

BIOCHEMISTRY 211
Fall, 2003

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<u>Date</u>		<u>Topic</u>
Sept 25	Lecture 1	Regulation of Gene Expression in Bacteria
Sept 30	Lecture 2	Eukaryotic Gene Expression
Oct. 2	Lecture 3	Chromatin
" 7	Lecture 4	Models for control of gene expression
" 9	Lecture 5	Splicing
" 14	Lecture 6	RNA Editing
" 16	Midterm (Lectures 1-5)	Boyce 1471 5:10 - 6:30 pm
" 21	Lecture 7	RNA Enzymes: RNase P, and Self Splicing
" 23	Lecture 8	3' end formation/polyadenylation
" 28	Lecture 9	RNA Transport/localization
" 30	Lecture 10	RNA Stability-Molecular Machinery
Nov. 4	Lecture 11	RNA Stability-Regulation
" 6	Lecture 12	Translation-Molecular Machinery
" 11	Lecture 13	Translation-Regulation
" 13	Lecture 14	Translation-Mechanisms
" 18	Lecture 15	RNA Silencing/Protein Targeting
" 20	Lecture 16	Secretory pathway/Chaperones
" 25	Lecture 17	Protein Splicing
" 27	Holiday	
Dec. 2	Lecture 18	Prions
" 4	Lecture 19	Programmed Cell Death
" 9	Final (Lectures 6-19)	Boyce 1471 7:00 - 10:00 pm

Reading for Lectures 1-2:

Trends in Biochemical Sciences 16: 397-402
Genes & Development 7: 1291-1308.
Nature 360: 16-17
Journal of Biological Chemistry 267: 679-682
Trends in Biochemical Sciences 16: 412-416
Current Opinion in Cell Biology 11:330-335
Trends in Biochemical Sciences 20:113-116
Gene 242: 1-13
Trends in Cell Biology 9:193-198
Trends in Biochemical Sciences 25:15-19
Trends in Biochemical Sciences 25:277-283
Trends in Biochemical Sciences 24: M46-M49
Trends in Genetics 6:192-197
Trends in Biochemical Sciences 25:375-380
Science 278: 1899-1901.

Reading for Lectures 3-4:

Cell 78:1-4
Annual Review of Genetics 28: 1-26
Science 273: 1813
Trends in Genetics 11:132-136
Nature Structural Biology 7: 14-16
Trends in Biochemical Sciences 25:381-388
Current Opinion in Cell Biology 11:363-371
Biochimie 78: 474-487
Trends in Biochemical Sciences 22:162-166
FEMS Microbiology Reviews 23:297-316

Reading for Lecture 5:

Trends in Biochemical Sciences 21:220-224
FASEB J. 7: 7-14
FASEB J. 7: 25-30
Biochemistry 62:1206-1215
Nature Biotechnology 14:836-839
Science 265: 1656-1658

Reading for Lectures 6-7:

Current Opinion in Cell Biology 11:347-351
Trends in Biochemical Sciences 25:290-293
European Journal of Biochemistry 247:461-469
Current Opinion in Cell Biology 9:329-336
Cell 81:829-832
Annual Review of of Neuroscience 20:269-301
Journal of Cell Biology 123:269-274
Science 271:1513-1518
Trends in Biochemical Sciences 23:185-189

Reading for Lectures 8-10:

Microbiological Reviews 59:423-450
Microbiological Reviews 60:233-249
Current Opinion in Cell Biology 12:346-350
Trends in Biochemical Sciences 20:465-470
Current Opinion in Genetics & Development 10:193-198
Cell 96: 307-310

Reading for Lectures 11-14:

Trends in Biochemical Sciences 24:398-403
Trends in Biochemical Sciences 24:85-87
Gene 216:1-11
Chapter 7 (page 199-244), 8 (page 245-269), 12 (page 335-362) from the book "*Translational Control*" Eds. **Sonenberg, N.**, Hershey, J.W.B., and Mathews, M.B. Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY.
Science 289:878-879
Trends in Biochemical Sciences 20:489-491
Trends in Microbiology 8:330-335

Reading for Lectures 15-17:

Cell 82:341-344
Science 279:1129-1131
Science 278:1728-1729
Science 272:227-234
Science 276:1212-1213
Science 271:1519-1526
Plant Molecular Biology 32:223-249
Trends in Cell Biology 6:104-108
Plant Molecular Biology 39:641-645
Trends in Biochemical Sciences 24:209-210
Trends in Biochemical Sciences 20:351-356
Trends in Biochemical Sciences 23:185-189

Reading for Lectures 18-19:

Oncogene 17:3237-3245
Science 281:1309-1312
Oncogene 17:3207-3213
Science 281:1322-1325
Cell 90:389-390
Science 272:1278-1279