



Scottish Funding Council

Promoting further and higher education

Greg Michaelson

SICSA Director of Education



University of Glasgow



Glasgow Caledonian University



University of St Andrews



UNIVERSITY OF STIRLING



University of Strathclyde Glasgow



SFC Research Pools

- “The research pooling initiative was created by SFC in 2003 to encourage researchers across Scottish higher education to pool their resources and respond to increasing international competition. ...
- ...The concept behind these research pools is the belief that dynamic collaborations between research departments can provide Scotland’s universities with a competitive advantage which other countries would find difficult to replicate. ...
- ...With 19 closely connected universities and a tradition of academic collaboration reaching back to the Enlightenment, Scotland is a well connected hub of world-leading research. “

SFC Research Pools

Scottish Universities Physics
Alliance (SUPA)

ScotCHEM

WestCHEM

EaStCHEM

Edinburgh Research Partnership
in Engineering and Mathematics
(ERP)

Glasgow Research Partnership in
Engineering (GRP)

Marine Alliance for Science &
Technology for Scotland
(MASTS)

Northern Research Partnership

Scottish Alliance for Geoscience,
Environment and Society (SAGES)

Scottish Institute for Research in
Economics (SIRE)

Scottish Universities Life Sciences
Alliance (SULSA)

Scottish Imaging Network: A
Platform for Scientific Excellence
(SINAPSE)

***Scottish Informatics and Computer
Science Alliance (SICSA)***

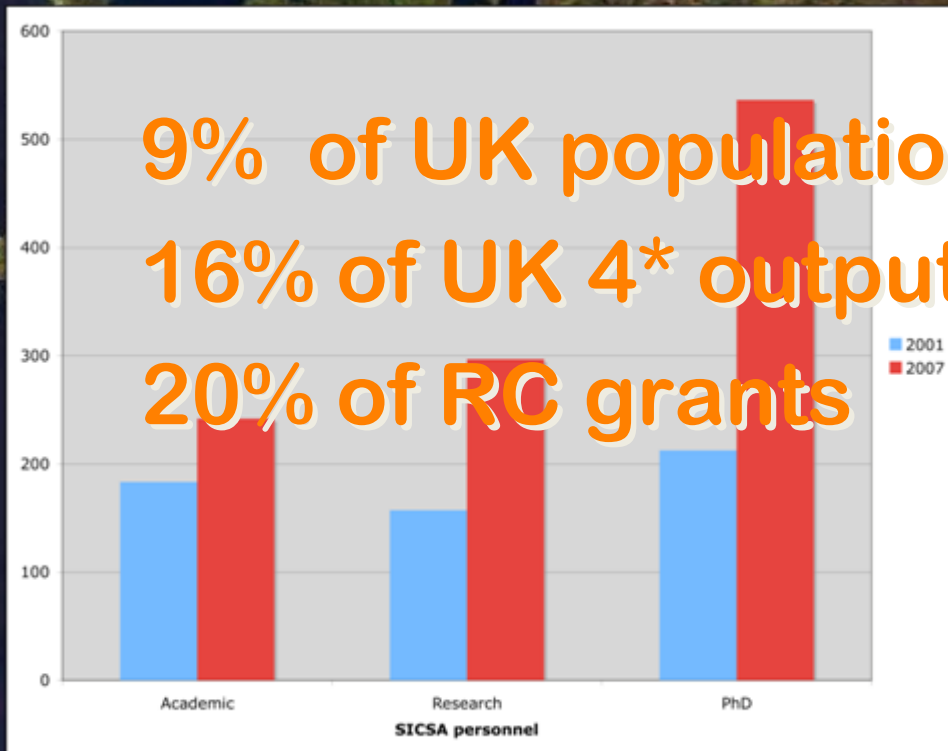
Soillse (Gaelic language and
culture)

Objectives

1. Improve the quality of Informatics and Computer Science research and education in Scotland
2. Contribute to economic development by working with industry to develop and exploit our work
3. Create a coherent, national community that represents all aspects of Scottish Informatics and Computer Science

Objectives

- “Our research covers virtually all areas of computer science and informatics from low-level hardware design, through networking and middleware, to wetware, artificial intelligence, human computer interaction and social informatics. ...
- ...We are world leaders in both theoretical and practical aspects of the discipline and have a strong interdisciplinary tradition involving maths, engineering, psychology, the humanities and the social sciences....
- ...SICSA also represents Scottish Computer Science teaching, where our 4-year degree scheme is unique in the UK.”

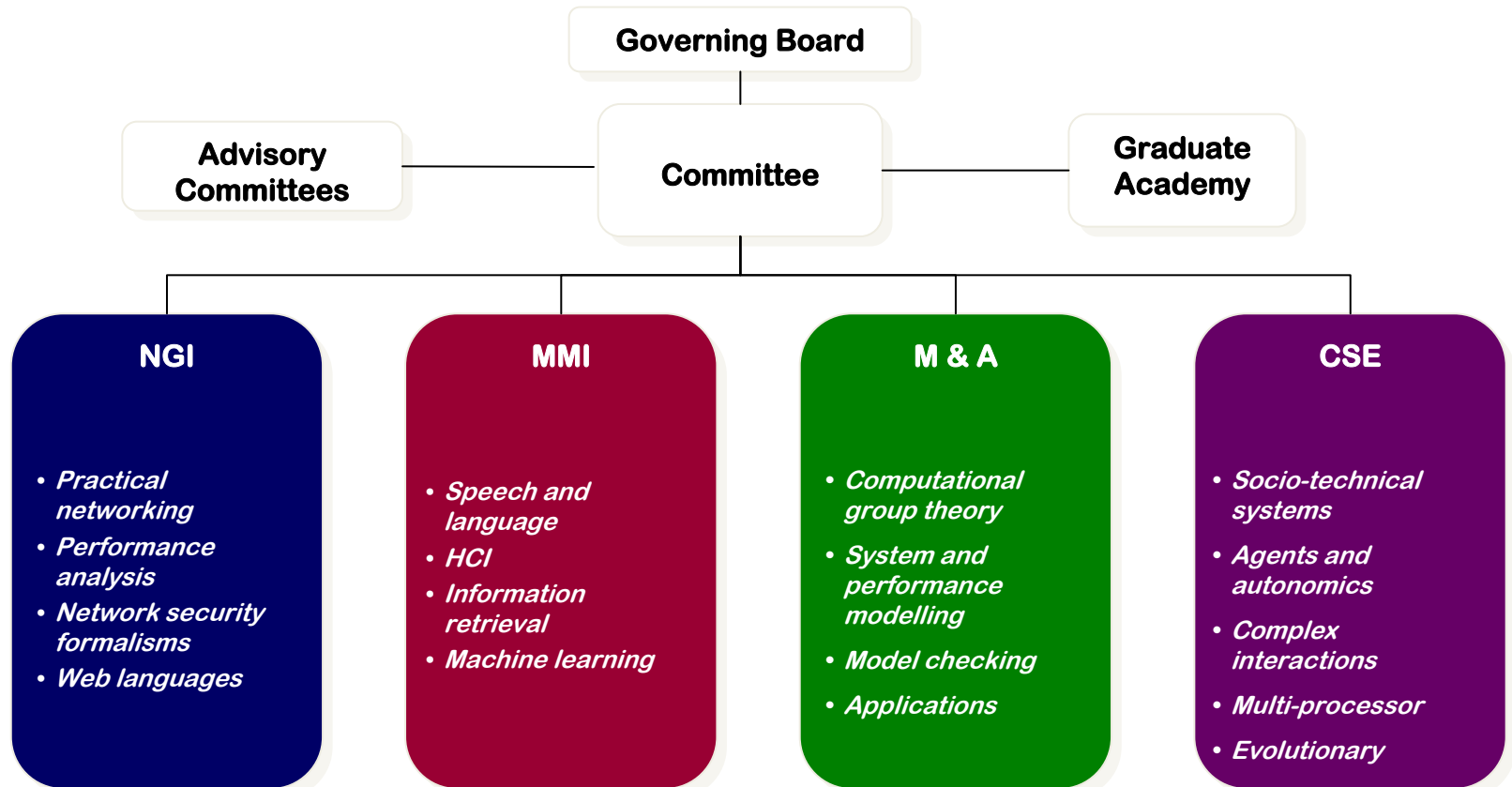


- Aberdeen
- Robert Gordon
- Dundee
- Abertay
- St Andrews
- Stirling
- Edinburgh
- Glasgow
- G. Caledonian
- Strathclyde
- Heriot Watt
- Napier

Resources

- £29M – 2008-2013 (-2015)
- 50/50 SFC/Universities
- 30 new academic staff
- 80+ PhD studentships
- support for:
 - research themes
 - knowledge transfer
 - distinguished visitors
 - summer schools

Structure



Governance

- Governing board
 - Principals/Vice Chancellors
- Committee
 - all HoDs
 - Directors
 - Theme Leaders
- International Advisory Group

Governance

- Directorate
 - Director of Research – Ian Sommerville, St Andrews
 - Director of Graduate Academy, Rod Murray-Smith, Glasgow
 - Director of KT, Jon Oberlander, Edinburgh
 - Director of Education, Greg Michaelson, Heriot-Watt
 - executive team

Research Themes

- Complex Systems Engineering – John McCall, Robert Gordon
- Modelling & Abstraction – Jane Hilston, Edinburgh
- Multi-Modal Interaction – Steve Brewster, Glasgow & Aaron Quigley, St Andrews
- Next Generation Internet – Saleem Bhatti, St Andrews

Research Themes

- self-organising
- annual budget
- support existing activity
 - e.g. SCONE, SPLS, STPS
- lubricate new activity
 - e.g. multi-core challenge, Scottish Category Theory Seminars
- covers:
 - meeting expenses
 - speaker expenses
- sponsor conference/workshop events

Graduate Academy

- representative from each Uni
- verifies PhD prize studentship awards
- scrutinises/funds
 - distinguished visitors
 - summer schools
- organises annual PhD conference

Knowledge Exchange

- **Senior Business Development Executive**
- **hosted by Informatics Ventures,
University of Edinburgh**
- **supporting**
 - entrepreneurship
 - start ups
 - annual DemoFest
- **programmes:**
 - **AspeKT - £1.7M from Scottish Enterprise**
 - **CGES – Centre for Global Entrepreneurship
in Scotland – outline agreement**

Knowledge Exchange

- **engagement through SFC Horizon Funding partnerships**
 - **Smart Tourism**
 - **Services to the Cloud**
 - **Scottish Sensor Signals Centre**



Education

Representing

Industry facing
Education
Showcase,

Scottish CS
education
overview

Supporting

Induction day for
new academics

Distance learning
shared 'Scottish MSc'

Contributing

CPD for Scottish
computing teachers

Schools curriculum &
exemplification

Does it work...?

- YES!
- see KPIs in annual report: www.sicsa.ac.uk
- most important...
- ... TRUST!

Does it work...?

- financing structures enforce interaction...
- all SICSA Prize PhD students must have cross-
Uni joint supervision
- Distinguished Visitors must demonstrate
multi-Uni engagement
- Research Theme supported activities must be:
 - pan-Scottish
 - free to Scottish PhD students

Does it work...?

- effective governance depends on mutual respect...
- inclusiveness
- what is best for SICSA is key criterion
- promote core shared interests
- acknowledge differences

Does it work...?

- before SICSA
 - implicit hierarchy: pre-1560 > pre-1966 > post 1992...
 - all competing for same resource
 - mutual suspicion
 - little collaboration beyond individual academics

Does it work...?

- after SICSA
 - perceived status not so important
 - synergies in competing for same resource
 - mutual acceptance
 - far more higher-level collaboration

Does it work...?

- improved engagement/perception beyond academia
- SICSA now “one stop shop” for:
 - Scottish government e.g. SFC, SQA, Education Scotland
 - industry & KT
 - schools
 - industrial placements



Future



Future

- no more SFC support for any research pools post REF
- plans for lean, mean, self-sustaining SICSA
 - core funding from members
- SFC/SE announce Scottish Innovation Centres April 2012
 - ongoing SICSA consortium for Systems of Systems IC