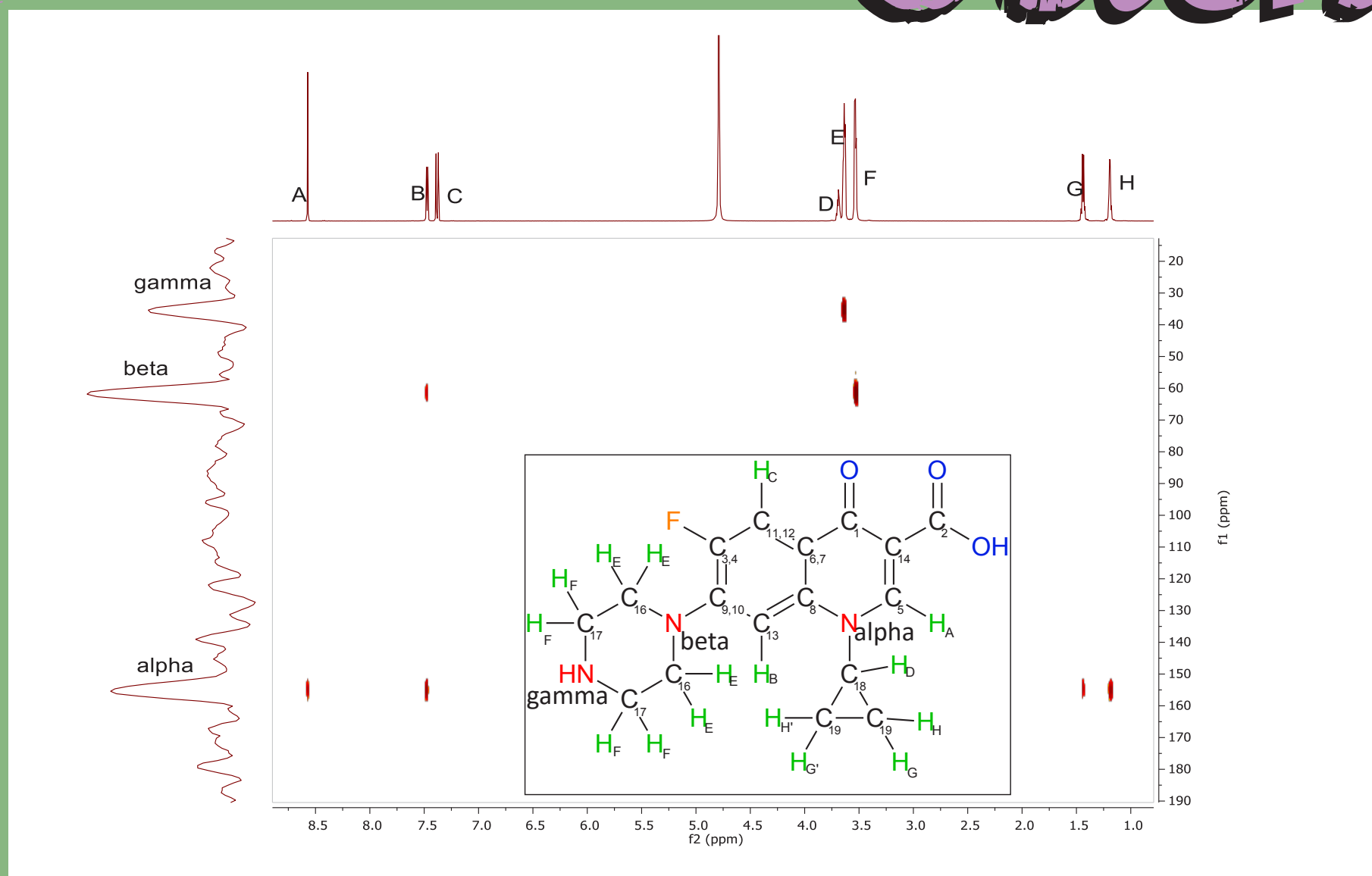


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NMR is Science



^{15}N -HMBC of ciprofloxacin

Justin Barry, 2013

Chemistry Department | University of Oregon

Field strength: 600 MHz

Why is this your favorite spectrum?

This compound was given to me and another student as part of a graduate-level NMR class. The lab component had us identify a complex compound using only NMR techniques as a final project. We previously knew nothing of the compound. We threw all we had at the molecule but still needed a ^{15}N NMR. The question becomes: how do you get a ^{15}N NMR with an unenriched and unconcentrated sample? The answer: with a little help from your friends...namely protons. This ^{15}N -HMBC shows three distinct nitrogen environments and correlations to proton environments. (Later, we found this was shown in 2004, DOI:10.1002/mrc.1468.)