

**MBL-ASU History of Biology Seminar**  
**HISTORY OF CELL BIOLOGY**

May 15-21, 2011

**Sunday May 15**

6:30pm

Welcome Dinner

**Monday May 16**

9:00-10:30am

Intro/Overview: Jane Maienschein and Manfred Laubichler

*Discusses the course focus, importance of cells in discussion establishing the foundations of biological theory and as a locus of experimentation and the relationships between cells/cell biology and other biological concepts and paradigms in 20 and 21<sup>st</sup> century biology*

11:00-12:30pm

Wilson and Boveri: Maienschein and Laubichler

*Discusses the various dimensions of the "classical" period of cell and biology ("The cell in development and heredity" and introduces such concepts as cell lineage, the chromosomal theory of heredity. We will also discuss the role of observation, experimentation and research organisms.*

2:00-3:30pm

Cell Heredity, Epigenetics, and Structural Inheritance: Jan Sapp

4:00-5:30pm

Library/Archives Visit

**Tuesday May 17**

9:00-12:30pm

Endosymbiosis: Lynn Margulis and James Strick

2:00-3:30pm

Endosymbiosis (continued): Lynn Margulis and James Strick

4:00-5:30pm

Parade: Everybody

**Wednesday May 18**

9:00-10:30am

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10:45-11:30am

Seeing Cells: Shinya Inoue and Garland Allen

2:00-3:30pm

Visualization: Andy Yang

4:00-5:00pm

Lab (looking at cells): Stuart Newfeld and Rachel Fink

7:00-8:30pm

Lab and Small Group Reflections

**Thursday May 19**

- 9:00-10:30am Mechanistic and Anti-mechanistic Approaches in the Elucidating of Basic Phenomena of Life - Controversies Around 1900: Ute Deichmann
- 11:00-12:30pm From Mechanisms to Synthetic Biology: Michel Morange
- 2:00-3:30pm Culturing and Stem Cells: Jane Maienschein
- 4:00-5:30pm Case Study of Specialized Cell Type: Bill Aird

**Friday May 20**

- 9:00-10:30am Neural Crest Cells: Brian Hall
- 11:00-12:30pm Gene Regulatory Networks: Manfred Laubichler  
*Following Hall's discussion of the nature of neural crest cells, Laubichler and Hall will use the neural crest as an example of the successful integration of different conceptual, experimental and theoretical approaches. We will explore how the emphasis on GRNs as mechanistic explanations for phenomena of developmental evolution intersects with cellular based explanations of the neural crest.*
- 2:00-4:00pm Groups Meet
- 6:00pm Nice Seafood Dinner

**Saturday, May 21**

- 9:00-11:00am Wrap up: Group Reports/What did we learn?: Everett Mendelsohn