

	Sunday, June 21	Monday, June 22	Tuesday, June 23
7:30 AM		7:30   <b>Breakfast</b>   161 Patapsco	7:30   <b>Breakfast</b>   161 Patapsco
8:00 AM	8:00-3:00   <b>Participants Arrive</b>   Check-In to Patapsco Hall anytime after 8:00 AM	8:30   <b>LECTURE: Processing Soil Samples: Enrichment Part 2 (with Serial Dilution) and Direct Plating</b>   Emily Fisher   120 Meyerhoff	8:30   <b>Lab Meeting</b>   SEA Lab
8:30 AM		9:00   <b>Laboratory Module: Aseptic Technique</b>   Kristen Butela   SEA Lab	8:45   <b>Participant Lab Work: Check Enrichment and Direct Plating Plates, Decide Next Steps</b>   Katie Mageeney, Scott Michael   SEA Lab
8:45 AM		9:15   <b>DEMO: Processing Soil Samples: Enrichment Part 2 (with Serial Dilution) and Direct Plating</b>   Emily Fisher   SEA Lab	9:15   <b>DEMO: Confirming Your Phage (with the Spot Test)</b>   Emily Fisher   SEA Lab
9:00 AM		9:45   <b>Participant Lab Work: Processing Soil Samples: Enrichment Part 2 (with Serial Dilution) and Direct Plating</b>   Emily Fisher, Kristen Butela   SEA Lab	9:30   <b>Participant Lab Work: Confirming Your Phage (with the Spot Test)</b>   Emily Fisher, Nick Edgington   SEA Lab
9:15 AM		10:15   <b>Break</b>   256 Meyerhoff	10:15   <b>Break</b>   256 Meyerhoff
9:30 AM		10:30   <b>Participant Lab Work: Processing Soil Samples: Enrichment Part 2 (with Serial Dilution) and Direct Plating (Continued)</b>   Emily Fisher, Kristen Butela   SEA Lab	10:30   <b>DEMO: Purifying Your Phage (with Stick Streak)</b>   Marianne Poxleitner   SEA Lab
9:45 AM		12:15   <b>Lunch</b>   256 Meyerhoff	10:45   <b>DEMO: Purifying Your Phage (with Serial Dilution)</b>   Kristen Butela   SEA Lab
10:15 AM		1:00   <b>In Lab Lecture: Working with the Bacterial Host (Media, Culture and Streak Plates)</b>   Katie Mageeney   SEA Lab	11:00   <b>Participant Lab Work: Purifying Your Phage (with Stick Streak and Serial Dilution)</b>   Marianne Poxleitner, Kristen Butela   SEA Lab
10:30 AM		1:30   <b>DEMO: Working with the Bacterial Host (Cultures and Streak Plates)</b>   Katie Mageeney   SEA Lab	12:15   <b>Lunch</b>   256 Meyerhoff
10:45 AM		1:45   <b>Participant Lab Work: Working with the Bacterial Host (Cultures and Streak Plates)</b>   Katie Mageeney, Marianne Poxleitner   SEA Lab	1:00   <b>LECTURE: Making Phage Stocks (Web Plates and MTL)</b>   Emily Fisher   120 Meyerhoff
11:00 AM		2:15   <b>Participant Lab Work: Open Lab</b>   Scott Michael, Marianne Poxleitner   SEA Lab	1:15   <b>LECTURE: Making Phage Stocks (The Empirical Test and HTL Harvest)</b>   Emily Fisher   120 Meyerhoff
12:15 PM		3:00   <b>Course Directors Welcome and Workshop Overview</b>   Sharon Isern, Scott Michael   120 Meyerhoff	1:45   <b>Participant Lab Work: Purifying Your Phage (with Stick Streak and Serial Dilution) (Continued) and Open Lab</b>   Marianne Poxleitner, Kristen Butela   SEA Lab
1:00 PM		3:15   <b>LECTURE: Course Overview and Resources</b>   Sharon Isern   120 Meyerhoff	2:15   <b>Participant Lab Work: Open Lab</b>   Scott Michael, Marianne Poxleitner   SEA Lab
1:15 PM		3:30   <b>LECTURE: Using the Resource Guide, Lab Manual, and TA Handbook</b>   Kevin Bradley   120 Meyerhoff	3:15   <b>Break</b>   256 Meyerhoff
1:30 PM	3:45   <b>LECTURE: Phage Biology Primer</b>   Scott Michael   120 Meyerhoff	3:30   <b>In Lab Lecture: Supplies and Logistics</b>   Kevin Bradley   SEA Lab	
1:45 PM	4:00   <b>LECTURE: Processing Soil Samples: Enrichment Part 1</b>   Kristen Butela   120 Meyerhoff	3:30   <b>LECTURE: Isolating Phage Genomic DNA</b>   Marianne Poxleitner   120 Meyerhoff	
2:15 PM	4:15   <b>Collect Soil Samples</b>   UMBC grounds	4:00   <b>Participant Lab Work: Open Lab</b>   Nick Edgington, Sharon Isern   SEA Lab	
3:00 PM	4:30   <b>Lab Safety and Orientation</b>   Kevin Bradley   SEA Lab	4:30   <b>LECTURE: Confirming Your Phage (with the Spot Test)</b>   Emily Fisher   120 Meyerhoff	
3:15 PM	4:45   <b>DEMO: Processing Soil Samples: Enrichment Part 1</b>   Kristen Butela   SEA Lab	5:00   <b>LECTURE: Purifying Your Phage (with Stick Streak, Serial Dilution, and Calculating Titer)</b>   Kristen Butela   120 Meyerhoff	
3:30 PM	5:00   <b>Participant Lab Work: Processing Soil Samples: Enrichment Part 1</b>   Kristen Butela, Nick Edgington   SEA Lab	5:30   <b>REORIENTATION and Q&amp;A</b>   Sharon Isern, Scott Michael   120 Meyerhoff	
3:45 PM	5:30 PM	6:00   <b>Dinner</b>   256 Meyerhoff	4:00   <b>DEMO: Isolating Phage Genomic DNA</b>   Marianne Poxleitner   SEA Lab
4:00 PM	5:45 PM	6:00   <b>Dinner</b>   256 Meyerhoff	4:15   <b>Participant Lab Work: Isolating Phage Genomic DNA (Purification and Quantitation)</b>   Marianne Poxleitner, Nick Edgington   SEA Lab
4:15 PM	6:00 PM	7:00   <b>Faculty Bonding</b>   Kristen Butela, Nick Edgington   256 Meyerhoff	5:30   <b>REORIENTATION and Q&amp;A</b>   Sharon Isern, Scott Michael   120 Meyerhoff
4:30 PM	7:00 PM	7:00   <b>TA Bonding</b>   Katie Mageeney   SEA Lab	6:00   <b>Dinner</b>   256 Meyerhoff
4:45 PM	8:00 PM	7:00   <b>Faculty Pedagogy Moment 1</b>   Nick Edgington   120 Meyerhoff	7:00   <b>Faculty Pedagogy Moment 2</b>   Emily Fisher   120 Meyerhoff
5:00 PM		7:00   <b>TA Lab Primer Part 1</b>   Kevin Bradley, Katie Mageeney   SEA Lab	7:00   <b>TA Activity</b>   Kevin Bradley, Sharon Isern, Scott Michael   SEA Lab
5:30 PM		8:00   Refreshments/Social   Commons Game Room	8:00   Refreshments/Social   Commons Game Room
5:45 PM		HOMEWORK   <b>READING:</b> Capture and Cultures <b>WEB:</b> Find seaphages.org and phagesdb.org	HOMEWORK   <b>READING:</b> Dissect <b>WEB:</b> Get an account on PhagesDB.org

# HOWARD HUGHES MEDICAL INSTITUTE

## SEA-PHAGES IN SITU WORKSHOP 8A

University of Maryland Baltimore County | June 21 - 26, 2015

SEA Lab Room 201 Meyerhoff Chemistry Building

# AGENDA

	Wednesday, June 24	Thursday, June 25	Friday, June 26	
7:30 AM	7:30   Breakfast   161 Patapsco	7:30   Breakfast   161 Patapsco	7:30   Breakfast   161 Patapsco	
8:30 AM	8:30   LECTURE: Analyzing Phage Genomic DNA (with Restriction Analysis)   Nick Edgington   120 Meyerhoff	8:30-1:30   Group 1: Analyzing Phage (with Electron Microscopy-Staining and Visualization), Open Lab   Marianne Poxleitner, Katie Mageeney   SEA Lab	8:30-12:15   Group 2: Analyzing Phage Genomic DNA (with Restriction Analysis-Load and Run Gel), Final Experimental Choices   Kristen Butela, Nick Edgington   SEA Lab	
9:00 AM	9:00   LECTURE: Analyzing Phage Genomic DNA (Checking DNA Quality Before Sequencing)   Scott Michael   120 Meyerhoff			
9:15 AM	9:15   LECTURE: Making Phage Stocks (Archiving)   Sharon Isern   120 Meyerhoff		8:30   Participant Lab Work: Individual Bench Clean-Up, Lab Notebook Catch-up, Prepare for Lab Meeting   SEA Lab	
9:30 AM	9:30   Participant Lab Work: Analyzing Phage Genomic DNA (Restriction Analysis Set Up, DNA Quantitation) (Continued)   Nick Edgington, Kristen Butela   SEA Lab		9:00   In Lab Lecture: Reagents and Media Prep, Final Culture Observation   Kevin Bradley   SEA Lab	
10:15 AM	10:15   Break   256 Meyerhoff	10:15   Break   256 Meyerhoff	9:15   In-Lab LAB MEETING All Participants and Faculty   SEA Lab	
10:30 AM	10:30   Participant Lab Work: Check Spot Test, Stick Streak, and Serial Dilution Plates, Decide Next Steps   Nick Edgington, Katie Mageeney   SEA Lab	10:30   Group 1: Analyzing Phage (with Electron Microscopy-Staining and Visualization), Open Lab (Continued)   Marianne Poxleitner, Katie Mageeney   SEA Lab	10:15   Break   256 Meyerhoff	
10:45 AM	10:45   Participant Lab Work: Open Lab   Katie Mageeney, Emily Fisher   SEA Lab	10:30   Group 2: Analyzing Phage Genomic DNA (with Restriction Analysis-Load and Run Gel), Final Experimental Choices (Continued)   Kristen Butela, Nick Edgington   SEA Lab	10:30   Participant Lab Work: Lab Clean Up   SEA Lab	
11:00 AM			11:00   REORIENTATION and Q&A   Sharon Isern, Scott Michael   120 Meyerhoff	
11:30 AM			11:30   Final Exam and Awards   SEA Lab	
12:15 PM	12:15   Lunch   256 Meyerhoff	12:15   Lunch-Assessment Seminar   Kristen Butela   256 Meyerhoff	12:15   Lunch   256 Meyerhoff	
1:00 PM	1:00   Participant Lab Work: Open Lab   Scott Michael, Emily Fisher   SEA Lab	1:00   Group 1: Analyzing Phage (with Electron Microscopy-Staining and Visualization) (Continued)	1:00   Participants Depart	
1:15 PM		1:30-5:00   Group 1: Analyzing Phage Genomic DNA (with Restriction Analysis-Load and Run Gel), Final Experimental Choices   Kristen Butela, Nick Edgington   SEA Lab	<p><b>HHMI STAFF</b></p> <p>SEA Office   208 Meyerhoff (410) 455-1628 SEA Lab   201 Meyerhoff</p> <p>David J. Asai asaid@hhmi.org</p> <p>Billy Biederman biederma@hhmi.org Cell (301) 806-5508</p> <p>Kevin Bradley bradleyk@hhmi.org Cell (240) 507-6923</p> <p>Vic Sivanathan sivanathanv@hhmi.org HHMI (301) 215-8985</p> <p><b>COURSE DIRECTORS</b></p> <p>Sharon Isern Florida Gulf Coast University Cell (239) 405-4401</p> <p>Scott Michael Florida Gulf Coast University Cell (239) 405-4402</p> <p><b>FACILITATORS</b></p> <p>Kristen Butela Seton Hill University</p> <p>Nick Edgington Southern Connecticut State University</p> <p>Emily Fisher Johns Hopkins University</p> <p>Katie Mageeney Lehigh University</p> <p>Marianne Poxleitner Gonzaga University</p>	
1:30 PM				
3:15 PM	3:15   Break   256 Meyerhoff	3:15   Break   256 Meyerhoff		
3:30 PM	3:30   LECTURE: Analyzing Phage (with Electron Microscopy)   Scott Michael   120 Meyerhoff	3:30   Group 1: Analyzing Phage Genomic DNA (with Restriction Analysis-Load and Run Gel), Final Experimental Choices (Continued)   Kristen Butela, Nick Edgington   SEA Lab		
4:00 PM	4:00   DEMO: Analyzing Phage (with Electron Microscopy) Group 1   Marianne Poxleitner, Scott Michael   Open Lab Group 2   Kristen Butela, Sharon Isern   SEA Lab	3:30   Group 2: Analyzing Phage (with Electron Microscopy-Staining and Visualization), Open Lab (Continued)   Marianne Poxleitner, Katie Mageeney   SEA Lab		
4:45 PM	4:45   DEMO: Analyzing Phage (with Electron Microscopy) Group 2   Marianne Poxleitner, Scott Michael   Open Lab Group 1   Kristen Butela, Sharon Isern   SEA Lab	5:30   REORIENTATION and Q&A   Sharon Isern, Scott Michael   120 Meyerhoff		
5:30 PM	5:30   REORIENTATION and Q&A   Sharon Isern, Scott Michael   120 Meyerhoff	6:00   Dinner   256 Meyerhoff		
6:00 PM	6:00   Dinner   256 Meyerhoff	7:00   Faculty Pedagogy Moment 3   Marianne Poxleitner   120 Meyerhoff		
7:00 PM	7:00   Faculty Pedagogy Moment 3   Marianne Poxleitner   120 Meyerhoff	7:00   Faculty Pedagogy Moment 4 - Beyond In Situ   Sharon Isern   120 Meyerhoff		
8:00 PM	8:00   Refreshments/Social   Commons Game Room	8:00   Refreshments/Social   Commons Game Room		
	HOMEWORK   READING: Review Resource Guide	HOMEWORK   Study for Final Exam		