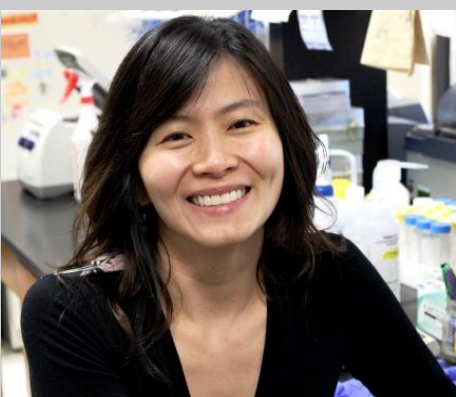




Jun Goh



Senior Research Scientist

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Title: Host fitness of Probiotic Microbes

Research emphasis:

Dr. Goh's research focuses on the molecular mechanisms of gut fitness in probiotic microbes, their immunomodulatory function and host microbiome interaction. Her current works include *in vivo* transcriptome studies of intestinal lactobacilli during gut transit in murine models, the roles of cell surface components on gut retention and immunomodulation, and prebiotic oligosaccharides utilization by gut microbes. She recently discovered the link between glycogen biosynthesis and *in vivo* competitiveness of *Lactobacillus acidophilus*. She is also interested in the biological roles of Cas9 and smRNA in lactobacilli physiology.

Applications:

- Probiotic delivery/activities in host
- Host/gut microbiome interaction
- Novel prebiotics
- *In vivo* (murine) colonization studies

Research Strengths:

- Functional genomics
- Marker-free gene replacement system
- Transcriptome profiling
- Epithelial cell adhesion and DC cytokine expression assays

Selected Publications:

Celebioglu, H. U., M. Ejby, A. Majumder, C. Købler, **Y. J. Goh**, K. Thorsen, B. Schmidt, S. O'Flaherty, M. Abou Hachem, S. J. Lahtinen, S. Jacobsen, T. R. Klaenhammer, S. Brix, K. Mølhave, and B. Svensson. 2016. Differential proteome and cellular adhesion analyses of the probiotic bacterium *Lactobacillus acidophilus* NCFM grown on raffinose – an emerging prebiotic. *Proteomics* 16:1361-1375.

Goh, Y. J. and T. R. Klaenhammer. 2015. Genetic mechanisms of prebiotic oligosaccharides metabolism in probiotic microbes. *Ann. Rev. Food Sci. Tech.* 6:137-56.

Goh, Y. J. and T. R. Klaenhammer. 2014. Insights into glycogen metabolism in *Lactobacillus acidophilus*: impact on carbohydrate metabolism, stress tolerance and gut retention. *Microb. Cell Fact.* 13:94. (Highly accessed)

Lightfoot, Y. L., K. Selle, T. Yang, **Y. J. Goh**, B. Sahay, M. Zadeh, J. L. Owen, N. Colliou, E. Li, T. Johannssen, B. Lepenies, T. R. Klaenhammer, and M. Mohamadzadeh. **2015**. SIGNR3-dependent immune regulation by *Lactobacillus acidophilus* surface layer protein A in colitis. *EMBO J.* 34:881-895.