

**THE UNIVERSITY OF MANCHESTER**  
**PARTICULARS OF APPOINTMENT**  
**FACULTY OF SCIENCE & ENGINEERING**  
**SCHOOL OF NATURAL SCIENCES**  
**DIVISION OF MATERIALS**  
**RESEARCH ASSOCIATE IN BIOLOGY/VIROLOGY**  
**VACANCY REF: SAE-015997**

**Salary:** Grade 6 £32,816 to £34,804 per annum (according to relevant experience)

**Hours:** 1 FTE

**Duration:** Fixed term, 12 Months from start date

**Location:** Sackville Street, Manchester

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**Enquiries about the vacancy, shortlisting and interviews:**

Manager: : Samuel T. Jones.

Email: [Samuel.jones-4@manchester.ac.uk](mailto:Samuel.jones-4@manchester.ac.uk)

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**BACKGROUND**

The Department of Materials wishes to appoint a Research Associate to work on funded project investigating a new type of antiviral agent.

This post is based within the Jones Lab at the University of Manchester (UoM), working with Dr. Samuel T. Jones and involves close collaboration with our industrial partners, Aqdot, and the University of Leeds. The project will be based within the newly opened Henry Royce Institute at the University of Manchester. You will be a hardworking, motivated and trustworthy, innovative experimental scientist who has successfully completed a PhD in Biology (or similar) or have equivalent experience.

Experience in general virology with a focus on developing and understanding extracellular antivirals are sought. Experience with cell toxicity assays (including ex-vivo) as well as dose-response and virucidal plaque assays will be beneficial. Mechanistic determination of antiviral mode of action will be necessary so experience with related techniques is advantageous.

### **Overall Purpose of the Job**

The main responsibilities will include testing of toxicity, antiviral efficacy and mechanistic determination of antiviral formulations against a wide range of viruses.

During the project you will determine the antiviral effect of a range of antiviral formulations against a number of different viruses. The main focus will be on understanding the antiviral mode of action of this new class of antiviral in order to allow efficacy to be improved in future formulations and to guide product use. Close collaboration with industrial partners will be essential and applicants will be required to lead this interaction. Testing of these antivirals will require skills in cell culture, excellent aseptic technique and plaque assays, so prior experience (or a demonstrable ability to rapidly acquire new skills/techniques) with all of these techniques will be important.

Experience in one or more of the following areas would be advantageous:

- Characterisation of organic small molecules
- Assay Development
- Electron Microscopy of biological samples
- Fluorescent microscopy

### **Key Responsibilities, Accountabilities or Duties**

The range of duties will include:

- Be involved in the assessment of student knowledge and supervision of projects.
- Assist in the development of student research skills.
- Develop research objectives and proposals for own or joint research, with the assistance of a mentor if required.
- Conduct individual and collaborative research projects.
- Write up research work for publication.
- Continually update knowledge and understanding in field or specialism.
- Translate knowledge of advances in the subject area into research activity.
- Deal with routine communication using a range of media.
- Communicate complex information, orally, in writing and electronically.
- Prepare proposals and applications to external bodies, e.g. for funding and contractual purposes.
- Communicate material of a specialist or highly technical nature.
- Liaise with colleagues and students.
- Build internal contacts and participate in internal networks for the exchange of information and to form relationships for future collaboration.
- Join external networks to share information and identify potential sources of funds.
- Manage own research and administrative activities, with guidance if required.
- Work with colleagues on joint projects, as required
- Collaborate with academic colleagues on areas of shared research interest.
- Attend and contribute to relevant meetings.
- Use new research techniques and methods.
- Use initiative and creativity to identify areas for research, develop new research methods and extend the research portfolio.
- Use creativity to analyse and interpret research data and draw conclusions on the outcomes.
- Contribute to collaborative decision making with colleagues in areas of research.
- Use research resources, laboratories and workshops as appropriate.
- Plan and manage own research activity in collaboration with others.
- Balance with help the competing pressures of research and administrative demands and deadlines.

- Be aware of the risks in the work environment and their potential impact on their own work and that of others.

## **PERSON SPECIFICATION**

### **Essential;**

- Have, or be about to obtain, a relevant PhD (or equivalent)
- Specialist knowledge in the discipline and a demonstratable ability to rapidly acquire new techniques.
- Experience in research methods and techniques to work within established research programmes, including aseptic techniques, plaque assays and toxicity assays.
- Excellent communication and interpersonal skills
- Excellent time management and organisational skills
- Ability to work independently and as part of a team
- Ability to liaise confidently and effectively with a range of individuals
- Flexible approach to dealing with research problems as they arise
- Willingness to learn and develop
- Ability to present in both written and oral publications
- Ability to meet deadlines
- Strong journal publication record.
- The ability to evaluate complex data
- Ability to contribute to broader management and administrative processes.
- Ability to assess and organise resources
- Understand equal opportunity issues as they may impact on areas of research content.

### **Desirable Skills, Knowledge and Experience;**

- Knowledge and experience with assays for determining antiviral mechanism
- Experience with fluorescent and/or electron microscopy
- Experience of working on small molecule characterisation
- Experience of developing new assays and techniques