

**BME 670: Early Visual Processing****T-Th; 4:00-5:20; HNB 100**

Module	#	Date	Lecture Title	Lecturer
<b>A: Phototransduction</b>				
A: Phototransduction	1	8/25	Introduction to Vision	Bosco Tjan
A: Phototransduction	2	8/27	Introduction to Phototransduction	Cheryl Craft
A: Phototransduction	3	9/1	Physiology and Biochemistry of Phototransduction	Jeannie Chen
A: Phototransduction	4	9/3	Computational Models of Phototransduction	Norberto Grzywacz
A: Phototransduction	5	9/8	Molecular Biology of Phototransduction	Cheryl Craft
A: Phototransduction	6	9/10	Open Questions in Phototransduction	Jeannie Chen
<b>B: Retinal Processing</b>				
B: Retinal Processing	7	9/15	Retinal Processing: Morphology	Eun Jin Lee
B: Retinal Processing	8	9/17	Retinal Processing: Physiology	Alapakkam Sampath
Exam 1		9/22	In Class	
B: Retinal Processing	9	9/24	Computational Models of Edge Detection	Bartlett Mel
B: Retinal Processing	10	9/29	Lateral Inhibition in the Retina	Norberto Grzywacz
B: Retinal Processing	11	10/1	Retinal Adaptation	Norberto Grzywacz
B: Retinal Processing	12	10/6	Optical Coherence Tomography of the Retina	David Huang
B: Retinal Processing	13	10/8	Retinal Psychophysics	Bosco Tjan
B: Retinal Processing	14	10/13	Retinal Development	Eun Jin Lee
B: Retinal Processing	15	10/15	Open Questions in Retinal Processing	Alapakkam Sampath
Society for Neuroscience		10/20		
Exam 2		10/22	In Class	
<b>C: Retinal Disorders</b>				
C: Retinal Disorders	16	10/27	Diseases of the Retina	Rajat Agrawal
C: Retinal Disorders	17	10/29	Retinal Transplantation	Biju Thomas
C: Retinal Disorders	18	11/3	Retinal Prosthesis	James Weiland
C: Retinal Disorders	19	11/5	Neural Remodeling in Retinal Degeneration	Eun Jin Lee
C: Retinal Disorders	20	11/10	Open Questions in Low-vision Research	Bosco Tjan
<b>D: Extra-retinal, Sub-cortical Processing</b>				
D: Extra-retinal, Sub-cortical Processing	21	11/12	From Retina to Thalamus: The Lateral Geniculate Nucleus	Judith Hirsch
D: Extra-retinal, Sub-cortical Processing	22	11/17	Post-transplantation Responses in Superior Colliculus	Biju Thomas
D: Extra-retinal, Sub-cortical Processing	23	11/19	Physiology of LGN1: Relay Cells	Judith Hirsch
D: Extra-retinal, Sub-cortical Processing	24	11/24	Physiology of LGN2: Interneurons	Judith Hirsch
Thanksgiving		11/26		
D: Extra-retinal, Sub-cortical Processing	25	12/1	Computational Models of LGN	Bartlett Mel
D: Extra-retinal, Sub-cortical Processing	26	12/3	Open Questions in Thalamic Research/Surprise	Laurent Itti
Exam 3		12/10	4:30-6:30 pm	