NUCLEAR MAGNETIC RESONANCE IN STRUCTURAL BIOLOGY

Ana Carolina de Mattos Zeri

Center for Structural Molecular Biology (CeBiME), Brazilian Synchrotron Light Laboratory (LNLS), Caixa Postal 6192, CEP 13084-971 Campinas SP aczeri@lnls.br

Nuclear Magnetic Resonance (NMR) is one of the biophysical techniques at the forefront of modern Structural Biology, alongside X-ray Crystallography at world-wide centers for Structural Genomics. Multi-user NMR facilities are justified due to the high costs of operation, maintenance, user training and support, and there are a few examples of such facilities, like the Brazilian Synchrotron Light Laboratory, in Campinas, and the NANUC- National High Field Nuclear Magnetic Resonance Centre, in Canada, among others. The current model of operation of the LNLS NMR facility will be presented, as well as some of the preliminary results in projects of our own and in collaboration with other researchers.

Keywords: protein structure, nuclear magnetic resonance, multi-user facilities