2021 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 (Please send the relevant paper at least one week in advance and share the slides with the PEM group after the presentation)

2021/date	Presenting lab	Presenter	JC Paper/Research Report
01/11	Lai	Mao-Sen Liu	An overview of floral dip mediated plant transformation
01/25	Kuo	Hung-Jui Kung	"Genome-wide identification of *Pseudomonas syringae* genes required for fitness during colonization of the leaf surface and apoplast" PNAS September 17, 2019 116 (38) 18900-18910; https://doi.org/10.1073/pnas.1908858116
02/08	Wu	Yu-Seng	Direct pathogen-induced assembly of an NLR immune receptor complex to form a holoenzyme. Science 2020 https://science.sciencemag.org/content/370/6521/eabe3069
02/22	Lai	Keith Pintor	Peptidoglycan editing provides immunity to *Acinetobacter baumannii* during bacterial warfare. Science Advances (2020) https://advances.sciencemag.org/content/6/30/eabb5614
03/08	Ku	Siwat Chang	The role of silicon in the development of complex crystal shapes in coccolithophores. *New Phytologist 2021.* doi: 10.1111/nph.17230
03/22	Ma	Yu-Han Lin	An orphan protein of *Fusarium graminearum* modulates host immunity by mediating proteasomal degradation of TaSnRK1α. Nature Communications | (2020) 11:4382 | https://doi.org/10.1038/s41467-020-18240-y
04/05	No meeting (holiday)		
04/19	Lai	Novaria	Contact-independent killing mediated by a T6SS effector with intrinsic cell-entry properties. Nature Communications | (2021) 12:423 | https://doi.org/10.1038/s41467-020-20726-8
05/03 (start at 9:30am)	Kuo	Ting-Yi Lee	**Research presentation:** Characterization of a Cold-shock Protein Gene Cluster on the Tumor-inducing Plasmid of Agrobacterium tumefaciens 1D1609
05/17	Wu	Ching-Yi Huang	Mutual potentiation of plant immunity by cell-surface and intracellular receptors. Nature 592, 110–115 (2021). https://doi.org/10.1038/s41586-021-03315-7
05/31	Lai	Wai	Limoli et al. Interspecies interactions induce exploratory motility in *Pseudomonas aeruginosa.* eLife 2019;8:e47365. DOI: https://doi.org/10.7554/eLife.47365
06/14	No meeting (Dragon Boat holiday)		
06/28	Ku	Ming-Wei Lai	Structural and Proteomic Characterization of the Initiation of Giant Virus Infection. Cell | (2020) 181: 1046-1061 | https://doi.org/10.1016/j.cell.2020.04.032

07/12	Lai	Yi-Hsuan Huang	canceled
07/26	Ma	Cuong	Phytopathogen Effectors Use Multiple Mechanisms to Manipulate Plant Autophagy. Cell Host Microbe. 2020 Oct 7;28(4):558-571.e6. doi: 10.1016/j.chom.2020.07.010.
08/09	Chu	Yen-I Cheng	Molecular mechanisms of biofilm formation and light-regulated motility in novel strains of Taiwan hot-spring cyanobacteria Front Microbiol. 2020 Jan 31;11:82. doi: 10.3389/fmicb.2020.00082.
08/23	Lai	Hung-Hui Wen	Burkholderia multivorans requires species-specific GltJK for entry of a contact-dependent growth inhibition system protein. Mol Microbiol 2021 Sep;116(3):957-973. doi: 10.1111/mmi.14783. Epub 2021 Jul 28.
09/06	Kuo	Yu-Chen Lin	Spatial transcriptomics of planktonic and sessile bacterial populations at single-cell resolution. Science 2021 Aug 13;373(6556):eabi4882. doi: 10.1126/science.abi4882.
09/20	No meeting (Moon festival holiday)		
10/04	Wu	Hung-yu Wang	The ZAR1 resistosome is a calcium-permeable channel triggering plant immune signaling. Cell, 2021, https://doi.org/10.1016/j.cell.2021.05.003.
10/18	Lai	Teng-Kuei	Ca2+ sensor-mediated ROS scavenging suppresses rice immunity and is exploited by a fungal effector. Cell 2021 Sep 28;S0092-8674(21)01056-4. doi: 10.1016/j.cell.2021.09.009.
11/01	Ku	Tsu-Wang Sun	Unraveling gene content variation across eukaryotic giant viruses based on network analyses and host associations. Virus Evol. 2021 7(2): veab081. https://doi.org/10.1093/ve/veab081
11/15	Ma	Floren Ariani Damei	Phosphorylation of ATG18a by BAK1 suppresses autophagy and attenuates plant resistance against necrotrophic pathogens. Autophagy 2020. https://doi.org/10.1080/15548627.2020.1810426
11/29	Lai	Yi-Hsuan	A Rice NBS-ARC Gene Conferring Quantitative Resistance to Bacterial Blight is Regulated by a Pathogen Effector-Inducible miRNA. Molecular Plant 2020. https://doi.org/10.1016/j.molp.2020.09.015
12/13	Chu	Keng-Min Lin	**Research presentation:** Growth properties and comparative genomic analysis of a novel strain of thermos-tolerant cyanobacterium, Cyanobacterium sp. DS4, from the lagoon of Dongsha Atoll
12/27	Kuo	Shen-Chian Pei	Nobori, T., Wang, Y., Wu, J., Stolze, S. C., Tsuda, Y., Finkemeier, I., et al. (2020). Multidimensional gene regulatory landscape of a bacterial pathogen in plants. Nat Plants 6, 883–896. doi:10.1038/s41477-020-0690-7