

## NEOMICS EXPERT WORKING GROUP

### MINUTES OF THE THIRD EWG MEETING, 17 SEPTEMBER 2010

Museum No 1, Royal Botanic Gardens, Kew

#### In Attendance

##### Expert Working Group

Thomas R. Meagher (Chair)	trm3@st-andrews.ac.uk	University of St Andrews
Roger Butlin	r.k.butlin@shef.ac.uk	University of Sheffield
Melody Clark	mscl@bas.ac.uk	British Antarctic Survey
Steven Paterson	s.paterson@liv.ac.uk	University of Liverpool
Charles Tyler	c.r.tyler@ex.ac.uk	University of Exeter

##### NEOMICS Team

Dawn Field	dfield@ceh.ac.uk	CEH Wallingford
Peter Kille	kille@cardiff.ac.uk	Cardiff University
Norman Morrison	norman.morrison@cs.manchester.ac.uk	University of Manchester
Mark Viant	m.viant@bham.ac.uk	University of Birmingham

##### Research Council Observers

Amanda Collis	amanda.collis@bbsrc.ac.uk	BBSRC
Bill Eason	wre@nerc.ac.uk	NERC

##### NBAF Observer

Terry Burke		University of Sheffield
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#### Apologies

##### Expert Working Group

Ewan Birney	birney@ebi.ac.uk	EBI
Terry Brown	terry.brown@manchester.ac.uk	University of Manchester
Guy Cochrane	cochrane@ebi.ac.uk	EBI
Tim Gant	twg1@le.ac.uk	MRC, University of Leicester
Jack Gilbert	jagi@pml.ac.uk	Plymouth Marine Laboratory
Simon Hiscock	simon.hiscock@bristol.ac.uk	University of Bristol,
James Prosser	j.prosser@abdn.ac.uk	University of Aberdeen
Nico van Straalen	nico.van.straalen@falw.vu.nl	VU University

##### NEOMICS Team

Mark Bailey	m Bailey@ceh.ac.uk	CEH Wallingford
Mark Blaxter	mark.blaxter@ed.ac.uk	University of Edinburgh
Sarah Turner	sltu@ceh.ac.uk	CEH Wallingford
Jason Snape	Jason.Snape@astrazeneca.com	Astrazeneca

##### Research Council Observers

Sarah Collinge	saco@nerc.ac.uk	NERC
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#### Notes:

Participant views are presented for the most part on a non-attributable basis.

In a small number of instances, comments were relocated from one section of the discussion to another to appear in a more sensible topical arrangement.

The minutes were derived by the Chair from notes provided by N. Morrison and D. Field of the NEOMICS Team.

## I. **Welcome and Introduction – Chairman Prof Thomas Meagher**

T. Meagher welcomed everyone to the meeting and expressed thanks to our RBG, Kew host, Dr. Felix Forest, for facilitating local arrangements, noting that Dr. Forest had also contributed to the NEOMICS consultation through participation in the Cardiff Town Meeting.

D. Field expressed thanks to P. Kille for his effort in preparing the draft report, T. Meagher for his service as Chair, and the whole EWG and NEOMICS Team for their extensive feedback on the various drafts of the NEOMICS report, noting that we are hoping to achieve consensus on the content and balance in the meeting today..

T. Meagher noted that the primary purpose of this meeting was to review the NEOMICS draft for balance now that it is nearly complete. An important part of that balance was to ensure that the report was well integrated with existing NERC 'omics support facilities, such as NBAF and NEBC, so that we would be starting with review of those facilities.

a. Apologies – as noted above

b. Minutes of 5 July Wallingford meeting were tabled. It was agreed that comments and corrections could be sent by email.

c. Activity since last meeting:

Thanks were expressed again for the feedback that had been provided to date on multiple versions of the draft NEOMICS report. Also, it was noted that a NEOMICS delegation (D. Field, J. Thomas-Oates, T. Meagher, S. Collinge, P. Kille, M. Clark) had met with the NERC Technologies Theme leader (A. Lewis) on 2 August in York to consult on a potential Theme Action Plan that might be building upon recommendations to appear in the NEOMICS report. The T3 TAP, still in draft, would support development of expertise required to further develop 'omics-based research within NERC.

## II. **Updated NERC 'omics challenge – Dr William Eason**

The purpose of this presentation was to review the NERC motivation for the NEOMICS consultation and to stress the potential role of the NEOMICS report in the development of NERC science strategy.

The following points were noted:

- Make sure the report includes what was originally requested by NERC (seven original sections from original tender – his first slide)
- We must state the obvious – like: “there needs to be continued support for 'omics in NERC’ – don't presume anything we currently have will go continue (e.g. NBAF, NEBC)
- Need to define needs going into the future, including infrastructure, bioinformatics and data management.
- Prioritize what should be continued/or not
- What will it cost
- We haven't covered training
- What about the bricks and mortar 'omics facility – if we don't recommend it, it will fall off the list
- What are the big research questions that need to be addressed for NERC science. What are the unique data issues to environmental 'omics.
- Define what the clear role and added value of EOS would be
- Consider other funders/organizations and the potential for partnerships – we are entered era of more difficult funding
- Need to produce a costed roadmap to deliver the short-term and long-term requirements identified via the activities above.
- Report must be cognizant of funding period we are going into (comprehensive Spending Review. 20th October announcement of science budget).
- Don't worry about where report goes in NERC, different paths will take different parts
- NCAG will look at NC costs as part of prioritization costs
- EWG needs to have consensus on main messages before open consultation.
- End message – NERC needs to see a strong, single voice from community – how big, why formed, where going? What needs to prosper best, what contribution to NERC as a whole? Don't tie into one delivery mechanism: there are many, TAPS, NC (NBAF and CEH-NEBC), centres, responsive mode. EOS has the potential to enable the community to benefit from all of these funding streams.

### III. Existing Centres to meet the NERC 'omics challenge

#### a. NBAF –Prof Terry Burke

- history of NBAF - NBAF started when Terry Burke started the Molecular Ecology lab in 1998; there are now five nodes (Sheffield, Liverpool, Birmingham, Edinburgh, NEBC). Liverpool and Edinburgh are now MRC hubs as well (larger effort than NERC). NBAF is now under the umbrella of NCAG. H
- NBAF support covers scientific life-cycle from experimental design to technical provision to publication N
- The emphasis is on cost effective delivery, concentrated expertise. Funding models are geared towards agile services. T
- Peer reviewed recently by Services Review Group SRG, not SISB P
- Highlighted the diversity of NERC facilities H
- Current structure includes 13 staff and a 1.3 million total budget per year (much of which is recovered from PAYG grants). C
- Renewal of NBAF not confirmed. R
- Note was taken of the current BIS agenda, which emphasizes work on commercial relevance should be highlighted along with scientific excellence. N

#### b. NEBC & ELIXER – Dr Dawn Field

A very brief overview of NEBC and its potential relationship to ELIXER was presented. Following its surge during the Environmental Genomics and Post-genomics and Proteomics thematic programmes, NEBC is currently limited to just a few posts. The future of NEBC is closely linked to ELIXIR and NEOMICS. NEBC has an expression of interest in place to become an ELIXER node.

### IV. NSF Synthesis Centers: an outline – Prof Thomas Meagher

A very brief reminder of the nature of the NSF synthesis centers was presented, mostly reiterating what already appears in the draft report. The role of a NERC synthesis centre would be different from an NSF center, as many of the NSF model functions already exist within NERC. A NERC synthesis centre would provide community-level support to frame major scientific directions as well as providing a focused conduit for outreach, impacts, and knowledge transfer. Further details are included in the draft report.

### V. Outline of the draft NEOMICS report – Dr Peter Kille

P. Kille said that he was eager for feedback. Text in document should be clearly aligned toward routes for prioritization. It was noted that there was considerable scientific background in the document to date, and we needed to focus on a clear and costed set of recommendations that need to appear right up front in the final document. It was further noted that such costs need to be scalable for different levels of potential funding.

### VI. Discussion of draft report – Prof Thomas Meagher to lead

The afternoon was an open discussion focusing on document structure. This included reordering the recommendations and restructuring the document to move these forward. It was agreed that there should be more explicit science deliverables. There was also agreement that the biodiversity deliverables, particularly in relation to conservation biology, could be enhanced. There was also a call for a table of functions that need to be met by a viable NERC 'omics strategy. The function of this table is to more clearly map emergent recommendations to scientific need. Much of the afternoon discussion was focused on strategic elements of presentation to be reflected in subsequent drafts and thus not outlined in detail here.

### VII. Open consultation process – Dr Dawn Field & Dr Bill Eason

The draft document, following the next round of EWG input, will go to NERC staff for comment and further input. The next step will be open consultation through the NERC website. Following open consultation and concomitant revision, the NEOMICS recommendations will be forwarded into the NERC business cycle.

**VIII. Wrap up, thanks and future actions – Prof Thomas Meagher**

The meeting was adjourned at 16:10.