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| Last updated: | 15 Dec 2017 |

**JOB DESCRIPTION**

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| Post title: | **Research Fellow** | | |
| Academic Unit/Service: | Geography and Environment | | |
| Faculty: | Social, Human and Mathematical Sciences | | |
| Career Pathway: | Education, Research and Enterprise (ERE) | Level: | 4 |
| \*ERE category: | Research pathway | | |
| Posts responsible to: | GRID3 Scientific Director | | |
| Posts responsible for: | GRID3 technician(s) | | |
| Post base: | Office-based, Southampton city centre | | |

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| Job purpose |
| To undertake statistical modelling research in accordance with the Gates Foundation award that funds analyses and mapping of population numbers and demographics in low income countries. |

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| Key accountabilities/primary responsibilities | | % Time |
|  | Undertake the development of statistical approaches to support the production of high resolution gridded estimates of population counts and demographic characteristics in the absence of national census data across countries, through the integration of geospatial covariate layers and survey data. | 55 % |
|  | Supporting National Statistical Offices in the analysis of existing census data, future census planning and/or responding to ad-hoc analysis and modelling requests. | 10 % |
|  | Contribute to the training of National Statistical Office/other government/international agency staff in the methods developed, and the running of workshops. | 5 % |
|  | Regularly disseminate findings by contributing to the preparation of publication materials for referred journals, presenting results at conferences, or exhibiting work at other appropriate events. | 5% |
|  | Carry out administrative tasks associated with specified research funding, for example risk assessment of research activities, organisation of project meetings and documentation. Implementation of procedures required to ensure accurate and timely formal reporting and financial control. | 5 % |
| 6. | Undertake line management of technician posts within the GRID3 programme. | 5% |
| 7. | Any other duties as allocated by the line manager following consultation with the post holder. | 5 % |
| 8. | To develop and carry out an area of personal research, and/or contribute to activities with the department of Geography and Environment. | 10 % |

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| Internal and external relationships |
| The role-holder will work under the supervision of Prof Andrew Tatem and the GRID3 Project Scientific Director within the WorldPop programme. They will provide direction and guidance for the research work to be undertaken. |

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| Special Requirements |
| The role-holder is likely to be expected to travel internationally occasionally during the period of employment to attend research meetings, undertake secondary data gathering, contribute to running workshops/training and attend national and international conferences for the purpose of disseminating research results.  *Applications for Research Fellow positions will be considered from candidates who are working towards or nearing completion of a relevant PhD qualification. The title of Research Fellow will be applied upon successful completion of the PhD. Prior to the qualification being awarded the title of* ***Senior Research Assistant*** *will be given.* |

**PERSON SPECIFICATION**

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| Criteria | Essential | Desirable | How to be assessed |
| Qualifications, knowledge and experience | PhD or equivalent professional in statistics or a related quantitative subject. Alternatively, industry experience will be considered  Detailed knowledge, understanding and experience of spatial statistical methods  Computer programming skills  Experience at working with large gridded 'raster' datasets  Experience you have in survey sample design. | Teaching at undergraduate level and contributing to teaching at postgraduate level  Knowledge and experience of Bayesian statistical approaches GIS and demography  Knowledge and familiarity of census, household survey and other demographic datasets  Familiarity with spatial population distribution dataset production methods  Familiarity with spatial visualization tools and methods | Application documents, interview |
| Planning and organising | Able to organise own research activities to deadline and quality standards  Able to plan and organise own workload in the absence of supervision |  | Application documents, interview |
| Problem solving and initiative | Proven ability to manage research projects, meeting defined milestones on time  Able to develop understanding of complex problems and apply in-depth knowledge to address them |  | Application documents, interview |
| Management and teamwork | Work effectively in a team, understanding the strengths and weaknesses of others to help teamwork development |  | Application documents, interview |
| Communicating and influencing | Communicate new and complex information effectively, both verbally and in writing, engaging the interest and enthusiasm of the target audience  Able to present research results at group meetings and conferences  Able to write up research results for publication in leading peer-viewed journals  Work proactively with colleagues in other work areas/institutions, contributing specialist knowledge to achieve outcomes |  | Application documents, interview |
| Other skills and behaviours | Understanding of relevant Health & Safety issues  Positive attitude to colleagues and students |  | Application documents, interview |
| Special requirements | Able to attend national and international conferences to present research results  Able to travel to visit national statistical offices and UN agencies in low income countries |  | Application documents, interview |

**JOB HAZARD ANALYSIS**

**Is this an office-based post?**

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| ☒ Yes | If this post is an office-based job with routine office hazards (eg: use of VDU), no further information needs to be supplied. Do not complete the section below. |
| ☐ No | If this post is not office-based or has some hazards other than routine office (eg: more than use of VDU) please complete the analysis below.  Hiring managers are asked to complete this section as accurately as possible to ensure the safety of the post-holder. |

## - HR will send a full PEHQ to all applicants for this position. Please note, if full health clearance is required for a role, this will apply to all individuals, including existing members of staff.

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| **ENVIRONMENTAL EXPOSURES** | **Occasionally**  (<30% of time) | **Frequently**  (30-60% of time) | **Constantly**  (> 60% of time) |
| Outside work |  |  |  |
| Extremes of temperature (eg: fridge/ furnace) |  |  |  |
| ## Potential for exposure to body fluids |  |  |  |
| ## Noise (greater than 80 dba - 8 hrs twa) |  |  |  |
| ## Exposure to hazardous substances (eg: solvents, liquids, dust, fumes, biohazards). Specify below: |  |  |  |
| Frequent hand washing |  |  |  |
| Ionising radiation |  |  |  |
| **EQUIPMENT/TOOLS/MACHINES USED** | | | |
| ## Food handling |  |  |  |
| ## Driving university vehicles(eg: car/van/LGV/PCV) |  |  |  |
| ## Use of latex gloves (prohibited unless specific clinical necessity) |  |  |  |
| ## Vibrating tools (eg: strimmers, hammer drill, lawnmowers) |  |  |  |
| **PHYSICAL ABILITIES** | | | |
| Load manual handling |  |  |  |
| Repetitive crouching/kneeling/stooping |  |  |  |
| Repetitive pulling/pushing |  |  |  |
| Repetitive lifting |  |  |  |
| Standing for prolonged periods |  |  |  |
| Repetitive climbing (ie: steps, stools, ladders, stairs) |  |  |  |
| Fine motor grips (eg: pipetting) |  |  |  |
| Gross motor grips |  |  |  |
| Repetitive reaching below shoulder height |  |  |  |
| Repetitive reaching at shoulder height |  |  |  |
| Repetitive reaching above shoulder height |  |  |  |
| **PSYCHOSOCIAL ISSUES** | | | |
| Face to face contact with public |  |  |  |
| Lone working |  |  |  |
| ## Shift work/night work/on call duties |  |  |  |