Call for Papers

Spatial Demography in Regional Science

During the last decade, there has been growing interest in the field of spatial demography. This has been prompted by demographers returning, after several decades of emphasis on micro demography, to the core issue of the distribution of population at various spatial scales (see e.g. Paul Voss' highly cited paper "Demography as a spatial social science" in 2007 *Population Research and Population Review*). A special journal, *Spatial Demography*, has been established to cater for this scientific trend. However, while the temporal-spatial dimension of population size, composition and distribution had already been a core concern of regional science since Isard's 1960 *Methods of Regional Analysis* and Rogers' 1968 *Matrix Analysis of Interregional Population Growth and Distribution*, there has been to date surprisingly little cross-fertilisation in the fields of demography, population geography, epidemiology and regional science.

The objective of the special session is to show how recent developments in regional science, both in terms of the rapidly evolving big data environments and new techniques to study space-time processes, may contribute to fruitful cross-disciplinary collaboration in spatial demography. Papers in the special sessions will showcase new methodological developments, such as stochastic sub-national population projection methodologies for heterogeneous populations, but also applications of regional science tools such as spatial Durbin and other spatial econometric models, Geographically Weighted Regression, GIS, multilevel modelling, spatial point processes, remote sensing, and artificial intelligence methods for complex space-time data analysis. Integrated public data infrastructures, that link administrative data from many sources, high-dimensional geo-referenced data from mobile phones and internet-based data on mobility, networks and spatial interactions have created an environment in which a remarkable range of new tools and data have emerged. Thus, new developments in spatial demography may contribute to a better understanding of core demographic processes of fertility, morbidity, mortality and geographic mobility—as well as the growing compositional diversity of populations—at a wide range of spatial scales.

A selection of papers presented at the Special Session will be published in a special issue of the *Journal of Geographical Systems*.

To Submit:

1. Upload an extended abstract (1,500 words including contribution, theoretical framework, empirical approach and / or first results) or a draft paper (between 5,000 and 10,000 words) by **February 10th, 2017** to the conference system.

2. Upload a full (draft) paper by **June 9th, 2017**.

3. Questions may be directed to Rachel Franklin, rachel_franklin@brown.edu.

Conveners:

Rachel Franklin, Brown University, and Jacques Poot, University of Waikato