# <u>UK Arctic and Antarctic Partnership (UKAAP) – 2nd</u> <u>Meeting</u>

Thursday 4 June, 2015, from 10.45 to 16.00 at the Grantham Institute, Imperial College London

# Minutes

### Attendees:

Prof Julian Dowdeswell (JD)Scott Polar Research Institute, ChairProf Phil Wookey (PW)Heriot –Watt University, Vice-chair

**Dr Sheldon Bacon (SB)**National Oceanography Centre, Southampton

Dr Ned Garnett (NG) NERC

**Dr Ed Hawkins (EH)**NCAS, University of Reading

Dr Kate Hendry (KH) Bristol University

Dr Stephanie Henson (SH)National Oceanography Centre, SouthamptonProf David Hopkins (DH)Royal Agricultural University, Cirencester

Dr Anne Jungblut (AJ)

Natural History Museum

Prof Mike Meredith (MM) BAS/SAMS

Dr Clare Robinson (CR)

University of Manchester

Prof Martin Siegert (MS)Grantham Institute, Imperial College LondonProf Martyn Tranter (MT)Bristol Glaciology Centre, University of Bristol

Prof Eric Wolff (EW) University of Cambridge

**Tun Jan Young (TJY)**Scott Polar Research Institute, UK Polar Network

representative

Nicola Munro (NM) BAS, Secretary

### **Apologies:**

Mike Dinn (MD) Operations, BAS (Co-opted member)
Prof Klaus Dodds (KD) Royal Holloway, University of London

Prof Mary Edwards (ME)

University of Southampton

Prof Jane Francis (JEF) BAS

**Dr Claire Hughes** (CH) University of York

Prof Ray Leakey (RL) Scottish Association for Marine Science

Prof Tavi Murray (TM) Swansea University
Prof Colm O'Cofaigh (CO) Durham University

Alex Tate (AT) Polar Data Centre, BAS (Co-opted member)

Dr Bart van Dongen (BvD)

University of Manchester

Dr Jeremy Wilkinson (JW) BAS

### WELCOME AND INTRODUCTIONS – JD/MS

JD opened the meeting and noted the apologies sent from members unable to attend. MS also welcomed the Committee members to the Grantham Institute, Imperial College London. Participants were then asked to introduce themselves. (A list of participant webpages can be found in Annex 1).

### BACKGROUND: TERMS OF REFERENCE (TOR) AND MISSION OF UKAAP

JD noted, by way of introduction, that the UKAAP is a UK community led initiative aimed at enhancing the communication and cohesiveness among UK polar researchers, including the social sciences. JD went through the revised ToR (08/12/14) and noted that there were related items on the agenda that would be discussed later in the meeting, including membership. However, at this stage there were no further comments on the ToR.

### MINUTES OF LAST MEETING AND ACTIONS (OCTOBER 2014)

### Minutes:

JD presented the minutes from the last meeting. No further comments or amendments were made and the minutes were accepted as a true record of the inaugural meeting in October 2014.

### Actions from the October meeting:

Agenda Item	Action	Who	Deadline	Status
How should a UKPP be structured and operate	Discuss links with UKNCAR	JD	31/10/2014	Discussed
Discussion on ToR	To revise draft ToR to reflect discussions during meeting and circulate to Committee	PW&JD	31/10/2014	Complete
Discussion on Work plan	Communications Task group to develop a website and set up social media platforms	KH, MM, NM	30/11/2014	Complete
	Conference Task group to look at future conferences and how UKAAP could potentially contribute to the planning and content	JEF, TJY and MS	31/10/2014	Discussed. Note the Conference Task Group (ii) action item below
	Task group circulate a paper looking at the current state of UK Arctic activity (4 to 5 pages) including information on who is involved, which institutions and to identify any potential gaps	RL, SB JEF, PW, TM and JCEL	Paper to be presented at next meeting – May 2015	Discussed. Note the UK Arctic Activity Task Group (iii) action item below.
	Funding support task group to look at potential funding sources Identify ways to encourage	JD, JEF, MT, PW JW and	? Paper to be	In progress
	stakeholder engagement	JCEL	presented at next meeting – May 2015	
	Arrange the next meeting to be held in London in May 2015 – send out doodle poll	NM and MS	31/10/2014	Complete

# Review of the action items:

JD commented that the issue of UKNCAR would be discussed further during the course of this meeting and that there had been several earlier discussions offline regarding this.

JD noted that the ToR had been circulated to the Steering Committee and these had been agreed.

### **Actions relating to the Task Teams:**

# (i) Communications Task Group – web pages

KH provided a brief overview of the structure of the website. The website currently has the following top-level pages:

- About (Includes ToR)
- Committee (Lists all Committee members with links to individual webpages)
- Links and Resources (List of resources relevant to the UK Community)
- News (Relevant news items for the Polar Community)
- Events (Series of meetings/Conferences, UK and international)
- Contact us (contact form)

There are 162 followers on Facebook but only 22 on Twitter. KH requested that Committee members follow the Twitter feed as well as circulating to colleagues. There followed a short discussion on the website and the following suggestions were made:

### Contacts Page:

Add NM's name to the 'Contacts' page and also some text to let visitors know that any
queries would be forwarded to the relevant Committee member. It would also be useful to
note on the webpage that the UKAAP SC would be happy to circulate information relevant to
the UK Polar Community via the UKAAP mailing list.

### Links and Resources Page:

- Amend the title of the page from 'Links and Resources' to just 'Resources'
- Separate resources under separate sub-headings as follows:
  - o policy documents
  - o reports
  - key publications
- Add a sub-page for 'Organisations' and provide links to
  - o governance organisations
  - universities and research institutes
  - o learned societies
- Add a sentence under each link to provide brief guidance as to what the link refers to.

It was also suggested that a diagram be created to show all the major groups and committees (IASC, SCAR, Arctic Council etc.), and what the UK's role is within these groups. This could then be added to the 'About' page on the website.

# ACTION: MM and PW to look at this and then circulate to JD and Committee for comments.

### **Events Page:**

- Amend the title of this page to 'Meetings and Events' with sub-headings:
  - o Public events (talks, outreach, public events etc.)
  - o Meetings (academic conferences, workshops etc.)

# ACTION: NM and KH to address and implement the suggestions made by the Steering Committee.

JD thanked the Comms Task Team for their work on the website.

### (ii) Conference Task Group

MS reported on recent conversations with JF on this issue. The next UK Arctic Science Conference will be held at the University of Sheffield (hosted by Prof Grant Bigg and colleagues) in September 2015 and it is likely that the next UK Antarctic Science Conference will be held at UEA (hosted by Karen Heywood) in 2016.MS noted that these conferences have in the past been run on an informal basis and that there is a community wish that this should continue. The UKAAP SC, however, could assist with the organisational handover between the conferences and MS recommended that the named Chairs of the local organising committees are invited to attend the UKAAP SC meetings to discuss the previous and upcoming conferences. A discussion on the conferences could then be a permanent item on the UKAAP SC meeting agenda. The UKAAP SC agreed that this would be a useful activity; however, it also recognised that the conferences are very much a community driveninitiative and that it should be noted that the UKAAP SC would be pleased to provide comment and advice if required.

TJY also reported that the UKPN will be moving their AGMs to coincide with the UK Arctic and Antarctic Conferences. This decision was made by the UKPN Committee and is now official.

ACTION: JD to send an invitation to Karen Heywood to attend the next UKAAP SC meeting as the organising chair of the next UK Antarctic meeting.

### (iii) UK Arctic Activity Task Group

JD commented that the original task, set, to look at the current state of UK Arctic activity, had been unrealistic in terms of the scope and timeframe. He noted that the issue of the Arctic would be discussed under the next agenda item, and suggested that this action is re-visited once the Arctic discussion had taken place.

Further to this, SB made the point that the FCO sponsored a review on the State of the Arctic in 2008 and this could be used as a starting point.

### (iv) Funding Support Task Group:

JD reported that there is currently no funding to support the UKAAP SC meetings and noted that it is through the generosity of individual institutions that UKAAP SC members are able to attend the meetings. However, the point was made that some early career researchers (ECR) find it difficult to get funding for travel to these meetings. TJY suggested that perhaps these meetings could be tagged to other major meetings, such as the Arctic/Antarctic conferences as most members would be attending these in any case.

JD commented that it is getting harder to get funding for activities such as these; however, with agreement from the UKAAP SC members present, JD offered to continue to investigate the possibility of obtaining a small amount of funding to assist with meeting costs and, in particular, the travel expenses of some of the early career researchers.

### ACTION: JD to investigate other avenues for potential funding of UKAAP SC meetings

### (v) Stakeholder Engagement Task Group:

JD reported that JW had sent through some slides regarding stakeholder engagement ideas in relation to an EU project he is involved with called ACCESS (Arctic Climate Change, Economy and Society). JD made the point that the interaction with stakeholders is usually very specific. Stakeholders know what they want and are pro-active in accessing the knowledge they think they need.

MM noted that EU-PolarNet (<a href="http://www.eu-polarnet.eu/">http://www.eu-polarnet.eu/</a>) is a new networking initiative to enhance polar coordination at a European level. It has recently been funded by the EU's Horizon 2020 programme and is led by the Alfred Wegener Institute with representation from all EPB (European Polar Board) member countries. One of the project work packages focusses on the interaction with stakeholders.

Further to these discussions, EW suggested that it would be useful to have representation from the FCO and that we might get a report, through BAS, on EU-PolarNet activities at each meeting. PW noted that it would be a useful exercise to look at who submitted written evidence to the HoL Arctic Select Committee and identify other key stakeholders. Further to this, EH noted that he was surprised that there was no representation from the Met Office on the UKAAP SC. JD commented that membership would be addressed later in the agenda and asked that this issue be brought up again at that point.

### **ACTIONS:**

JD: To approach the FCO regarding stakeholder role.

JD/NM: Ensure Stakeholder activity is on the agenda for the next meeting.

# STRATEGIC AND SUSTAINED UK RESEARCH ACTIVITY IN THE ARCTIC -A DISCUSSION LED BY MM

MM made the comment that there is currently a clear difference in the way the UK carries out research in the Arctic compared to the Antarctic. In the Antarctic, BAS provides the logistic support required to do the science, and oversees the long term monitoring which HEIs can connect to and add their expertise to address specific issues. However, at the moment, the UK does not have the equivalent sustained infrastructure in the Arctic (apart from the UK Arctic Station at Ny-Ålesund), nor does it have equivalent sustained observations programmes. MM noted that most of the Arctic science programmes are of relatively short duration; for example, the Arctic Research Programme, which is doing good science, but it is due to complete in the next couple of years.

MM also noted that NERC is changing the way it commissions science from the centre/surveys that it supports with National Capability funding. The first phase of this recommissioning is happening this year, with other phases commencing in subsequent years. MM felt that it was therefore timely for there to be a discussion/consultation to establish what the UK Arctic community's aspirations are with regard to long-term, sustained science in the Arctic, and in particular to establish what the contribution of the NC-supported labs could/should be in enabling this, and how best to enable the HEIs and the UK Polar Community as a whole to connect to these activities with shorter-term (Responsive/Thematic) science projects. MM suggested that a wider UK polar community consultation would be useful to gather this information, for example, a Town Hall meeting coupled with (potentially) a simple web-based consultation (SurveyMonkey, or equivalent)

Further to this, there was a discussion regarding capital items and NG commented that it would be very useful to have a prioritised list of items that could then be used to address any capital requests that come in from Government.

In summary, the outcomes from these discussions focussed on two points:

(i) The need to establish a clear Vision for UK science in the Arctic on a sustained (decade and longer) basis, and how the current funding mechanisms can optimally be used so that the whole community can help deliver it. (ii) Priorities for investment in capital items, and what might optimally advance UK Arctic and Antarctic strategic science activities. EH made the point that this could also include issues such as 'data rescue'.

ACTION: Arctic Activity Task Group (SB, PW, EH, KH and MT): To lead the scoping of a community document to identify key research gaps in the Arctic, including a list of items that would be of use to the UK Arctic/Polar Community should the opportunity arise to bid in for capital items.

# <u>UPDATE AND DISCUSSION OF UK ARCTIC AND ANTARCTIC ACTIVITIES. WHAT IS THE UKAAP COMMUNITY VIEW AND HOW CAN UKAAP CONTRIBUTE?</u>

### UK National Committee for Antarctic Research (UKNCAR):

DH provided background to the UKNCAR and explained that it exists under the auspices of the Royal Society. The UKNCAR is a multidisciplinary committee which promotes and co-ordinates the UK's interest in the activities of SCAR. UKNCAR is also responsible for informing the UK Antarctic Science Community about SCAR activities. It is responsible for appointing two delegates to attend the main SCAR meetings (usually the Director of BAS and the Chair of UKNCAR) as well as electing Standing Scientific Group representatives and ensuring that the UK's scientific interests are represented at the SCAR meetings through these individuals.

DH commented that the UKNCAR are looking for more members and it was noted that there may be some overlap in membership between UKNCAR and the UKAAP SC, which could potentially lead to a duplication of activities. A suggestion was made to hold back-to-back meetings with UKNCAR to try and avoid this; however, the point was also raised that there may be a logistical constraint with this in that paper deadlines for SCAR are required far in advance of the meetings.

### ACTION: UKNCAR to consider whether UKAAP SC could have back to back meetings - DH

### ➤ House of Lords Select Committee on the Arctic (JAD for Klaus Dodds):

KD, as Special Adviser to the House of Lords (HoL) Select Committee on the Arctic, had provided a paper in his absence outlining the main recommendations made by the HoL Committee. The UKAAP SC agreed with the recommendations mentioned in KD's report. It was noted that several members of the UK Polar Community, including a number of UKAAP SC members, had been asked to give evidence and have since given responses to the recommendations. The UKAAP SC noted the HoL Report and the recommendations and thanked the members of the UK Polar Community who had provided input to the report.

# ➤ UK Arctic Science Conference 16-18 Sept, Sheffield (Grant Bigg/JAD):

GB was unable to attend the meeting but provided slides to give an update on the upcoming UK Arctic Science Conference. This will be hosted at Sheffield University from 16<sup>th</sup> to 18<sup>th</sup> September, and will include some side meetings including the UK Sea Ice Group meeting on the Tuesday 15<sup>th</sup> September. Abstract submission deadline is the 17<sup>th</sup> July 2015.

### Arctic Science Summit Week (ASSW) – Integrating Arctic Research: a roadmap for the future (Phil Wookey)

PW gave an update on the recent ASSW, held in Toyama, Japan. He was invited to attend the Council meetings in the absence of a UK representative. The meetings were followed by ASSW and ICARP III (Third International Conference on Arctic Research Planning). The next IASC (International Arctic Science Committee) Council meeting will be held during the next ASSW at the University of Alaska Fairbanks in March 2016 which is being organised by Larry Hinzman. The Arctic Council will also hold its meeting at this time and it should be noted that the Arctic Council, SAON (Sustaining

Arctic Observing Networks) and IASC will have a common day. This ASSW will once again include the Open Science meeting.

JD commented that it was unfortunate that there was no official UK representative at the Council meeting in Toyama and that this must be addressed ahead of the Council meeting next year. JD had been the UK delegate in the past and this had been passed to the NERC Arctic Office role holder. NERC is responsible for nominating a representative, and the recommendation from the UKAAP SC is that this person should be connected, community-minded and an appropriate high-level scientist.

JD also noted that there is a need for more UK representation on the various IASC groups and felt that the UKAAP SC could provide recommendations on who these people could be. It was suggested that ECRs could be more involved in this.

# ACTION: TJY to find out more information about any IASC secondment opportunities available to ECR and to make the UKPN members aware of these.

### > NERC Changing Arctic Scoping Group

A scoping group, chaired by Prof David Thomas, met on the 7<sup>th</sup> and 8<sup>th</sup> May to discuss a new Arctic programme looking at the 'Changing Arctic Ocean - Implications for marine biology and biogeochemistry'. Recommendations will go to SISB in June and to NERC Council in July. If this is funded, it will be another substantial programme in the Arctic.

#### NERC Arctic Office update

NG reported that recruitment for a new Head of the Arctic Office is still in progress, with a second advert likely to go out to the community in June.

### > NERC Arctic Field Experience training course:

MM provided an update on the recently funded NERC Advanced Training Short Course called 'A skills framework for delivering safe and effective fieldwork in the Polar Regions', to be managed by the British Antarctic Survey. This will involve 16 students visiting Cambridge and Ny-Ålesund to learn about polar fieldwork safety and techniques. There were 26 applications in total. The Committee noted that this was a positive initiative.

## > NERC Future funding opportunities and demand management

NG gave an update on future funding opportunities and the need for demand management of grant applications to NERC. He highlighted the lead agency agreement with NSF and RCUK where joint grants could be submitted to either council, thus avoiding the issue of double jeopardy when putting joint proposals forward. He also mentioned the recently-funded collaboration with Chile – CONICYT. Details of both of these are on the NERC website. NG emphasised the point that if members of the UKAAP SC become aware of potential international opportunities, please discuss with NG in the first instance.

NG also noted that NERC are looking to make strategic science more bottom-up and responsive to ideas from the UK Science Community. A call went out in 2014 for the community to put forward ideas to the Strategic Programme Advisory Group (SPAG). 150 ideas were received and out of these five highlight topics were identified; however, NG commented that there is not anything distinctly polar within these. NG made the point that the Polar Community needs to put together ideas and noted that other scientific communities had held Town Hall meetings to discuss what to put forward.

There was also a discussion on Demand Management and the comment was made that this mechanism makes it very difficult for smaller institutions to put forward proposals. The point was made that there is then the danger that the full diversity of UK science will not be fully represented.

### > Antarctic Horizon Scan (MS)

MS reminded the SC about the scoping exercise that has been coordinated by SCAR. There was a retreat in Easter 2014, where 80 major science questions were identified. There have been a couple of publications that have since come out, one in *Nature* and the other in *Antarctic Science*. There is also a website available.

The second phase of this project is currently underway, looking at how the science questions can be answered. The 'Antarctic Roadmap Challenge' Group has developed a questionnaire and have asked for feedback. The request had been circulated to the UKAAP SC as well as the wider UK Antarctic community.

### Education Training and Mentoring (additional item added at the meeting)

It was noted that, in the UKAAP SC ToR, the last bullet highlights the need to enhance education, training and mentoring. JD commented that there was a lot of enthusiasm for this point at the last meeting and asked the SC how we take this forward. EH made the point that it would be useful if NERC would allow PhD students to be funded under some of the strategic areas where they currently are not allowed to. NG was asked to feed this back to NERC. KH also made the point that there is a gap with mentorship when it comes to people at the post doc level and asked whether there is a role for the UKAAP SC here. DH made the point that mentoring is also the formal responsibility of the employer and therefore this needs to be handled sensitively. PW noted that APECS (the Association of Polar Early Career Scientists) run a series of webinars and perhaps this is something that could be introduced.

ACTION: TJY and AJ were tasked with looking at this issue. TJY to discuss with the UKPN and see what the UKAAP SC as a group could provide that home institutions could not, and AJ to look at this from a post doc point of view.

### MEMBERSHIP OF UKAAP - ToR suggest refreshing about 1/3rd of membership each year

There was a discussion on the membership of UKAAP. MM gave a brief reminder on how the UKAAP SC was set up. There had been a call for nominations, 67 were received, DH, PW and MM then considered the applications and selected members, maintaining a balance in gender, location, discipline etc. The Chair was then chosen. Text was added to the ToR in terms of membership and how often this should be refreshed. It was suggested that  $1/3^{rd}$  of members should be refreshed each year.

The Committee then discussed the process for this and agreed it needs to be transparent and make sure there is the continued representation across disciplines. It was agreed that there should be another open call, but that the Chair also writes to those who were unsuccessful at the last round and asks them to re-submit/update their application if they wish to do so. The Committee agreed that they would look to refresh membership for the first time next year (2016), providing some initial continuity to the newly formed committee.

In addition to current membership, it was agreed that the chair of the local organising committees for the Arctic/Antarctic conferences are invited as co-opted members at the meetings. It was also agreed that the Chair of the UKNCAR, Director of BAS, and Head of the Arctic Office would sit as ex-officio members along with the representative from RCUK (usually NERC). JD also noted that it would be useful to have a second member from the social sciences. JD will also speak to the FCO informally on this point.

ACTION: NM and JD to draft a letter to go to current members of the UKAAP SC asking for 7 volunteers to step down.

ACTION: TJY to ask the UKPN members how they would like to proceed with membership moving forward.

# AOB, WRAP-UP AND AGREED ACTIONS (JD)

No AOB; the UKAAP SC agreed that that next meeting should be held in Edinburgh in mid to end October if possible. JD thanks all the members for attending the meeting.

ACTION: NM to send out doodle poll with dates for the next meeting.

# **SUMMARY OF ACTIONS**

Agenda Item	Action	Who	Deadline	Status
Task group:	To develop a diagram to show all	PW and MM	30 Sept.	
Website	the major polar groups and	(JD)		
activity:	committees and where the UK sits			
	within these groups. This should			
	then be added to the website.	NIM on a IZII	04-4	
	2 To implement abongs to the	NM and KH	31st July	
	To implement changes to the website as recommended by the			
	UKAAP SC			
Task Group:	To send an invitation to Karen	JD	31 <sup>st</sup> July	
Conferences	Heywood to attend the next UKAAP		or daily	
001110101000	SC meeting in Edinburgh			
Task Group:	To investigate other avenues for	JD	30Sept	
Funding	potential funding of UKAAP SC			
	meetings			
Task Group:	To approach the FCO regarding	JD	30 Sept	
Stakeholder	stakeholder role		Nove	
engagement		NM	Next	
activity	2. Ensure that Stakeholder activity is	NIVI	Meeting	
	on the agenda for the next meeting			
	on the agenda for the flext fleeting			
Task Group:	Arctic Activity Task Group (SB, PW,	SB, PW, EH,	15 <sup>th</sup>	
Arctic	EH, KH and MT): To lead the scoping	KH, MT	October?	
Activity	of a community document to identify			
	key research gaps in the Arctic,			
	including a list of items that would be			
	of use to the UK Arctic/Polar			
	Community should the opportunity			
limatete en i	arise to bid in for capital items.	DII	Donosti	
Update and	UKNCAR: UKNCAR to consider	DH	Report to	
discussion of UK Arctic	whether UKAAP could have back to back meetings		SC at next meeting	
and Antarctic	Dack Hieelings		meening	
Activities				
	ASSW: To find out more information	TJY	Report to	
	about any IASC opportunities available		SC at next	
	to ECR, and to make the UKPN		meeting	
	members aware of these.			
	Education training and mentoring:	TJY and AJ	Report to	
	TJYto discuss with the UKPN and see		SC at next	
	what the UKAAP SC as a group could		meeting	
	provide that own institutions could not.			
	AJ to look at this from a post doc point of view.			
UKAAP	To draft a letter to go to current	JD and NM	31 July	
Membership	members of the UKAAP SC	ob and Nivi	J i July	
Membersiih	members of the ONAAF SO	<u> </u>	1	Ĭ

	asking for seven volunteers to step down			
	To discuss UKPN representation with UKPN members	TJY	?	
AOB	Circulate Doodle poll and confirm dates for next meeting	NM	16 <sup>th</sup> July	

# **CLOSE OF MEETING**

#### ANNEX 1:

### **Steering Committee webpages:**

Prof Julian Dowdeswell (JD), Scott Polar Research Institute, Chair:

http://www.spri.cam.ac.uk/people/dowdeswell/

Prof Phil Wookey (PW), Heriot –Watt University, Vice-chair:

http://www.env.hw.ac.uk/people/philip-wookey.html

Tun Jan Young (TJY), Scott Polar Research Institute, UK Polar Network representative

http://www.spri.cam.ac.uk/people/young/

Dr Ned Garnett (NG), NERC – Head of Atmospheric and Polar Science

Alex Tate (AT), Polar Data Centre, BAS -

http://www.antarctica.ac.uk/about bas/contact/staff/profile/ajtate/personal/

Mike Dinn (MD), Operations Manager, BAS -

http://www.antarctica.ac.uk/about bas/contact/staff/profile/138d293462a9c22e8dd84ed09d4d5d33/

Prof Mike Meredith (MM), BAS/SAMS:

http://www.antarctica.ac.uk/about bas/contact/staff/profile/mmm

Dr Bart van Dongen BvD), University of Manchester:

http://www.manchester.ac.uk/research/bart.vandongen/

Prof Colm O'Cofaigh (CO), Durham University

https://www.dur.ac.uk/geography/staff/geogstaffhidden/?id=1008

Dr Anne Jungblut (AJ), Natural History Museum

http://www.nhm.ac.uk/research-curation/about-science/staff-directory/life-sciences/a-

jungblut/index.htmlProf Tavi Murray (TM), Swansea University

http://www.swansea.ac.uk/staff/science/geography/t.murray/

Prof Jane Francis (JEF), BAS

http://www.antarctica.ac.uk/about bas/contact/staff/profile/8055ae8ed82c79f4e08e30cd7c7f2be2

Dr Sheldon Bacon (SB), National Oceanography Centre, Southampton

https://noc.ac.uk/people/shb

Dr Clare Robinson (CR), University of Manchester

http://www.manchester.ac.uk/research/clare.robinson/

Dr Kate Hendry (KH), Bristol University

http://www.bristol.ac.uk/earthsciences/people/kate-r-hendry/index.html

Dr Stephanie Henson (SH), National Oceanography Centre, Southampton

https://noc.ac.uk/people/sah1e09

Prof Martyn Tranter (MT), Bristol Glaciology Centre, University of Bristol

http://www.bristol.ac.uk/geography/people/martyn-tranter/index.html

Dr Jeremy Wilkinson (JW), BAS

http://www.antarctica.ac.uk/about bas/contact/staff/profile/02af10f600dd73f559129e5ef12a0dd6

Nicola Munro (NM), BAS, Secretary

http://www.antarctica.ac.uk/about bas/contact/staff/profile/1fd1a2c4429aac8deec3a049a472dda4

Prof Eric Wolff, University of Cambridge

http://www.esc.cam.ac.uk/people/academic-staff/professor-eric-wolff

Dr Ed Hawkins, NCAS, University of Reading

http://www.met.reading.ac.uk/~ed/home/index.html

Dr Claire Hughes, University of York

http://www.york.ac.uk/environment/our-staff/hughesc/

Prof David Hopkins, Royal Agricultural University, Cirencester

http://www.rau.ac.uk/the-rau/academic-staff-profiles/school-of-agriculture-food-and-

environment/profiles/professor-david-hopkins

Prof Ray Leakey (RL), Scottish Association for Marine Science:

http://www.sams.ac.uk/ray-leakey

Prof Mary Edwards (ME), University of Southampton:

http://www.southampton.ac.uk/geography/research/staff/mee.page

Prof Klaus Dodds (KD), Royal Holloway, University of London:

http://pure.rhul.ac.uk/portal/en/persons/klaus-dodds fb99b223-7661-4aa1-95f6-1cd527dd0fc7.html

Prof Martin Siegert (MS), Grantham Institute, Imperial College London

http://www.imperial.ac.uk/people/m.siegert