

Research pools in Scotland

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Outline of talk

- Current research pools
- Origins & aims
- How they are working; successes and risks
- Library issues and responses

Research pools: “Science Scotland”

- Well established research pools
 - Chemistry (Eastchem, Westchem & Scotchem)
 - SUPA (Scottish Universities Physics Alliance)
- Newer research pools
 - Engineering & Maths
 - Geo- and earth sciences
 - Economics
 - Biology
 - Medical Imaging
- Research pools under development

Physics: Scottish Universities Physics Alliance



Edinburgh, Glasgow, Heriot-Watt, Paisley, St Andrews, Strathclyde

“Six Scottish Universities have come together to form a research alliance in Physics. The aim is to place Scotland at the forefront of research in Physics through an agreed national strategy, an inter-institutional management structure, and co-ordinated promotion and pursuit of excellence.”

Investment: £14m from SFC, universities, OST



SUPA achievements

- New faculty positions directed to enhance research and graduate training.
- Enhancement of research excellence through theme-based strategic leadership.
- Efficient collaborative use of state-of-the-art research infrastructure.
- A distinguished visitor programme.
- High profile Scottish Graduate School studentships open to *all* nationalities.
- Broadband video-links for research training and collaborations.
- Summer schools building on the proven international reputation of the Scottish Universities Summer School in Physics (SUSSP) to attract top researchers.
- Establishment of new outward-looking interdisciplinary research links at all levels - Scottish, UK and international.
- 20 new Chairs and Lecturers, 14 SUPA Research Fellowships, and 8 competitive studentships per year, as well as the selection of an overall Chief Executive to run the enterprise, and a Director of the new Scottish Graduate School in Physics.

Research pools in Chemistry



Edinburgh and St Andrews



Glasgow and Strathclyde



Eastchem, Westchem and
Heriot-Watt, Dundee, Aberdeen

Scotchchem

“Structural changes will enhance the performance of existing staff, while major financial investments will strengthen the research infrastructure and permit the recruitment of new staff of international research calibre. These developments will make Scottish Chemistry a magnet for the best researchers and a target of major funding agencies, worldwide. It will allow us to increase the number of postgraduate research students and produce more highly skilled research fellows. Overall, it will help to sustain and develop links with the Scottish chemical and other vital, knowledge-based industries. ”

Investment of £23m over 4 years from SFC, universities,
OST

Engineering and Mathematics: Scottish Research Partnership

Glasgow Research
Partnership in Engineering

EDINBURGH RESEARCH PARTNERSHIP
in Engineering and Mathematics

Glasgow, Strathclyde, plus
Glasgow Caledonian and
Paisley

Edinburgh, Heriot-Watt

Northern Research
Partnership



Aberdeen, RGU, Dundee

750 researchers; £154 m
investment of which £114m
from SFC



SAGES

- June 2006
- Scottish Alliance for Geosciences, Environment and Society
- Aberdeen, Abertay, Dundee, Edinburgh, Glasgow, Paisley, St Andrews, Stirling, UHI
- Investment of £22m, incl £6.5m from SFC
- Themes: landscape dynamics; terrestrial carbon cycle; oceans atmosphere and climate

Scottish Institute for Research in Economics

- November 2006
- Aberdeen, Dundee, Edinburgh, Glasgow, Heriot-Watt, Napier, Paisley, St. Andrews, Stirling, Strathclyde
- £21m incl £9.4 from SFC
- Building on Scottish Graduate Programme in Economics
- 18 professors, 18 lectureships
- Different themes at different universities, eg
 - work and wellbeing – principally involving the Universities of Aberdeen, Dundee, Stirling, and Napier University
 - behaviour, incentives and contracts theme – principally involving the University of Edinburgh and Heriot-Watt University
 - macroeconomics, financial linkages and the regions – principally involving the Universities of Glasgow, Strathclyde, Paisley and St Andrews

Life Sciences

- Scottish Universities Life Sciences Alliance (SULSA)
- February 2007
- Total investment £77m incl £27 from SFC over 5 years
- Aberdeen, Dundee, Edinburgh, Glasgow, St Andrews, Strathclyde
- Press coverage

SINAPSE

- Scottish Imaging Network: A Platform for Scientific Excellence
- Approved by SFC May 2007
- Aberdeen, Dundee, Edinburgh, Glasgow, St Andrews and Stirling

Research pools in development

- Marine science
- Computing & informatics
- Creative arts
- Clinical academic fellowships
- Gaelic language & culture

Source SFC May 2007



Relevance to other science

- Big science is collaborative
- Cross institutional teams
- Research pools takes this to new level

Origins of research pooling

- A strong research base in Scotland
 - 9% of UK population, but 12% of research funds; high level of publication
- Difficult for Scottish universities to compete with the top UK universities
- Lack of critical mass, poor results in RAE
- Introduction of tuition fees in England a threat—different way of allocating funding
- Tradition of working collaboratively in Scotland

Aims of research pooling

- Need to enhance research competitiveness
- Creation of more attractive research environment
- Making Scottish universities more attractive to research stars
- RAE: joint submissions
- Sharing resources and research equipment and facilities
- Better links to enterprise; new opportunities for spin out companies
- Inclusive—but based on excellence

Investment

- “Star appointments” and other appointments, including technical staff
- Equipment
- Studentships
- Shared doctoral training programmes
- Funding from SFC, HEIs and other sources (eg OST)—very significant investment

Practicalities

- Differing governance and organisational models
- Institutional autonomy retained
 - All staff have institutional base
- Different models of asset sharing
- Different universities in each group
- Some shared doctoral programmes/graduate schools
- No link with institutional teaching
- Not degree awarding

How they are working

- Seen as a “political” success for Scotland
- Support the “invisible college” or “the guild”
- Joint submissions for RAE (but probably too early to see how successful this is—but important in “research environment”)
- SFC working on evaluation framework
- Key next stage is CSR in Scotland

Successes & risks

- Science and Innovation awards to Westchem and ERP
- Good recruitment for studentships and staff
- Grant application successes
- Smaller universities have access to anyone in the pool
- RAE
- Leadership needed to develop shared goals
- Management of the institution - research pool relationship
- Continued collaborative work with other (non Scottish) HEIs
- Continued funding

Library issues

- Difficulty of engaging with researchers in pools
- Addressing big equipment, but not library resources
- Institutional licenses don't work for pools
- JISC opt-in model doesn't work
- Some pools are legal entities but this doesn't help, because of UGs, PGs, staff, technical staff who are not in pool

Library responses

- Finding ways of making it work
 - (we try, they probably just make it work...)
- Websites eg mySupaPortal includes SUPA Library—
“presentations from speakers and other resources”
- Some new subscriptions taken out based on equity
- Honorary status as “fix”

Longer term responses

- “Science Scotland” needs to be supported by “Library Scotland”
- SCURL reflects the research pools in collaboration
- Scottish Higher Education Digital Library initiative
- Opportunities for supporting data sharing?
- Opportunities to talk to researchers collectively?
- Opportunities for collaborative information literacy?