

Chemistry 620
Analytical Spectroscopy
Summary Questions – Paper #3 Due 5/1/08 (revised)

Campagnola, P. J., Wei, M. D., Lewis, A., Loew, L. M., High-resolution nonlinear optical imaging of live cells by second harmonic generation. *Biophys. J.* **1999**, 77(6), 3341-3349.

A good summary of this paper will be no more than 3 pages long, written using a word processor in essay format (a few paragraphs, 1.5 or double spaced) and address the following issues without repeating the questions explicitly:

1. What is the purpose of the work described by Campagnola *et al*?
2. Describe the approach the authors take to achieve their objectives.
3. List the light-matter interactions occurring in the sample that form the basis for the work.
4. Outline the instrumentation the authors used to make the measurement(s), briefly explaining the operation of any device or component that has not be discussed previously.
5. Summarize the principal results described (figures or tables) in the paper.
6. Summarize the conclusions the authors draw from their results.
7. Are the conclusions well supported by the data?
8. Discuss the availability and performance of other measurements to provide the information generated in this paper. Describe the relative advantages and disadvantages of the approach used in this paper to an alternative measurement.
9. List the references you used to answer questions 1 – 8.