

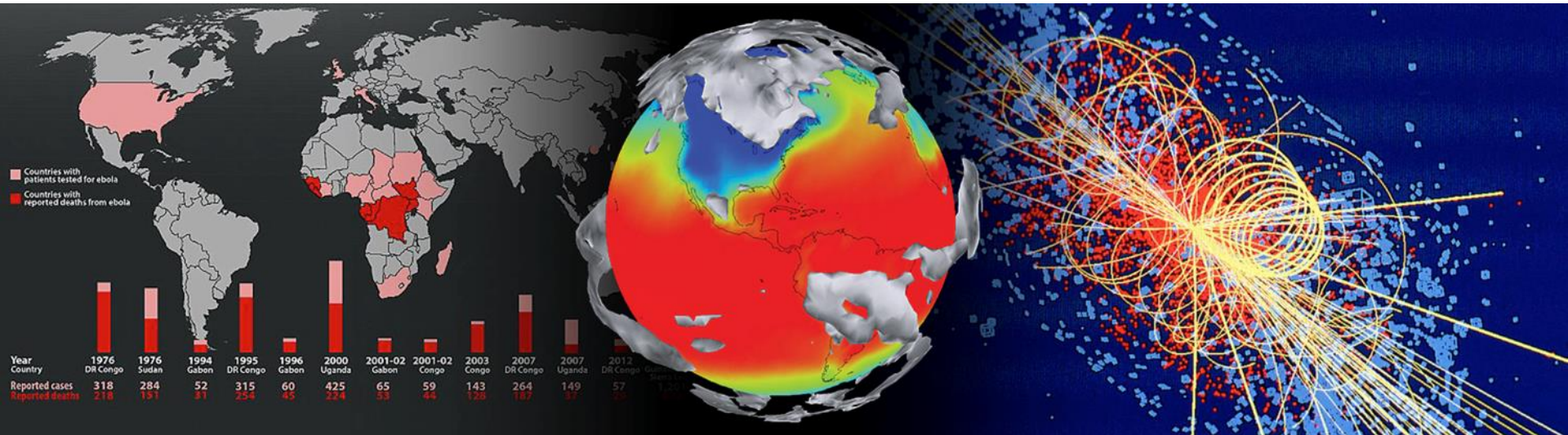


SOFTWARE SUSTAINABILITY INSTITUTE

Neil Chue Hong, Director



Modern research is impossible without software



From thrown-together scripts, through an abundance of complex spreadsheets, to the millions of lines of code behind large-scale infrastructure, there are few areas where software does not play a fundamental part in research

Software Sustainability Institute

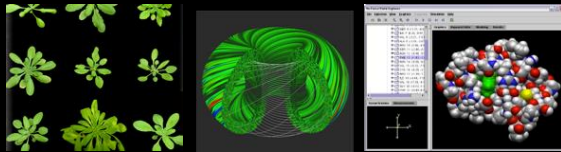
- **Mission:** *to cultivate better, more sustainable, research software to enable world-class research*
- Collaboration between universities of Edinburgh, Manchester, Oxford and Southampton; led by Edinburgh
- Founded in 2010
 - Phase 1 (2010-15): £4.3m from EPSRC
 - Phase 2 (2015-18): £3.5m from EPSRC, ESRC & BBSRC
 - Additional project funding from BBSRC, EPSRC, NERC, Jisc
 - Team of ~12.5 FTE (only 3.5 FTE sw dev, many roles)



Work of the Institute

Software

Helping the community to develop software that meets the needs of reliable, reproducible, and reusable research



Collecting evidence on the community's software use & sharing with stakeholders



Policy

Training

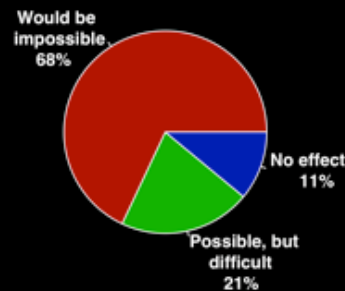
Delivering essential software skills to researchers via CDTs, institutions & doctoral schools



Bringing together the right people to understand and address topical issues

Outreach

Exploiting our platform to enable engagement, delivery & uptake



Community



"It is fortunate that there is this level of professionalism in this area in the UK and that the SSI is truly outstanding and internationally leading."
 – SSI Phase 2 review panel

Achievements of the Institute

Software



Advice



150+ evaluations, 4 surgeries

UK SWC/DC Coordinators



Training

Courses

40+ training events
1000+ learners

Consultancy

60+ projects



Outreach

Website & blog

150+ contributed articles
20,000 unique visitors per month
3,000 Twitter followers

Guides

80+ guides
50,000 readers



Research

740 researchers
50,000 grants analysed



Fellowship

61 domain ambassadors



Policy


300+ RSEs engaged



Campaigns

BETTER SOFTWARE BETTER RESEARCH


2100 signatures



13 issues highlighted

Workshops

20+ workshops organised



Community

Future objectives of the Institute

- **A skilled researcher base in the UK:** software skills are vital to the modern researcher
- **Recognition of the importance of software to research:** lack of visibility of software hinders the ability of researchers to reuse and build on existing work
- **Professionalisation of the research software area:** understanding the variety of skilled roles associated with research software, helps meet researcher needs
- **Increased scientific integrity:** without trust in software, and scrutiny of results, researchers cannot develop an understanding at more complex levels and systems
- **Protection of investment:** development of policies to support software sustainability in funded research maximises productivity, quality, economy, and reuse

Further information

- Our website: <http://www.software.ac.uk/>
- Publications:
 - The Software Sustainability Institute: Changing Research Software Attitudes and Practices
<http://dx.doi.org/10.1109/MCSE.2013.133>
 - Best Practices for Scientific Computing
 - <http://dx.doi.org/10.1371/journal.pbio.1001745>
 - 2014 UK Research Software Survey
 - <http://www.software.ac.uk/blog/2014-12-04-its-impossible-conduct-research-without-software-say-7-out-10-uk-researchers>
 - Measuring the Success of the Software Sustainability Institute
 - <http://www.software.ac.uk/attach/SuccessMetricsApril2014.pdf>
- Associated initiatives:
 - [Journal of Open Research Software](#)
 - [Software Carpentry](#)
 - [Data Carpentry](#)
 - [UK Research Software Engineer Association](#)