

Post: 5401BR Senior Applications Developer & Curator
Career Pathway: MPSS
Grade: 6

ADVERT

Senior Applications Developer & Curator
Division of Infection and Immunity
School of Medicine
College of Biomedical and Life Sciences

We are seeking an individual who has a background in analytical chemistry/biology or related discipline, and experience in the design and implementation of software solutions for processing, searching, display and analysis of data. You will independently develop software for analysis of data from mass spectrometry. You will also write programs to generate *in silico* datasets; develop software pipelines to upload and manage data and will be involved in curating information from existing sources.

This role will work within a multidisciplinary team that includes scientists and informaticians.

This post is a full time (35 hours per week), is available immediately and is fixed term until 29th January 2022.

Salary £32,004- £38,183 per annum (Grade 6)

JOB DESCRIPTION

Job Purpose

Curating data, developing and supporting the efforts of a team of programmers/curators as part of the international database project, LIPID MAPS (<http://www.lipidmaps.org/>). Leading on the design and development of new database/software catering for the analysis, integration and visualisation of lipidomic data derived from Mass Spectrometry (MS).

Duties and Responsibilities

Key Duties

- Design, write and implement software for the analysis of Mass Spectrometry (MS) data relating to lipidomics experiments. Software developed will have international impact and will be made accessible via the LIPID MAPS portal (<http://www.lipidmaps.org/>).
- Provide specialist knowledge and engage in software development within an international, multi-centre team. The role holder will use judgement and creativity to suggest the most appropriate course of development where appropriate, ensuring that complex and conceptual user-requirements are translated into appropriate software solutions and tools
- Investigate coding initiatives and report effectively within the team
- Ensure that the project milestones are met, proactively changing delivery according to user

requirements

- Establish working relationships with key contacts, developing appropriate communication links within the University and internationally recognised researchers within the field of lipidomics and other high-profile, international databases
- Plan and deliver specific small-scale coding projects, supervising project teams created as needed and co-ordinating and working closely with a project coordinator and other programmers
- Engage in cross-training within the team and provide a secondary support buffer for curation and other team roles, where appropriate
- Provide professional advice and guidance on the LIPID MAPS resource and database processes and procedures to internal and external customers that will have institute wide impacts, using judgement and creativity to suggest the most appropriate course of action where appropriate, and ensuring complex and conceptual issues are understood
- Take responsibility for resolving issues independently within a team of programmers/curators within the LIPID MAPS group where they fall within set role objectives
- Investigate and analysis specific issues within LIPID MAPS, creating recommendation reports, supported by advances within the lipidomics research field
- Ensure that the provision of LIPID MAPS objectives is delivered to the institution, proactively changing the delivery according to customer requirements
- Create specific working groups from colleagues across the University to achieve School of Medicine and Division of Infection and Immunity objectives
- Plan and deliver specific small scale projects, co-ordinating and
- Develop and deliver training within LIPID MAPS and lipidomics in general
- Instruct and guide others within the LIPID MAPS team and other employees across the University within the field of lipidomics and in relation to the LIPID MAPS resource

General Duties

- Ensure that an understanding of the importance of confidentiality is applied when undertaking all duties
- Abide by University policies on Health and Safety and Equality and Diversity
- Perform other duties occasionally which are not included above, but which will be consistent with the role

PERSON SPECIFICATION

Essential Criteria

Qualifications and Education

1. MSc or PhD Degree in a computational, physical or life science /NVQ, or relevant experience.

Knowledge, Skills and Experience

2. Substantial background in at least one of the following areas:
 - mass spectrometry
 - analytical chemistry,
 - cheminformatics,
 - bioinformatics
 - an associated discipline
3. Experience of coding in at least 2 of the following languages as well as knowledge of relational database:
 - PHP,
 - Perl,
 - Python,
 - R,
 - SQL
4. Proven experience in developing new processes and procedures

Customer Service, Communication and Team Working

5. Ability to communicate and translate conceptually detailed and complex information effectively and professionally with a wide range of people
6. Evidence of ability to explore customers' needs and adapt software/service accordingly
7. Proven ability to develop networks in order to contribute to long term developments

Planning, Analysis and Problem solving

8. Evidence of ability to solve expansive problems using initiative and creativity; identify and propose both practical and innovative solutions
9. Evidence of demonstrable knowledge of key advances within software development
10. Evidence of ability to undertake and deliver specific projects where others are involved

Desirable Criteria

1. An understanding of lipid biology
2. An understanding of basic statistics

For more information, please see http://www.bioinformatics.org/forums/forum.php?forum_id=12523.