One Calleva Centre one-year Postdoctoral Research Associate:

Understanding evolution using molecules and their markers

Magdalen College proposes to appoint one Postdoctoral Research Associate in its Calleva Research Centre to work on the project Understanding evolution using molecules and their markers. The post will commence as soon as possible and will be for up to one calendar year.

The Calleva Centre at Magdalen College

Magdalen College, one of thirty-eight colleges within the University of Oxford, carries out research and teaching in the full range of science, social science and humanities subjects. It has several Fellows in Biochemistry, Chemistry and Medicine. For further information on the College see www.magd.ox.ac.uk.

The College’s Calleva Research Centre for Evolution and Human Science was inaugurated in October 2010. Its aims are to investigate key questions about the origins, development, causes and functions of human behaviour by bridging the humanities, social, cognitive, and biological sciences within a broad evolutionary framework. The Centre’s work is embodied through successive fixed-term interdisciplinary research programmes that draw on unique collaborations between Magdalen Fellows working in these diverse fields.

Details of the research programme

This project falls under the Calleva Centre’s interest in the study of the expression of the human genome and how it physically helps generate a wide array of human functioning and behaviour. Methodologically it asks how studies of atomic structures and macromolecular assemblies can help us understand evolutionarily adaptive processes. The project is led by Professor Robert Gilbert.

The post

We are seeking one qualified and highly motivated individual for a Postdoctoral Research Associate post investigating the interface of protein structure and assembly into complexes, and epigenetic and cell regulatory modifications. The postholder will focus on completing two studies: one a study of enzymes regulating RNA turnover and involved in the control of gene expression in normal, virally infected and cancerous tissues, the other of proteins related to human perforin which are involved in facilitating parasitic and restricting bacterial infection.
The postholder will join a stimulating, interdisciplinary research environment, as well as receive training in cutting edge combinations of interdisciplinary biophysical, structural and imaging techniques. The Postdoctoral Research Associate will be responsible for research activities such as designing and conducting laboratory experiments, conducting data analyses, and writing manuscripts.

**Responsibilities and duties**

- Manage own academic research and administrative activities related to the project, including small-scale project management, to co-ordinate multiple aspects of work to meet deadlines.
- Generate and test hypotheses using data from a variety of sources, including structural, biophysical, genetic and imaging data, reviewing and refining hypotheses as appropriate.
- Work collaboratively with colleagues from other disciplines.
- Contribute ideas for new research projects, and develop ideas for taking research forward to the next stage.

**Communication**

- Contributing to the preparation of scientific manuscripts based on research for publication in peer-reviewed journals.
- Participating in and contributing to didactic activities in the lab (discussions, training of junior researchers).
- Produce and present posters and oral presentations to the local and broad scientific community and non-academic audiences, and be involved in outreach activities related to the projects.
- Represent the research group at external meetings/seminars, either with other members of the group or alone.

**Education and training**

- Opportunities for training in cutting edge combinations of interdisciplinary biophysical, structural and imaging techniques will be provided.
- Attending appropriate scientific seminars and meetings.

**Other General Responsibilities**

- Undertaking such other duties as may be required from time to time that are commensurate with the grade and responsibilities of this post, such as project group administration.
- Conducting themselves with due regard to the University Equal Opportunities and Data Protection policies.
Selection criteria

Required

- Hold or be close to completing a relevant PhD/DPhil in biophysics/structural biology/molecular biology.
- An established interest in and experience of one or both of the systems under study.
- Evidence of ability to write for publication for academic audiences.
- Experience of independently managing a discrete area of a research project. The post holder will be expected to operate largely unsupervised in the day-to-day running of the research and administrative aspects of the project; good attention to detail and excellent organisation skills are essential.
- Within the research group the postholder should work in a collaborative and supportive fashion. Good inter-personal skills with an ability to work co-operatively in a multidisciplinary setting.
- Ability to contribute ideas for new research projects and to take the research forward.
- Excellent communication skills, including the ability to present research proposals and results, and represent the research group at meetings.

The location of the job- will be in Oxford.

Salary and benefits

The appointments will be made on grade 7 of University Salary Scale, currently £34,308 - £46,047 p.a..

The posts carry an entitlement to join, or to remain a member of, the Universities Superannuation Scheme (USS).

Application procedure

Applications must include the completed application form (available from www.magd.ox.ac.uk/job-vacancies/). Candidates should also submit a detailed (no more than one page) covering letter outlining their suitability for the post. The covering letter and completed application form should be emailed to human.resources@magd.ox.ac.uk by 12 noon (UK time) on Friday 16th September 2022.

Candidates should request two referees to send references directly to the same email address by the same date. The College will NOT contact referees and it is each candidate’s responsibility to ensure that the College receives all his/her references by the closing date.

We expect to notify short-listed candidates within one week from the closing date.
Following the initial offer of the position, appointment will be subject to (a) satisfactory completion of a medical questionnaire, and (b) provision of proof of the right to work in the UK.

If the chosen candidate requires a UK visa, HR and the University Staff Immigration Team will discuss visa routes and will provide advice and assistance with an application.

If a person appointed to the post is a migrant sponsored under the UK's new points-based migration system, we are required to retain the applications for all shortlisted candidates until six months after we have ceased sponsoring the migrant in question.

**Recruitment Monitoring**

A Magdalen College Recruitment Monitoring Form will be found at the following page on the Magdalen College web site: [http://www.magd.ox.ac.uk/job-vacancies/](http://www.magd.ox.ac.uk/job-vacancies/). Applicants are requested to complete the form and return it to Human Resources, Magdalen College, Oxford OX1 4AU (or by email to human.resources@magd.ox.ac.uk). Please note that the form is anonymous and is used only to monitor and ensure equality of opportunity for all candidates: it is not part of the selection process and will not be seen by any member of the selection committee.

**Data protection**

All data supplied by applicants will be used only for the purposes of determining their suitability for the post and will be held in accordance with the principles of the Data Protection Act 2018 and the College’s Data Protection Policy with can be found at [http://www.magd.ox.ac.uk/other-policies/data-protection/](http://www.magd.ox.ac.uk/other-policies/data-protection/).