

Publications from Glycom donation program



J. Sonnenburg	Marcobal A et al. (2011) Bacteroides in the infant gut consume milk oligosaccharides via mucus-utilization pathways, <i>Cell Host Microbe</i> 10(5):507-14.
D. Mills	Ruiz-Moyano S et al. (2013) Variation in consumption of human milk oligosaccharides by infant gut-associated strains of <i>Bifidobacterium breve</i> , <i>Appl Environ Microbiol</i> 79(19):6040-9. Garrido D et al. (2015) Comparative transcriptomics reveals key differences in the response to milk oligosaccharides of infant gut-associated bifidobacteria, <i>Sci Rep</i> 5:13517. Garrido, D., et al. (2016) A novel gene cluster allows preferential utilization of fucosylated milk oligosaccharides in <i>Bifidobacterium longum</i> subsp. <i>longum</i> SC596. <i>Sci Rep.</i> , 6: p. 35045.
N. Juge	Crost EH et al. (2013) Utilisation of mucin glycans by the human gut symbiont <i>Ruminococcus gnavus</i> is strain-dependent, <i>PLoS One</i> 8(10):e76341. Crost, E.H., et al. (2016) The mucin-degradation strategy of <i>Ruminococcus gnavus</i> : The importance of intramolecular trans-sialidases. <i>Gut Microbes</i> , 7(4): p. 302-312.
T. Hennet	Weiss GA et al. (2014) Selective proliferation of intestinal <i>Barnesiella</i> under fucosyllactose supplementation in mice, <i>Br J Nutr</i> 111(9):1602-10. Huang YL et al. (2015) Sialic acid catabolism drives intestinal inflammation and microbial dysbiosis in mice, <i>Nat Commun</i> 6:8141.
S. Donovan	Li M et al. (2014) Human milk oligosaccharides shorten rotavirus-induced diarrhea and modulate piglet mucosal immunity and colonic microbiota, <i>ISME J</i> 8(8):1609-20. Comstock et al. (2017) Dietary Human Milk Oligosaccharides but Not Prebiotic Oligosaccharides Increase Circulating Natural Killer Cell and Mesenteric Lymph Node Memory T Cell Populations in Noninfected and Rotavirus-Infected Neonatal Piglets <i>J Nutr</i> doi: 10.3945/jn.116.243774
S. Beni	Balogh R et al. (2015) Determination and quantification of 2'-O-fucosyllactose and 3-O-fucosyllactose in human milk by GC-MS as O-trimethylsilyl-oxime derivatives, <i>J Pharm Biomed Anal</i> 115:450-6
C. Schwab/C. Chassard	Bunesova V et al. (2016) Fucosyllactose and L-fucose utilization of infant <i>Bifidobacterium longum</i> and <i>Bifidobacterium kashiwanohense</i> , <i>BMC Microbiology</i> 16:248 Schwab et al. (2017) Trophic Interactions of Infant Bifidobacteria and <i>Eubacterium hallii</i> during L-Fucose and Fucosyllactose Degradation <i>Frontiers in Microbiology</i> 8:95 Bunesova et al. (2017) Mucin Cross-Feeding of Infant Bifidobacteria and <i>Eubacterium hallii</i> <i>Microbial Ecology</i> Volume 75, Issue 1, pp 228-238
Douwe Van Sinderen	James et al. (2016) <i>Bifidobacterium breve</i> UCC2003 metabolises the human milk oligosaccharides lacto- <i>N</i> -tetraose and lacto- <i>N</i> -neo-tetraose through overlapping, yet distinct pathways, <i>Scientific Report</i> 6:38560 Arboleya et al. (2018) Gene-trait matching across the <i>Bifidobacterium longum</i> pan-genome reveals considerable diversity in carbohydrate catabolism among human infant strains, <i>BMC Genomics</i> ; 19:33 James et al. (2018) <i>Bifidobacterium breve</i> UCC2003 employs multiple transcriptional regulators to control metabolism of particular human milk oligosaccharides, <i>AEM</i>
Daniel Garrido	Medina et al. (2018) Simulation and modeling of dietary changes in the infant gut microbiome <i>FEMS Microbiology Ecology</i> , 94, 2018, fiy140

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Takane Katayama	<p>Gotoh et al (2018) Sharing of human milk oligosaccharides degradants within bifidobacterial communities in faecal cultures supplemented with Bifidobacterium bifidum Scientific Reports, 8:13958</p> <p>Sakanaka et al. 2019 Evolutionary adaptation in fucosyllactose uptake systems supports bifidobacteria-infant symbiosis Sci. Adv. 5 : eaaw7696</p>
Steven Townsend	<p>Craft, K.M., H.C. Thomas, and S.D. Townsend, Sialylated variants of lacto-N-tetraose exhibit antimicrobial activity against Group B Streptococcus. Org Biomol Chem, 2018.</p> <p>Craft, K.M., H.C. Thomas, and S.D. Townsend, Interrogation of Human Milk Oligosaccharide Fucosylation Patterns for Antimicrobial and Antibiofilm Trends in Group B Streptococcus. ACS Infect Dis, 2018.</p>
Lindsay Hall	<p>Lawson, MAE, O'Neill IJ, Kujawska M, Gowrinadh Javvadi S, Wijeyesekera A, Flegg Z, Chalklen L, Hall L. Breast milk-derived human milk oligosaccharides promote Bifidobacterium interactions within a single ecosystem. ISME J. 2019 Nov 18. doi: 10.1038/s41396-019-0553-2. [Epub ahead of print]</p>



Glycom A/S

Kogle Alle 4, 2970 Hørsholm, Denmark

+45 (0) 8830 9500 • glycare@glycom.com • www.glycom.com