

Northeast Structural Genomics Consortium NESG NMR Wiki Site

<http://wiki.nesg.org>

A wiki containing many of the protocols, procedures, and experimental set-ups used by the Northeast Structural Genomics Consortium is ideal for training new protein NMR spectroscopists.

A large part of the 'combined NMR spectroscopic wisdom' of the NESG NMR groups is now publicly available to everyone in the NESG wiki. The wiki includes contributions from the Arrowsmith, Kennedy, Montelione, Prestegard, and Szyperski NMR groups.

The screenshot shows a web browser displaying a wiki page. The page title is "Deuterium pulse width calibration and decoupling". The content includes an introductory paragraph, a "Contents" table of contents, and two main sections: "2H 90° Automatic Calibration" and "2H 90° Manual Calibration". The "2H 90° Manual Calibration" section includes a list of steps for manual calibration. At the bottom of the page, there is a 1D NMR spectrum plot showing several peaks.

NMR spectroscopy is a very important technique for structural genomics NMR can often succeed where numerous crystallographic attempts have failed, and partly because it provides information about the dynamic properties of proteins.

Three centers have produced nearly all of the PSI NMR structures: NESG, CESG, and JCSG. These PSI centers have developed high-throughput pipelines for solving structures. In particular, some 45% of the > 800 protein structures deposited in the PDB by the NESG consortium have been solved by NMR methods.

The NESG has developed an internal wiki site to share the methods we are developing. Over 50 subscribers have entered valuable information about protein sample production, NMR data acquisition data, NMR data processing, NMR resonance assignment, and structure calculation and validation.

More than ~230 articles on distinct topics are currently available, and this number is sure to grow now that it is open to the wider world.

If you want to contribute to the site, you will need to sign in. But if you just want to browse the site, there is no need to register.

Adopted from PSI KB Highlight written by Maria Hodges.