Two Positions Available - Life Sciences Data Analyst/Senior Data Analyst Scientific Officers.

Grade 7/8 depending on experience.

Funding: Wellcome Trust

Term: 2 Years in the first instance, renewable possible up to 5 years.

Job Description

Modern biological research is increasingly dependent on the access to and manipulation of large datasets. These include the analysis of data from high-throughput DNA sequencing, microarray techniques, microscopy and mass-spectrometry as well as the effective exploitation of large public databases and tools. Frequently, a research project will, in addition to extensive laboratory-based experiments, require the development of novel analytic methods in order to make best use of the available data. As experimental data acquisition has scaled, the requirement for new computational software resources has also grown, but is often not met.

At Dundee we have strong research groups in both laboratory-based "wet" biological research and computational "dry" research and we are dedicated to driving the fusion of these two disciplines to squeeze as much insight as possible from our quantitative datasets. These two appointments are funded through a Strategic Award to the Wellcome Trust Centre for Gene Regulation and Expression and will join existing staff in a new Data Analysis facility in the College of Life Sciences, managed and headed by Professor of Bioinformatics, Geoff Barton and tightly integrated with the world-leading imaging and proteomic facilities and the many internationally competitive research groups housed within the College. The new appointments will occupy office space adjacent to Professor Barton's research group and thus will be exposed daily to colleagues with research expertise in "dry" biology. However, the key role of the new appointments is to be a source of expertise and advice on computational analysis for data-intensive "wet" biological research across the College to support its activities in proteomics, DNA sequencing imaging and microarray analysis. Accordingly, the new staff will act responsively to requests from laboratory-based researchers for assistance and input into research projects. However, they will also be pro-active in identifying opportunities for collaboration within the College and will be expected to attend group meetings and gain close familiarity with the goals of the 7 Research Divisions (http://www.lifesci.dundee.ac.uk/research). In addition to solving computational problems in collaboration with laboratory scientists, a key output of the facility will be new software tools and techniques that have been developed to solve the specific collaborative problems, but may be of wide applicability.

The new appointments will enjoy access to the excellent, managed computing facilities in the College of Life Sciences, including 400+ core CPU cluster, 130Tb SAN and petabyte backup. The new staff will not be expected to perform systems admin tasks, but will interact with the skilled computing support team to help tune facilities to their needs.

Requirements for the jobs

Minimum of 3-years experience of computational methods applied in a research environment. Strong demonstrated programming skills in a high-level programming language such as C/C++ or Java as well as at least one scripting language (e.g. Perl/Python) in a Unix/Linux environment. Strong ability to adapt to new ideas and learn new techniques as required for the job. Knowledge of biological concepts, database methods, and standard bioinformatics tools, libraries and techniques and familiarity with one or more data analysis packages (Matlab, Octave, R) would be advantageous. However, we encourage applications by individuals from research fields outside biology (e.g. Physics, Chemistry, Computing Science) who would enjoy the challenge of applying their skills to biological problems. For appointment on the higher grade we would expect at least three years post-doctoral experience in a relevant computational research discipline.

Candidate Profile

We are looking for mathematicians/bioinformaticians/computer scientists/programmers/physicists with strong programming and data analysis skills and the ability and enthusiasm to apply these to a range of biological problems. You might have gained these skills in biological environment, perhaps by carrying out Ph.D. research in bioinformatics, or by obtaining a M.Sc. in bioinformatics followed by a minimum of three years of programming and data analysis in another research environment. Alternatively, you might be a scientist with a strong research background in a non-biological discipline, but with excellent computational skills who is seeking to apply their expertise in a different and challenging field. You will wish to contribute to the cutting-edge research of a number of different groups while extending your range of skills and experience in programming and data analysis.

Strong interpersonal and communication skills are essential as is the ability to work as part of a team. You will have the ability to discuss research projects from a wide range of biological research fields and gain sufficient understanding of the topic to be able to apply your computational and data analysis skills to the problem, or to advise on the best way forward.

Informal enquiries may be made to Prof. Geoff. Barton - g.j.barton@dundee.ac.uk