

## **Department of Medical Genetics**

### **FURTHER PARTICULARS**

#### **EASIH IT SYSTEMS MANAGER**

The Eastern Sequence and Informatics Hub (EASIH) is a University Clinical School Research Facility hosted by the University Department of Medical Genetics and located on level 4 of the laboratory block on the Addenbrooke's Hospital site.

The facility provides a world class sequencing environment to a consortium of researchers both in and outside Cambridge. EASIH will co-ordinate with the other sequencing Hubs across the UK to work together on matters of national and international importance in the life sciences and routine medical diagnostic uses, in particular in transplantation and cord blood stem cells, prenatal diagnosis, and re-sequencing of disease genes.

EASIH will operate across five operating systems in both laboratory and office environments. The key functional activities are Administration, IT, Sequencing, Bioinformatics and Laboratory based.

#### **PURPOSE OF THE ROLE**

The role holder is responsible for providing day to day IT support for a regional scientific hub with an emphasis on biocomputing, including a wet laboratory, management of the sequencing laboratory and management of remote storage and computer servers.

The role holder is specifically responsible for the development and maintenance of hardware and software platforms, instruments network support, helpdesk, backup strategy, hardware and software audit, storage back charging and business continuity and disaster recovery provision. They will also provide support to the Head of Bioinformatics for web deployment, data pipeline management and data dissemination to the research community. Procurement and negotiation of computing equipment needs and costings will be required.

#### **KEY DUTIES AND RESPONSIBILITIES**

##### **Network and Systems Administration**

- Administration of role-based access control for all internal and external user accounts
- Quota management of users at all levels
- Maintains records of University IP address allocation, DNS entries
- Help desk for software installation/reliability
- Creation and maintenance of new and existing mailing lists
- Responding to and instigating communication with internal and national security bodies where necessary;
- Liaise with Cambridge CERT for security incidents
- Maintaining network security according to access policy
- Allocation and re-partition storage when required
- Analyzing system logs and identifying potential issues with computer systems; Planning for and responding to service outages
- Provides support related to computer virus and spyware removal, computer optimization, registry repair, device driver issues, Web related issues, and Windows security updates
- Disaster recovery backup, design of data backup policy, and implementation
- Configure and maintain different network topology issues and networking components including routers, switches, and firewalls (hardware/software)

##### **Equipment Provisioning**

- Installation, configuration and troubleshoot variety of hardware/software

- Applying operating system updates, patches, and configuration changes. (Unix/Linux/Windows)
- Design and delivery of rolling hardware replacement programme of equipment
- Negotiation and procurement of computing equipment, printers and consumables

#### Research Support

- Providing maintenance of network servers, including network domain, email file sharing, web and printing services
- Delivering rolling programme of equipment to the Hub
- Providing IT support for laboratory instruments
- Responsibility for running backup for main systems
- Design, maintain and monitor network infrastructure, equipment, and security policies

#### Project Support

- Bioinformatics Group
- Providing web-based services to deliver finalised data to research users
- Provide day to day data pipeline management support and checking
- Providing programming support to Bioinformatics team
- Maintenance of the Hub LIMS and QM IT systems
- Management of storage allocation to the project
- Management of any back charging associated with hardware use

#### User Support

- Inducting new staff to system use
- Explaining security policy to all staff
- Receiving and responding to verbal queries from staff
- Instigating and receiving/responding to emails from staff, including University computing staff
- Provides support to the COO for: diary management, email lists, operating system and word processing

#### Teamwork Teaching/Documentation

- Providing written documentation for staff
- Design/maintenance of the departmental web site
- Writing plans, and network schematics
- Writing up statistical results using complex figures to aid senior managers decisions
- Apprises scientists of Data Protection rights and responsibilities with regard to confidential patient data

### **TERMS AND CONDITIONS**

The salary will be within the scale Pay Grade 7 £27,578-£35,938 per annum. The hours of work are 38hrs per week (excluding lunch times). Annual leave is 41 days per calendar year which includes bank holidays and building closures. Leave must be arranged with the prior agreement of the Line Manager.

The University of Cambridge is committed to a policy and practice which require that entry into employment with the University and progression within employment be determined only by personal merit and by the application of criteria which are related to the duties of each particular appointment and the relevant stipend or salary structure.

No applicant for an appointment in the University, or member of staff once appointed, will be treated less favourably than another on the grounds of sex, marital status, race, ethnic or national origin, colour, or disability. If any employee considers that he or she is suffering from unequal treatment on grounds of sex, marital status, race, ethnic or national origin, colour, or disability he or

she may make a complaint which will be dealt with through the agreed procedures for dealing with grievances

#### **OTHER INFORMATION**

University Staff based at the Addenbrooke's site have access to a range of facilities on the site including a food mall, sports & social club (the Frank Lee Centre) and a shopping concourse. Car parking and discounted bus travel vouchers are also available.

#### **APPLICATION PROCEDURE**

Completed applications consisting of a CHRIS/6 (parts 1 and 3) downloadable from <http://www.admin.cam.ac.uk/offices/hr/forms/chris6/> and a CV should be emailed to Lynda Smith, Departmental Administrator, ([lms28@cam.ac.uk](mailto:lms28@cam.ac.uk)). Please quote the job reference **SS00223** on all correspondence.

Closing date: 25 May 2012

**We regret that we are unable to respond to all applicants so if you do not hear from us you have not been shortlisted.**

### Person specification for EASIH IT SYSTEMS MANAGER

	Knowledge, skills and experience required for role	Necessary	Desirable
Education & qualifications	The role holder will have a first degree in a mathematical/scientific/engineering subject and have further specialist training on high-end computing maintenance and administration		
Specialist knowledge & skills	<ul style="list-style-type: none"> <li>• Substantial knowledge of high-end computing environments</li> <li>• Ability to design and implement network infrastructure, maintenance, enhancements and solutions</li> <li>• Understanding of different components of IT in the current marketplace, including workstations and servers, operating systems and software applications and data communications hardware and software</li> <li>• Proficiency in UNIX/Linux, and Microsoft development environment</li> <li>• Expert Knowledge of routers, switches, firewall administration and TCP/IP-based LAN and WAN architecture, design and management skills</li> <li>• Experience and exposure to internet based solutions; dealing with real time issues and hardware troubleshooting, optimisation and performance improvement</li> <li>• RedHat Certification, Cisco CCNA</li> <li>• Experience of Internet Security for a Datacentre Network</li> <li>• Infrastructure, scripting or light programming</li> </ul>		
Interpersonal & communication skills	<ul style="list-style-type: none"> <li>• Highly motivated computer professional with excellent technical skills</li> <li>• Excellent verbal and written communication skills, enabling communication with all levels of staff both in the technical sphere and in liaison with non-technical colleagues and have an ability to organise time and work unsupervised</li> </ul>		
Relevant experience	<ul style="list-style-type: none"> <li>• Proven and demonstrable experience in computer networking and server management in an academic and/or commercial service environment</li> <li>• Broad experience in Systems and Network administration, working with large scale data storage systems and hands on technical skills and understanding of data centre issues at Snr Network Administrator or Snr Network Engineer level</li> <li>• Knowledge and experience of work on best practices for network monitoring, security improvements, uptime, change control, etc</li> </ul>		