



CHEM 330 Biochemistry I

Tenth Week
November 5 – 9, 2012

Assignments

- Reading: Chapter 14, Chapter 15, sections 16.1, 16.2, 16.3 of Chapter 16, and sections 19.1, 19.2, 19.3 of Chapter 19
- Exam 3 is due Friday, November 9, 2012.
- Course evaluations will be available on Banner 10th week, beginning on Monday (November 5), and **ending on Sunday** (November 11, 2012). Please fill out course evaluations for the courses in which you are enrolled.

Announcements

- Obviously, you should be working on Exam 3 this week. You are welcome (and, in fact, encouraged) to come to my office to discuss it. ***Please do not wait until the last minute to begin work on the exam!***
- If you are taking CHEM 331 Biochemistry II, please begin thinking about topics in which you are especially interested.
- Good luck on exams, and have a good break!

“The discovery of insulin by Banting and Best in the early 1920s was a milestone of medical research in the 20th century and resulted in the award of a Nobel Prize in medicine.

“The discovery and then availability of insulin coupled several decades later by the development of bioassays for insulin allowed for two major findings. The first is that the hyperglycemia of diabetes had two distinct origins occurring in the absence and presence of circulating insulin, leading to the postulation of two forms of diabetes These two forms marked by nominally zero and high levels of insulin were earlier known as juvenile-onset and maturity-onset diabetes but are now termed type 1 and type 2 diabetes, respectively. The second major finding was that the response or sensitivity of individuals to the glucose-lowering action of insulin could vary greatly. This variability in insulin sensitivity led to the recognition of the existence of insulin resistance (part of the cause of type 2 diabetes). It was later established that insulin resistance clusters with a variety of risk factors for cardiovascular disease— dyslipidemia, hypertension, and hypercoagulability— which are physiological/metabolic disturbances that form a syndrome known as syndrome X, the metabolic syndrome, or the insulin-resistance syndrome” – Julie Nigro, Narin Osman, Anthony M. Dart, and Peter J. Little, *Endocrine Reviews* 27, 242-259 (2006)