<div align="center">**GENERIC JOB SUMMARY**</div>

JOB TITLE: RESEARCH POSTOCTORAL SCIENTIST

JOB PURPOSE: To work on numerous mass spectrometry-based metabolomics projects investigating a variety of neurodegenerative diseases.

MAIN ACTIVITIES/RESPONSIBILITIES:
The following describes the type of work that is typically required of research staff at this level. It is not expected that anyone carries out all the activities mentioned below and some carry out additional duties.

- Conduct research involving LC-MS metabolomics, and apply these techniques to the study of human diseases.
- Perform metabolite analyses on biofluid and tissue specimens using accurate mass LC-Orbitrap-MS including sample preparation, data acquisition and data processing with commercial and in-house software.
- Perform metabolite analyses on biofluid and tissue specimens using commercially available kits (Biocrates) for in-house and fee for service studies.
- Design, develop and refine experimental protocols to differentiate disease states from control groups.
- Operate, maintain and troubleshoot issues with liquid chromatography, mass spectrometers and auxiliary instruments.
- Present regular progress reports on research to members of the research group or to external audiences to disseminate and publicise research findings.
- Prepare, often in consultation with supervisor, material for publication in national and international journals and presentations at international conferences.
- Carry out routine administrative tasks associated with the research project/s to ensure that project/s are completed on time and within budget. These might include organisation of project meetings and documentation, financial control, risk assessment of research activities.
- Read academic papers, journals and textbooks to keep abreast of developments in own specialism and related disciplines.

PLANNING AND ORGANISING:
- Plan for specific aspects of research programmes. Timescales range from 1-6 months in advance and contribute to research group planning.
- Plan for the use of research resources, laboratories and workshops where appropriate.
- Plan own day-to day activity within framework of the agreed research programme.
- Plan up to a year in advance to meet deadlines for journal publications and to prepare presentations and papers for conferences.
- Coordinate and liaise with other members of the research group over work progress.

RESOURCE MANAGEMENT RESPONSIBILITIES ((e.g. finance, people, equipment, etc):
- Ensure research resources are used in an effective and efficient manner.
- Provide guidance as required to support staff and any students who may be assisting with research.
- Contribute to commercial study contracts.

INTERNAL AND EXTERNAL RELATIONSHIPS:
- Liaise with research colleagues and support staff on routine matters.
- Make internal and external contacts to develop knowledge and understanding and form relationships for future collaboration.
- Attend and contribute to relevant meetings

QUALIFICATIONS, KNOWLEDGE, SKILLS AND EXPERIENCE:
ESSENTIAL CRITERIA:
1. A Ph.D. in a relevant Life Sciences subject (e.g. Biology, Biochemistry, Biomedical Sciences) or a relevant Chemistry based subject.
2. At least 3 years' experience of using and maintaining mass spectrometers.
3. Understanding of the issues pertaining to LC-MS analysis of small molecule metabolites.
4. Have experience using Biocrates kits.
5. Capable of developing and optimizing chromatography methods for a range of metabolites/tissues, whether that is targeted or untargeted analyses.
6. Comfortable working with a range of biological specimens.
7. Experience working with animal models.

8. Some knowledge of multivariate statistical software packages (e.g. SIMCA, MATLAB, R etc.).
9. Ability to write papers and present results.
10. Ability to work autonomously.
11. Ability to work effectively within an experimental team.
12. Organised and attentive to detail.
13. Ability to meet deadlines.
14. Dedicated to the completion of a project.
15. Capable of multitasking and prioritizing work.
16. Strong work ethic, clear thinker and strong sense of urgency.
17. Strong Interpersonal skills.
18. Ability to work seamlessly as part of a diverse and multidisciplinary team (scientists and physicians).
19. Demonstrate a willingness to teach others in the lab/research institute.

DESIRABLE CRITERIA:
1. A background in metabolomics research.
2. A background in neurodegenerative disease research.
3. Hands-on experience in applying LC-MS (Orbitrap-MS) to untargeted and targeted (Waters TQ-S; Sciex 6500+) small molecule metabolite analysis.
4. Experience in lipidomics.
5. Experience with ^{1}H NMR metabolomics.
6. Hands-on experience in using chemical/metabolomics databases to identify unknown metabolites.
7. Hands-on experience with multivariate statistical software packages (e.g. SIMCA, MATLAB, R etc.).
8. Experience attracting external funding.

To apply please visit https://www.beaumont.org/careers and use Requisition # 30132911.

For further information please contact Dr. Stewart Graham (stewart.graham@beaumont.org).