SECURE: Statistics of Environmental change, resources and ecosystems

- **EPSRC Grant Ref: EP/M008347/1**

- **E Marian Scott, School of Mathematics and Statistics**
- **Marian.scott@glasgow.ac.uk**

"the SECURE network will bring together the environmental and statistical communities to provide fresh intelligence and new insights into environmental change and society's management of that change. In this way the network will address some of the key challenge areas including ecosystems, resources (e.g. water), health, infrastructure, climate change underpinned by environmental and earth observation."

University of Glasgow | College of Science & Engineering
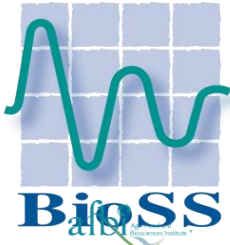
Imperial College London

UNIVERSITY of STIRLING

Lancaster University

Met Office

THE UNIVERSITY of EDINBURGH
School of GeoSciences

BioSS

CEH Centre for Ecology & Hydrology
NATURAL ENVIRONMENT RESEARCH COUNCIL

Scottish Natural Heritage
Dualchas Nàdair na h-Alba
All of nature for all of Scotland
Nàdar air fad airson Alba air fad

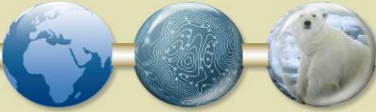British Geological Survey
NATURAL ENVIRONMENT RESEARCH COUNCIL

UCL

Scottish Water
Trusted to serve Scotland

UNIVERSITY OF EXETER

afbi Agri-Food and Biosciences Institute ®

Scotland's environment

CREEM
Centre for Research into Ecological and Environmental Modelling

UNIVERSITY OF DUNDEE

RICARDO – AEA

- **Objective 1: shaping the data sets of the future:**

new and challenging environmental monitoring strategies will be required to ensure that future datasets will reflect the nature of the scientific investigations needed to address the environmental science priorities.   Additionally, as the use of complex models becomes more commonplace, experimental design criteria will be needed to create model runs and strategies for data assimilation.

- **Objective 2: ensuring that maximum benefit is gained from existing data resources:**

through data mining and the creation of linkage strategies, both between data sources and with process models. This will centre on the development and application of new modelling tools that are essential to manage the data streams from many sources that inform on environmental change.

- annual network conferences – next conference 19th September

- workshops and conference sessions, including at TIES conference, Bergamo July 2017

- Newsletters

- So far 10 feasibility projects funded

A series of user-led challenges, to stimulate and encourage the formation of new partnerships.

Leading to a further and final feasibility project call.

We have funds sufficient to fund up to 5 new projects (maximum funds £15K)

Health Protection Scotland

Challenge 1: "Linkage of air pollution data and health data in Scotland"

Environment Agency

Challenge 2: "Healthy Soils"

Challenge 3: "Catchment Sensitive Farming"

Scottish Environment Protection Agency

Challenge 4: "Improving Seabed Analysis"

Challenge 5: "Integrating sensor technologies with traditional environmental monitoring approaches"

After the presentations, we will break up into challenge groups. A rapporteur should be nominated

This small group forms the nucleus of the possible feasibility project team. The group will explore and examine the nature of the challenge in more detail and consider potential approaches and solutions.

Identify a lead for the project.

The rapporteur will report back briefly in plenary

The team go away and work up a feasibility project proposal.

Next steps

From the discussions today, teams will form to submit a feasibility project bid.

The lead needs to be someone who is able to hold an EPSRC award (this is a condition of the SECURE award).

Next steps

Deadline for submission of feasibility projects 23rd June

To be submitted to Gillian Brown (gillian.brown@glasgow.ac.uk)

Each project should last for a maximum of 4 months, funding is up to £15K (different to the previous round)

There is additional detail on the SECURE web pages

http://www.gla.ac.uk/research/az/secure/feasibilityprojects/

There are some key points (which are slightly different to the detail on the web) and this will be updated to reflect this.

Projects will need to be completed and final report submitted before the end of January 2018. There are some bureaucratic processes that need to be completed if successful

If you held a previous FP as PI, you are eligible to bid for an FP in this round as PI

The same decision process as before will be used (proposals reviewed by the Project Feasibility review board)

- The proposal form is short, several pages length

- Proposals are scored on:

- Co-ordination and networking (partnerships, existing or new, inter-disciplinarity) Any proposal must be clear about how the challenge provider will be involved in the project.

- Research excellence- scientific quality (relationship to SECURE objectives, activities planned):

- Justification of resources-potential impact and sustainability :

- should be a maximum of two pages (Arial 11), and include the following:

- Applicants:

- Aims and objectives: Include the context and the rationale for the choice of the theme and the research questions that will be addressed. Highlight how this theme fits with the remit and objectives of the SECURE network Activities:

- Set out a timetable of programme of activities.

- Outcome: Detail milestones and deliverables for the research project and potential impact.

- Budget: A brief justification of the resources sought.

- **We need:**

- **If successful, a 1 page <u>Non-negotiable</u> Master Letter of Offer referring to funding conditions on website**

- **Collaboration agreements (informal or formal) between Lead Applicant's institution and partner institutions to be in place**

Project submission: June 23rd

Outcomes known: before end of July

Projects start: by beginning of September

Projects complete: end of December

Final report submitted: end of January 2018

Our web pages will be updated with the new details for this round