Job Opportunities at the Centre for Computational Science

The Centre for Computational Science (http://ccs.chem.ucl.ac.uk/) at UCL is seeking high quality applicants for a range of new projects described below. Several of these are aligned with the activities of the new UCL Computational Life and Medical Sciences Network (http://www.clms.ucl.ac.uk/). The successful candidates will join a very active inter-disciplinary group, working on international projects in fields ranging from condensed matter physics and chemistry to life sciences and medicine.

RESEARCH ASSOCIATE
Computational Biomedical Infrastructure
(1 x Junior Software Engineer & 1 x Senior Software Engineer)

The project will involve the design, development, deployment and support of software infrastructure tools to share and access a wide range of medical and clinical data, in order to support real time clinical decision systems. The heterogeneous data sharing infrastructure developed will allow clinicians and researchers to securely share sensitive datasets, using distributed and possibly cloud based solutions as well as dedicated file servers to host large quantities of data. Funding is provided by the EU FP7 Virtual Physiological Human initiative.

The ideal candidates will have substantial experience of the development of distributed infrastructure software (including Web services), and will be required to work as part of a large international team on the development of infrastructure tools. At least one of the posts requires relevant prior experience at post-doctoral level. Applicants must be able to demonstrate a high-level of programming proficiency. A background in distributed (grid-based) high performance computing would be advantageous. Applicants should have (or, at a minimum, be about to obtain) a PhD in physics, applied mathematics, chemistry, computational biology, software engineering or computer science and a proven ability to work as a member of a team.

The posts will be on the UCL pay scale at Grade 7 (£28,983 – 35,646 p.a. plus London Allowance of £2,795 p.a.) and the second will be funded at Grade 8 (£36,715 – 43,840 p.a.), depending on qualifications and experience, plus London allowance.

For further details about the vacancy and how to apply on line please go to http://www.ucl.ac.uk/hr/jobs/ and search on Reference Number 1162320 (Junior post) or 1162844 (Senior post).

RESEARCH ASSOCIATE
Biomedical molecular dynamics

This post will involve the development of patient specific molecular models, using established molecular dynamics codes such as NAMD and GROMACS, to investigate and rank available drugs in order to inform the clinical decision making process. This work will build on and extend the Binding Affinity Calculator system developed at the Centre for Computational Science.

Applicants must have substantial experience of biological molecular simulation and related proven programming expertise. Experience of high performance visualisation and distributed (grid-based) high performance computing would be advantageous. Applicants should have (or be about to obtain) a PhD in physics, applied mathematics, chemistry, computational biology or computer science and a proven ability to work as a member of a team.

For further details about the vacancy and how to apply on line please go to http://www.ucl.ac.uk/hr/jobs/ and search on Reference Number 1163163.

RESEARCH ASSOCIATE
Multiscale Lattice-Boltzmann methods for complex fluids

The project will involve development, deployment and application of advanced computational methods including optimisation of high performance parallel lattice-Boltzmann codes for use in turbulence, complex fluid and blood flow research domains, in order to be able to run these codes on a range of evolving petascale and exascale architectures. The research will involve close collaborations with other personnel at CCS, across UCL, and within a number of international collaborations.

Applicants should have substantial experience of the use of lattice-Boltzmann methods within a high performance computing environment. Experience of high performance visualisation and grid computing would be advantageous. A proven ability to programme large scale parallel applications is essential. Applicants should have (or be about to obtain) a PhD in physics, applied mathematics, chemistry, computational biology or computer science and a proven ability to work as a member of a team.

For further details about the vacancy and how to apply on line please go to http://www.ucl.ac.uk/hr/jobs/ and search on Reference Number 1163161.

RESEARCH ASSOCIATE
Evolution and Assessment of Biomedical Informatics & the Virtual Physiological Human

The post holder will be responsible for coordinating UCL's activity in a newly funded EU FP7 Virtual Physiological Human (VPH) project (INBIOMEDVision) which aims to monitor and assess the evolution of the Biomedical Informatics field, including the impact of VPH, and to address the scientific challenges and opportunities by means of collaborative work performed by a broad group of international experts having complementary perspectives on the field. In addition, the post holder will be involved in the administration and management of other VPH projects currently underway.

Applicants should have substantial experience of biological and/or biomedical informatics, including computational biology/biomedicine. Experience in project management and administration would be an advantage. Applicants should have (or be about to obtain) a PhD in physics, applied mathematics, chemistry, bioinformatics, computational biology or computer science, or an MSc in a relevant discipline, and a proven ability to work as a member of a team.

The post is initially funded for 18 months

For further details about the vacancy and how to apply on line please go to http://www.ucl.ac.uk/hr/jobs/ and search on Reference Number 1163171.

RESEARCH ASSOCIATE
Quantum and classical molecular dynamics in life and materials science

The post holder will be responsible for developing molecular and multiscale models in two distinct research domains: biomolecular simulation and materials simulation. In the biomolecular domain, the post holder will be responsible for developing molecular models for use across a number of different biomedical research projects, concerned with drug binding efficacy in diseases such as HIV and cancer. In the materials domain the post holder will be responsible for developing quantum chemical methods to model chemical reactions of organic compounds within clay based layered materials, as well as course grained models for clay-polymer nanocomposites.

Applicants must have substantial experience of molecular simulation and proven programming expertise. Experience of high performance visualisation, distributed (grid) high performance computing and/or multiscale modelling would be advantageous. Applicants should have (or be about to obtain) a PhD in physics, applied mathematics, chemistry, computational biology or computer science and a proven ability to work as a member of a team.

The post is partly funded by the Qatar National Research Foundation, and the postholder will be expected to spend between 12 to 18 months at Qatar University in Doha where accommodation and certain living expenses will be provided in addition to tax-free salary.

For further details about the vacancy and how to apply on line please go to http://www.ucl.ac.uk/hr/jobs/ and search on Reference Number 1163169.

Positions are initially funded for 2.5 years from 1 February 2011, except where otherwise stated . The posts will be on the UCL pay scale at Grade 7 (£28,983 – 35,646 p.a. plus London Allowance of £2,795 p.a.), unless otherwise stated. The closing date for applications is 5pm on November 22nd.

Further particulars including job description and person specification are available at http://www.ucl.ac.uk/hr/jobs/ where you can apply online. Informal inquiries may be addressed to Professor Peter Coveney, Director of the Centre for Computational Science, University College London, 20 Gordon Street London WC1H 0AJ U.K. email: P.V.Coveney@ucl.ac.uk.

UCL Taking Action for Equality