Department of Physiology, Anatomy and Genetics

Job Description for Mr. T. R. Pragnell (Currently Grade 7)

Job Title: Senior IT Officer - Application and Hardware Specialist

Responsible to the IT Manager (Mr Neil Hoggarth)

Responsible for the IT Support Officer (part-time)

Whilst the management of DPAG's IT support system may he represented in a two dimensional structural form as per the organizational chart; in reality it is important to emphasise its co-operative and organic nature. Individual members of the team have clear areas of expertise within the whole where they make a significant contribution to the strategic development of IT in the department and take professional responsibility without any form of direct supervision.

Main Role

Software development to support teaching in the department and division.

Two major aspects of this role currently are

1. Writing and maintaining a number of data acquisition and analysis programs used in the undergraduate classroom, and supporting the use of that software in the MSTC.

2. Writing and maintaining an extensive web application which allows undergraduates to book tutorials offered by college tutors.

The role requires that the post holder consult and liaise with members of academic staff on the design of specific software, but also work on their own initiative. Some interaction with students and tutors is necessary. The post-holder is one of the Department's representatives at MSTC IT meetings.

In addition to this role, the post holder works as a senior member of a team of departmental IT support staff and contributes to policy and technical decisions both at team meetings and individually. The team receives help desk requests for assistance from academic staff by email and in person. The post holder will take on those requests most appropriate to their specialisations, but may also take on any other jobs when covering for other members of the team.

The post holder is required to supervise the part-time IT Support Officer who is the first-line help-desk contact. The post-holder also contributes to providing first-line help-desk support on a rota basis, and provides absence cover.

Other Roles

Software development to support Research and Administration in the department. This may include data acquisition and data processing projects, intranet web pages and databases, and supporting software

Set up and maintenance of networking hardware, computer data acquisition interfaces, and PC hardware. Choosing appropriate hardware, preparing costings, and communication with suppliers is required, as well as an intimate knowledge of digital and analogue electronics.
In collaboration with Windows systems staff, provide an archive of departmental Windows software and creating scripting software to install applications.

Management of the day-to-day operation, maintenance and incremental expansion of the physical IT infrastructure (including the UTP cabling, network distribution closets, ethernet switches, wireless access points, server room, etc) in the Sherrington and OCGF buildings. This includes selection of, and technical liaison with, outside contractors for the installation of additional network facilities.

Various other tasks such as UNIX and Windows server administration, Windows application support, configuration of networking software on PCs, operating system and software installation and configuration, PC hardware and software troubleshooting, advice on suitable hardware purchases.

**Abilities - Software/Hardware**

Fluent in several major programming languages, and ability to learn other programming and scripting languages as required.

Fluent in the National Instruments Labview development environment, currently used for undergraduate classroom software.

Fluent in web application programming and database languages, specifically HTML, Perl, PHP, Javascript, CSS, SQL.

Ability to manage web server and database server software on UNIX sufficient to support web application programming.

Familiarity with UNIX systems sufficient to perform day to day management tasks such as adding users and machines, maintaining print queues, setting up file shares and email administration.


Ability to troubleshoot hardware and software faults in a logical and efficient manner.

Use of web sites and mailing lists to research solutions to problems and new approaches to IT service provision, and also to keep up to date with developing technologies

**Abilities - Communication**

Ability to communicate effectively with all members of the department including academic staff, for example when discussing development of software projects for the department, when troubleshooting individual or research group computing problems, best practice for IT procedures, and recommendation of IT purchases.

Ability to liaise with other IT staff in the University, including collaborating on projects and contributing in meetings with key academic staff. A specific example is managing the link between the divisional tutorial booking software and the colleges' tutorial reporting software.
Excellent writing skills for both technical and user documentation of software programs and operating procedures. Ability to produce clear and comprehensive emails in reply to technical assistance queries including step-by-step instructions tailored to the technical comprehension level of the intended audience.