

Postdoctoral position in nuclear magnetic resonance (NMR) spectroscopy
Closing date – Open until filled

The Wishart lab group at the University of Alberta's Department of Biological Sciences is a world leader in metabolomic research. We are currently seeking a full-time post-doctoral fellow in the area of nuclear magnetic resonance (NMR) spectroscopy. The successful candidate will have proven experience in Biochemistry or a related field and should have experience in the NMR analysis of both small molecules and larger biomolecules. The incumbent will be responsible for conducting novel NMR experiments, developing and testing NMR pulse sequences, analyzing and interpreting NMR results, and writing manuscripts.

Dr. David Wishart is a Distinguished University Professor in the Department of Biological Sciences at the University of Alberta. He is a highly respected scientist who operates one of the largest and best-equipped laboratories at the University of Alberta. His research facilities are situated in the Department of Biological Sciences and the Centennial Centre for Interdisciplinary Sciences on the University of Alberta campus. Dr. Wishart's laboratories contain more than \$10 million in cutting-edge analytical equipment including more than a half dozen high-end mass spectrometers and a fully equipped 700 MHz NMR spectrometer with a 5 mm triple resonance cryoprobe and a SampleJet autosampler. Dr. Wishart has active research programs in precision health, cancer (lung, breast), infectious diseases (COVID-19), neurological diseases (Alzheimer's, ALS), kidney diseases, animal/livestock health, forestry research, microbiome research, food chemistry, structural biology, portable sensor systems and metabolomics technology development. He has active collaborations with more than 30 scientists around the world. Additional information about Dr. Wishart and his laboratory can be found on The Metabolomics Innovation Centre (TMIC) website at www.metabolomicscentre.ca

Duties

- Recording various NMR experiments for both proteins and small molecules (for metabolomics)
- Analyzing and interpreting NMR experiments of both proteins and small molecules, such as structure determination and validation
- Preparation, analysis and quantification of small molecules in complex mixtures (biofluids)
- Designing and optimizing new NMR pulse sequences for biomolecules and small molecules in complex matrices
- Conducting high quality research under the guidance of senior researchers.

- Writing first drafts of manuscripts for publication in high impact journals
- Keeping current with regard to the latest knowledge of international research trends and outcomes in relevant areas, and make significant contributions to the applications of fundamental knowledge
- Working with a high degree of independence following a research plan approved by the PI
- Preparing abstracts for conferences meetings and presents these research findings at meetings

Qualifications

- PhD in Biochemistry or a related field.
- Must have working experience and a working knowledge of NMR.
- Candidates will be expected to mentor others in data analysis methods, possess strong written and oral communication skills, and have solid organizational skills.
- Ability to write Standard Operation Procedures (SOPs) and other related documentation
- Demonstrated attention to details and problem-solving skills
- Self-starter and sensitive to project timelines
- Ability to work as part of a team

To Apply:

Please send inquiries and applications to Dr. Wishart administrative team at: wishartadmin@mailman.srv.ualberta.ca.

Applications should include a cover letter, CV as well as the names and contact information of three references.

Closing date: We will begin considering applications immediately until the position is filled.

We thank all applicants for their interest; however, only those individuals selected for an interview will be contacted.

How to Apply

Email wishartadmin@mailman.srv.ualberta.ca.

All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority. If suitable Canadian citizens or permanent residents cannot be found, other individuals will be considered. The University of Alberta is

committed to an equitable, diverse, and inclusive workforce. We welcome applications from all qualified persons. We encourage women; First Nations, Métis and Inuit persons; members of visible minority groups; persons with disabilities; persons of any sexual orientation or gender identity and expression; and all those who may contribute to the further diversification of ideas and the University to apply.