## University of Oxford Mathematics and Physical Sciences Division

## Appointment of four Postdoctoral research and one Computer Scientist positions. Salary £17,451 - £26,229, with a discretionary range to £32,215, pa

Up to 5 postdoctoral research positions of 3 years duration in Bioinformatics funded by Medical Research Council (MRC) are available for working with Prof. Jotun Hein and other bioinformaticians at Oxford University. At least one of these positions is envisioned to be central in systems management, directing development of software, but will also be encouraged to have his/her own research within Bioinformatics from a computational perspective.

There are already strong research groups in the Department of Statistics in theoretical and applied genetics. Bioinformatics is presently being pursued by a variety of groups in Oxford, Professor Hein's appointment marks a major expansion of this field, and a variety of new subjects 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, protein structure comparison and prediction, regulatory networks and metabolic pathways, or some other area. Applicants may have a background in either the mathematical and physical, or the biological sciences.

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 Research.

Since bioinformatics cover a variety of subjects and the newly established professorship and these positions are aimed to stimulate the bioinformatics activity in Oxford in general, there will be much freedom to choose research topic as long as the research is of high quality. Prof. Hein's research is shortly 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, applicants can very well choose other topics and Oxford offers a series of collaborative opportunities:

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

A series of empirical groups are highly interested in the application of bioinformatics and presents good opportunity for collaborations and data analysis. To mention a few:

Department of Human Anatomy and Genetics (<u>http://units.ox.ac.uk/departments/anatomy/</u>) Oxford Centre for Molecular Sciences (<u>http://www.ocms.ox.ac.uk/</u>) The Weatherall Institute for Molecular Medicine (http://immwww.jr2.ox.ac.uk/) In addition, Bioinformatics could also be approached from a methodological viewpoint if an applicant has main interests such as computer science (algorithmics - <u>http://web.comlab.ox.ac.uk/oucl/people/peter.jeavons.html</u>,

Machine Learning - <u>http://web.comlab.ox.ac.uk/oucl/people/ashwin.srinivasan.html</u>) or statistics (http://www.stats.ox.ac.uk/)

In the group there will be graduate students, programming assistance and software development projects. It is envisioned that Postdoc's with a computer science background will be active in the collaboration of such projects, but not in daily systems support, that will be supported separately.

Prof. Hein is presently in the Peter Medawar Building for Pathogen Research <u>http://www.medawar.ox.ac.uk</u>) and will here be conduct bioinformatics research and analysis related to pathogen evolution and function. In the summer of 2002 Oxford Centre for Gene Function (OCGF) will be completed and will constitute a major strengthening of functional aspects of Bioinformatics coupled to empirical research.

An educational program in Bioinformatics, both at undergraduate and graduate level, is being implemented, which should increase the people recruited to the field in the near future.

## **Conditions of employment**

The stipends will be on the RS1A scale - salary range from Salary £17,451 - £26,229, with a discretionary range to £32,215, pa. The appointment is for a fixed period of 3 to 4 years and there will be a probation period of 6 months. The appointee will be entitled to 38 days of annual leave and will have the option of becoming (or remaining) a member 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 on full and a 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 woman 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 the case of applicants from the UK) together with 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 at <u>hein@stats.ox.ac.uk</u>. The closing date for applications is November 2nd 2001 and applicants should request referees to write directly to the Department by that date. Interviews for short-listed candidates will be held in November and all reasonable interview expenses will be reimbursed.

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 favourable than another because of her sex, marital status, or racial group.

Jotun Hein September 25th 2001