s and early 1990s before undertaking one of the first PhD studies on Earth System modelling to help understand warm climates in the geologic past. This was followed by post doctoral positions at the National Oceanic and Atmospheric Administration (NOAA) and the National Center for Atmospheric Research (NCAR), before joining the faculty of the University of Massachusetts.

In the last fifteen years, Rob’s work has focused on the climate of Antarctica, the dynamics of ice sheets, and the sensitivity of the Antarctic Ice Sheets (and sea level) to conditions warmer
than today. The need for model/field data integration was born in part from an international workshop he organized in 2002 that laid the groundwork for what would eventually become the SCAR Antarctic Climate Evolution (ACE) and SCAR Past Antarctic Ice Sheet Evolution (PAIS) scientific research programmes. His leadership has been instrumental in bringing ice sheet modelling and data acquisition communities together, enabling a data-constrained modelling approach to understanding the past and future behaviour of Antarctica’s ice sheets. This initially led to the now classic 2003 Nature paper with modeller David Pollard, Pennsylvania State University, which presented a new coupled ice sheet-climate model showing how atmospheric CO$_2$ levels declining below ~3 times pre-industrial levels could initiate ice sheet growth on Antarctica.

Rob’s pioneering data-model integration strategy was also key to the success of the ANDRILL programme, central to SCAR ACE and PAIS, and eventually adapted by the International Ocean Drilling Program’s (IODP) science plan with an emphasis on the role of the South Polar region in climate evolution and sea level history.

Over the last decade, Rob has worked with colleagues to build on this basic methodology in a series of influential papers, incorporating new and significant ice loss processes that provide improved comparisons between model results and geological data. In their most recent article (DeConto and Pollard, Nature, March 2016), the models predict a doubling in the amount of sea level rise by the end of the century and beyond, compared with the 2013 assessment by the Intergovernmental Panel on Climate Change (IPCC). This increased sea-level rise comes from melting ice sheets if atmospheric CO$_2$ emissions continue to rise as at present. They also show that aggressive reductions in CO$_2$ emissions in order to stabilize global warming at no more than 2 degrees C, agreed in the Paris Climate Change Accord, substantially limits Antarctic ice sheet melting and future sea-level rise.

Rob DeConto says, “I am thrilled to receive this award. Our work indicates we do still have choices in addressing climate change and sea-level rise. The award will stimulate my work with colleagues to improve the robustness of this new generation of models, hopefully leading to greater confidence in confronting the issue.”

Julie Brigham-Grette, Head of the Department of Geosciences, University of Massachusetts Amherst, and chair of the U.S. National Academy Polar Research Board, says, “DeConto has forged an international reputation through his work with colleagues toward understanding the processes and dynamic interactions of past ice sheets and climate. The latest article reflects his evolving research focus toward Antarctica’s future and global-to-local sea-level impacts, by informing international climate mitigation policy.”

The award will be officially presented to him at the Scientific Committee on Antarctic Research (SCAR) 2016 Open Science Conference in Kuala Lumpur on August 23.

2015 Muse Prize Fellow appointed as co-chair of IPCC Working Group

The Intergovernmental Panel on Climate Change (IPCC) has appointed the 2015 Martha T. Muse Prize winner, Dr Valérie Masson-Delmotte, as co-Chair of Working Group I, which assesses the physical scientific aspects of the climate system and climate change, for Assessment Report 6 (AR6). This prestigious appointment follows Dr Masson-Delmotte’s previous service for IPCC as Lead Author of IPCC AR4 (paleoclimate chapter) and Coordinating Lead Author of IPCC AR5 (paleoclimate chapter).

For more details, see the IPCC website.

2015 Muse Prize winner receives her award in Venice
The Martha T. Muse Prize Award Ceremony 2015 was held at Palazzo Franchetti, part of the Istituto Veneto in Venice, on Thursday, September 3rd. Dr Valérie Masson-Delmotte received the Martha T. Muse Prize from Renate Rennie, Chairman and President of the Tinker Foundation, and the Chair of the Selection Committee, Prof. Peter Barrett. The event took place during the Antarctica2K meeting being held at Palazzo Franchetti, which included many of Dr Masson-Delmotte’s close colleagues. A recording of the live webcast of the ceremony and the acceptance speech are available on YouTube.

Top right: Valérie Masson-Delmotte receives the Muse Prize from Renate Rennie, Chair of the Tinker Foundation, with Peter Barrett, chair of the Selection Committee. Left: Valérie making her acceptance speech with a presentation outlining her plans for the future. Above right: Valérie chatting with colleagues at the prize ceremony reception.

2012 Muse Prize Fellow to give S.T. Lee Lecture

Dr Steve Rintoul, who was awarded the 2012 Muse Prize for his work on Southern Ocean circulation, will give the 2015 S.T. Lee Lecture in Antarctic Studies at the Victoria University of Wellington on Tuesday 15 September.

The S.T. Lee Lecture in Antarctic Studies was established by Singaporean philanthropist Lee Seng Tee. This high-profile lecture series, held annually, is designed to recognise and bolster the University’s strong contribution to Antarctic research. Previous lecturers include Muse Prize Fellows Prof Steven Chown and Prof Martin Siegert.

Dr Rintoul’s lecture is entitled “The Fate of the Antarctic Ice Sheet: Lessons from the geological past and how they are informing future predictions”. More information on the lecture is available from the S.T. Lee Lecture website.

Dr Valérie Masson-Delmotte awarded the 2015 Martha T. Muse Prize for Science and Policy in Antarctica

Dr Valérie Masson-Delmotte has been awarded the 2015 Martha T. Muse Prize for Science and Policy in Antarctica for her work on the characterization, quantification and understanding of past changes in climate and water cycle, translating the isotopic data to paleo-temperature records.

Dr Masson has used combinations of the water isotope data to interpret the transport route for the moisture reaching Antarctica and elevation changes of the deep drill sites in Antarctica. She has an interdisciplinary profile in isotopic geochemistry, glaciology, climate modelling and paleoclimatology. She has also contributed to the paleoclimate chapters of two IPCC reports: as Lead Author of IPCC AR4 and as Coordinating Lead Author of IPCC AR5. Her leadership roles in major international Antarctic collaborations include the IGBP-PAGES International Partnerships in Ice Core Sciences (IPICS) and with the International Association of Cryospheric Sciences (IACS). Her research prizes include the prestigious 2013 Prix Irène Joliot Curie for “Scientific Woman of the Year” and she was recognised as “Highly cited scientist” by Thomson Reuters (2014). She is currently head of the scientific and technical council of LSCE (Laboratoire des Sciences du Climat et de l’Environnement) at CEA.
Professor Tim Naish awarded the 2014 Martha T. Muse Prize for Science and Policy in Antarctica

Professor Tim Naish has been awarded the 2014 Muse Prize for his outstanding research in understanding Antarctica’s response to past and present climate change and the role of Antarctica’s ice sheets in global sea-level change through time. He led the first season of the ambitious and highly successful Antarctic Drilling Program (ANDRILL) where his international team pioneered innovative drilling technology to obtain sedimentary records of the past 13 million years, paving the way for further successful drilling in previously inaccessible ice-covered areas. As Chair of the ANDRILL Steering Committee, he continued to be actively involved in overseeing the programme, including securing funding for the next phase. More recently, he has played an influential role in the process of translating science into policy as a lead author on the Paleoclimate chapter of the 5th Assessment Report of the Intergovernmental Panel on Climate Change (IPCC). He is currently Director of the Antarctic Research Centre, Victoria University of Wellington, which continues to develop and has more than trebled its capacity under his direction.

The Prize Ceremony will be held at the SCAR Open Science Conference in Auckland in August.

The 1st Martha T. Muse Fellows Colloquium - April 22, 2014; Queenstown, NZ

“What will Antarctica and the Southern Ocean look like in 2065?"

Many forecasters and futurists tell us that in 2065:

- the world’s human population will be 8.5 billion,
- atmospheric CO₂ levels will exceed 650 ppm under a business as usual scenario,
- the Arctic ocean will be ice free in August and September,
- average global temperature will 4°C warmer than in 2000,
- ocean pH will be less than 8.2, and
- sea level will be ~26 cm higher than in 1990.

What will these dramatic changes to Planet Earth mean for the world’s last great wilderness and a bellwether of global change – Antarctica and the Southern Ocean? To speculate about this future world and the ramifications for human societies, the “1st Martha T. Muse Colloquium” will convene a panel of the Martha Muse Prize Awardees and Guests to address the topic “Beyond the Horizon – Antarctica and the Southern Ocean 2065” in Queenstown, New Zealand on Tuesday, April 22, 2014. The Colloquium is part of the “1st SCAR Antarctic and Southern Ocean Horizon Scan” (http://www.scar.org/horizonscanning/) that is assembling ~80 of the world’s leading Antarctic scientists, policymakers, and logistics science funders to develop a collective community view of the most timely, urgent and compelling scientific questions that need to be addressed in the next two decades.

The Colloquium panel will include Martha T. Muse Prize Fellows Steven Chown (terrestrial ecologist and policy adviser), Monash University, Melbourne, Australia; Helen Fricker...
(glaciologist and satellite observational specialist), University of California, San Diego, USA; José Xavier (marine biologist ecologist and marine mammals expert), University of Coimbra and the British Antarctic Survey, Portugal/UK; Steve Rintoul, (physical oceanographic modeller and observationalist) CSIRO, Australia; and Martin Siegert (glaciologist and geologist), University of Bristol, UK. The Muse Fellows will be joined on the panel by Neil Gilbert (policy adviser and Antarctic governance expert), Antarctica New Zealand, and Gary Wilson (marine geologist and geophysicist and paleoclimate expert), Director of the New Zealand Antarctic Research Institute (NZARI). The panel will be moderated by a public New Zealand personality or popular news scientist to be named. The Muse Colloquium will be made widely available via the web, details to follow.

Obituary: Martha T. Muse

The Scientific Committee on Antarctic Research (SCAR) and the Selection Committee for the Martha T. Muse Prize for Science and Policy in Antarctica join the Tinker Foundation in mourning the passing of Martha T. Muse on 9th February 2014.

Martha was a founding director of the Tinker Foundation. She served as its president for 27 years and its chairman for 33 years, retiring in 2008. It was under her direction that the Foundation became a leading funder of Latin American-related activities, providing support for educational, environmental, security, economic, legal and governance issues. One of her final directives to the Tinker Foundation was incorporating Antarctica-related subjects under its funding mandate. Her passion for Antarctica was recognised with the Tinker Foundation establishing the Muse Prize for Science and Policy in Antarctica, an award for mid-career Antarctic scientists and policy makers, recognised as leaders of tomorrow. The First Martha T. Muse Fellows Colloquium will be held in her honour, in conjunction with the Antarctic and Southern Ocean Horizon Scan, in April 2014 in New Zealand.

Martha received her undergraduate degree from Barnard College in 1948 and a master's degree in political science from Columbia University in 1955. In 1981, she received an honorary doctorate from Georgetown University. She was the first woman elected as a trustee to Columbia University and was among the first women named to the Board of the New York Stock Exchange and the Council on Foreign Relations.

A memorial service will be held in New York City in the late spring. Letters of inquiry and condolence may be sent to the Tinker Foundation, 55 E. 59th St., New York, NY 10022. For a detailed obituary, please see the New York Times website.

Prof Martin Siegert awarded the 2013 Martha T. Muse Prize for Science and Policy in Antarctica

Professor Martin Siegert of the University of Bristol has been awarded the 2013 Muse Prize for his innovative research on Antarctic subglacial lakes and the reconstruction of Antarctic glacial history. His research in this field is multidisciplinary and collaborative, and has received significant world-wide attention, which Prof Siegert has cultivated to promote public awareness of Antarctic earth and environmental sciences. He has maintained a successful and diverse research programme, involving multiple multidisciplinary international collaborations. His work has supported the development of early-career scientists (e.g. his airborne geophysics research, and his convening of major international meetings), international collaborations (e.g. the ICECAP and subglacial lakes activities) and the public understanding of science (through outreach work on subglacial lakes, and in international symposia). Full press release available here.
The prize will be awarded at the Cryosphere Reception, 2013 Fall AGU, San Francisco. We hope you will be able to join us there!

Dr Stephen Rintoul awarded the 2012 Martha T. Muse Prize for Science and Policy in Antarctica

Dr Stephen Rintoul, a physical oceanographer from CSIRO Marine and Atmospheric Research in Hobart, Australia, has been awarded the prestigious 2012 Martha T. Muse Prize for Science and Policy in Antarctica for his outstanding research on the Southern Ocean. Dr Rintoul is also affiliated with the Antarctic Climate and Ecosystems Cooperative Research Centre and with the Centre for Australian Weather and Climate Research.

The Muse Prize is awarded to an individual in the fields of Antarctic science or policy who has demonstrated potential for sustained and significant contributions that will enhance the understanding and/or preservation of Antarctica.

Dr Rintoul's research has made a profound contribution to our scientific understanding of the Southern Ocean and of Antarctica's role in the global system. His work has provided new understanding of the structure, dynamics and variability of the Antarctic Circumpolar Current, the largest ocean current on Earth. He has also shown how the Southern Ocean circulation links the shallow and deep layers of the ocean to form a global network of ocean currents that strongly influences climate patterns. His research has provided new insights into the nature, causes and consequences of Southern Ocean change. Dr Rintoul’s leadership has been critical to advancing coordinated international investigation of the Southern Ocean and to promoting long term Southern Ocean observing systems. A recent interview with Dr Rintoul about his research showing continuing deep ocean change Southern Ocean can be seen here.

Dr Rintoul will be awarded the Prize and will deliver the Muse Prize Lecture at the SCAR Open Science Conference in Portland, Oregon in July 2012.

José Xavier awarded the 2011 Martha T. Muse Prize for Science and Policy in Antarctica

Dr. José Xavier, from the Institute of Marine Research of the University of Coimbra in Portugal and the British Antarctic Survey in the UK, has been awarded the prestigious 2011 Martha T. Muse Prize for Science and Policy in Antarctica. Beginning with his doctoral research (PhD, Cambridge University, 2003), Dr. Xavier has conducted outstanding research on the predator-prey dynamics that sustain populations of albatrosses, penguins and other top predators in the Southern Ocean. One example of his leadership in this field is his recent publication of a comprehensive monograph on the prey of top predators that will be a great aid to many researchers. The Selection Committee of leading Antarctic scientists and policy makers also cited his leadership in the establishment of a new and thriving Antarctic research programme in Portugal during the International Polar Year (IPY, 2007-2008) and in launching a highly successful educational programme, LATITUDE 60! during the IPY.

The award ceremony will be held at the World Conference on Marine Biodiversity, Aberdeen (26 - 30 Sept, 2011).

Associate Professor Helen Fricker awarded the 2010 Martha T Muse Prize for Science and Policy in Antarctica
An outstanding glaciologist, Associate Prof. Helen Fricker from Scripps Institution of Oceanography of the University of California-San Diego, has been awarded the prestigious 2010 Martha T. Muse Prize for Science and Policy in Antarctica. Professor Fricker is widely recognized for her discovery of active subglacial lakes, and she has shown that these lakes form dynamic hydrologic systems, where one lake can drain into another in a short period of time. She is also known for her innovative research into Antarctic ice shelf mass budget processes such as iceberg calving and basal melting and freezing. The Selection Committee of leading Antarctic scientists and policy makers cited her leadership in the application of remote sensing techniques, using laser altimetry to detect current changes in the Antarctic ice sheet in response to rising sea level and climate variability, and her individual activities promoting educational outreach about ice sheets of Antarctica.

Professor Fricker will be awarded the Prize and deliver the Muse Lecture at the American Geophysical Union meeting to be held in San Francisco in December 2010.

**Professor Steven Chown awarded the first Martha T. Muse Prize for Science and Policy in Antarctica**

An outstanding researcher and world renowned advisor to the Antarctic Treaty System, Professor Steven Chown of Stellenbosch University, South Africa, has been named the inaugural recipient of the prestigious Martha T. Muse Prize for Science and Policy in Antarctica. Professor Chown is a widely published and cited authority on invasive species and the effect of climate change and human interactions on Antarctica. The Selection Committee of leading Antarctic scientists and policy makers cited his outstanding contributions to both science and policy in Antarctica. Professor Chown plays a critical role in Antarctic policy by leading the delegation of the Scientific Committee on Antarctic Research (SCAR) at the annual Antarctic Treaty Consultative Meetings (ATCMs). His advice and leadership has been pivotal in advising policy makers in a wide range of environmental stewardship issues before the ATCM’s Committee on Environmental Protection.