

### **IR of Proteins Pre-Lab**

1. What are the biological functions of the three proteins we will be using (Ribonuclease A, Lysozyme and Myoglobin)?
2. What does IR spectroscopy tell us about the proteins besides the fact that proteins are composed of amides?
3. What are secondary structures of proteins? How does IR spectroscopy give information about the secondary structure?
4. Why do we take the IR spectra at different temperatures? What do you expect to be different between the spectra at the different temperatures?

#### EXTRA CREDIT:

What other spectroscopic techniques are used to characterize proteins? List a few examples, pick one technique and explain the technique in more detail? How does this technique compare with IR spectroscopy? What different information does it give you?

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5.35 / 5.35U Introduction to Experimental Chemistry  
Fall 2012

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