# Justin L Sonnenburg

## List of Publications by Year in Descending Order



| 94 | 15,433 | 47 | 112 |
|---|---|---|---|
| papers | citations | h-index | g-index |
| **112** | **20,097** | **22** | **7.03** |
| ext. papers | ext. citations | avg, IF | L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 94 | Establishment and characterization of stable, diverse, fecal-derived in vitro microbial communities that model the intestinal microbiota.. *Cell Host and Microbe*, **2022**, | 23.4 | 4 |
| 93 | Global, distinctive, and personal changes in molecular and microbial profiles by specific fibers in humans.. *Cell Host and Microbe*, **2022**, | 23.4 | 4 |
| 92 | Reporting guidelines for human microbiome research: the STORMS checklist. *Nature Medicine*, **2021**, 27, 1885-1892 | 50.5 | 19 |
| 91 | C. difficile exploits a host metabolite produced during toxin-mediated disease. *Nature*, **2021**, 593, 261-265 | 50.4 | 11 |
| 90 | Mucin-derived O-glycans supplemented to diet mitigate diverse microbiota perturbations. *ISME Journal*, **2021**, 15, 577-591 | 11.9 | 16 |
| 89 | A metabolomics pipeline for the mechanistic interrogation of the gut microbiome. *Nature*, **2021**, 595, 415-420 | 50.4 | 32 |
| 88 | Gut-microbiota-targeted diets modulate human immune status. *Cell*, **2021**, 184, 4137-4153.e14 | 56.2 | 86 |
| 87 | Quantifying rapid bacterial evolution and transmission within the mouse intestine. *Cell Host and Microbe*, **2021**, 29, 1454-1468.e4 | 23.4 | 0 |
| 86 | The Clinical Drug Ebselen Attenuates Inflammation and Promotes Microbiome Recovery in Mice after Antibiotic Treatment for CDI. *Cell Reports Medicine*, **2020**, 1, | 18 | 10 |
| 85 | Long-term dietary intervention reveals resilience of the gut microbiota despite changes in diet and weight. *American Journal of Clinical Nutrition*, **2020**, 111, 1127-1136 | 7 | 43 |
| 84 | Phase-variable capsular polysaccharides and lipoproteins modify bacteriophage susceptibility in Bacteroides thetaiotaomicron. *Nature Microbiology*, **2020**, 5, 1170-1181 | 26.6 | 39 |
| 83 | High-Throughput Stool Metaproteomics: Method and Application to Human Specimens. *MSystems*, **2020**, 5, | 7.6 | 7 |
| 82 | Bacteroides thetaiotaomicron-Infecting Bacteriophage Isolates Inform Sequence-Based Host Range Predictions. *Cell Host and Microbe*, **2020**, 28, 371-379.e5 | 23.4 | 25 |
| 81 | Dysbiosis-Induced Secondary Bile Acid Deficiency Promotes Intestinal Inflammation. *Cell Host and Microbe*, **2020**, 27, 659-670.e5 | 23.4 | 128 |
| 80 | A Metabolic Pathway for Activation of Dietary Glucosinolates by a Human Gut Symbiont. *Cell*, **2020**, 180, 717-728.e19 | 56.2 | 48 |
| 79 | Klebsiella michiganensis transmission enhances resistance to Enterobacteriaceae gut invasion by nutrition competition. *Nature Microbiology*, **2020**, 5, 630-641 | 26.6 | 25 |
| 78 | In Vivo Wireless Sensors for Gut Microbiome Redox Monitoring. *IEEE Transactions on Biomedical Engineering*, **2020**, 67, 1821-1830 | 5 | 6 |

| | | | |
|---|---|---|---|
| 77 | Longitudinal Multi-omics Reveals Subset-Specific Mechanisms Underlying Irritable Bowel Syndrome. *Cell*, **2020**, 182, 1460-1473.e17 | 56.2 | 63 |
| 76 | alters the gut microbiota and modulates the functional metabolism of T regulatory cells in the context of immune checkpoint blockade. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 27509-27515 | 11.5 | 39 |
| 75 | Proximal colon-derived O-glycosylated mucus encapsulates and modulates the microbiota. *Science*, **2020**, 370, 467-472 | 33.3 | 47 |
| 74 | Bacterially Derived Tryptamine Increases Mucus Release by Activating a Host Receptor in a Mouse Model of Inflammatory Bowel Disease. *IScience*, **2020**, 23, 101798 | 6.1 | 8 |
| 73 | A randomized crossover trial on the effect of plant-based compared with animal-based meat on trimethylamine-N-oxide and cardiovascular disease risk factors in generally healthy adults: Study With Appetizing Plantfood-Meat Eating Alternative Trial (SWAP-MEAT). *American Journal of Clinical Nutrition*, **2020**, 112, 1188-1199 | 7 | 55 |
| 72 | When Gut Microbiota Creep into Fat, the Fat Creeps Back. *Cell*, **2020**, 183, 589-591 | 56.2 | 3 |
| 71 | Vulnerability of the industrialized microbiota. *Science*, **2019**, 366, | 33.3 | 83 |
| 70 | Pursuing Human-Relevant Gut Microbiota-Immune Interactions. *Immunity*, **2019**, 51, 225-239 | 32.3 | 54 |
| 69 | Role for diet in normal gut barrier function: developing guidance within the framework of food-labeling regulations. *American Journal of Physiology - Renal Physiology*, **2019**, 317, G17-G39 | 5.1 | 37 |
| 68 | The ancestral and industrialized gut microbiota and implications for human health. *Nature Reviews Microbiology*, **2019**, 17, 383-390 | 22.2 | 136 |
| 67 | Small intestinal microbial dysbiosis underlies symptoms associated with functional gastrointestinal disorders. *Nature Communications*, **2019**, 10, 2012 | 17.4 | 88 |
| 66 | Western diet regulates immune status and the response to LPS-driven sepsis independent of diet-associated microbiome. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 3688-3694 | 11.5 | 38 |
| 65 | Links between environment, diet, and the hunter-gatherer microbiome. *Gut Microbes*, **2019**, 10, 216-227 | 8.8 | 66 |
| 64 | Depletion of microbiome-derived molecules in the host using genetics. *Science*, **2019**, 366, | 33.3 | 42 |
| 63 | Intestinal IgA Regulates Expression of a Fructan Polysaccharide Utilization Locus in Colonizing Gut Commensal Bacteroides thetaiotaomicron. *MBio*, **2019**, 10, | 7.8 | 17 |
| 62 | Competitively Selected Donor Fecal Microbiota Transplantation: Butyrate Concentration and Diversity as Measures of Donor Quality. *Journal of Pediatric Gastroenterology and Nutrition*, **2018**, 67, 185-187 | 2.8 | 15 |
| 61 | Microbiota-accessible carbohydrates suppress Clostridium difficile infection in a murine model. *Nature Microbiology*, **2018**, 3, 662-669 | 26.6 | 105 |
| 60 | A Gut Commensal-Produced Metabolite Mediates Colonization Resistance to Salmonella Infection. *Cell Host and Microbe*, **2018**, 24, 296-307.e7 | 23.4 | 193 |

| | | | |
|---|---|---|---|
| 59 | An exclusive metabolic niche enables strain engraftment in the gut microbiota. *Nature*, **2018**, 557, 434-438 | 50.4 | 157 |
| 58 | Gut Microbiota-Produced Tryptamine Activates an Epithelial G-Protein-Coupled Receptor to Increase Colonic Secretion. *Cell Host and Microbe*, **2018**, 23, 775-785.e5 | 23.4 | 136 |
| 57 | Gut microbiome transition across a lifestyle gradient in Himalaya. *PLoS Biology*, **2018**, 16, e2005396 | 9.7 | 71 |
| 56 | A Microbiota Assimilation. *Cell Metabolism*, **2018**, 28, 675-677 | 24.6 | 3 |
| 55 | uses amino acids associated with gut microbial dysbiosis in a subset of patients with diarrhea. *Science Translational Medicine*, **2018**, 10, | 17.5 | 73 |
| 54 | Genetic Variation of the SusC/SusD Homologs from a Polysaccharide Utilization Locus Underlies Divergent Fructan Specificities and Functional Adaptation in Strains. *MSphere*, **2018**, 3, | 5 | 20 |
| 53 | The Gut Microbiome: Connecting Spatial Organization to Function. *Cell Host and Microbe*, **2017**, 21, 433-442 | 23.4 | 274 |
| 52 | Tunable Expression Tools Enable Single-Cell Strain Distinction in the Gut Microbiome. *Cell*, **2017**, 169, 538-546.e12 | 56.2 | 101 |
| 51 | Commensal Microbes and Hair Follicle Morphogenesis Coordinately Drive Treg Migration into Neonatal Skin. *Cell Host and Microbe*, **2017**, 21, 467-477.e5 | 23.4 | 130 |
| 50 | The emerging metabolic view of Clostridium difficile pathogenesis. *Current Opinion in Microbiology*, **2017**, 35, 42-47 | 7.9 | 26 |
| 49 | Seasonal cycling in the gut microbiome of the Hadza hunter-gatherers of Tanzania. *Science*, **2017**, 357, 802-806 | 33.3 | 423 |
| 48 | Dynamic Light Scattering Microrheology Reveals Multiscale Viscoelasticity of Polymer Gels and Precious Biological Materials. *ACS Central Science*, **2017**, 3, 1294-1303 | 16.8 | 39 |
| 47 | A gut bacterial pathway metabolizes aromatic amino acids into nine circulating metabolites. *Nature*, **2017**, 551, 648-652 | 50.4 | 438 |
| 46 | Individualized Responses of Gut Microbiota to Dietary Intervention Modeled in Humanized Mice. *MSystems*, **2016**, 1, | 7.6 | 31 |
| 45 | Diet-induced extinctions in the gut microbiota compound over generations. *Nature*, **2016**, 529, 212-5 | 50.4 | 890 |
| 44 | Host-Microbiota Interactions in the Pathogenesis of Antibiotic-Associated Diseases. *Cell Reports*, **2016**, 14, 1049-1061 | 10.6 | 63 |
| 43 | The effect of microbial colonization on the host proteome varies by gastrointestinal location. *ISME Journal*, **2016**, 10, 1170-81 | 11.9 | 21 |
| 42 | Diet-microbiota interactions as moderators of human metabolism. *Nature*, **2016**, 535, 56-64 | 50.4 | 1086 |

| | | | |
|---|---|---|---|
| 41 | Correlated gene expression encoding serotonin (5-HT) receptor 4 and 5-HT transporter in proximal colonic segments of mice across different colonization states and sexes. *Neurogastroenterology and Motility*, **2016**, 28, 1443-8 | 4 | 8 |
| 40 | Modulation of a Circulating Uremic Solute via Rational Genetic Manipulation of the Gut Microbiota. *Cell Host and Microbe*, **2016**, 20, 709-715 | 23.4 | 127 |
| 39 | Metabolome progression during early gut microbial colonization of gnotobiotic mice. *Scientific Reports*, **2015**, 5, 11589 | 4.9 | 24 |
| 38 | Quantitative Imaging of Gut Microbiota Spatial Organization. *Cell Host and Microbe*, **2015**, 18, 478-88 | 23.4 | 242 |
| 37 | A small-molecule antivirulence agent for treating Clostridium difficile infection. *Science Translational Medicine*, **2015**, 7, 306ra148 | 17.5 | 99 |
| 36 | Monitoring host responses to the gut microbiota. *ISME Journal*, **2015**, 9, 1908-15 | 11.9 | 30 |
| 35 | Your gut microbiome, deconstructed. *Nature Biotechnology*, **2015**, 33, 1238-1240 | 44.5 | 1 |
| 34 | Nutrition: A personal forecast. *Nature*, **2015**, 528, 484-6 | 50.4 | 4 |
| 33 | Gut microbes promote colonic serotonin production through an effect of short-chain fatty acids on enterochromaffin cells. *FASEB Journal*, **2015**, 29, 1395-403 | 0.9 | 538 |
| 32 | Starving our microbial self: the deleterious consequences of a diet deficient in microbiota-accessible carbohydrates. *Cell Metabolism*, **2014**, 20, 779-786 | 24.6 | 423 |
| 31 | Gut microbes take their vitamins. *Cell Host and Microbe*, **2014**, 15, 5-6 | 23.4 | 6 |
| 30 | Reprograming of gut microbiome energy metabolism by the FUT2 CrohnTs disease risk polymorphism. *ISME Journal*, **2014**, 8, 2193-206 | 11.9 | 140 |
| 29 | The Enteric Two-Step: nutritional strategies of bacterial pathogens within the gut. *Cellular Microbiology*, **2014**, 16, 993-1003 | 3.9 | 27 |
| 28 | Gut microbiota-produced succinate promotes C. difficile infection after antibiotic treatment or motility disturbance. *Cell Host and Microbe*, **2014**, 16, 770-7 | 23.4 | 209 |
| 27 | Microbiota-liberated host sugars facilitate post-antibiotic expansion of enteric pathogens. *Nature*, **2013**, 502, 96-9 | 50.4 | 630 |
| 26 | Integrative analysis of the microbiome and metabolome of the human intestinal mucosal surface reveals exquisite inter-relationships. *Microbiome*, **2013**, 1, 17 | 16.6 | 175 |
| 25 | A refined palate: bacterial consumption of host glycans in the gut. *Glycobiology*, **2013**, 23, 1038-46 | 5.8 | 123 |
| 24 | Genetically dictated change in host mucus carbohydrate landscape exerts a diet-dependent effect on the gut microbiota. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 17059-64 | 11.5 | 180 |

| | | | |
|---|---|---|---|
| 23 | Complex interactions among diet, gastrointestinal transit, and gut microbiota in humanized mice. *Gastroenterology*, **2013**, 144, 967-77 | 13.3 | 281 |
| 22 | A metabolomic view of how the human gut microbiota impacts the host metabolome using humanized and gnotobiotic mice. *ISME Journal*, **2013**, 7, 1933-43 | 11.9 | 222 |
| 21 | Host-centric proteomics of stool: a novel strategy focused on intestinal responses to the gut microbiota. *Molecular and Cellular Proteomics*, **2013**, 12, 3310-8 | 7.6 | 42 |
| 20 | Prioritization of a plant polysaccharide over a mucus carbohydrate is enforced by a Bacteroides hybrid two-component system. *Molecular Microbiology*, **2012**, 85, 478-91 | 4.1 | 46 |
| 19 | Molecular analysis of model gut microbiotas by imaging mass spectrometry and nanodesorption electrospray ionization reveals dietary metabolite transformations. *Analytical Chemistry*, **2012**, 84, 9259-67 | 7.8 | 50 |
| 18 | Eating for two: how metabolism establishes interspecies interactions in the gut. *Cell Host and Microbe*, **2011**, 10, 336-47 | 23.4 | 309 |
| 17 | Bacteroides in the infant gut consume milk oligosaccharides via mucus-utilization pathways. *Cell Host and Microbe*, **2011**, 10, 507-14 | 23.4 | 337 |
| 16 | Community health care: therapeutic opportunities in the human microbiome. *Science Translational Medicine*, **2011**, 3, 78ps12 | 17.5 | 64 |
| 15 | Mechanistic insight into polysaccharide use within the intestinal microbiota. *Gut Microbes*, **2011**, 2, 86-90 | 8.8 | 31 |
| 14 | Specificity of polysaccharide use in intestinal bacteroides species determines diet-induced microbiota alterations. *Cell*, **2010**, 141, 1241-52 | 56.2 | 450 |
| 13 | Symbiosis research, technology, and education: Proceedings of the 6th International Symbiosis Society Congress held in Madison Wisconsin, USA, August 2009. *Symbiosis*, **2010**, 51, 1-12 | 3 | 1 |
| 12 | Genomic and metabolic studies of the impact of probiotics on a model gut symbiont and host. *PLoS Biology*, **2006**, 4, e413 | 9.7 | 299 |
| 11 | A hybrid two-component system protein of a prominent human gut symbiont couples glycan sensing in vivo to carbohydrate metabolism. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 8834-9 | 11.5 | 115 |
| 10 | Glycan foraging in vivo by an intestine-adapted bacterial symbiont. *Science*, **2005**, 307, 1955-9 | 33.3 | 803 |
| 9 | Host-bacterial mutualism in the human intestine. *Science*, **2005**, 307, 1915-20 | 33.3 | 3448 |
| 8 | Getting a grip on things: how do communities of bacterial symbionts become established in our intestine?. *Nature Immunology*, **2004**, 5, 569-73 | 19.1 | 302 |
| 7 | Recovery of the Gut Microbiota after Antibiotics Depends on Host Diet and Environmental Reservoirs. *SSRN Electronic Journal*, | 1 | 1 |
| 6 | Electron transfer proteins in gut bacteria yield metabolites that circulate in the host | | 1 |

| | | |
|---|---|---|
| 5 | Gut Microbiota-Targeted Diets Modulate Human Immune Status | 6 |
| 4 | Links between environment, diet, and the hunter-gatherer microbiome | 2 |
| 3 | Depletion of microbiome-derived molecules in the host using Clostridium genetics | 3 |
| 2 | Recovery of the gut microbiota after antibiotics depends on host diet and environmental reservoirs | 1 |
| 1 | A metabolomics pipeline enables mechanistic interrogation of the gut microbiome | 1 |