

Biology of the Inner Ear: Experimental and Analytical Approaches

2009 Course Schedule Overview-- Week 1

	SUNDAY August 9	MONDAY August 10	TUESDAY August 11	WEDNESDAY August 12	THURSDAY August 13	FRIDAY August 14	SATURDAY August 15					
9:00 AM		Overview of Inner Ear Structure and Function J. Corwin	Introduction to Auditory Neuroanatomy & Physiology J. Ashmore	Principles and Issues in Inner Ear Development D. Wu	Mechano-transduction J. Howard	Hair Bundle Structure and Development G. Richardson	Roundtable I: Strategies for Gene Delivery in the Inner Ear J. Brigande, J. Holt, M. Kelley, G. Richardson					
9:30 AM												
10:00 AM												
10:30 AM												
11:00 AM												
11:30 AM												
12:00 PM		Lunch	Lunch	Lunch	Lunch	Lunch	Lunch					
12:30 PM												
1:00 PM		MBL orientation: ID cards, etc..	LAB Microdissection I: Frog Sacculus <i>J. Cyr, J. Gale, G. Géléoc, J. Holt, E. Yamoah</i>	LAB Light Microscopy & Immunocytochem. <i>J. Cyr, J. Gale, M. Kelley, G. Richardson,</i>	LAB Microdissection: Chick End Organs & Paint Fill Demonstration <i>J. Corwin, J. Jones, G. Richardson, M. Warchol, D. Wu</i>	LAB Regeneration I, & Continuing Paint Fills of Chick End Organs <i>J. Corwin, J. Jones, G. Richardson, M. Warchol, D. Wu</i>	LAB Electron Microscopy <i>A. Forge, A. Lysakowski, G. Richardson</i>					
1:30 PM												
2:00 PM												
2:30 PM												
3:00 PM												
3:30 PM												
4:00 PM	Course Overview and Animal Use Training	LAB Overview of the Labyrinth- Toadfish <i>S. Highstein & Faculty</i>	Dinner	Dinner	Dinner	Dinner	Dinner					
4:30 PM												
5:00 PM	WELCOME BBQ	Discussion and Open Lab time	Discussion and Open Lab time	Discussion and Open Lab time	Discussion and Open Lab time	Discussion and Open Lab time	Discussion and Open Lab time					
5:30 PM												
6:00 PM												
6:30 PM												
7:00 PM												
7:30 PM												
8:00 PM												
8:30 PM								Research Seminar Bechara Kachar	Student Introductions	Research Seminar L. Lustig	Research Seminar G. Soukup	MBL Friday Evening Lecture Martin Chalfie
9:00 PM												
9:30 PM												
10:00 PM												
10:30 PM												
11:00 PM												
11:30 PM												
12:00 AM												

Lab faculty listed alphabetically.

Biology of the Inner Ear: Experimental and Analytical Approaches

2009 Course Schedule Overview -- Week 2

	SUNDAY August 16	MONDAY August 17	TUESDAY August 18	WEDNESDAY August 19	THURSDAY August 20	FRIDAY August 21	SATURDAY August 22						
9:00 AM	FREE DAY	Sensory Signaling in Vestibular and Auditory Hair Cells J. Holt	Hair-Cell Cytoskeletal Specializations Guy Richardson	Hair Cell Death M. Warchol	Planar Cell Polarity M. Montcouquiol	Spiral Ganglion R. Davis	Roundtable II Mechanisms of Sensory Epithelium Repair J. Corwin, J. Gale, N. Segil, J. Stone, M. Warchol						
9:30 AM													
10:00 AM													
10:30 AM													
11:00 AM		Hair-Cell Synaptic Transmission P. Fuchs	Hair Cell and Neural Repair J. Corwin	Tutorial / Flex Time	Cochlear Amplification/ DPOAEs D. Kemp	Zebrafish as a Model System D. Raible							
11:30 AM													
12:00 PM		Lunch	Lunch	Lunch	Lunch	Lunch	Lunch						
12:30 PM													
1:00 PM		LAB Electrophysiology I J. Ashmore, D. Corey, G. Géléoc, P. Fuchs, J. Holt, H. Kennedy	LAB Electrophysiology II J. Ashmore, D. Corey, G. Géléoc, P. Fuchs, J. Holt, H. Kennedy	LAB Microdissection and Culturing of Mouse Utricle & Cochlea I J. Corwin, G. Géléoc, J. Holt, M. Kelley, M. Montcouquiol, G. Richardson, N. Segil	LAB Microdissection and Culturing of Mouse Utricle & Cochlea II J. Corwin, G. Géléoc, J. Holt, M. Kelley, M. Montcouquiol, G. Richardson, N. Segil	LAB Inner Ear Gene Delivery: Adenoviral Infection and Gene Gun Transfection J. Brigande, G. Géléoc, J. Holt, J. Jones, M. Montcouquiol, G. Richardson, M. Warchol	LAB Light microscopy II I. Belyantseva, J. Corwin, J. Gale, J. Holt, G. Richardson, J. Stone,						
1:30 PM													
2:00 PM													
2:30 PM													
3:00 PM													
3:30 PM													
4:00 PM													
4:30 PM													
5:00 PM													
5:30 PM													
6:00 PM								Dinner	Dinner	Dinner	Dinner	Dinner	Dinner
6:30 PM													
7:00 PM													
7:30 PM		Research Seminar Richard Reed	Research Seminar N. Segil	Research Seminar J. Gale	Research Seminar J. Stone	MBL Friday Evening Lecture Joshua Sans	Research Seminar D. Kemp						
8:00 PM													
8:30 PM		Discussion and Open Lab time	Faculty Introductions	Discussion and Open Lab time	Discussion and Open Lab time	Discussion and Open Lab time	Discussion and Open Lab time						
9:00 PM													
9:30 PM													
10:00 PM													
10:30 PM													
11:00 PM													
11:30 PM													
12:00 AM													

Lab faculty listed alphabetically.

Biology of the Inner Ear: Experimental and Analytical Approaches 2009 Course Schedule Overview -- Week 3

	SUNDAY August 23	MONDAY August 24	TUESDAY August 25	WEDNESDAY August 26	THURSDAY August 27	FRIDAY August 28	SATURDAY August 29		
9:00 AM	FREE DAY	FIELD TRIP Massachusetts Eye and Ear Infirmary C. Liberman and C. Halpin	Central Processing of Auditory and Vestibular Signals C. Carr	Genetics of Deafness: Humans T. Friedman	Inner-Ear Gene Profiling M. Lovett	Genetics of Deafness and Balance Disorders in Mice U. Müller	Roundtable III: Choosing an animal model J. Corwin, M. Gopfert, J. Holt, J. Jones, S. Megason, U. Müller, G. Richardson, M. Warchol, J. Zuo		
9:30 AM									
10:00 AM									
10:30 AM					Tour of The Marine Resources Center	Human Deafness Genetic Counseling and Screening H. Rehm	Tutorial / Flex Time	Transgenic Mouse Models J. Zuo	
11:00 AM									
11:30 AM									
12:00 PM					Lunch	Lunch	Lunch	Lunch	
12:30 PM									
1:00 PM					(Students rotate through two, 2.5 hr labs)				Course Wrap-up Debriefing with Students
1:30 PM					LAB Human Otoacoustic Emmissions D. Kemp				
2:00 PM									Lab Clean Up
2:30 PM									
3:00 PM									
3:30 PM									
4:00 PM					LAB <i>Drosophila</i> DPOAEs & Spontaneous Oscillations M. Gopfert	LAB Hair Cell Regeneration II J. Corwin, G. Richardson, M. Warchol	LAB Zebrafish D. Raible et al.	LAB Inner-Ear Gene Profiling M. Lovett	
4:30 PM									
5:00 PM									
5:30 PM									
6:00 PM									
6:30 PM									
7:00 PM					Dinner	Dinner	Dinner	Dinner	FAREWELL PARTY
7:30 PM									
8:00 PM									
8:30 PM					Research Seminar M. Gopfert	Research Seminar S. Megason	Research Seminar U. Müller	Research Seminar D. Ketten	
9:00 PM									
9:30 PM			Faculty Introductions						
10:00 PM									
10:30 PM				Discussion and Open Lab time	Discussion and Open Lab time	Discussion and Open Lab time			
11:00 PM			Discussion and Open Lab time						
11:30 PM									
12:00 AM									

Lab faculty listed alphabetically.