# Karen Guillemin

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/480810/publications.pdf

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|---|---|---|---|
| 89 papers | 8,177 citations | 66343 42 h-index | 60623 81 g-index |
| 107 all docs | 107 docs citations | 107 times ranked | 8135 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Evidence for a core gut microbiota in the zebrafish. ISME Journal, 2011, 5, 1595-1608. | 9.8 | 990 |
| 2 | Contribution of neutral processes to the assembly of gut microbial communities in the zebrafish over host development. ISME Journal, 2016, 10, 655-664. | 9.8 | 627 |
| 3 | Intestinal Alkaline Phosphatase Detoxifies Lipopolysaccharide and Prevents Inflammation in Zebrafish in Response to the Gut Microbiota. Cell Host and Microbe, 2007, 2, 371-382. | 11.0 | 613 |
| 4 | Distinct signals from the microbiota promote different aspects of zebrafish gut differentiation. Developmental Biology, 2006, 297, 374-386. | 2.0 | 543 |
| 5 | The composition of the zebrafish intestinal microbial community varies across development. ISME Journal, 2016, 10, 644-654. | 9.8 | 524 |
| 6 | The Hypoxic Response: Huffing and HIFing. Cell, 1997, 89, 9-12. | 28.9 | 446 |
| 7 | Epithelial cell proliferation in the developing zebrafish intestine is regulated by the Wnt pathway and microbial signaling via Myd88. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 4570-4577. | 7.1 | 231 |
| 8 | Cag pathogenicity island-specific responses of gastric epithelial cells to Helicobacter pylori infection. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 15136-15141. | 7.1 | 202 |
| 9 | The Complete Genome Sequence of Helicobacter pylori Strain G27. Journal of Bacteriology, 2009, 191, 447-448. | 2.2 | 183 |
| 10 | Host Gut Motility Promotes Competitive Exclusion within a Model Intestinal Microbiota. PLoS Biology, 2016, 14, e1002517. | 5.6 | 164 |
| 11 | Chemodetection and Destruction of Host Urea Allows Helicobacter pylori to Locate the Epithelium. Cell Host and Microbe, 2015, 18, 147-156. | 11.0 | 141 |
| 12 | Individual Members of the Microbiota Disproportionately Modulate Host Innate Immune Responses. Cell Host and Microbe, 2015, 18, 613-620. | 11.0 | 135 |
| 13 | Interhost dispersal alters microbiome assembly and can overwhelm host innate immunity in an experimental zebrafish model. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 11181-11186. | 7.1 | 131 |
| 14 | The enteric nervous system promotes intestinal health by constraining microbiota composition. PLoS Biology, 2017, 15, e2000689. | 5.6 | 126 |
| 15 | Comparison of Genetic Divergence and Fitness between Two Subclones of Helicobacter pylori. Infection and Immunity, 2001, 69, 7832-7838. | 2.2 | 120 |
| 16 | A conserved bacterial protein induces pancreatic beta cell expansion during zebrafish development. ELife, 2016, 5, . | 6.0 | 117 |
| 17 | Study of Hostâ€“Microbe Interactions in Zebrafish. Methods in Cell Biology, 2011, 105, 87-116. | 1.1 | 110 |
| 18 | Helicobacter pylori perceives the quorum-sensing molecule AI-2 as a chemorepellent via the chemoreceptor TlpB. Microbiology (United Kingdom), 2011, 157, 2445-2455. | 1.8 | 102 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Ontogenetic Differences in Dietary Fat Influence Microbiota Assembly in the Zebrafish Gut. MBio, 2015, 6, e00687-15. | 4.1 | 101 |
| 20 | Distinct gene expression profiles characterize the histopathological stages of disease in Helicobacter-induced mucosa-associated lymphoid tissue lymphoma. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 1292-1297. | 7.1 | 100 |
| 21 | The hygiene hypothesis, the COVID pandemic, and consequences for the human microbiome. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, . | 7.1 | 100 |
| 22 | Helicobacter pylori-host cell interactions mediated by type IV secretion. Cellular Microbiology, 2005, 7, 911-919. | 2.1 | 96 |
| 23 | H. pylorivirulence factor CagA increases intestinal cell proliferation by Wnt pathway activation in a transgenic zebrafish model. DMM Disease Models and Mechanisms, 2013, 6, 802-10. | 2.4 | 95 |
| 24 | Spatial and Temporal Features of the Growth of a Bacterial Species Colonizing the Zebrafish Gut. MBio, 2014, 5, . | 4.1 | 93 |
| 25 | The role of adaptive immunity as an ecological filter on the gut microbiota in zebrafish. ISME Journal, 2017, 11, 1630-1639. | 9.8 | 93 |
| 26 | NATURAL TRANSFORMATION INCREASES THE RATE OF ADAPTATION IN THE HUMAN PATHOGEN HELICOBACTER PYLORI. Evolution; International Journal of Organic Evolution, 2007, 62, 071101082849001-???. | 2.3 | 89 |
| 27 | Structure and Proposed Mechanism for the pH-Sensing Helicobacter pylori Chemoreceptor TlpB. Structure, 2012, 20, 1177-1188. | 3.3 | 88 |
| 28 | The Quorum-Sensing Molecule Autoinducer 2 Regulates Motility and Flagellar Morphogenesis in Helicobacter pylori. Journal of Bacteriology, 2007, 189, 6109-6117. | 2.2 | 84 |
| 29 | Chemorepulsion from the Quorum Signal Autoinducer-2 Promotes Helicobacter pylori Biofilm Dispersal. MBio, 2015, 6, e00379. | 4.1 | 84 |
| 30 | Experimental bacterial adaptation to the zebrafish gut reveals a primary role for immigration. PLoS Biology, 2018, 16, e2006893. | 5.6 | 83 |
| 31 | We know you are in there: Conversing with the indigenous gut microbiota. Research in Microbiology, 2007, 158, 2-9. | 2.1 | 78 |
| 32 | Multiple Acid Sensors Control Helicobacter pylori Colonization of the Stomach. PLoS Pathogens, 2017, 13, e1006118. | 4.7 | 72 |
| 33 | A Transgenic Drosophila Model Demonstrates That the Helicobacter pylori CagA Protein Functions as a Eukaryotic Gab Adaptor. PLoS Pathogens, 2008, 4, e1000064. | 4.7 | 66 |
| 34 | Modernized Tools for Streamlined Genetic Manipulation and Comparative Study of Wild and Diverse Proteobacterial Lineages. MBio, 2018, 9, . | 4.1 | 65 |
| 35 | Microbiota promote secretory cell determination in the intestinal epithelium by modulating host Notch signaling. Development (Cambridge), 2018, 145, . | 2.5 | 64 |
| 36 | Helicobacter pylori CagA Induces AGS Cell Elongation through a Cell Retraction Defect That Is Independent of Cdc42, Rac1, and Arp2/3. Infection and Immunity, 2007, 75, 1203-1213. | 2.2 | 59 |

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|---|---|---|---|
| 37 | Innate immune responses to gut microbiota differ between threespine stickleback populations. DMM Disease Models and Mechanisms, 2015, 9, 187-98. | 2.4 | 58 |
| 38 | Swimming motility of a gut bacterial symbiont promotes resistance to intestinal expulsion and enhances inflammation. PLoS Biology, 2020, 18, e3000661. | 5.6 | 58 |
| 39 | Identification of Population Bottlenecks and Colonization Factors during Assembly of Bacterial Communities within the Zebrafish Intestine. MBio, 2015, 6, e01163-15. | 4.1 | 56 |
| 40 | Dynamic Evolution of the LPS-Detoxifying Enzyme Intestinal Alkaline Phosphatase in Zebrafish and Other Vertebrates. Frontiers in Immunology, 2012, 3, 314. | 4.8 | 50 |
| 41 | Bacterial Cohesion Predicts Spatial Distribution in the Larval Zebrafish Intestine. Biophysical Journal, 2018, 115, 2271-2277. | 0.5 | 50 |
| 42 | Zebrafish microbiome studies make waves. Lab Animal, 2020, 49, 201-207. | 0.4 | 50 |
| 43 | Investigating Bacterial-Animal Symbioses with Light Sheet Microscopy. Biological Bulletin, 2012, 223, 7-20. | 1.8 | 48 |
| 44 | Colonization of Germ-free Transgenic Mice with Genotyped Helicobacter pylori Strains from a Case-Control Study of Gastric Cancer Reveals a Correlation between Host Responses and HsdS Components of Type I Restriction-Modification Systems. Journal of Biological Chemistry, 2002, 277, 34191-34197. | 3.4 | 47 |
| 45 | Sublethal antibiotics collapse gut bacterial populations by enhancing aggregation and expulsion. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 21392-21400. | 7.1 | 46 |
| 46 | A bacterial immunomodulatory protein with lipocalin-like domains facilitates hostâ€“bacteria mutualism in larval zebrafish. ELife, 2018, 7, . | 6.0 | 46 |
| 47 | Helicobacter pylori senses bleach (HOCl) as a chemoattractant using a cytosolic chemoreceptor. PLoS Biology, 2019, 17, e3000395. | 5.6 | 42 |
| 48 | Host Genotype and Microbiota Contribute Asymmetrically to Transcriptional Variation in the Threespine Stickleback Gut. Genome Biology and Evolution, 2017, 9, 504-520. | 2.5 | 40 |
| 49 | The scales of the zebrafish: hostâ€“microbiota interactions from proteins to populations. Current Opinion in Microbiology, 2017, 38, 137-141. | 5.1 | 36 |
| 50 | Transgenic Expression of the Helicobacter pylori Virulence Factor CagA Promotes Apoptosis or Tumorigenesis through JNK Activation in Drosophila. PLoS Pathogens, 2012, 8, e1002939. | 4.7 | 35 |
| 51 | Evolutionary â€œExperimentsâ€•in Symbiosis: The Study of Model Animals Provides Insights into the Mechanisms Underlying the Diversity of Hostâ€“Microbe Interactions. BioEssays, 2019, 41, e1800256. | 2.5 | 34 |
| 52 | Market Integration Predicts Human Gut Microbiome Attributes across a Gradient of Economic Development. MSystems, 2018, 3, . | 3.8 | 31 |
| 53 | The bacterial virulence factor CagA induces microbial dysbiosis that contributes to excessive epithelial cell proliferation in the Drosophila gut. PLoS Pathogens, 2017, 13, e1006631. | 4.7 | 31 |
| 54 | A Retrospective Study of the Prevalence and Classification of Intestinal Neoplasia in Zebrafish (Danio Rerio). Zebrafish, 2013, 10, 228-236. | 1.1 | 29 |

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|---|---|---|---|
| 55 | The Helicobacter pylori cag Pathogenicity Island Protein CagN Is a Bacterial Membrane-Associated Protein That Is Processed at Its C Terminus. Infection and Immunity, 2006, 74, 2537-2543. | 2.2 | 25 |
| 56 | Bacteria evoke alarm behaviour in zebrafish. Nature Communications, 2019, 10, 3831. | 12.8 | 24 |
| 57 | Agent-Based Modeling Demonstrates How Local Chemotactic Behavior Can Shape Biofilm Architecture. MSphere, 2019, 4, . | 2.9 | 23 |
| 58 | Draft Genome Sequence of Aeromonas veronii Hm21, a Symbiotic Isolate from the Medicinal Leech Digestive Tract. Genome Announcements, 2013, 1, . | 0.8 | 22 |
| 59 | Host-emitted amino acid cues regulate bacterial chemokinesis to enhance colonization. Cell Host and Microbe, 2021, 29, 1221-1234.e8. | 11.0 | 21 |
| 60 | Intestinal Alkaline Phosphatase Deficiency Leads to Lipopolysaccharide Desensitization and Faster Weight Gain. Infection and Immunity, 2015, 83, 247-258. | 2.2 | 19 |
| 61 | Identification and Characterization of Zebrafish Tlr4 Coreceptor Md-2. Journal of Immunology, 2021, 206, 1046-1057. | 0.8 | 19 |
| 62 | Ontogeny of alkaline phosphatase activity in infant intestines and breast milk. BMC Pediatrics, 2019, 19, 2. | 1.7 | 17 |
| 63 | Identification of genetic modifiers of CagA-induced epithelial disruption in Drosophila. Frontiers in Cellular and Infection Microbiology, 2012, 2, 24. | 3.9 | 16 |
| 64 | The Other Side of the Coin: What Beneficial Microbes Can Teach Us about Pathogenic Potential. Journal of Molecular Biology, 2019, 431, 2946-2956. | 4.2 | 16 |
| 65 | Intestinal Inflammation Induced by Soybean Meal Ingestion Increases Intestinal Permeability and Neutrophil Turnover Independently of Microbiota in Zebrafish. Frontiers in Immunology, 2020, 11, 1330. | 4.8 | 16 |
| 66 | The SARS-CoV-2 receptor and other key components of the Renin-Angiotensin-Aldosterone System related to COVID-19 are expressed in enterocytes in larval zebrafish. Biology Open, 2021, 10, . | 1.2 | 14 |
| 67 | The dCache Chemoreceptor TlpA of Helicobacter pylori Binds Multiple Attractant and Antagonistic Ligands via Distinct Sites. MBio, 2021, 12, e0181921. | 4.1 | 14 |
| 68 | Multidisciplinarity in Microbiome Research: A Challenge and Opportunity to Rethink Causation, Variability, and Scale. BioEssays, 2019, 41, e1900007. | 2.5 | 12 |
| 69 | Pseudocapillaria tomentosa,Mycoplasmaspp., and Intestinal Lesions in Experimentally Infected ZebrafishDanio rerio. Zebrafish, 2021, 18, 207-220. | 1.1 | 12 |
| 70 | Enteric nervous system modulation of luminal pH modifies the microbial environment to promote intestinal health. PLoS Pathogens, 2022, 18, e1009989. | 4.7 | 11 |
| 71 | Patterns of partnership: surveillance and mimicry in host-microbiota mutualisms. Current Opinion in Microbiology, 2020, 54, 87-94. | 5.1 | 10 |
| 72 | Starvation causes changes in the intestinal transcriptome and microbiome that are reversed upon refeeding. BMC Genomics, 2022, 23, 225. | 2.8 | 10 |

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|---|---|---|---|
| 73 | H.Âpyloriâ€™s BabA Embraces Change. Cell Host and Microbe, 2016, 19, 5-7. | 11.0 | 9 |
| 74 | Structures of the ligandâ€binding domain of Helicobacter pylori chemoreceptor TlpA. Protein Science, 2018, 27, 1961-1968. | 7.6 | 9 |
| 75 | A Bacterial Inflammation Sensor Regulates c-di-GMP Signaling, Adhesion, and Biofilm Formation. MBio, 2021, 12, e0017321. | 4.1 | 9 |
| 76 | Zebrafish mbnl mutants model physical and molecular phenotypes of myotonic dystrophy. DMM Disease Models and Mechanisms, 2021, 14, . | 2.4 | 7 |
| 77 | Racing to Stay Put: How Resident Microbiota Stimulate Intestinal Epithelial Cell Proliferation. Current Pathobiology Reports, 2018, 6, 23-28. | 3.4 | 5 |
| 78 | Packing in the Proteins. Developmental Cell, 2019, 51, 1-2. | 7.0 | 5 |
| 79 | Immigrants in immunology: the benefits of lax borders. Trends in Immunology, 2015, 36, 286-289. | 6.8 | 3 |
| 80 | The Impacts of Microbiota on Animal Development and Physiology. , 2022, , 177-196. | | 3 |
| 81 | Reports from a Healthy Community: the 7th Conference on Beneficial Microbes. Applied and Environmental Microbiology, 2019, 85, . | 3.1 | 1 |
| 82 | Hiding in Plain Sight. Cell Host and Microbe, 2021, 29, 5-7. | 11.0 | 1 |
| 83 | Evolving in a Microbial Soup: You Are What They Eat. Developmental Cell, 2018, 47, 682-683. | 7.0 | 0 |
| 84 | Editorial overview: Frontiers in microbiome studies: viewing vast vistas with roadmap in hand. Current Opinion in Microbiology, 2019, 50, iii-iv. | 5.1 | 0 |
| 85 | A twist in the tail. ELife, 2014, 3, e02386. | 6.0 | 0 |
| 86 | Title is missing!. , 2020, 18, e3000661. | | 0 |
| 87 | Title is missing!. , 2020, 18, e3000661. | | 0 |
| 88 | Title is missing!. , 2020, 18, e3000661. | | 0 |
| 89 | Title is missing!. , 2020, 18, e3000661. | | 0 |