

Biomolecular Magnetic Resonance Facility



About Us

The Biomolecular Magnetic Resonance Facility (BioNMR) is available to all investigators at the University of Virginia and has four NMR spectrometers. They all execute experiments typically used for structure elucidation and dynamics characterization of both small and large (ie. protein) molecules in solution.



Our Services

Nuclear magnetic resonance (NMR) spectroscopy provides information on molecular structure and dynamics at atomic level resolution. The UVA Biomolecular Magnetic Resonance Facility facilitates and promotes research which utilizes NMR spectroscopy to examine molecules in solution. Molecules with molecular weights between 10 and 10^6 grams/mol can be studied. Assistance is available for all who wish to use NMR spectroscopy.

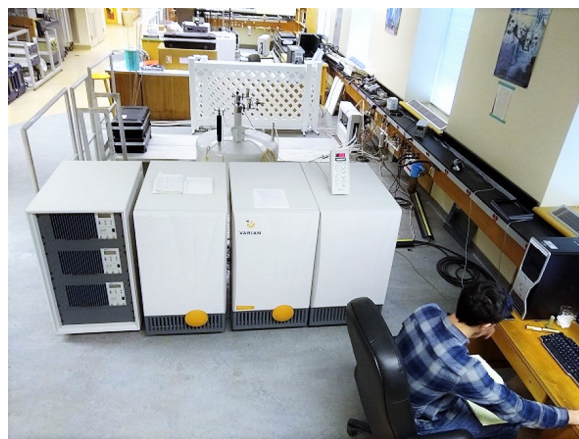
- Consultation
- 600 and 800 MHz NMR spectrometer time

Instrumentation

- **Neptune – Bruker AvanceIII 800** located in Room 138
Specifications: 4 RF channels, pulse field gradient - Z-axis, probes and accessories: 5mm HCN Zpfg cryoprobe
- **Ariel – Bruker AvanceIII 600**
located in Room 138
Specifications: 4 RF channels, pulse field gradient - Z-axis, probes and accessories: 5mm HCN Zpfg, auto sample changer
- **Echo – Varian NMRS 600**
located in Room 175
Specifications: 3 RF channels, pulse field gradient - Z-axis, probes and accessories: multiple probes
- **Shamu – Varian NMRS 600**
located in Room 122
Specifications: 4 RF channels, pulse field gradient - Z-axis, probes and accessories: 5mm HCN and HCP Zpfg
- **New 400 MHz and 600 MHz Bruker Neo spectrometers** with large sample temperature range (140°C to -80°C) and automatic sample changers will be installed in late 2023 and early 2024.

*The BioNMR lab instrumentation
can be used to obtain atomic
resolution information about*

molecular structure



***Enhancing Research,
Rigor and Reliability***

Our Team

Jeff Ellena PhD - Director
Senior Scientist



Contact

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med.virginia.edu/biomolecular-magnetic-resonance-facility/

Request services on:
uva.corefacilities.org/account/login

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