



Job title	Research Associate/Fellow	Job family and level	Research & Teaching Level 4 Training Grade/Level 4
School/ Department	School of Veterinary Medicine and Science	Location	Sutton Bonington campus

Purpose of role

The occupant of this role will play a key role in the design and delivery of an innovative and ongoing research project, funded by the EU as part of an internationally recognised research partnership. The main focus of the role will be active involvement in virus research (involving bluetongue virus) at CAT-3. The successful applicant would be expected to participate in many areas of the research, including presentations, publication and supervision of students.

	Main responsibilities (Primary accountabilities and responsibilities expected to fulfil the role)	% time per year
1	Research activities <ul style="list-style-type: none"> ▪ To design, create, develop and characterise a range of phage display libraries and constituent antibodies resembling those that are most technologically mature, sufficiently diverse, reliable and compatible with a wide range of analysis techniques ▪ Where required, to adopt affinity maturation techniques to improve binding characteristics 	80%
2	Administrative/general <ul style="list-style-type: none"> ▪ Any administrative duties appropriate to the grade and role in support of the administration of the School ▪ To keep up to date with the latest technologies ▪ To prepare and present progress reports, contribute to scientific publications, prepare of materials for publicity and attend/ present at European and international meetings ▪ To assist in the planning of training programs and workshops / external meetings 	10%
3	Other <ul style="list-style-type: none"> ▪ Undertake appropriate training and continuous professional development ▪ Maintain and improve the profile of the group by presenting relevant material at local, national and/or international conferences ▪ Appropriate knowledge exchange activity within the 3Rs sector. 	10%

Person specification

	Essential	Desirable
Skills	<ul style="list-style-type: none"> ▪ Molecular biology, site directed mutagenesis ▪ Excellent skills in recombinant DNA technologies ▪ Mammalian cell culture ▪ Protein expression and purification ▪ Immunoassays ▪ Excellent troubleshooting abilities ▪ Good communication skills ▪ Excellent IT, organisational and record keeping skills 	<ul style="list-style-type: none"> ▪ Bioinformatic analysis of next-generation sequencing outputs ▪ General microbiology ▪ Phage display library development and selection ▪ DNA library production ▪ SPR
Knowledge and experience	<ul style="list-style-type: none"> ▪ Post-doctoral experience in molecular biology: <ul style="list-style-type: none"> - Transfection - Range of PCR techniques - Site directed mutagenesis - DNA library production - Recombinant DNA technologies ▪ Post-doctoral experience in mammalian cell culture ▪ Post-doctoral experience in protein purification ▪ Postdoctoral experience of immunoassays 	<ul style="list-style-type: none"> ▪ Relevant publications in high impact journals ▪ Paper/grant writing ▪ Relevant post-doctoral experience in an industrial or academic laboratory setting
Qualifications, certification and training (relevant to role)	<ul style="list-style-type: none"> ▪ A first or upper-second class honours degree ▪ PhD awarded (or close to completion) in molecular biology, protein/peptide engineering or related disciplines 	
Statutory, legal or special requirements	<ul style="list-style-type: none"> ▪ Satisfactory basic disclosure is obtained 	



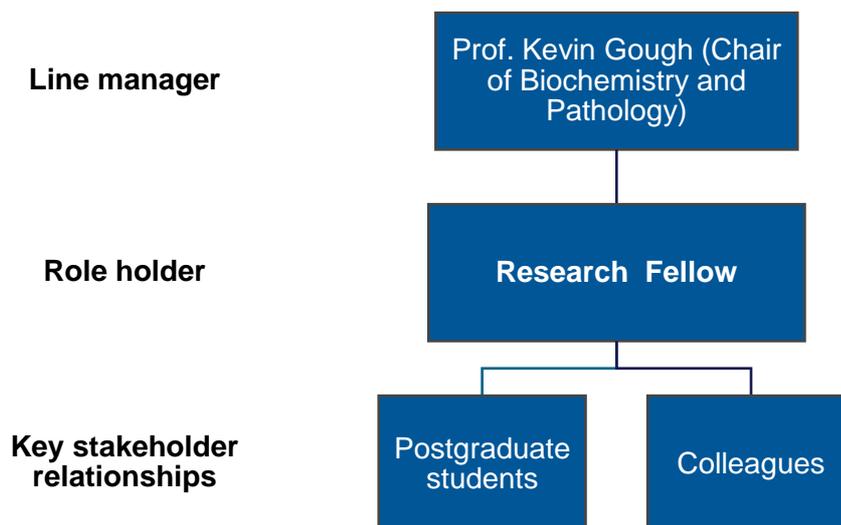
The University of Nottingham is focused on embedding equality, diversity and inclusion in all that we do. As part of this, we welcome a diverse population to join our work force and therefore encourage applicants from all communities, particularly those with protected characteristics under the Equality Act 2010.

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 always equitable and fair and works with integrity. Proactively looks for ways to develop the team and is comfortable providing clarity by explaining the rationale behind decisions.
- Taking ownership** Is highly self-aware, looking for ways to improve, both taking on board and offering constructive feedback. Inspires others to take accountability for their own areas.
- Forward thinking** Driven to question the status quo and explore new ideas, supporting the team to "lead the way" in terms of know-how and learning.
- Professional pride** Sets the bar high with quality systems and control measures in place. Demands high standards of others identifying and addressing any gaps to enhance the overall performance.
- Always inclusive** Ensures accessibility to the wider community, actively encouraging inclusion and seeking to involve others. Ensures others always consider the wider context when sharing information making full use of networks and connections.

Key relationships with others



Project Summary:

A fantastic opportunity has arisen for a molecular biologist, preferably with experience in phage display, to join a dynamic team of scientists focused on the development and application of novel molecular diagnostics and therapeutics. The post is based at the SVMS, University of Nottingham, working in close collaboration with AFABILITY. As a prospering organisation, AFABILITY promotes the awareness and availability of non-animal techniques and resources for the production of antibodies. With recent highly successful milestones reached, significant support and collaborations formed, it is an ideal time to be joining the team. This project is funded by Forsogsdyrenes Vaern and Alternativfondet.

The Post:

The main duty of this post will be to design, create, develop and characterise one or more synthetic or human donor sourced phage display libraries resembling those that are most technologically mature, sufficiently diverse, reliable and compatible with a wide range of analysis techniques. The libraries are intended for use in a range of applications including molecular diagnostics and therapeutics. Using streamlined production and affinity maturation techniques that can be easily adopted, the libraries will be used to educate and assist the scientific community with technological advancements in the field of antibody production, moving away from the traditional hybridomas and polyclonal antibody production approaches. There will be opportunities to travel to international meetings to promote the technology in line with 3Rs core values.

The School of Veterinary Medicine and Science:

It is our intent to make significant leading contributions to both veterinary research and teaching within the context of valid relevance and application to the wider veterinary profession. Research is central to the activities of the School, both in terms of maintaining ourselves at the forefront of national and international efforts in veterinary medicine but also as an integral part of the training and education for undergraduate and postgraduate students.

Research is central to the activities of the School of Veterinary Medicine and Science at the University of Nottingham. In the 2014 Research Excellence Framework assessment, 97% of work submitted by the Schools of Veterinary Medicine and Science and Biosciences was judged to be of international quality, and 37% of work as world-leading (4-star). Research environment was ranked top of all institutions within our Unit of Assessment (Agriculture, Veterinary and Food Science).

Further information about the School of Veterinary Medicine and Science is available at <http://www.nottingham.ac.uk/vet/index.aspx>