

**Chemistry 5.08** (Spring 2016)

Recitation #5 (March 3-4, 2016)

Overview of cross-linking, including photo-reactive cross-linking methods

**Discussion Questions**

1. What methods are available to study protein-protein interactions?
2. Why is chemical cross-linking commonly employed to identify and interrogate protein-protein interactions?
3. What types of cross-linkers are available and routinely used?
4. What are the pitfalls of non-specific homo- or heterobifunctional cross-linkers?
5. What are the advantages of site-specifically modifying a protein with a cross-linking reagent? Is it worth the effort?

**Suggested references for further information (optional reading):**

Easy molecular bonding crosslinking technology: Reactivity chemistries, applications and structure references. Thermo Scientific Crosslinking Technical Handbook.

Chemical cross-linking and mass spectrometry to map three-dimensional protein structures and protein-protein interactions. Sinz, A. *Mass Spectrometry Reviews* **2006**, 25, 663-682.

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