

Appointment of five postdoctoral research positions in Bioinformatics
Salary £17,451 – £26,229, with a discretionary range to £32,215, pa

The Appointments

Applications are invited for five postdoctoral research positions of 3 years duration in Bioinformatics funded by the Medical Research Council (MRC). The appointments are available from 1st January 2001 (or a mutually agreed date).

The principal duty of the posts will be to carry out research in some area of bioinformatics in collaboration with Professor Jotun Hein and together with other bioinformaticians. In addition all the appointees may be required to undertake a small amount of teaching in the department, amounting to no more than three hours per week during university terms.

There are already strong research groups in the department in some areas of bioinformatics. Jotun Hein's appointment marks a major expansion of bioinformatics in Oxford, and a variety of new topics will be promoted in the near future. Applications are thus welcomed from candidates with research interests in any sub-area of bioinformatics, including: sequence comparison, molecular evolution, molecular population genetics, genome annotation, pathogen evolution, structure comparison and prediction, regulatory networks and metabolic pathways. Applicants may have a background in the mathematical, physical, biological or computer sciences. Candidates from mathematical, physical, statistical and computer sciences are also encouraged to apply if strongly committed to move into bioinformatics.

Well-qualified successful applicants are likely to be appointed at or near the top of the salary scale given above, with the possibility of annual increments extending into the discretionary range.

The postholders would be based in space in the Peter Medawar Building for Pathogen Research. This is a new building with a strong interdisciplinary flavour, containing substantial experimental and theoretical research groups from four different departments in the University. The bioinformatics and mathematical genetics groups currently comprise five members of academic staff (with a lecturer in bioinformatics also to be based there when the post is filled) and around 8 postdocs and 8 research students, in addition to the advertised posts. Their members come from backgrounds in both the mathematical and biological sciences. We believe it offers a very lively and stimulating research environment, at the forefront of international research in several fields.

The Research Projects:

Applications are encouraged from researchers interested in working on any of the broad range of topics which come under the heading of bioinformatics, provided their work is of high quality. Professor Hein's research is briefly described on his home page and focuses presently on statistical alignment, coalescent theory and the analysis of population variation data, comparative genome analysis and viral evolution. However, successful applicants may very well plan to develop other topics.

Oxford offers the following collaborative opportunities:

Prediction of Structure/Function Prediction (<http://www.ocms.ox.ac.uk/~ponting/>)

Expression Data and Regulatory Networks (<http://linkage.rockefeller.edu/wli/microarray>)
Molecular Dynamics (<http://biop.ox.ac.uk/www/top.html>)
Regulatory or Metabolic Pathways (<http://bms-mudshark.brookes.ac.uk/fell>)
Embryological Modelling (<http://www.maths.ox.ac.uk/cmb/>)
Structural Genomics (<http://www.strubi.ox.ac.uk/>)
SNP Data & Gene Mapping (<http://snp.well.ox.ac.uk/>)
Bioinformatics Software (<http://www.molbiol.ox.ac.uk/>)
and other groups interested in computational biology (<http://www.compbio.ox.ac.uk/>).

A number of groups work on the application of bioinformatics, thus providing good opportunities for collaboration, and relevant data sets. For example:

Department of Human Anatomy and Genetics (<http://units.ox.ac.uk/departments/anatomy/>)
Oxford Centre for Molecular Sciences (<http://www.ocms.ox.ac.uk/>)
The Weatherall Institute for Molecular Medicine (<http://immwww.jr2.ox.ac.uk/>)

Bioinformatics may also be approached from a methodological viewpoint by an applicant whose main interests are in computer science (for example constraint satisfaction techniques – <http://web.comlab.ox.ac.uk/oucl/people/peter.jeavons.html>, or machine learning – <http://web.comlab.ox.ac.uk/oucl/people/ashwin.srinivasan.html>) or in statistics – (<http://www.stats.ox.ac.uk/>)

In the group there will be graduate students, programming assistance and software development projects.

Candidates for the positions should have a strong background in computational biology, computer science, mathematics or statistics, preferably in more than one of these areas, and have solid experience of applying these skills in the biosciences. A PhD, or equivalent research experience, will be required.

The Department of Statistics

Professor John Gittins is currently Head of the Department of Statistics. The department has three established professorships (Professor Peter Donnelly, Professor Jotun Hein and Professor Brian Ripley), and an established readership (Dr Peter Clifford). Other members of the academic staff are Dr J F Bithell, Dr A M Etheridge, Professor R C Griffiths, Dr R W Hiorns, Dr C N Laws, Dr M Lunn, Dr A D Lunn, Professor C J H McDiarmid, Dr G McVean, Dr P Northrop and Dr G Reinert. Sir David Cox, although retired, is also based in the department.

In addition to the Bioinformatics group there are two other major research groups in the department: the Mathematical Genetics group led by Professor Donnelly, and the Computationally Intensive Statistics group led by Professor Ripley.

The department is located in two pleasant, adjacent, Victorian buildings, together with an annexe in the Peter Medawar Building for Pathogen Research, where the Bioinformatics and Mathematical Genetics research groups are based. There are well-equipped networks of Sun workstations, a cluster of fast Intel processor machines, and excellent computing support staff.

The department runs a taught MSc course in Applied Statistics and is in the process of setting up and recruiting staff to run a post-experience part-time MSc in Bioinformatics. The department is also extensively involved in undergraduate teaching.

Conditions of Employment

The appointments are for a fixed period of 3 years and there will be a probationary period of 6 months. Appointees will be entitled to 38 days of annual leave and will have the option of becoming (or remaining) members of the Universities Superannuation Scheme (USS).

The University has a generous maternity leave scheme, which goes well beyond the statutory provisions. Provided they have at least forty-one weeks service with the University by the expected date of birth, or were at any stage entitled to the benefits of a previous employer's paid maternity leave scheme, or have at or before the expected week of childbirth two years' continuous service with any employer in the past, women may choose between two schemes offering combinations of maternity leave on full and half pay: both schemes also offer periods of unpaid leave. Arrangements are available for the flexible use of untaken unpaid leave to enable a phased return to full duties, for women to return to work on a part-time basis after the birth of their child, and for paternity leave. The University operates two childcare nurseries, and has a holiday programme for school age children.

Application Procedure

Applications, including a curriculum vitae and a list of publications (six copies of each in the case of applicants from the UK) together with the names, addresses and telephone, fax and e-mail details of three referees, should be sent to the Administrator, Department of Statistics, University of Oxford, 1 South Parks Road, Oxford OX1 3TG. Informal enquiries should be directed to hein@stats.ox.ac.uk. The closing date for applications is November 1st 2001 and applicants should request referees to write directly to the Administrator so as to arrive by that date. Faxed (+44 1865 272 595) or emailed (jane@stats.ox.ac.uk) references followed by hard copy are acceptable. Interviews for short-listed candidates will be held in November and all reasonable interview expenses will be reimbursed.

Equal Opportunities Statement

The policy and practice of the University of Oxford require that entry into employment with the University and progression within employment will be determined only by personal merit and the application of criteria that are related to the status of each particular post and the relevant salary structure. Subject to statutory provisions, no applicant or member of staff will be treated less favourably than another because of his or her sex, marital status, or racial group.