

Man-Wah Tan: Publication List

A. Peer-reviewed Articles:

1. Lehar, S.M., Pillow, T., Xu, M., Staben, L., Kajihara, K., DePalatis, L., Raab, H., Vandlen, R., Hazenbos, W., Morisaki, H., Kim, J., Park, S., Khalfin, Y., Loyet, K., Lupardus, P., Fong, R., Lee, B.C., Yan, D., Chalouni, C., Strandh, M., Koefoed, K., Lyssikatos, J.P., Flygare, J.A., **Tan, M.-W.**, Brown, E.J.*, and Mariathasan, S.* (2015) Novel antibody-antibiotic conjugate eliminates intracellular *S. aureus*. *Nature* 19;527(7578):323-8 (* Co-corresponding author)
2. Coady A, Xu M, Phung Q, Cheung TK, Bakalarski C, Alexander MK, Lehar, SM, Kim J, Park, S, **Tan, M-W**, Nishiyama, M (2015) The *Staphylococcus aureus* ABC-Type Manganese Transporter MntABC Is Critical for Reinitiation of Bacterial Replication Following Exposure to Phagocytic Oxidative Burst. PLoS ONE 10(9): e0138350. doi: 10.1371/journal.pone.0138350
3. Kong, C., **Tan, M.-W.** and Nathan, S. (2014) Modulation of host immune pathways by *Orthosiphon stamineus* protects *Caenorhabditis elegans* against *Staphylococcus aureus* Infection. *Biology Open* doi: 10.1242/bio.20148334
4. Kong, C., Yehye, W.A., Abd Rahman, N., **Tan, M.-W.** Nathan, S. (2014). Discovery of potential anti-infectives against *Staphylococcus aureus* using a *Caenorhabditis elegans* infection model. *BMC Complement Altern Med.* 14:4. doi: 10.1186/1472-6882-14-4.
5. Diep BA, Phung Q, Date S, Arnott D, Bakalarski C, Xu M, Nakamura G, Swem DL, Alexander MK, Le HN, Mai TT, **Tan M,-W**, Brown EJ, Nishiyama M. (2014). Identifying potential therapeutic targets of methicillin-resistant *Staphylococcus aureus* through *in vivo* proteomic analysis. *J Infect Dis* 209(10):1533-41. doi: 10.1093/infdis/jit662. Epub 2013 Nov 26.
6. Lee, S.-H., Wong, R.R., Chin, C.Y., Lim, T.Y., Eng, S.A., Kong, C., Ijap, N, Lau, M.S., Lim, M.P., Gan, Y.-H., He, F.-L., **Tan, M.-W.***, Nathan, S.* (2013). *Burkholderia pseudomallei* suppresses *Caenorhabditis elegans* immunity by specific degradation of a GATA transcription factor. *Proc. Natl. Acad. Sci. USA* 110(37):15067-72 (* Co-corresponding author)
7. Hazenbos, W.L.W., Kajihara, K.K., Morisaki J.H., Lehar, S.M., Kwakkenbos, M.J., Beaumont, T., Bakker, A.Q., Phung, Q., Swem, L., Ramakrishnan, S., Kim, J., Xu, M., Shah I.M., Diep, B.A., Sai, T., Sebrell, A., Khalfin, Y., Oh., A., Lin, S.-L., Koth, C., Lee, B.-C., Vandlen, R., Strandh, M., Koefoed, K., Andersen, P.S., Spits, H., Brown, E.J., **Tan, M.-W.** and

- Mariathasan, S. (2013). Novel staphylococcal glycosyltransferases SdgA and SdgB mediate immunogenicity and protection of virulence-associated cell wall proteins. *PLoS Pathog.* 9(10):e1003653. doi: 10.1371
8. Date, S.V., Modrusan, Z., Lawrence, M., Morisaki, J.H., Toy, K., Shah, I.M., Kim, J., Park, S., Xu, M., Basuino, L., Chan, L., Zeitschel, D., Chambers, H.F., **Tan, M.-W.**, Brown, E.J., Diep, B.A., Hazenbos, W.L.W. (2013). Infection-specific whole-genome transcriptional profile of methicillin-resistant *Staphylococcus aureus*. *J Infect Dis* Nov 28 [Epub ahead of print]
 9. Ian R. Monk I.R., Shah I.M., Xu, M., **Tan, M.-W.** and Foster, T.J. (2012). Transforming the untransformable. Application of direct transformation to manipulate genetically *Staphylococcus aureus* and *Staphylococcus epidermidis*. *mBio* 3(2). pii: e00277-11. doi: 10.1128/mBio.00277-11.
 10. Twumasi-Boateng, K., Wang, T., Tsai, L, Wu, L., **Tan, M.-W.** and Shapira, M. (2012). An age-dependent reversal in the protective capacities of JNK signaling shortens *C. elegans* lifespan. *Aging Cell* 11(4):659-67.
 11. Sem, X.H., Jason F Kreisberg, J.F., Kawli, T., **Tan, M.-W.**, Rhen, R. and Tan, P. (2012). Modulation of *Caenorhabditis elegans* Infection Sensitivity by the LIN-7 Cell Junction Protein *Cell Microbiol* 14(10): 1584-99.
 12. Bendesky, A., Pitts, J., Rockman, M.V., Chen, W.C., **Tan, M.-W.**, Kruglyak, L., Bargmann, C.I. (2012). Long-range regulatory polymorphisms affecting GABA receptor constitute a quantitative trait locus (QTL) for social behavior in *C. elegans*. *PLoS Genet* 8(12):e1003157. doi: 10.1371
 13. Dharmalingam, K, Tan, B.K., Mahmud, M.Z., Sedek, S.A., Majid, M.I., Kuah, M.K., Sulaiman, S.F., Ooi, K.L., Khan, N.A., Muhammad, T.S., **Tan, M.-W.**, Shu-Chien, A.C. (2012) *Swietenia macrophylla* extract promotes the ability of *Caenorhabditis elegans* to survive *Pseudomonas aeruginosa* infection. *J Ethnopharmacol.* 31;139(2):657-63.
 14. **Tan, M.-W** and Shapira, M. (2011) Genetic and molecular analysis of nematode-microbe interactions. *Cell Microbiol.* 13(4), 497-507
 15. Lee, S.-H, Ooi, S.K., Nor Muhammad Mahadi N.M., **Tan, M.-W.**, and Nathan S. (2011) Complete Killing of *Caenorhabditis elegans* by *Burkholderia pseudomallei* is Dependent on Prolonged Direct Association with the Viable Pathogen *PLoS One* 6(3): e16707. doi:10.1371.
 16. Glauser, D.A., Chen, W.C., Agin, R., Brownyn L. MacInnis, B.L., Hellman, A. B., Garrity, P.A.,

- Tan, M.-W.** and Miriam B. Goodman, M.B. (2011) Heat avoidance is regulated by transient receptor potential (TRP) channels and a neuropeptide signaling pathway in *C. elegans*. *Genetics* 188(1), 91-103.
17. **Tan, M.-W.** (2011) Innate immunity: Unfolding the neuro-immuno connections in resistance and tolerance. *Curr. Biol.* 21(12), R474-76.
 18. Alegado, R. Chin, C.Y., Monack, D.M. and **Tan, M.-W.** (2011) The two-component sensor kinase KdpD is required for *Salmonella typhimurium* colonization of *C. elegans* and survival in macrophages. *Cell Microbiol.* 13(10):1618-37
 19. Mansisidor, A.R., Cecere, G., Hoersch, S., Jensen, M.B., Kawli, T., Kennedy, L.M., Chavez, V., **Tan, M.-W.**, Lieb, J.D. and Grishok, A (2011). A Conserved PHD Finger Protein and Endogenous RNAi Modulate Insulin Signaling in *C. elegans*. *PLoS Genet* 7(9):e1002299
 20. Kawli, T., Wu, C. and **Tan, M.-W.** (2010) Systemic and cell intrinsic roles of Gq α signaling in the regulation of innate immunity, oxidative stress and longevity in *C. elegans*. *Proc. Natl. Acad. Sci. USA* 107(31), 13788-93
 21. Kawli, T., He F. and **Tan, M.-W.** (2010) It takes nerves to fight infections; insights on neuro-immune interactions from *C. elegans*. *Dis. Model. Mech.* 3(11-12), 721-31.
 22. Alegado, R. and **Tan, M.-W.** (2008). Resistance to antimicrobial peptides contributes to persistence of *Salmonella typhimurium* in the *C. elegans* intestine. *Cell Microbiol.* 10,1259-73
 23. Shapira, M and **Tan, M.-W.** (2008). Genetic analysis of *C. elegans* innate immunity. *Methods Mol. Biol.* 415, 429-42
 24. Muir R.E. and **Tan M.-W.** (2008). Virulence of *Leucobacter chromiireducens* subsp. *solipictus* to *Caenorhabditis elegans*: characterization of a novel host-pathogen interaction. *Appl Environ Microbiol.* 74, 4185-98.
 25. Evans, E., Chen, W.C. and **Tan, M.-W.** (2008). The DAF-2 insulin-like signaling pathway independently regulates aging and immunity in *C. elegans*. *Aging Cell.* 7, 879-93.
 26. Evans, E., Kawli, T. and **Tan, M.-W.** (2008). *Pseudomonas aeruginosa* suppresses host immunity by activating the DAF-2 insulin-like signaling pathway in *Caenorhabditis elegans*. *PLoS Pathog.* 4, e1000175.
 27. Nandakumar, N. and **Tan, M.-W.** (2008). Gamma-linolenic and stearidonic acids are required for basal immunity in *Caenorhabditis elegans* through their effects on p38 MAP

kinase activity. *PLoS Genet.* 4, e1000273.

28. Kawli, T. and **Tan, M.-W.** (2008). Neuroendocrine signals modulate the innate immunity of *Caenorhabditis elegans* through insulin signaling. *Nat Immunol.* 9, 1415-24 [highlighted in News and Views *Nat. Immunol.* 9, 1329-30].
29. Muir R.E. and **Tan M.-W.** (2007). *Leucobacter chromiireducens* subsp. *solipictus* subsp. nov., a pigmented bacterium isolated from the nematode *Caenorhabditis elegans*, and emended description of *L. chromiireducens*. *Int J Syst Evol Microbiol.* 57, 2770-6.
30. Kurz, C., Shapira, M., Chen, K., Baillie, D.L. and **Tan, M.-W.** (2007) Regulation of the infection and stress responsive ABC transporter, PGP-5 requires different isoform of the TIR domain adaptor protein TIR-1. *Biochem Biophys Res Commun.* 363, 438-43.
31. Thomsen, L.E., Slutz, S.S., **Tan, M.-W.** and Ingmer, H. (2006) *C. elegans* is a model host for *Listeria monocytogenes*. *Appl. Environ. Microbiol.* 72, 1700-01
32. Beale, E., Li, G., **Tan, M.-W.** and Rumbaugh, K. (2006) *C. elegans* senses bacterial autoinducers. *Appl. Environ. Microbiol.* 72, 5135-37. [Cover Article]
33. Shapira, M., Hamlin, B.J., Chen, K., Ronen, M. and **Tan, M.-W.** (2006). A conserved role for a GATA transcription factor in regulating innate immune responses. *Proc. Natl. Acad. Sci. USA* 103, 14086-91.
34. Kurz, C. and **Tan, M.-W.** (2004). Regulation of aging and innate immunity in *C. elegans*. *Aging Cell* 3,185-93
35. Alegado, R., Campbell, M., Chen, W., Slutz, S. and **Tan, M.-W.** (2003). Characterization of mediators of microbial virulence and innate immunity using the *C. elegans* host-pathogen model. *Cell. Microbiol.* 5, 435-44.
36. **Tan, M.-W.** (2002) Cross-species infections and their analysis. *Ann. Rev. Microbiol.* 56, 539-565.
37. **Tan, M.-W.** and Ausubel, F.M (2002). Alternative models in microbial pathogens. *Methods Microbiol.* 31:461-475.
38. Kim, D.H., Feinbaum, R., Alloing, G., Emerson, F.E., Garsin, D.A., Inoue, H., Tanaka-Hino, M., Hisamoto, N., Matsumoto, K., **Tan, M.-W.**, and Ausubel, F.M. (2002). A conserved p38 MAP Kinase pathway in *Caenorhabditis elegans* innate immunity. *Science* 297, 620-623
39. **Tan, M.-W.** (2002). Identification of host and pathogen factors involved in virulence using

C. elegans. Methods Enzymol. 358, 12-28

40. Pujol, N., Link, E.M., Liu, L.X., Kurz, C.L., Alloing, G., **Tan, M.-W.**, Ray, K.P., Solari, R., Johnson, C.D., and Ewbank, J.J., (2001). A reverse genetic analysis of components of the Toll signaling pathway in *Caenorhabditis elegans*. Curr. Biol. 11, 809-821
41. Yorgey, P., Rahme, L.G., **Tan, M.-W.**, and Ausubel, F.M., (2001). The roles of *mucD* and alginate in the virulence of *Pseudomonas aeruginosa* in plants, nematodes and mice. Mol. Microbiol. 51, 1063-1076.
42. **Tan, M.-W.** and Ausubel, F.M. (2000). *Caenorhabditis elegans*: a model genetic host to study *Pseudomonas aeruginosa* pathogenesis. Curr. Opin. Microbiol. 3, 29-34.
43. Rahme, L.G., Ausubel, F.M., Cao, H., Drenkard, E., Goumnerov, B.C., Lau, G.W., Mahajan-Miklos, M., Plotnikova, J. **Tan, M.-W.**, Tsongalis, J., Walendziewicz, C.L. and Tompkins, R. (2000). Plants and animals share functionally common bacterial virulence factors. Proc. Natl. Acad. Sci. USA 97, 8815-8821
44. **Tan, M.-W.**, Rahme, L.G., Sternberg, J.A., Tompkins, R.G. and Ausubel, F.M. (1999). *Pseudomonas aeruginosa* killing of *Caenorhabditis elegans* used to identify *P. aeruginosa* virulence factors. Proc. Natl. Acad. Sci. USA 96, 2408-2413.
45. **Tan, M.-W.**, Mahajan-Miklos, S., and Ausubel, F.M. (1999). Killing of *Caenorhabditis elegans* by *Pseudomonas aeruginosa* used to model mammalian bacterial pathogenesis. Proc. Natl. Acad. Sci. USA 96, 715-720.
46. Mahajan-Miklos, S., **Tan, M.-W.**, Rahme, L.G., and Ausubel, F.M. (1999). Molecular mechanisms of bacterial virulence elucidated using a *Pseudomonas aeruginosa*-*Caenorhabditis elegans* pathogenesis model. Cell 96, 47-56.
47. Shirasu, K., Lahaye, T., **Tan, M.-W.**, Zhou, F., Azevedo, C. and Shulze-Lefert, P. (1999). A novel class of eukaryotic zinc-binding proteins is required for disease resistance signaling in barley and development in *C. elegans*. Cell, 99, 355-366
48. Rahme, L.G., **Tan, M.-W.**, Le, L., Wong, S.M., Tompkins, R.G., Calderwood, S.B., and Ausubel, F.M. (1997). Use of model plant hosts to identify *Pseudomonas aeruginosa* virulence factors. Proc. Natl. Acad. Sci. USA 94, 13245-13250.
49. **Tan, M.-W.**, Kirton, L.G., and Kirton, C.G. (1992). Composition and distribution of butterflies in Rompin-Endau, especially along Sungai Kinchin and its vicinity. Malay. Nat. J. 45, 193-212.

50. Kirton, L.G., **Tan, M.-W.** and Kirton, C.G. (1982). Life histories of *Euploea crameri bremeri* and *Idea hypermnestra linteata* (Lepidoptera; Danaidae). Malay. Nat. J. 36, 29-3