

SCAR Standing Scientific Group –Life Sciences (SSG-LS) Business Meeting, Wednesday August 24, and Saturday August 27 2016, Kuala Lumpur, Malaysia.

WEDNESDAY August 24 15:30 to 18:30

1. Welcome and Apologies

Marc Shepanek, Deputy Chief Officer and Yan Ropert-Coudert, Secretary, SCAR Standing Scientific Group - Life Sciences (SSG-LS), opened the meeting and welcomed all members, alternate members and observers, including Fernanda Quaglio (Brazil) as primary APECS contact, Jeff Bowman (US) and Henrik Christiansen (Belgium) as alternates. Jeff and Henrik attended the meetings.

2. Adoption of Agenda and timetable

Members were asked to propose additional agenda items. They adopted the draft annotated agenda and the list of documents.

3. Election of Chief Officer, Deputy CO and Secretary

Elections were required for all three executive positions of Life Sciences. Nominations from Yan Ropert-Coudert (CO), and Ian McDonald (secretary) were received before the meeting. Marc Shepanek stood for re-election as deputy CO. No additional nominations were received. Each nation had one vote and the three nominees were unanimously appointed.

4. Letter of appreciation

It was proposed that a letter of appreciation from the life science group be written to congratulate Graham Hosie for his services (**ACTION ITEM 1**). All national representatives endorsed the idea.

5. Announcement

Christel Hassler (Switzerland) announced the Antarctic Circumpolar Expedition (ACE) run by the Swiss Polar Institute involving 22 research projects from Dec 2016 – March 2017

6. Progress Reports

EG Antarctic Biodiversity Informatics – Anton van de Putte presented the various works to which EG-ABI participate like MARS, the dynamic Biodiversity Atlas (dBASO) and Taxonomic meetings in Belgium.

EG Birds & Marine Mammals¹ – Mark Hindell presented the outputs of the working groups² that composed EG-BAMM, including the retrospective analysis of Antarctic tracking data (RAATD) with two workshops (May 2015 in Brussels and April 2016 in Bremen) and a French CESAB funding that was obtained for 2.5 years to fund 5 additional workshops and a postdoc. The health monitoring working group has also been active in holding workshops and producing articles (Antarctic Environment Portal) and recommendations.

¹ Request continuation (see 'recommendations').

² new working groups were created during the OSC, including the establishment of a biochemical marker database and the test of a DNA sequencing portable systems for the field.

- *Steven Chown (Australia) – suggested that EG-BAMM’s expertise may be relevant to the Status and Trends Working Group, and SOOS, CCAMLR.*
- *Mark Hindell – if one of these organisations makes a request for statuses and trends EG-BAMM will be happy to task a group to work on these. However, no one has expressed an interest for the topic over the past 8 years.*

EG Continuous Plankton Recorder Research³ – Kunio Takahashi summarized the work of this long-term EG, notably the CPR database and surveys that completed 250,000 nautical miles since 1991, over 50,000 samples. Future standardization workshops are planned.

- *Philippe Koubbi (France) – suggested that (additional?) taxonomic specialists be included in the EG and asked if there was the potential to have online training/refreshers*

SCAR-COMNAP Joint EG Human Biology & Medicine – Marc Shepanek summarized the various activities of our medical colleagues. Jeff Ayton (Australia) ended his term in 2016 and the new line-up consists of Anne Hicks (UK, CO), Giichiro Ohno (Japan, DCO), Paul Laforet (France) and Nathalie Pattyn (Belgium) (secretaries).

AG Acidification – Richard Bellerby (UK, absent, no excuse received) did not deliver the already-overdue report.

- *SCAR executive director Jenny Baeseman informed us that the report is in an advanced stage and should be delivered at the end of the year⁴.*

AG Antarctic Near-shore and Terrestrial Observing System (ANTOS)⁵ – Craig Cary & Vonda Cumming introduced the recent activities of this recently-created AG (2014, Auckland) which aims at constituting a network of long-term observatories involving a network of nodes, a database being developed by the Korean Polar Research Institute (KOPRI), and an online survey developed to identify long term sites for nodes. The AG is working on the development of sub groups, a formal paper to be produced, is proactively engaged with COMNAP and will held a workshop at SCAR Biology 2017. The ANTOS group meeting at the OSC 2016 was extremely well attended.

- *Silvano Onofri (Italy) suggested that Spatial Biology should be considered for programs like ANTOS (but not only) as exobiology is a relevant discipline to Antarctic biology and a source of possible financial help (from the European Space Agency for example).*

AG Integrated Science for the Sub-Antarctic (ISSA)⁶ – Steven Chown & Gary Wilson sent their report during the OSC meeting. They presented their activities that included a workshop in Punta Arenas in early 2016.

- *Irene Schloss (Argentina) – requested that the website be populated so that the aims of the AG are clear*

AG Remote Sensing – Hans-Ulrich Peter (Germany) reported on this expanding AG⁷ that includes two major initiatives: one on the use of satellite imagery and other data to count wildlife and another one on the use and impact of Unmanned Aerial Vehicles (UAVs, drones, Rümmler et al 2016 Polar Biology) on wildlife.

³ Request to be continued as an EG (see ‘recommendations’).

⁴ Following discussions at the Delegates meeting both COs of the SSG-PS and SSG-LS decided to discontinue the AG if no report had been received by the next OSC (Davos).

⁵ Request to be transitioned to an expert group (see ‘recommendations’).

⁶ Request continuation as an AG and a carry-over of the 3k\$ not used in the past two years (see ‘recommendations’).

⁷ On-going discussion on the best evolution for the AG: transition to EG, include in EG-BAMM, or SC-ATS.

- Ewan Mclvor (CEP) explained that CEP looked at the drone question, as these tools could potentially reduce impact compared to other methods. The CEP are developing protocols around drone use in Antarctica and would like feedback on guidelines
- Yan Ropert-Coudert (Life Sciences) complemented this by informing the group that SC-ATS has been approached to address the question of drones impacts on wildlife and concluded at that time that data were insufficient.
- Several national programs mentioned the existence of guidelines (or their absence). SC-ATS and Remote sensing, in connection with EG-BAMM, should explore ways to centralize such information through maybe a survey addressed to national representatives of Life Science (to be debated, see footnote 7) **(ACTION ITEM 2)**.
- The Remote sensing Action Group would like Life Science to present the following request to the Delegates⁸ **(ACTION ITEM 3)**:

The SCAR Action Group "Development of a satellite-based, Antarctic-wide, remote sensing approach to monitor bird and monitor populations" emphasized the high demand of free available high-resolution multispectral satellite images by the Antarctic scientific community. Currently, the coverage of Sentinel-2 is restricted to 56° South latitude and therefore does not cover the Antarctic region. In this context, the Action Group proposes that SCAR clearly addresses this serious demand to ESA with the aim to extend the coverage of the Sentinel-2 satellite over the area of Antarctica (at least up to 80° South latitude). Suggesting an initial tasking of at least one cloud free image per month over the whole of Antarctica taken between November and February (the Antarctic summer season), with the possibility of this coverage being repeated on annual basis henceforth.

7. Status Reports on Life Science SRPs

Antarctic Thresholds – Ecosystem Resilience and Adaptation – Julian Gutt complemented his presentation of the morning by quickly summarizing the numerous activities of Ant-ERA that included the maintenance of a mailing list, webpage, workshops, contributions to ACCE/SSGLS/IPBES reports, mini grants to early career scientists.

- Academy of Science from Malaysia offered to co-sponsor an ANT-ERA workshop.

State of the Antarctic Ecosystem – Huw Griffiths & Jan Strugnell

SOOS ICED – Andrew Constable presented the SOOS/ICED initiative (working paper 16) and made members aware of the Soki – Southern Ocean Knowledge and Information wiki. A request was made for a letter of support from SCAR to the MEASO2018 conference in Hobart, April 2018, and the Benchmarking Antarctic and Southern Ocean 2022 initiative. The full support of Life Sciences to this initiative was also mentioned during the presentation to the Delegates.

8. New Action or Expert Groups

No new groups were proposed before the conference but following the meeting on Wednesday, the representatives of the Netherlands and Finland approached the executive with the intention of submitting a proposal for a new AG to be presented on Saturday.

9. Discussion

Yan made some general comment about the following points:

- It is important to make sure that the products and existing tools that SCAR is developing are being used by the different AG, EG, SRP. This is especially true for EG-ABI to ensure databases compatibility (antabif.aq).

⁸ Following discussions after the meeting it is decided that this request will take the form of a letter written by SCAR executive director Jenny Baeseman.

- The role of national representatives to convey information to the scientific community in their respective countries was also re-emphasized⁹.

Meeting close at 18:20

SATURDAY August 27 09:00 to 12:30

10. Proposal for a new AG Biogeochemical Exchange Processes at the Sea-Ice Interfaces (BEPSII) – Proposal by Jacqueline Stefels (the Netherlands) and Janne-Markus Rintala (Finland)¹⁰

BEPSII represents a group of researchers in sea-ice biogeochemistry that started as a group in 2009 and was formalized as a SCOR working group in 2012. Now that the SCOR lifetime has ended, the community seeks support to continue and expand her goals and membership. The aim of BEPSII is to support and further develop an international community on sea-ice biogeochemistry; to stimulate the interaction between experimentalists and modellers working on this topic and to help the community articulate research priorities and identify optimized and cost-effective approaches and research platforms in internationally resource-limited times.

Overall, the Life Sciences group endorsed the idea. Suggestions were made to link with Ant-ERA and Ant-ECO, ANTOS; and also to potentially include Eugene Murphy (British Antarctic Survey) in the group.

11. Recommendations of the Structural Review, specifically¹¹:

- (a) **Task Groups instead of EG and AG:** This change was apparently requested because there was little understanding of the function of these two groups (despite the precise definition in the SCAR constitution). Life Sciences members showed a **general preference for retaining the current structure of AGs and EGs**. AGs are focussed, short-lived groups either addressing a specific task or providing a trial period – with an evaluation process at the end – for a larger group before transition to an EG. EG are broad groups of experts, sometimes complex in structure (for example containing several working groups within an EG like in EG-BAMM) and address longer-term issues. EGs can be consulted for their expertise. Task groups seem vague and would introduce confusion rather than solutions. For example, how would a large active EG fit into the smaller more focused concept of a Task group? To remove AGs and EGs would set in place a mechanism where there is no way to evaluate the progress and to assess funding levels. The evaluation process for the task group is also unclear.
- (b) **Midweek OSC format:** The better and broader attendance at LSSG on Wednesday demonstrated the utility of this format and **Life Sciences endorsed the change**. The mid-week presentations allow for a wider community engagement (especially APECS). Yet, time allocated to business meetings and between business discussions need to be improved. It

⁹ Over the next year and prior to the Biology Symposium in 2017 in Belgium, the executives of Life Sciences would like to know better about the procedure used by each national representative to pass on the information and news between SCAR and their community. This will help us find ways to optimize this communication where needed.

¹⁰ The two PI speak in the name of a much bigger community. The executive of BEPSII includes 5 people.

¹¹ The following has been forwarded to Terry Wilson prior to the meeting of the Delegates as Terry asked the view of the different SSG in advance.

needs to be made clearer that SCAR Open Science meeting is not a five day meeting but closer to a 10-day meeting. There was substantial concern about lack of sufficient free time to explore, discuss, and develop ideas emerging from the open science meetings. Discussion around the structure of the mid-week meeting included:

- *From Philippe Koubbi (France) – Have the LSG first meeting on the Saturday before the OSC to present current affairs that need to be discussed during the following week. Keep the SCAR symposium on Wednesday morning. New ideas: Afternoon for people to come and see the different representative of each AG, EG, programs, like having tables in front of posters of programs. The afternoon can be used also for APECS members also to get information in each program and develop networking.*
- *From Horst Bornemann and Wilhelm Hagen (Germany) – Timing of the events this year might not be optimal, given that Chief Officer YRC could not attend OSC / plenaries after the Wednesday meeting due to being too occupied/busy with meetings arising from the Wednesday meeting and preparing the Saturday one. Timing might be improved by splitting MWOSC into two fractions. It would be also important to establish early in the program that open side-meetings are an integrative part of the conference and encouraged to be attended by everybody (also yet accredited).*
- *From Jose Xavier (Portugal) – Midweek business meetings should be kept but with shorter presentations: e.g. each SSG explains briefly which EGs and AGs are included, what they do, brief highlights and how scientists can participate in them.*
- *From Henrik Christiansen (APECS) – it is beneficial to have the initial SSG-LS meeting embedded within the conference program. It should be clearly advertised (e.g. in the general conference program handout and online) that this meeting is part of the conference and open to all audiences. A brief introduction during the meeting about its content and structure (and for example information that the representatives have a written report and that the presentations given here are only additions to that report) seems useful. That way a greater number of early career researchers may be informed of the existence and important work of SSG-LS. Whether the meeting takes place on Wednesday or an earlier day (e.g. in conjunction with advertising more clearly that the whole conference starts on Saturday and not on Monday as suggested by others), can be discussed.*

(c) Change of name of SSG-LS to LSG: This was not debated as **all members think this is a good idea**; although it should be emphasized that these groups are permanent.

12. Highlights of National Research Programs

Polar Knowledge Canada (POLAR) – Gustavo Ferreyra (Canada) presented the new Canadian federal agency set up in 2014, which aims at developing Antarctic Research Program (2017/18), and proposing facility sharing with their Arctic Base (CHARS – Canadian High Arctic Research Station). A Workshop on the topic is planned in Ottawa October 3-4 2016.

International Union of Biological Sciences (IUBS) – Andres Barbosa (Spain) made the group aware of the IUBS programs relevant to Antarctic Biology.

US Antarctic Programs updates – Charles Amsler (USA) informed the members that the US Antarctic Program has completed its third phase and is undergoing discussions with NSF about future directions, with an emphasis on Omics approaches/Bioinformatics. McMurdo station will undergo major rebuild with plans already drawn up.

POLAR SE – Michael Axelsson (Sweden) presented the webpage of the Swedish polar group. They are in the process of replacing their icebreaker, which may have a greater potential role in Antarctic research.

Boats for hire – Janne-Markus Rintala (Finland) told the group that there are currently too many icebreakers and not enough ice in Finland so that these vessels may be available for research to other groups (\$85k per researcher on a 30-day trip with 40-50 persons).

13. SCAR Biology Symposium

- (a) **Progress on XIIth Symposium Leuven, Belgium 2017** – Anton van de Putte (Belgium) gave a presentation of the latest updates on the Symposium, especially the launch of the webpage <http://kuleuvencongres.be/scarbiology2017/> where all information can be found about the venue, the expected costs and other practical information.
- (b) **Proposals for XIIIth Symposium, Christchurch, New Zealand 2021** – Craig Cary & Charlie Lee defended New Zealand bid for organizing the SCAR Biology Symposium in Christchurch. **The proposal was unanimously accepted.**

14. Future meetings of relevance to the SSG-LS

- (a) **Latin American Congress of Antarctic Biology** – Lohengrin Cavierres-González (Chile) informed the group that the congress is planned to be held in Punta Arenas, 4-6 Oct. 2017, <http://www.scar.org/events/51-events/150-clca-2017>
- (b) **The 8th Portugal Polar Congress** – Jose Xavier (Portugal) reminded the group of the Congress which is held last week of October each year: <http://cienciapolar.weebly.com/>.
- (c) **The 7th Symposium on Polar Science** – Satoshi Imura (Japan) reminded the group of the annual symposium held at the National Institute of Polar Research, Tokyo, <http://www.nipr.ac.jp/symposium2016/>, 29 November to 2 December 2016.

15. Financial Requests

Group	Contact	Purpose	2017	2018	
EG-ABI	Bruno Danis	ABI workshop July 2017	7000	7000	
EG-BAMM	Mark Hindell	CO to attend SCAR Biology in 2017 WG Wildlife Disease Workshop 2017 Tag and isotope databases	12500	12500	
EG-CPR	Kunio Takahashi	Standardization-Training workshops	3500	3500	
JEGHBM	Jeff Ayton	Secretariat support 2017 Meeting support 2018 Capacity Building Awards 2018	2000	3000	
AG Remote Sensing	Hans-Ulrich Peter	Travel for young scientists to conferences	500 (500)	500 (500)	LS PS
AG-ANTOS	Craig Cary, Vonda Cummings	Technical workshop July 2017 Database development June 2018	6000 (2000) (2000)	6000 (2000) (2000)	LS GS PS
AG-ISSA	Steven Chown, Gary Wilson	Carry-over from 2015-16 request to organize workshops	1500	1500	
AG-BEPSII	Jacqueline Stefels, Janne Markus Rintala	Young researchers support to travel to attend workshops	3000	3000	
SSG-LS	CO	Travel for meetings, supporting early career/student travel, contingency	5000	5000	
Total			41000	42000	

The budget was adopted by the group.

- *Pete Convey (UK, SCAR Development Council) stressed that it is important to be proactive in finding external funding for activities*
- *Yan Ropert-Coudert suggested that a record of such applications to external grants be kept, to pass back the information of successful application to the CO of LS for SCAR via the development Council.*

16. Recommendations (revised)

Updated recommendations:

- EG-CPR request to become a SO-CPR Database expert group
- EG-BAMM requests continuation as EG-BAMM
- ISSA requests to continue as an AG
- ANTOS requests to move from an AG to an EG
- Life Sciences request the creation of a new AG Biogeochemical Exchange Processes at the Sea-Ice Interfaces (BEPSII)
- Life Sciences support the organization of the MEASO meeting in 2018 in Hobart and the benchmarking Antarctic and SO marine ecosystems in 2022 by SOOS/ICED.

17. Close of meeting 12:20pm

ANNEX: National Representatives present at the OSC Life Sciences meeting in 2016
(74% of countries present, near quorum!)

Wednesday

1. AXELSSON Michael	Sweden
2. BYRON Adams	USA
3. CAVIERES-GONZALES Lohengrin	Chile
4. CONVEY Peter	United Kingdom
5. FAWCETT Sarah	South Africa
6. FERREYRA Gustavo	Canada
7. HAGEN Wilhelm	Germany
8. HASSLER Christel	Switzerland
9. HINDELL Mark	Australia
10. IMURA Satoshi	Japan
11. KOUBBI Philippe	France
12. LAMARE Miles	New Zealand
13. LEE Sanghoon	Korea
14. LOWTHER Andy	Norway
15. ONOFRI Silvano	Italy
16. RINTALA Janne-Markus	Finland
17. SANCHO Leopoldo G	Spain
18. SCHLOSS Irene	Argentina
19. SECCHI Eduardo	Brazil
20. STEFELS Jacqueline	The Netherlands
21. WILMOTTE Annick	Belgium
22. WONG Clemente Michael	Malaysia
23. XAVIER Jose	Portugal
24. BOWMAN Jeff	APECS
25. McDONALD Ian	Secretary
26. SHEPANEK Marc	Deputy-CO
27. ROPERT-COUDERT Yan	CO

Saturday

1. AXELSSON Michael	Sweden
2. BYRON Adams	USA
3. CAVIERES-GONZALES Lohengrin	Chile
4. CONVEY Peter	United Kingdom
5. FERREYRA Gustavo	Canada
6. HAGEN Wilhelm	Germany
7. HINDELL Mark	Australia
8. IMURA Satoshi	Japan
9. KOUBBI Philippe	France
10. LAMARE Miles	New Zealand
11. LOWTHER Andy	Norway
12. ONOFRI Silvano	Italy
13. RINTALA Janne-Markus	Finland

14. SANCHO Leopoldo G
15. SCHLOSS Irene
16. SECCHI Eduardo
17. STEFELS Jacqueline
18. VAN DE PUTTE Anton
19. WONG Clemente Michael
20. XAVIER Jose
21. CHRISTIANSEN Henrik
22. McDONALD Ian
23. SHEPANEK Marc
24. ROPERT-COUDERT Yan

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