

# **Biomolecular Nuclear Magnetic Resonance Spectroscopy**

## **NMR's Power: *Beyond Structure***

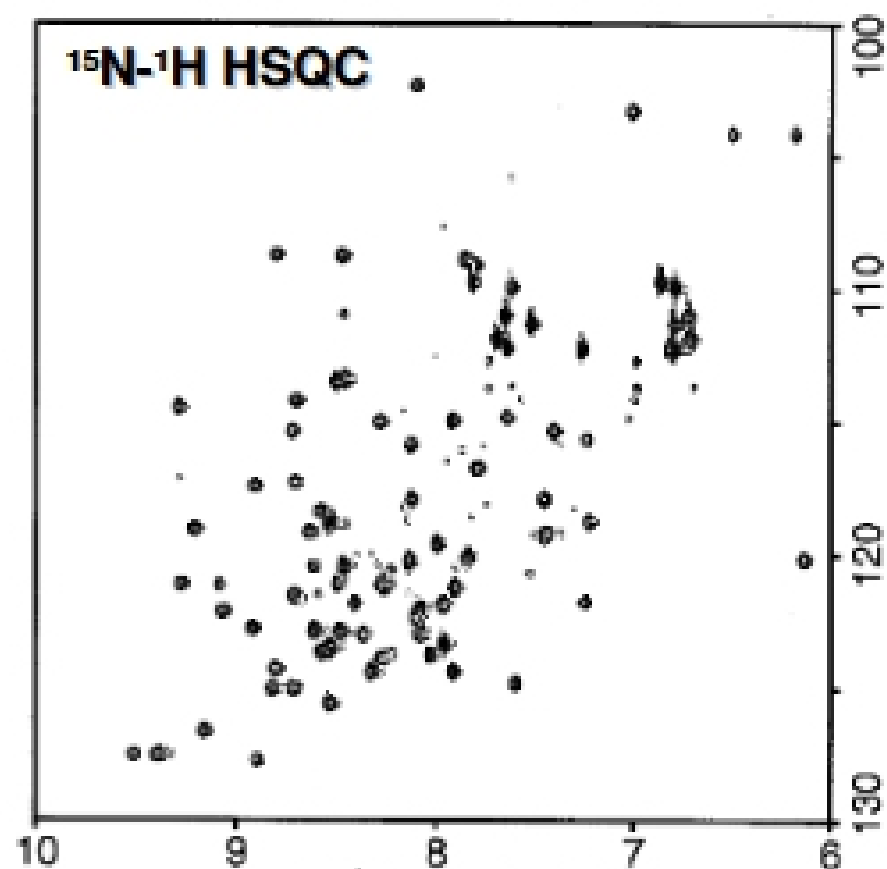
- **Analytical biochemistry**
- **Comparative analysis**
- **Interactions between biomolecules**
- **Protein dynamics from NMR**

# Analytical Protein Biochemistry

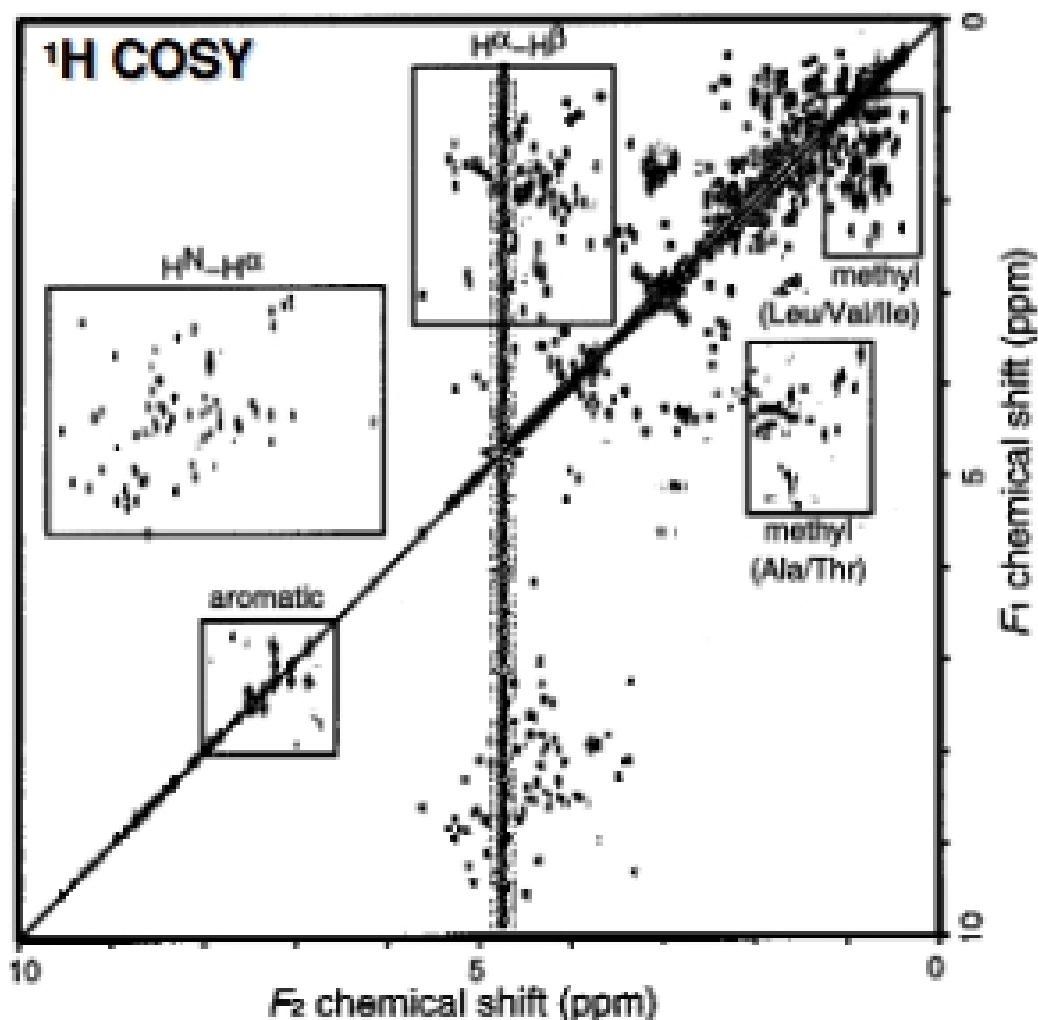
- Purity (can detect >99%)- heterogeneity, degradation, buffer
- Is a construct folded- great complement to crystallography
- Check on sequence (fingerprint regions)

*Don't need the sequence-specific assignments!*

# Protein Folding and Fingerprints



**$^{13}\text{C}$  HSQC also!**



**Assay of tertiary structure & check sequence**