



# **Trachea Isolation, Lung Epithelium Cell Culture and Lung Tissue Immunohistochemistry**

**Skills Development Training Workshop  
JULY 24-26, 2012**

**JOHNS HOPKINS ASTHMA AND ALLERGY CENTER**

**(JOHNS HOPKINS BAYVIEW CAMPUS)**

**BALTIMORE, MD**

Didactic presented by -

**Dr. Bruce Bochner  
Dr. Allen Myers  
Dr. Becky Vonakis  
Dr. Zhou Zhu**

Experimental Skills  
presented by -

**Dr. Takumi Kiwamoto  
Sherry Hudson  
Mary Brummet**

# Trachea Isolation, Lung Epithelium Cell Culture & Lung Tissue Immunohistochemistry

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**LID-PEG Skills Development Training Course,  
July 24-26, 2012  
Johns Hopkins Division of Allergy and Clinical Immunology  
5501 Hopkins Bayview Circle  
Bayview Campus, Baltimore, MD.**

<b>July 24th</b>	<b>Topic</b>	<b>Location</b>	<b>Personnel</b>	<b>Time Line</b>
8:45	Assemble, Meet & Greet		Bochner Lab	
9:00-12:00	Mouse Airway Lecture	3A66	Zhou Zhu	9:00-9:45
	Human Airway Lecture	3A66	Bruce Bochner	9:45-10:30
	<b>Break</b>	3A66		10:30-10:45
	Epithelial Cell Lecture	3A66	Becky Vonakis	10:45-11:30
	Lab Safety & Tissue Banking	3A66	Allen Myers	11:30-12:00
<b>12:00-1:00</b>	<b>Lunch Break</b>	<b>3A66</b>		
1:00-4:00	Mouse Trachea dissection	1A4	Takumi Kiwamoto/ Mary Brummet	
	Enzymatic treatment	1A4	Takumi Kiwamoto/ Mary Brummet	
	Mouse lung explant	1A4	Takumi Kiwamoto/ Mary Brummet	
	Sterile technique	3A52	Sherry Hudson	
4:00-5:00	Watch video - Human Lung Epithelial Cell Isolation (Hands-on if human lung available)	3A66		

<b>July 25th</b>	<b>Topic</b>	<b>Location</b>	<b>Personnel</b>	<b>Time Line</b>
9:00-12:00	Mechanical disruption of epithelial cells, remove fibroblasts	3A52	Takumi Kiwamoto/ Mary Brummet	
<b>12:00-1:00</b>	<b>Lunch Break</b>	<b>3A66</b>		
1:00-3:00	Tissue Sectioning	2A38	Allen Myers/ Mary Brummet	1:00-1:30
	Set up IHC of mouse and human lung tissues	3A52	Mary Brummet	1:30-3:00
3:00-5:00	Harvesting mouse lung explant supernatant	3A52	Mary Brummet	
	Plating mouse ALI cultures	3A52	Takumi Kiwamoto	
7:05PM	<i>(Optional) Orioles baseball game</i>		<i>ALL INVITED</i>	

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<b>July 26th</b>	<b>Topic</b>	<b>Location</b>	<b>Personnel</b>	<b>Time Line</b>
9:00-1:00	Finish IHC (previous day- 25 <sup>th</sup> July)	3A52	Mary Brummet	
	Stain with Sig-8-Fc, Sig-9-Fc, Sig-F-Fc, MAA +/-Neuraminidase			9:00-12:00
	Microscopic imaging of stained slides	2A38		12:00-1:00
<b>1:00-2:00</b>	<b>Lunch Break</b>	<b>3A66</b>		
2:00-3:00	Harvest ALI cultures (MLE)	3A52	Mary Brummet	
4:00-5:00	Epithelial smoke exposure chamber demonstration	5A24	Becky Vonakis	