

2020 IPMB Plant and Environmental Microbiology (IPMB-PEM) joint meeting

Biweekly: Monday 10:00am~(~ 1 to 1.5 hr), A106

Participants: lab members of Erh-Min Lai, Chih-Horng Kuo, Lay-Sun Ma, Chuan Ku, and Chih-Hang Wu

Format: either progress report or JC, decided by the presenting lab

-Progress report: Formal presentation including background introduction (including hypothesis and rationale), results, conclusions, and future work

-Journal club: Paper presentation of one specific paper with comprehensive background introduction or review a specific topic

Date	Lab	Presenter	JC Paper/Research Report
01/13	Lai	Ching-Jung	Successive passaging of a plant-associated microbiome reveals robust habitat and host genotype dependent selection. PNAS January 14, 2020 117 (2) 1148-1159 https://doi.org/10.1073/pnas.1908600116
02/03	Kuo	Hung-Jui	Calcium transcriptionally regulates movement, recombination and other functions of Xylella fastidiosa under constant flow inside microfluidic chambers. Microbial Biotechnology(2020)13(2), 548–561doi:10.1111/1751-7915.1351
02/17	Lai	Xuan Lai	Sugar-mediated regulation of a c-di-GMP phosphodiesterase in Vibrio cholerae. Nature Communication 2019. https://doi.org/10.1038/s41467-019-13353-5
03/02	Ma	Cuong	Biosynthesis and secretion of the microbial sulfated peptide RaxX and binding to the rice XA21 immune receptor. PNAS 2019 https://www.pnas.org/content/116/17/8525.long
03/16	Lai	Hsiao-Han	Engineering transkingdom signalling in plants to control gene expression in rhizosphere bacteria. Nature Communication 2019
04/27	Ma	Hagos	An effector protein of the wheat stripe rust fungus targets chloroplasts and suppresses chloroplast function. Nature Communication 2019
05/11	Lai	Ching-Fang	Perception of <i>Agrobacterium tumefaciens</i> flagellin by FLS2 XL confers resistance to crown gall disease. Nature Plants 2020
05/25	Kuo	Lin Chou	Phytochromes and its relationship with T6SS in <i>Agrobacterium</i> https://onlinelibrary.wiley.com/doi/full/10.1111/php.12761 https://publikationen.bibliothek.kit.edu/1000096939
06/08	Ku	Chia-Ling	Ecological drivers of bacterial community assembly in synthetic phycospheres. PNAS 2020 https://www.pnas.org/content/early/2020/01/30/1917265117.short
06/22	Lai	Nia Santos	BioID: powerful technique for protein-protein interaction screen. Nature Microbiology 2019 https://www.nature.com/articles/s41564-019-0580-9
07/06	Wu	Juan Carlos	A plant pathogen utilizes effector proteins for microbiome manipulation, BioRxiv 2020 https://www.biorxiv.org/content/10.1101/2020.01.30.926725v1
07/20	Lai	Jemal	A comparative genomics methodology reveals a widespread family of membrane-disrupting T6SS effectors, Nat Com 2020 https://www.nature.com/articles/s41467-020-14951-4.pdf
08/03	Ma	Cuong van	Research talk

08/17	Ku	Tzu-Haw	Dynamic genome evolution and complex virocell metabolism of globally-distributed giant viruses (2020) https://www.nature.com/articles/s41467-020-15507-2
08/31	No meeting		
09/14	Lai	Si-Chong	Competition for iron drives phytopathogen control by natural rhizosphere microbiomes. <u>Nature Microbiology</u> volume 5, pages1002–1010(2020) https://www.nature.com/articles/s41564-020-0719-8
09/28	Ma	Chibbhi	Antifungal symbiotic peptide NCR044 exhibits unique structure and multifaceted mechanisms of action that confer plant protection, PNAS 2020 " https://www.pnas.org/content/117/27/16043
10/12	Lai/Kuo	Yu Wu	Discussion on thesis proposal
10/26	Kuo	Yu-Chen	Review on <i>Agrobacterium</i> -mediated transformation in soybean based on: 1. Optimization of <i>Agrobacterium</i> -mediated transformation in soybean. <u>Front Plant Sci.</u> https://www.frontiersin.org/articles/10.3389/fpls.2017.00246/full 2. Improved soybean transformation for efficient and high throughput transgenic production. <u>Transgenic Res.</u> https://link.springer.com/article/10.1007/s11248-020-00198-8
11/09	Wu		
11/23	Lai/Kuo	Hagos	Discussion on thesis proposal
12/14	Ku	Tzu-Tong	Global radiation in a rare biosphere soil diatom <u>Nature Communications</u> (2020) https://www.nature.com/articles/s41467-020-16181-0
12/28	Ma	Ray	Research talk