Statistician

- University of Dundee, Dundee, Scotland

Apply

Grade 7 SP 29-33, £31,604-£35,550

Duration of employment: 21 months, Closing Date: 8 April 2018

Role Purpose

This post is part of an innovative project to examine a series of 3300 CT scans in NHS Fife on older people aged 65 and over admitted as an emergency to hospital. The primary hypotheses are that (a) brain atrophy, and (b) white matter hyper-intensities (WMHs) are associated with higher delirium risk. The secondary hypotheses are that in patients with delirium, greater degrees of (a) brain atrophy, and (b) WMHs, predict worse outcomes such as mortality, readmission and new institutionalisation. For each of the hypotheses, appropriate variables such as age, pre-admission dementia status, physical comorbidity and activities of daily living will be controlled for.

The role of the statistician will be to analyse this cohort linked to routine datasets such as SMR01 and GRO. For outcomes that are binary over a fixed period of time such as 30 day mortality logistic regression modelling will be used to assess associations with CT factors described earlier along with binary markers for delirium, cognitive impairment, dementia, demographic factors and co-morbidity. Co-linearity will be assessed as there may be variables that are precursors or markers of each other in the model simultaneously.

For outcomes that are time to a binary event such as time to death the Cox proportional hazards model will be utilised. For outcomes such as time to readmission, it is important to account for the competing risk of mortality and this will be modelled using Fine & Gray regression.

You will have responsibility for designing and analysing the statistical modelling in Dundee. The principal investigator is Dr Vera Cvoro who is a consultant Geriatrician in NHS Fife and honorary Senior Lecturer at the University of Edinburgh, but in Dundee you will also work closely with Professor Peter Donnan (a biostatistician)

Summary of Skills, Experience and Qualifications

Qualifications & Education

Essential

- At least MSc and /or extensive relevant experience of biostatistics and management and analysis of routine health services data
Desirable

- PhD or other higher degree

Experience

Essential

- Extensive relevant experience of biostatistics and management and analysis of routine health services data

Desirable

- Cohort study methods
- Descriptive quantitative analysis methods
- Trial management or project coordination

Skills

Essential

- Time management skills
- Good communication skills to work with multi-disciplinary research team
- Good communication skills to interpret and translate findings to a range of different audiences

Desirable

- Project management or coordination

Knowledge

Essential

- Complex biostatistical analysis and modelling

Desirable

- Risk prediction modelling
- Competing risks modelling

Personal Qualities

- Ability to work with and co-ordinate multi-disciplinary research teams
- Organised, efficient and delivery focused

To apply for this position please click the apply button.
Additional Information

The University of Dundee is a diverse community and is committed to equality of opportunity for all by providing a supportive, flexible and inclusive working environment. We have family friendly policies (including flexible working and childcare vouchers), staff groups for LGBT and BME; and prayer room facilities.

The University of Dundee has received the Athena SWAN Bronze Award (Athena Swan) which recognises the promotion of gender equality and has made further commitment to advancing inclusive culture which supports and encourages all under-represented groups.

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https://www.statsjobs.com/job/statistician-34/