

### International Symposium of One Health: the Role of Microbe

### June 15, 2016, Boston, USA

Posner Hall, Tufts University 200 Harrison Avenue, Boston, MA 02111

#### **Organizers:**

- Host: Sino-Micro (Overseas Chinese Society of Microbiology) Support: American Society for Microbiology Chinese Society for Microbiology Tufts University School of Medicine
- Co-Chairs: Frank X. Yang, Ph.D., Indiana University School of Medicine Chuanwu Xi, Ph.D., University of Michigan

#### **Organization Committee:**

Frank X. Yang, Ph.D., Indiana University School of Medicine Chuanwu Xi, Ph.D., University of Michigan Oliver He, Ph.D., University of Michigan Xin Li, Ph.D., Tufts University School of Medicine Howard Xu, Ph.D., California State University

#### **Time and Venue:**

Time: June 15, 2016 Venue: Posner Hall, Tufts University, 200 Harrison Avenue, Boston, MA 02111

We are grateful to the support from the following sponsors:







# **Meeting Program**

8:30 am - 9:00 am	Register/Check-in		
9:00 am - 9:40 am	Welcome / Introductory Comments		
	Chuanwu Xi, President-elect and Secretary, Sino-Micro		
	Frank X. Yang, President, Sino-Micro		
	James Tiedje, Treasure, American Society for Microbiology		
	John Leong, Chair of Department of Molecular Biology and Microbiology, Tufts		
	University School of Medicine		
9:40 am - 11:00 am	Microbiome and Synthetic Biology Moderator: Qijing Zhang		
9:40-10:00	Wenyuan Shi, UCLA Oral microbiome and National Microbiome Initiative		
10:00-10:20	Pinghua Liu, Boston University New Natural Product Sources and Synthetic Biology to Generate Leads		
10:20-10:40	Jun Lin The University of Tennessee Bile salt hydrolase: a promising microbiome target for enhanced animal production and human health		
10:40-11:00	Zhili He, University of Oklahoma Global Water Microbiome		
11:00 am - 12:00 pm	Microbial pathogenesis Moderator: Zhao-Qing Luo		
11:00-11:20	John Leong, Tufts University Pathogen-host interactions		
11:20-11:40	Zhao-Qing Luo, Purdue University Ubiquitination lessons taught by a bacterial pathogen		
11:40-12:00	Yinduo Ji, University of Minnesota Role of AirSR two-component system in Staphylococcus aureus survival in human blood		
12:00 am - 1:00 pm	Lunch Break		
	BIOLOG Tech Forum, Stacy Montgomery (10 minutes)		
1:00 pm - 2:20 pm	Microbes and Virulence factors Moderator: Hua Wang		
1:00-1:20	Qijing Zhang, Iowa State University Uncovering specific mutations responsible for bacterial virulence		
1:20-1:40	Youjun Feng, Zhejiang University School of Medicine Metabolic evidence that biotin is a nutritional virulence factor		
1:40-2:00 Hong-Yu Ou, Shanghai Jiaotong University Comparative Analysis of Bacterial Integrative and Conjugative Elements			

2:00-2:20	Jianjun Sun, University of Texas at El Paso			
	Roles of ESAT-6 in Mycobacterium tuberculosis pathogenesis			
2:20 pm - 4:00 pm	Antibiotic Resistance and Applied Microbiology Moderator: Howard Xu			
2:20-3:40	Hua Wang, The Ohio State University			
	Antibiotic Resistance Mitigation: Time for Paradigm Change			
2:40-3:00	Visorus Wang, South China Sas Institute of Occarology, CAS			
2.40-0.00	Xiaoxue Wang, South China Sea Institute of Oceanology, CAS Characterization of toxin-antitoxin systems in marine bacteria			
	Characterization of toxin-antitoxin systems in marine bacteria			
3:00-3:20	HongminLi, Wadsworth Center, New York State Department of Health			
	The Prp8 Intein as a Target for Inhibition of Pathogenic Fungi			
3:20-3:40	Howard Xu, California State University			
	Target Identification Platform for Antibacterials: TIPA systems for antibiotic drug			
	discovery			
0.40.4.00				
3:40-4:00	Zhi Zhou, Purdue University			
4.00	Antibiotic resistance in urban and natural environments			
4:00 am - 4:20 pm	Coffee Break			
4:20 pm - 5:20 pm	Diagnosis and Vaccines Moderator: Oliver He			
4:20-4:40	Yi-Wei Tang, Memorial Sloan Kettering Cancer Center			
	Progress toward a quick and accurate laboratory diagnosis of septicemia			
4:40-5:00	Shan Lu, University of Massachusetts Medical School			
	DNA Vaccine			
5:00-5:20	Oliver He, University of Michigan			
	Vaccine Design: genomic perspective			
6:00 pm - 9:00 pm	Dinner and Sino-Micro Business Meeting (open to Sino-Micro Members)			
	Address: China Pearl Restaurant, 9 Tyler Street, Boston, MA 02111			

# Google Maps

Boston Convention and Exhibition Center to Posner Walk 1.5 miles, 30 min Hall, Boston, MA 02111



Map data ©2016 Google 500 ft

**Boston Convention and Exhibition Center** Use caution - may involve errors or sections not suited for walking 415 Summer Street, Boston, MA 02210

	1.	Walk for 0.0 mi	
	2.	Take the elevator down to the 1st floor	0.0 mi
	3.	Walk for 0.2 mi	20 ft
t	4.	Head northeast toward Summer St	0.2 mi
4	5.	Turn left onto Summer St	30 ft
L,	6.	Turn right onto West Side Dr	367 ft
4	7.	Turn left onto Summer St	39 ft
4	8.	Turn left onto John F Fitzgerald Surface Rd/Surface Rd	0.7 mi
₽	9.	Turn right onto Beach St	0.2 mi
4	10.	<ul> <li>Turn left onto Tyler St</li> <li>Destination will be on the right</li> </ul>	325 ft
			105 ft

25 min (1.2 mi)

### China Pearl

9 Tyler Street, Boston, MA 02111

1	11.	Head south on Tyler St toward Kneeland St	
<b>r</b> ≯	12.	Turn right onto Kneeland St	230 ft
4	13.	Turn left onto Harrison Ave	180 ft
4	14.	Turn left at Nassau St Destination will be on the right	0.1 mi
			98 ft

5 min (0.2 mi)

Posner Hall

Boston, MA 02111

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

Posner Hall: 200 Harrison Ave., Boston, MA 02111. There is a telecom system installed in front of the entry, which connects to the dormitory office, and you can ask the person to open the door for you. Not sure if this works offhours. China Pearl: 9 Tyler Street, Boston, MA 02111. Dinner and business meeting site. The restaurant's phone number is (617) 426-4338. Contacts: Frank Yang: (317) 985-2828 Chuanwu Xi: (217) 714-4835 Oliver He: (734) 356-6761 Zhuoteng Yu: (617) 636-4657; (339) 293-2731





### **Antibody Production Services**

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**Mouse Ascites Production** - Produce mAb from 10 to 50 mice in 5 weeks!

**Monoclonal Hybridoma Development** - Use 5 Balb/c mice, and the subcloning to guarantee the clonality of cell lines.

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### Antibodies, Peroxidase Substrates for Immunoassays

### **HRP-conjugated Secondary Antibodies**

#### **Peroxidase Substrates**

Description	Applications	Cat. No.	Description	Applications	Cat. No.
Anti-Mouse IgG (H+L), HRP-Conjugated	WB, ELISA	GM5201	TMB One Solution Substrate for ELISA	ELISA	TMB-001
Anti-Rabbit IgG (H+L), HRP-Conjugated	WB, ELISA	GR2201	Chemiluminescent Kit DAB Substrate Kit	WB WB, IHC, ICC	CL-401 DAB-301
Anti-Human IgG (H+L), HRP-Conjugated	WB, ELISA	GH9201	AEC Substrate Kit	IHC, ICC	AEC-001

### **Hapten & Tag Antibodies**

Description	Applications	Cat. No.
Anti-Biotin	WB, IP, ELISA, IHC	AB75001
Anti-Digoxigenin	WB, IP, ELISA, IHC	AB79295
Anti-His(6X) tag	WB, IP, ICC, IHC, FC	AB20146
Anti-Methylcytosine (5-mC)	MeDIP, ELISA, IHC, ICC	AB20231
Anti-PEG	IHC, ELISA	AB20105

### **Human Immunoglobulin Antibodies**

Description	Host/Clonality	Cat. No.		
Anti-Human IgG (H+L)	Goat/polyclonal	GH9200		
Anti-Human IgA	Goat/polyclonal	GH9300		
Anti-Human IgD	Rabbit/monoclonal	AB20123		
Anti-Human IgE	Mouse/monoclonal	AB23347		
Anti-Human IgG Fc	Mouse/monoclonal	AB23420		
Anti-Human IgM	Rabbit/monoclonal	AB20121		
Anti-Human <i>kappa</i> Light Chain	Rabbit/monoclonal	AB20103		
Anti-Human <i>lambda</i> Light Chain	Rabbit/monoclonal	AB20110		



## **Immunohistochemistry (IHC) Detection Reagents**

#### **TruVision™ Poly-HRP IHC Detection Reagents**

**Superior sensitivity & high specificity** -Truvision<sup>™</sup> Poly-HRP conjugate offers low limit detection with a clean staining performance.

**Rapid Detection** - The Poly-HRP reagent is suitable for a rapid immunohistochemistry procedure to obtain a satisfactory result. There is no biotin blocking step involved in the IHC staining procotol.



The **TruVision™** poly-HRP IHC reagent features our proprietary polymer HRP technology to provide superior performance for immunostaining. The poly-HRP conjugate is created by attaching compact peroxidase enzyme clusters to antibody without using large linear backbone molecules. The compact poly-HRP conjugate has better accessibility to its target. This novel approach does not rely on biotin-avidin mechanism, and therefore eliminates potential background staining due to endogenous biotin activity.

#### **Ordering Information**

Description	Format	Cat. No.
Anti-Mouse IgG Poly-HRP IHC Reagent	RTU	IHC-5281
Anti-Rabbit IgG Poly-HRP IHC Reagent	RTU	IHC-2281
Poly-HRP IHC Detection Kit (anti-mouse/rabbit, with DAB)	Kit	IHC-701
DAB Substrate Kit	Kit	DAB-301



**Immunostaining of human breast carcinoma with Poly-HRP Conjugate IHC Reagents. (A)** Cytokeratin 7 Detection: incubation with mouse anti-CK7 (30 min), Anti-mouse Poly-HRP Conjugate Reagent (10 min) (Cat. No. IHC-5281), and DAB substrate for 5 min (Cat. No. DAB-301). **(B)** Ki67 Detection: incubation with rabbit anti-Ki67 (30 min), Anti-Rabbit Poly-HRP Conjugate Reagent (10 min) (Cat. No. IHC-2281), and DAB substrate for 5 min (Cat. No. DAB-301). **(C)** Cytokeratin 7 Detection: the same detection procedure used as in (A).

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