Candidate Information

Position:	Research Assistant- Virology
School/Department:	Wellcome-Wolfson Inst for Experimental Medicine
Reference:	20/108467
Closing Date:	Monday 7 December 2020
Salary:	£28,331 per annum
Anticipated Interview Date:	Thursday 17 December 2020.
Duration:	This post is available until 28 February 2022.

JOB PURPOSE:

To join an interdisciplinary team seeking to use nanotechnology to develop novel, cost-effective, antimicrobial materials for use in personal protective equipment (PPE) or on surfaces. These materials must have demonstrable activity against viruses like SARS-CoV-2, the virus that causes COVID-19. Prof. Andrew Mills (School of Chemistry), Prof. Brendan Gilmore (School of Pharmacy) and Dr. Connor Bamford (Wellcome-Wolfson Institute for Experimental Medicine, School of Medicine, Dentistry and Biomedical Sciences) lead our team (funded by a UKRI/EPSRC COVID-19 Rapid Response grant). This position involves the production of stocks of viruses (including SARS-CoV-2) at Biological Safety Level 3; development of protocols to test the effectiveness of potential antiviral materials; and characterisation of resulting inactivated virus samples in molecular and virological assays. This position is suited to a highly ambitious, productive, and collaborative individual, comfortable with interdisciplinary working and looking to contribute to this current global crisis.

MAJOR DUTIES:

1. To be actively involved in the existing research programme as directed by the supervisor and to ensure adequate planning and progression of the investigation so that the overall research objectives for the project are met.
2. Design, develop and refine experimental models testing the virucidal activity of surfaces.
3. Carry out analysis, critical evaluation, and interpretation using methods and techniques appropriate to area of research.
4. Maintain up-to-date knowledge of the field.
5. Present regular progress reports on research to members of the research group or to external audiences to disseminate and publicise research findings.
6. Prepare, in consultation with supervisor, material for publication in national and international journals and presentations at national and international conferences.
7. Carry out school/undergraduate/post-graduate student and visiting researcher training and supervision under the guidance of a member of academic staff.
8. Carry out routine administrative tasks associated with the research project to ensure that project milestones are completed on time and within budget. These might include organisation of project meetings and documentation, financial control, risk assessment of research activities.

Planning and Organising:

1. Plan for practical and specific aspects of the research programme.
2. Plan for access to, and use of, research resources, laboratories and workshops where appropriate.
3. Plan own day-to-day activity within the framework of the agreed research programme as well as communal activities (e.g. meetings) were appropriate.
4. Plan in advance to meet deadlines for progress reports, journal publications and presentations for conferences.
5. Coordinate and liaise with other members of the research group and collaborative research groups regarding work progress.

Resource Management Responsibilities:

1. Ensure research resources are used in an effective and efficient manner including liaising with vendors, and routine ordering of research consumables through P2P.

2. Provide guidance as required to support staff and any postgraduate/undergraduate students and visiting researchers who may be assisting with research work within the group.

Internal and External Relationships:

1. Liaise on a regular basis with supervisor and other members of the research team.
2. Make internal and external contacts to develop knowledge and understanding and form relationships for future collaboration.
3. Attend and contribute to relevant meetings.

ESSENTIAL CRITERIA:

1. Degree in virology, biochemistry, cell biology, molecular biology, or a relevant biomedical science.
2. At least 1 year recent relevant research experience.
3. Recent hands-on experience in:
    1. Routine cell culture using cell lines
    2. Molecular assays, to include: PCR, RT-qPCR, Western blotting
4. Methodical approach to project management and meticulous in regard to experimental procedures and record keeping.
5. Highly ambitious, motivated, efficient, organised and show a commitment to, and interest in, research topic.
6. Competent in maintaining knowledge of cutting-edge of field of expertise.
7. Strong interpersonal skills.
8. Ability to communicate complex information clearly.
9. Competent in giving effective and informative oral and poster presentations.
10. Demonstrable intellectual ability.
11. Strong ability to work from own initiative.
12. Excellent problem-solving skills.
13. Excellent teamwork skills.
14. Must be prepared to work irregular hours including evening, weekend and other out-of-hours work on an ad-hoc basis as required.
15. May be required to travel for training, meetings and conferences on an ad-hoc basis as required up to a maximum of twice per annum.

DESIRABLE CRITERIA:

1. Postgraduate qualification in a relevant area.
2. Experience in virology assays.
3. Experience at Biological Safety Level 3.
4. Original research publications in peer-reviewed journals commensurate with career stage.
5. Experience teaching/supervising undergraduate students and visiting researchers in the laboratory.
6. Research project management experience.
7. Up-to-date knowledge in the field of virology and microbiology pathways.
8. Ability to assess and organise resources.