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SCAR SRP

Ant-ICON

Person  
Responsible:

Daniela Liggett

## SCAR Executive Committee Meeting 2023

Trieste, Italy, 15-16 September 2023

# Integrated Science to Inform Antarctic and Southern Ocean Conservation (Ant-ICON) 2022-23 Report

### Report Authors

Daniela Liggett (NZ); Mercedes (Mecha) Santos (ARG); Jilda Alicia Caccavo (France) and Alvaro Soutullo (Uruguay); and by theme, (R1) Svenja Halfter (NZ); Nicole Trefault (Chile) Antonio Quesada (ESP); (R2) Kevin A. Hughes (UK), Jasmine Lee (UK/Australia), Andrew Lowther (Norway); (R3) Daniela Liggett (NZ), Adrian Howkins (UK), Stephen Chignell (Canada); (S1) Natasha Gardiner (NZ), Neil Gilbert (NZ) & Hyoungh Chul Shin (South Korea).

### Summary

- A mini-symposium on science to policy communication was delivered at the SCAR Open Science Conference in August 2022, and a follow-up symposium is in planning for the SCAR OSC in 2024.
- The Ant-ICON-SC-ATS Science-Policy Fellowship was conceived and launched, with two fellows selected to attend the ATCM/CEP and the SC-CCAMLR meeting.
- An in-person workshop to advance socio-ecological research objectives was held at the Scott Polar Research Institute (Cambridge) in September 2022.
- On-line workshops were delivered in October 2022 to facilitate environmental reporting and communication to policy makers. The [workshop report](#) was submitted to the Committee for Environmental Protection ([WP18](#)) and the CEP encouraged the further development of environmental reporting tools by SCAR.
- Ant-ICON had strong presence at the SCAR Biology Symposium in August 2023 as well as at the SC-HASS biennial conference in June 2023 where an Ant-ICON-led roundtable on Antarctic conservation was run.
- Several academic publications on the science/policy interface are in progress.

**Requests to ExCom:** We request continued support of our activities and the option to roll over left-over funds from 2023 into 2024 to ensure that we can offer a wider range of ECR travel bursaries for the SCAR OSC in 2024.

## SRP updates since 2022 Delegates Meeting

### What has been achieved?

Date	Activity
2022 and 2023	Development of a joint Science-Policy Fellowship scheme with SC-ATS (with a rigorous application and selection process). This <a href="#">SCAR Ant-ICON/SC-ATS science policy fellowship</a> was launched with the first recipient (Lucia Ziegler, Uruguay) participating in the CEP meeting (Helsinki, May 2023) and preparing and presenting a paper at the meeting. Susie Grant (SCATS) and Kevin Hughes (Ant-ICON) acted as the Fellowship mentors. A second fellow (Kirsten Steinke, USA) has been selected to attend the SC-CCAMLR meeting (Hobart, October 2023).
12-13/09/2022	Multi-disciplinary R2 / <a href="#">Ant-ICON Workshop on Antarctic conservation</a> at SPRI in Cambridge, UK, and a follow-up online workshop (also in September 2022) to reach a wider audience.
25-26/10/2022	Two community online workshops on the <a href="#">State of the Antarctic Environment Reporting</a> project.
06/04/2023	A Working Paper (WP18) entitled: <a href="#">Contribution of information to inform State of the Antarctic Environment Reporting (SAER): a potential new SCAR initiative</a> , prepared by Ant-ICON, was presented by SCAR/SCATS to the Committee for Environmental Protection at the Antarctic Treaty Consultative Meeting (Helsinki, Finland). In response, the CEP encouraged SCAR to develop tools to share environmental information and encouraged SCAR to present an example report to the Committee (CEP Final Report para. 201-204).
22-24/06/2023	Participation in the biennial SC-HASS conference in Lisbon, Portugal with a series of presentations, and an R3/S1-led roundtable discussion on Antarctic conservation; Ant-ICON travel bursaries were awarded to 4 ECRs.
31/07-04/08/2023	Participation in the SCAR Biology Symposium in Christchurch, with a community gathering on Tuesday evening, a public talk delivered by Jasmine Lee, a presentation to EGBAMM by Daniela Liggett, and a series of scholarly presentations by Ant-ICON researchers; Ant-ICON travel funding was awarded to 7 ECRs.

### What lies ahead?

Date	Activity
08/08/2023	Submission of a background paper to SC-CAMLR-42 on State of the Antarctic Environment Reporting project.
15/04/2024	Submission of a paper to the CEP on the progress with the development of an online tool to allow communication of information on Antarctic human impacts.
30/09/23	Development of a paper on science-policy communication within the context of the Antarctic Treaty System (R2 and ST).
29/02/24	Development of a community-wide paper on the human dimensions of Antarctic conservation (R3)
01/02/24	Development of a paper on re-interpreting the science needs of the Committee for Environmental Protection (CEP) and the Antarctic Treaty Consultative Meetings (ATCM) (S1).

## Budget

### Changes to planned use of funds for 2023 and 2024

Year (YYYY)	Purpose/Activity	Amount (in USD)	Contact Name	Contact Email
2023	Ant-ICON/SC-ATS Fellowships	6,000	Mercedes Santos/ Daniela Liggett	<a href="mailto:msantos@apn.gob.ar">msantos@apn.gob.ar</a> ; <a href="mailto:daniela.liggett@canterbury.ac.nz">daniela.liggett@canterbury.ac.nz</a>
2023	Ant-ICON cross-theme workshop	Planned: 15,000	Mercedes Santos/ Daniela Liggett	<a href="mailto:msantos@apn.gob.ar">msantos@apn.gob.ar</a> ; <a href="mailto:daniela.liggett@canterbury.ac.nz">daniela.liggett@canterbury.ac.nz</a>
Postponed due to reduced capacity to travel to yet another international event by Ant-ICON researchers after the SCAR Biology Symposium – this funding will be added to support for the SCAR OSC in 2024 and the Synthesis workshop)				
2023	ECR Participation in the SCAR Biology Symposium	Planned: 5,000 Actual: 7,900	Kevin Hughes/ Jasmine Lee	<a href="mailto:kehu@bas.ac.uk">kehu@bas.ac.uk</a> ; <a href="mailto:jaslee45@bas.ac.uk">jaslee45@bas.ac.uk</a>
2023	Thematic targeted research support grants (R1, R2, R3, S1)	9,000	Mercedes Santos/ Daniela Liggett	<a href="mailto:msantos@apn.gob.ar">msantos@apn.gob.ar</a> ; <a href="mailto:daniela.liggett@canterbury.ac.nz">daniela.liggett@canterbury.ac.nz</a>
2024	Ant-ICON/SC-ATS Fellowships	6,000	Mercedes Santos/ Daniela Liggett	<a href="mailto:msantos@apn.gob.ar">msantos@apn.gob.ar</a> ; <a href="mailto:daniela.liggett@canterbury.ac.nz">daniela.liggett@canterbury.ac.nz</a>
2024	EMCR Support to attend the SCAR OSC	Now 12,000	Mercedes Santos/ Daniela Liggett	<a href="mailto:msantos@apn.gob.ar">msantos@apn.gob.ar</a> ; <a href="mailto:daniela.liggett@canterbury.ac.nz">daniela.liggett@canterbury.ac.nz</a>
2025 (shifted from 2024 to 2025)	Synthesis Workshop (aligned with SCAR OSC)	20,000	Mercedes Santos/ Daniela Liggett	<a href="mailto:msantos@apn.gob.ar">msantos@apn.gob.ar</a> ; <a href="mailto:daniela.liggett@canterbury.ac.nz">daniela.liggett@canterbury.ac.nz</a>

Note: For the sake of clarity and transparency, we have included details for all planned expenses and have highlighted changes to what was originally planned in yellow.

## Membership

### Changes to SRP Leadership

Role	First Name	Last Name	Affiliation	Country	Date Started	Date Term is to End
Deputy CO	Bettine	van Vuuren	U. of Johannesburg	South Africa	Sep 2020	Stepped down in Feb 2023

### SCAR Fellowship Reviewers

First Name	Last Name	E-mail	Principal Expertise
Daniela	Liggett	Daniela.liggett@canterbury.ac.nz	Human engagement; geopolitics; governance; tourism; environmental management
Jilda	Caccavo	ergo@jildacaccavo.com	Population biology, fisheries management, genomics
Svenja	Halfter	svenja.halfter@niwa.co.nz	Plankton ecology, biogeochemistry, sea ice

### Significant Deviations from the Implementation Plan

N/A

### Additional information

#### Outreach, communication and capacity-building activities

- (a) Two science-policy fellowships, jointly managed and co-funded with SC-ATS
- (b) Ant-ICON travel funding awarded to ECRs attending the SCAR Biology Symposium (7) and the SC-HASS Biennial Conference (4)
- (c) Active promotion, and facilitation, of ECR involvement in R3 workshop in Cambridge in September 2022, and in the online workshops run by R2, R3 and S1
- (d) Website presence (<https://www.scar.org/science/ant-icon/home/>), with resources providing an overview of workshop results as well as a database of affiliated researchers
- (e) Ant-ICON mailing list through SCAR's mailman listserv (266 subscribers)
- (f) Social media presence (>450 followers on Twitter)
- (g) A series of community workshops

### Notable Papers

Hughes, K. A., Santos, M., Caccavo, J. A., Chignell, S. M., Gardiner, N. B., Gilbert, N., Howkins, A., et al. 2022. [Ant-ICON – 'Integrated Science to Inform Antarctic and Southern Ocean Conservation': a new SCAR Scientific Research Programme](#). *Antarctic Science* **34**. 446-455.

This paper sets out the aims and objectives of the Ant-ICON scientific research project. The paper was developed by the Ant-ICON Steering Committee.

Hawes, I., Howard-Williams, C., Gilbert, N., Hughes, K. A., Convey, P., & Quesada, A. (2023) [The need for increased protection of Antarctica's inland waters](#). *Antarctic Science* **35**, 64-88.

This paper records the diversity of Antarctic inland waters and sets out a framework for enhancing protection under the Antarctic Treaty System. The paper was presented to CEP 25 in Helsinki (IP90). Authors Neil Gilbert, Antonio Quesada and Kevin Hughes co-chair Ant-ICON Themes ST, RT1 and RT2, respectively.

Lee JR, et al. 2022. Threat management priorities for conserving Antarctic biodiversity. *PLOS Biology* **20**, e3001921.

This work identifies management priorities for Antarctic terrestrial biodiversity at a continental scale. It was presented as an Information Paper to CEP25 (IP045) and highlighted in multiple discussion during the meeting, including within the CEP advice to the ATCM on implementation of the Climate Change Response Work Programme (CEP Final Report para. 56). Jasmine Lee (lead author) is co-chair of Ant-ICON Theme 2 and several other Ant-ICON members are represented on the author list.

Convey, P., & Hughes, K. A. (2023) [Untangling unexpected terrestrial conservation challenges arising from the historical human exploitation of marine mammals in the Atlantic sector of the Southern Ocean](#). *Ambio* **52**. 357-375. 10.1007/s13280-022-01782-4

This paper explores the unintended consequences of marine mammal harvesting on Antarctic terrestrial ecosystems. Kevin Hughes co-chairs Ant-ICON Research Theme 2.

### **Direct support from outside organisations received for your activities**

1. Substantive support has been received by R3 to hold an Ant-ICON/Antarctic Conservation workshop in Cambridge, UK, in September 2022. Adrian Howkins has obtained a *British Academy Knowledge Frontiers* grant (£50,000) grant for a related project, titled “Antarctic Mosaic: An Environmental History of the McMurdo Dry Valleys”.

### **Major collaborations your group has with other SCAR groups and with organisations/groups beyond SCAR**

#### **Within SCAR**

1. Standing Committee on the Antarctic Treaty System (SC-ATS)
2. Standing Committee on the Humanities and Social Sciences (SC-HASS)
3. SRP Near-term Variability and Prediction of the Antarctic Climate System (AntClim<sup>Now</sup>)
4. SRP INSTabilities & Thresholds in ANTarctica (INSTANT)
5. SCAR Life Sciences Group
6. SCAR Physical Sciences Group
7. SCAR Geosciences Group
8. SCAR Standing Committee on Antarctic Data Management
9. SCAR Standing Committee on Antarctic Geographic Information
10. SCAR Standing Committee on Humanities and Social Sciences
11. SCAR Expert Group on Antarctic Biodiversity Informatics
12. SCAR Expert Group on Birds and Marine Mammals
13. SCAR Action Group on Geological Heritage and Geoconservation

#### **Outside SCAR**

1. Committee for Environmental Protection to the Antarctic Treaty (CEP)
2. SC-CAMLR
3. International Association of Antarctic Tour Operators (IAATO)
4. Council of Managers of National Antarctic Programs (COMNAP)
5. Association of Polar Early Career Scientists (APECS)

6. Antarctic and Southern Ocean Coalition (ASOC)
7. SCOR Integrating Climate and Ecosystem Dynamics in the Southern Ocean (ICED)
8. Southern Ocean Observing System (SOOS)
9. United Nations Decade of Ocean Science for Sustainable Development
10. PT-REPAIR (Dutch Antarctic Tourism Research Programme): Ant-ICON is a project partner on the recently funded ANT-MICI Netherlands grant to examine the cumulative impacts of human activities, where R2's expertise will be drawn on to support several of the work packages (; similarly, one of the Ant-ICON COs is one of the researchers on two other PT-REPAIR projects: ANTARC-SHIP and GUIDE-BEST, both of which draw on R3's work on conservation framings, especially in relation to environmental stewardship see: <https://www.nwo.nl/en/news/four-new-projects-about-antarctic-tourism>)