
Job Title	Computational Science PostDoc - Structural Biology
PVN ID	RC-2211-005242
Category	Research
Location	CUNY-ADVANCED SCIENCE RESEARCH CENTER
Department	Structural Biology Initiative
Status	Full Time
Hourly Rate	\$30.00-\$37.00
Hour(s) a Week	35
Closing Date	Feb 02, 2023 (Or Until Filled)

General Description

The Johnson group at the CUNY ASRC Structural Biology Initiative (<https://asrc.gc.cuny.edu/people/bruce-johnson/>) seeks applications from individuals with experience in software development and NMR (Nuclear Magnetic Resonance) spectroscopy, computational biology, computer science, biology or chemistry to serve as postdoctoral fellows in computational science. Several positions are available and the job description and level is dependent on the skills, experience and career goals of the candidates.

The Computational Scientists will be involved in several specific NMR related projects that are funded by three NIH grants. All projects will involve the production of state-of-the-art software projects that will be used by an international audience of scientists. The projects involve developing NMRFx, an integrated software suite for macromolecular NMR analysis, and involves software development for NMR processing, visualization and analysis, and structure calculation using torsion angle molecular dynamics and developing RING NMR Dynamics, an application for analyzing macromolecular dynamics by NMR. The grants involve collaborations with NMR scientists at the New York Structural Biology Center (<https://nysbc.org>) and with the Center for Structural Biology of HIV RNA (<https://crna.med.umich.edu>).

Position is available immediately.

Application Information

Please submit application materials in PDF format and include both a resume and a cover letter describing your interest and summarizing your qualifications for the position.

Other Duties

Other duties may include:

- Developing new algorithms for data analysis

- Working with experimental NMR scientists and their data
- Publishing articles describing the research and developed software
- Training users in use of the developed software
- Presenting at workshops and meetings.

Qualifications

Minimum Qualifications (depending on position)

- A PhD from an accredited institution in Chemistry/Biochemistry/Computational Biology/Computer Science.
- Software development experience in Java (or C++) and Python
- Experience using standard software engineering tools including source code control (such as Git), integrated development environments (such as NetBeans), project management tools (such as Maven) and test suites (such as Junit).

Preferred Qualifications

- Coursework and/or experience in NMR spectroscopy (especially in NMR relaxation analysis) or structural biology
- Course work or experience in numerical methods such as linear algebra, signal processing or optimization.
- Course work or experience in deep learning.
- Experience with GPU programming