

THE DISTILLERY

This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Instrumentation			
High-speed NMR spectroscopy	A combination of alternative sampling and data analysis processes enables faster completion of NMR spectroscopy experiments, thus facilitating structural genomics research. The strategy combines three data-acquisition strategies—nonlinear sampling, targeted acquisition and hyperdimensional spectroscopy—with multidimensional decomposition, a mathematical technique that had been applied to other data analysis problems but not to NMR. The 8 kDa globular protein ubiquitin and the 13 kDa naturally disordered protein ζ_{cyt} were characterized in 0.4 and 5.2 hours, respectively, representing time savings of ~100-fold over conventional methods. Further validation might be achieved with NMR spectroscopy experiments on known proteins in a blinded fashion.	Not applicable	Jaravine, V. <i>et al. J. Am. Chem. Soc.</i> ; published online March 3, 2008; doi:10.1021/ja0772820 Contact: Vladislav Y. Orekhov, Harvard University Medical School, Boston, Mass. e-mail: orov@nmr.gu.se