

STUDY GUIDE FOR THE FOURTH EXAM
(Lecture 20 – Protein Targeting, Secretion and Turnover; Signal Transduction)

The following will permit you to focus on information that you will need to know for the exam and provide you with an in-depth knowledge of many of the most salient points presented in lecture 20.

For the exam, you will only be responsible for what was presented in the lecture -- the assigned reading in the text (Chapter 27, Pp. 1068-1077; Chapter 12, Pp. 435-443) serves as a background to better understand the points raised in lecture.

My questions on this exam will be of a similar type to those on the previous exams that are posted on the MBB Website: (<http://mbb.rutgers.edu/MBBCourses.html>)

Protein Targeting, Secretion and Turnover

1. Know how proteins are targeted to the ER
2. Know how ER-targeted proteins reach their final locations in the cell
3. Know the components of the ATP-dependent eukaryotic protein degradation pathway
4. Know how the proteasome functions

Signal Transduction

1. Know how the specificity of the signal transduction process is governed
2. Know the β -adrenergic receptor signal transduction pathway
3. Know the ligand activated phospholipase C signal transduction pathway
4. Know how signal transduction responses are terminated