

Biology 78 w14

Molecular Mysteries of Human Biology

Weekly Schedule 9L

Lectures: Monday, Wednesday & Friday 8:45-9:50 **X-hour:** Thursday 9-9:50

Text/Reading:

1. **Recommended text:** Any biochemistry text (e.g. Voet, Voet & Pratt, Berg, Tymoczko & Stryer, or Garrett & Grisham) may provide important background information. . Copies on Dana Course Reserve or on-line (Berg) at link below.
2. **Course Reader:** 40 manuscripts that are required course reading. Available at Wheelock Books. Additional helpful reviews for each topic posted as .pdfs on web site, with .pdf files for most other manuscripts.

Date	Topic	Prob Set Posted	Prob Set Due
Monday, Jan 6	Atherosclerosis: The Loch Ness Monster and John Hunter's Ossified Arteries		
Wed, Jan 8	Plasma Lipoproteins: The Legacies of Michel-Eugène Chevreul and Mona Lisa		
Thurs, Jan 9 X-hour	Video: The Hidden Epidemic: Heart Disease in America		
Fri, Jan 10	Readings: Schoenheimer Effect Explained: Cholesterol Regulates Itself		
Mon, Jan 13	Readings: PCSK9: An Unexpected Gene Modifying Atherosclerosis Risk	#1	
Wed, Jan 15	Otto Warburg and the Mysterians: Metabolism in Cancer Cells		
Thurs, Jan 16 X-hour	Dr. John Butterly: A Patient with Atherosclerosis		#1
Fri, Jan 17	Readings: Cancer's Achilles Heel? Targeting GLUT1 by Chemical Synthetic Lethality		
Mon, Jan 20	NO CLASS: MLK Day		
Wed, Jan 22	Readings: Pyruvate Kinase M2: Key Glycolytic Regulator in Cancer	#2	
Thurs, Jan 23 X-hour	Starvation: Sarah Jacob and the Irish Republican Army		
Fri, Jan 24	Readings: Cancer-Associated Cachexia and Adipose Triglyceride Lipase		
Mon, Jan 27	Readings: mTORC1 and the Regulation of Ketogenesis	#3	#2
Wed, Jan 29	Sled Dogs, Toadfish, Frogs, Geese, Bats & Lance Armstrong		
Thurs, Jan 30 X-hour	NO CLASS		#3
Fri, Jan 31	Readings: AMP-activated Protein Kinase and Exercise Response		
Mon, Feb 3	Readings: PGC1 α and Muscle Triglyceride Refueling After Exercise	#4	
Wed, Feb 5	Bathsheba's Breast: Hendrickje Stoffels, Anne of Austria, Susan Sontag and Jill Ireland		
Thurs, Feb 6 X-hour	Dr. Peter Kaufman: A Patient with Breast Cancer		#4
Fri, Feb 7	NO CLASS: CARNIVAL		
Mon, Feb 10	Readings: Her2 (ERBB2), HIF-1 & Anoikis		
Wed, Feb 12	Readings: Serine Biosynthesis & Metabolism in Breast Cancer	#5	
Thurs, Feb 13 X-hour	Archibald Garrod, "The Child Who Never Grew" and Kilmer McCully		
Fri, Feb 14	Readings: Pharmacologic Chaperones & Phenylalanine Hydroxylase in Phenylketonuria		
Mon, Feb 17	Readings: Homocystinuria: Use of Proteasome Inhibitors	#6	#5
Wed, Feb 19	Diabetes Mellitus: Paul Cezanne's Vision and Shirley Horn's Feet		
Thurs, Feb 20 X-hour	Dr. Richard Comi: A Patient with Long-standing Type 1 Diabetes Mellitus		#6
Fri, Feb 21	Readings: VEGF, Methylglyoxal and Angiogenesis		
Mon, Feb 24	Readings: Ubiquitin Ligase and VEGF Regulation by Methylglyoxal	#7	
Wed, Feb 26	Alois Alzheimer and Auguste D: Sailing Into Darkness		
Thurs, Feb 27 X-hour	Video: The Forgetting: A Portrait of Alzheimer's		#7
Fri, Feb 28	Readings: apoE Isoforms and Amyloid- β Clearance		
Mon, Mar 3	Readings: apoE-directed Therapeutics: Targeting the RXR Receptor		
Mon, Mar 3 evening	Movie/Dinner/Discussion with Dr. Robert Santulli: Iris: A Tale of Iris Murdoch		
Wed, Mar 5	Aging: In Vino Veritas: Luigi Cornaro & <i>Discorsi della Vita Sobria</i>		
Thurs, Mar 6 X-hour	Readings: Rapamycin, Life Span and Age-related Pathologies		
Fri, Mar 7	Readings: The Sirtuin SIRT6 Regulates Life Span	#8**	
Fri, Mar 14			#8**

**Problem set #8 covers both Alzheimer's and Aging