Role profile

<table>
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<th>Job title</th>
<th>Research Associate/Fellow</th>
<th>Job family and level</th>
<th>Research and Teaching Level 4 (Appointment will be Level 4 Career training grade where an appointment is made before PhD has been completed)</th>
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<tbody>
<tr>
<td>School/Department</td>
<td>School of Life Sciences</td>
<td>Location</td>
<td>D100, Medical School, University of Nottingham</td>
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Purpose of role

High-throughput methods for gene function analysis are powerful modern tools to understand parasite biology. In African trypanosomes, genome-scale screening has to date only been possible for parasites in culture. However, to understand parasite biology in the host, animal infection models remain critical for the identification of genes important for infection establishment, survival in the host, transmission, and drug resistance. We have developed a novel genome-scale approach for highly-parallel phenotyping of African trypanosome mutants during host infections. By following 1000s of individual mutants in a single infection, our approach substantially reduces experimental animal usage while obtaining better scientific translatability. This project in the labs of Dr Catarina Gadelha and Dr Bill Wickstead will interrogate the fitness landscape for every gene in the genome of the most important trypanosomes for human and animal diseases, using *Trypanosoma brucei gambiense* and *T. congolense* strains that capture real disease biology, and studying gene function in both acute and chronic models of trypanosomiasis.

Main responsibilities

(Primary accountabilities and responsibilities expected to fulfil the role)

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<th>% time per year</th>
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<td>80%</td>
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<tr>
<td>10%</td>
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<td>5%</td>
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1. To plan and conduct primary research towards the goals of the research project in a timely manner. To generate and analyse data, solve problems, interpret and evaluate texts, plan and manage own research activity and time, meet research objectives and deadlines, and bring new insights to the research area.

2. To work productively with other members of host lab, collaborator labs, and University of Nottingham research support team.

3. To prepare results, reports and manuscripts for publication, and contribute to the dissemination of research outputs at scientific conferences.

4. As agreed with the line manager, other duties commensurate with the nature of the post, e.g. contribute to the running of the lab, supervision of visitors.
## Person specification

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<th>Essential</th>
<th>Desirable</th>
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| **Skills**              | ▪ Demonstrable strong research skills in molecular cell biology, including generation and analysis of ‘omic-level data.  
                          ▪ Ability to analyse and interpret data, evaluate and criticise texts, and bring new insights.  
                          ▪ Ability to work quantitatively at all times.  
                          ▪ Excellent organisational, time management and communication skills, including the ability to communicate with clarity on complex information. | ▪ Existing skills in bioinformatics.  
                          ▪ Track record of research in animal infection models.  
                          ▪ Peer-reviewed scientific publication(s) in relevant research area.  
                          ▪ Previous success in gaining support for externally funded research projects. |
| **Knowledge and experience** | ▪ Knowledge and experience of molecular biology.  
                          ▪ Experience in growth, genetic manipulation and cell biology of trypanosomes, or transferable experience from other systems.  
                          ▪ Evidence of data presentation at scientific meetings.  
                          ▪ Ability to work independently and also within a group.  
                          ▪ Demonstrable expertise in experimental design. | ▪ Experience of analysing NGS data.  
                          ▪ Experience of developing new approaches, models, techniques or methods in research area.  
                          ▪ Track record of writing papers as evidenced by publications or submitted manuscripts in refereed journals. |
| **Qualifications, certification and training (relevant to role)** | ▪ PhD or equivalent in a relevant area. Or near to completion of such a PhD. | |  |
| **Statutory, legal or special requirements** | ▪ Ability to maintain confidentiality and security of information where appropriate.  
                          ▪ Ability to ensure research and record keeping are carried out in accordance with best practice, scientific integrity, and in compliance with local policies and legal requirements. | ▪ Flexibility and ability to adapt the working schedule and techniques to varying hours at a short notice (e.g. willingness to work outside standard working hours when required).  
                          ▪ Ability to undertake occasional travel (national and international) to attend courses or relevant meetings to enable continuous professional development and remain up to date with current developments in the field. This also includes meetings with project collaborators. |

The University of Nottingham is focused on embedding equality, diversity and inclusion in all that we do. As part of this, we welcome a diverse population to join our workforce and therefore encourage applicants from all communities, particularly those with protected characteristics under the Equality Act 2010.
The University is a signatory of the Declaration on Research Assessment (DORA). As such we commit to focus on the scientific content of publications (where requested or provided as part of the recruitment and selection process) as a basis for review of quality, and consideration of value and impact of research conducted, rather than any proxy measures such as Journal Impact Factor.
Expectations and behaviours

The University has developed a clear set of core expectations and behaviours that our people should be demonstrating in their work, and as ambassadors of the University’s strategy, vision and values. The following are essential to the role:

Valuing people
Is friendly, engaging and receptive, putting others at ease. Actively listens to others and goes out of way to ensure people feel valued, developed and supported.

Taking ownership
Is clear on what needs to be done, encouraging others to take ownership. Takes action when required, being mindful of important aspects such as Health & Safety, Equality, Diversity & Inclusion, and other considerations.

Forward thinking
Drives the development, sharing and implementation of new ideas and improvements to support strategic objectives. Engages others in the improvement process.

Professional pride
Is professional in approach and style, setting an example to others; strives to demonstrate excellence through development of self, others and effective working practices.

Always inclusive
Builds effective working relationships, recognising and including the contribution of others; promotes inclusion and inclusive practices within own work area.

Key relationships with others

Line manager

Role holder

Group Leader
Research Associate/Fellow
Research group members
Research support staff
Project collaborators