

SICSA Distinguished Visiting Fellowship Report

Assoc. Professor **John Bass**, of the Menzies Research Institute, University of Tasmania, visited the University of St Andrews between 5th May and 25th June 2014, hosted by Dr Graham Kirby, School of Computer Science, University of St Andrews.

The purpose of the visit was to establish a collaboration, applying John's expertise and experience to work taking place at St Andrews as part of the recently awarded ESRC Administrative Data Research Centre Scotland. The ADRC, led by Professor Chris Dibben at the School of Geosciences at Edinburgh, brings together major Scottish centres of research involving secondary analysis of public-sector data in order to create a common framework for research based on an integrated data linkage service.

The ADRC Scotland includes co-investigators at the universities of Aberdeen, Dundee, Glasgow, Heriot-Watt, St Andrews, Stirling and UHI. The computational aspects of the data linkage research are led by St Andrews (Graham Kirby) and Heriot-Watt (Alasdair Gray). The work at St Andrews is currently focused on genealogical record linkage, based on the data produced by the ESRC Digitising Scotland project, which is transcribing all civil registration records in Scotland (from 1855 to 1974).

During the visit, John worked with the host team to scope options for performing linkage on the genealogical data set. Within St Andrews, activities included:

- numerous discussions of John's pioneering experience in establishing and operating data linkage processes in the health domain
- development of a linkage approach for the Digitising Scotland project, building on experience of current state of the art, and exploring potential for application of new collective entity resolution approaches
- development of John's link repository software, with application to the representation of the provenance of linkage decisions

Within SICSA, activities included:

- an afternoon Master Class held at Heriot-Watt University, titled: "There's more to data linkage than just making links", hosted by Alasdair Gray
- a seminar held at Glasgow University, titled: "National and international data linkage—top down or bottom up?", hosted by Tim Storer (Computer Science) and Ian Anderson (Humanities Advanced Technology and Information Institute)
- a seminar held at St Andrews University, titled: "A slippery slope—the path to national health data linkage in Australia"
- a research visit by Alasdair Gray of Heriot-Watt to St Andrews, to discuss John's work
- participation by John in a SICSA workshop on deep learning held at Edinburgh University

Overall, John's visit was very fruitful and it is hoped to build on the work conducted, within the context of the ADRC and the wider linkage problems encompassed by it.