

# Laurence G Rahme

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4968911/publications.pdf>

Version: 2024-02-01

110  
papers

12,105  
citations

43973

48  
h-index

27345

106  
g-index

118  
all docs

118  
docs citations

118  
times ranked

14762  
citing authors

#	ARTICLE	IF	CITATIONS
1	Structural, mechanistic, and physiological insights into phospholipase A-mediated membrane phospholipid degradation in <i>Pseudomonas aeruginosa</i> . <i>ELife</i> , 2022, 11, .	2.8	13
2	Proteobacteria and Firmicutes Secreted Factors Exert Distinct Effects on <i>Pseudomonas aeruginosa</i> Infection under Normoxia or Mild Hypoxia. <i>Metabolites</i> , 2022, 12, 449.	1.3	5
3	Characterization of antibiotic resistance profiles in <i>Pseudomonas aeruginosa</i> isolates from burn patients. <i>Burns</i> , 2021, 47, 1833-1843.	1.1	4
4	Antimicrobial Peptide Dendrimers and Quorum-Sensing Inhibitors in Formulating Next-Generation Anti-Infection Cell Therapy Dressings for Burns. <i>Molecules</i> , 2021, 26, 3839.	1.7	4
5	The Role of Common Solvents against <i>Pseudomonas aeruginosa</i> -Induced Pathogenicity in a Murine Burn Site Infection Model. <i>Microbiology Spectrum</i> , 2021, 9, e0023321.	1.2	5
6	Multi-Biomarker Prediction Models for Multiple Infection Episodes Following Blunt Trauma. <i>IScience</i> , 2020, 23, 101659.	1.9	7
7	Denver and Marshall scores successfully predict susceptibility to multiple independent infections in trauma patients. <i>PLoS ONE</i> , 2020, 15, e0232175.	1.1	3
8	Intestinal alkaline phosphatase targets the gut barrier to prevent aging. <i>JCI Insight</i> , 2020, 5, .	2.3	66
9	Targeting the gut to prevent sepsis from a cutaneous burn. <i>JCI Insight</i> , 2020, 5, .	2.3	19
10	Editorial: Beyond Antimicrobials: Non-traditional Approaches to Combating Multidrug-Resistant Bacteria. <i>Frontiers in Cellular and Infection Microbiology</i> , 2019, 9, 343.	1.8	13
11	Associations between clinical characteristics and the development of multiple organ failure after severe burns in adult patients. <i>Burns</i> , 2019, 45, 1775-1782.	1.1	5
12	Targeting bacterial quorum sensing shows promise in improving intestinal barrier function following burn site infection. <i>Molecular Medicine Reports</i> , 2019, 19, 4057-4066.	1.1	12
13	<i>Pseudomonas aeruginosa</i> Quorum Sensing Molecule Alters Skeletal Muscle Protein Homeostasis by Perturbing the Antioxidant Defense System. <i>MBio</i> , 2019, 10, .	1.8	11
14	Magnetization transfer contrast MRI in GFP-tagged live bacteria. <i>Molecular Medicine Reports</i> , 2019, 19, 617-621.	1.1	0
15	Molecular Insights into Function and Competitive Inhibition of <i>Pseudomonas aeruginosa</i> Multiple Virulence Factor Regulator. <i>MBio</i> , 2018, 9, .	1.8	53
16	Animal Models for <i>Pseudomonas aeruginosa</i> Quorum Sensing Studies. <i>Methods in Molecular Biology</i> , 2018, 1673, 227-241.	0.4	15
17	Portal System as the Source of Inflammation in an Acute Systemic Burn. <i>Journal of the American College of Surgeons</i> , 2018, 227, S271.	0.2	0
18	Effects of a small, volatile bacterial molecule on <i>Pseudomonas aeruginosa</i> bacteria using whole cell high-resolution magic angle spinning nuclear magnetic resonance spectroscopy and genomics. <i>International Journal of Molecular Medicine</i> , 2018, 42, 2129-2136.	1.8	8

#	ARTICLE	IF	CITATIONS
19	952 - The Gut-Liver Axis: Probing the Portal System as the Source of Inflammation in Acute and Chronic Diseases. <i>Gastroenterology</i> , 2018, 154, S-1295.	0.6	0
20	Bioanalysis of <i>Pseudomonas aeruginosa</i> alkyl quinolone signalling molecules in infected mouse tissue using LC-MS/MS; and its application to a pharmacodynamic evaluation of MvfR inhibition. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2017, 139, 44-53.	1.4	12
21	<i>Pseudomonas aeruginosa</i> Alginate Overproduction Promotes Coexistence with <i>Staphylococcus aureus</i> in a Model of Cystic Fibrosis Respiratory Infection. <i>MBio</i> , 2017, 8, .	1.8	124
22	Polypharmacology Approaches against the <i>Pseudomonas aeruginosa</i> MvfR Regulon and Their Application in Blocking Virulence and Antibiotic Tolerance. <i>ACS Chemical Biology</i> , 2017, 12, 1435-1443.	1.6	36
23	Pharmacological Inhibition of the <i>Pseudomonas aeruginosa</i> MvfR Quorum-Sensing System Interferes with Biofilm Formation and Potentiates Antibiotic-Mediated Biofilm Disruption. <i>Antimicrobial Agents and Chemotherapy</i> , 2017, 61, .	1.4	65
24	In-depth Profiling of MvfR-Regulated Small Molecules in <i>Pseudomonas aeruginosa</i> after Quorum Sensing Inhibitor Treatment. <i>Frontiers in Microbiology</i> , 2017, 8, 924.	1.5	49
25	NF- $\kappa$ Bp50 and HDAC1 Interaction Is Implicated in the Host Tolerance to Infection Mediated by the Bacterial Quorum Sensing Signal 2-Aminoacetophenone. <i>Frontiers in Microbiology</i> , 2017, 8, 1211.	1.5	15
26	TNF- $\alpha$ /IL-10 Ratio Correlates with Burn Severity and May Serve as a Risk Predictor of Increased Susceptibility to Infections. <i>Frontiers in Public Health</i> , 2016, 4, 216.	1.3	39
27	In vivo high-resolution magic angle spinning magnetic and electron paramagnetic resonance spectroscopic analysis of mitochondria-targeted peptide in <i>Drosophila melanogaster</i> with trauma-induced thoracic injury. <i>International Journal of Molecular Medicine</i> , 2016, 37, 299-308.	1.8	8
28	Designed Small-Molecule Inhibitors of the Anthranil-CoA Synthetase PqsA Block Quinolone Biosynthesis in <i>Pseudomonas aeruginosa</i> . <i>ACS Chemical Biology</i> , 2016, 11, 3061-3067.	1.6	41
29	Bacterial-excreted small volatile molecule 2-aminoacetophenone induces oxidative stress and apoptosis in murine skeletal muscle. <i>International Journal of Molecular Medicine</i> , 2016, 37, 867-878.	1.8	16
30	Evidence for Direct Control of Virulence and Defense Gene Circuits by the <i>Pseudomonas aeruginosa</i> Quorum Sensing Regulator, MvfR. <i>Scientific Reports</i> , 2016, 6, 34083.	1.6	95
31	A quorum-sensing signal promotes host tolerance training through HDAC1-mediated epigenetic reprogramming. <i>Nature Microbiology</i> , 2016, 1, 16174.	5.9	56
32	Considerations and caveats in anti-virulence drug development. <i>Current Opinion in Microbiology</i> , 2016, 33, 41-46.	2.3	128
33	Auto Poisoning of the Respiratory Chain by a Quorum-Sensing-Regulated Molecule Favors Biofilm Formation and Antibiotic Tolerance. <i>Current Biology</i> , 2016, 26, 195-206.	1.8	148
34	Prediction of Multiple Infections After Severe Burn Trauma. <i>Annals of Surgery</i> , 2015, 261, 781-792.	2.1	33
35	Do standard burn mortality formulae work on a population of severely burned children and adults?. <i>Burns</i> , 2015, 41, 935-945.	1.1	31
36	Identification of Anti-virulence Compounds That Disrupt Quorum-Sensing Regulated Acute and Persistent Pathogenicity. <i>PLoS Pathogens</i> , 2014, 10, e1004321.	2.1	238

#	ARTICLE	IF	CITATIONS
37	In vivo high-resolution magic angle spinning proton NMR spectroscopy of <i>Drosophila melanogaster</i> flies as a model system to investigate mitochondrial dysfunction in <i>Drosophila</i> GST2 mutants. <i>International Journal of Molecular Medicine</i> , 2014, 34, 327-333.	1.8	28
38	Assessing <i>Pseudomonas</i> Virulence with the Nonmammalian Host Model: <i>Arabidopsis thaliana</i> . <i>Methods in Molecular Biology</i> , 2014, 1149, 689-697.	0.4	6
39	Assessing <i>Pseudomonas aeruginosa</i> Persister/Antibiotic Tolerant Cells. <i>Methods in Molecular Biology</i> , 2014, 1149, 699-707.	0.4	18
40	Mitochondria-targeted antioxidant promotes recovery of skeletal muscle mitochondrial function after burn trauma assessed by <i>in vivo</i> <sup>31</sup> P nuclear magnetic resonance and electron paramagnetic resonance spectroscopy. <i>FASEB Journal</i> , 2013, 27, 2521-2530.	0.2	22
41	The End of an Old Hypothesis: The <i>Pseudomonas</i> Signaling Molecules 4-Hydroxy-2-Alkylquinolines Derive from Fatty Acids, Not 3-Ketofatty Acids. <i>Chemistry and Biology</i> , 2013, 20, 1481-1491.	6.2	122
42	Genomic responses in mouse models poorly mimic human inflammatory diseases. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 3507-3512.	3.3	2,518
43	Skeletal muscle mitochondrial uncoupling in a murine cancer cachexia model. <i>International Journal of Oncology</i> , 2013, 43, 886-894.	1.4	79
44	Live-cell high resolution magic angle spinning magnetic resonance spectroscopy for <i>in vivo</i> analysis of <i>Pseudomonas aeruginosa</i> metabolomics. <i>Biomedical Reports</i> , 2013, 1, 707-712.	0.9	14
45	A Small Volatile Bacterial Molecule Triggers Mitochondrial Dysfunction in Murine Skeletal Muscle. <i>PLoS ONE</i> , 2013, 8, e74528.	1.1	32
46	A Quorum Sensing Small Volatile Molecule Promotes Antibiotic Tolerance in Bacteria. <i>PLoS ONE</i> , 2013, 8, e80140.	1.1	77
47	The Quorum Sensing Volatile Molecule 2-Amino Acetophenon Modulates Host Immune Responses in a Manner that Promotes Life with Unwanted Guests. <i>PLoS Pathogens</i> , 2012, 8, e1003024.	2.1	49
48	Down-regulation of glutathione S-transferase $\gamma$ 4 (hGSTA4) in the muscle of thermally injured patients is indicative of susceptibility to bacterial infection. <i>FASEB Journal</i> , 2012, 26, 730-737.	0.2	29
49	An Ex Vivo Bacteriologic Study Comparing Antiseptic Techniques for Natural Orifice Transluminal Endoscopic Surgery (NOTES) via the Gastrointestinal Tract. <i>Digestive Diseases and Sciences</i> , 2012, 57, 2130-2136.	1.1	6
50	A method for high throughput determination of viable bacteria cell counts in 96-well plates. <i>BMC Microbiology</i> , 2012, 12, 259.	1.3	128
51	Honey's Ability to Counter Bacterial Infections Arises from Both Bactericidal Compounds and QS Inhibition. <i>Frontiers in Microbiology</i> , 2012, 3, 144.	1.5	59
52	Immune response to bacteria induces dissemination of Ras-activated <i>Drosophila</i> hindgut cells. <i>EMBO Reports</i> , 2012, 13, 569-576.	2.0	51
53	Imaging C-Fos Gene Expression in Burns Using Lipid Coated Spion Nanoparticles. <i>Advances in Molecular Imaging</i> , 2012, 02, 31-37.	0.3	0
54	Nuclear magnetic resonance in conjunction with functional genomics suggests mitochondrial dysfunction in a murine model of cancer cachexia. <i>International Journal of Molecular Medicine</i> , 2011, 27, 15-24.	1.8	70

#	ARTICLE	IF	CITATIONS
55	A Quorum Sensing Regulated Small Volatile Molecule Reduces Acute Virulence and Promotes Chronic Infection Phenotypes. <i>PLoS Pathogens</i> , 2011, 7, e1002192.	2.1	100
56	Combining magnetic resonance spectroscopy and molecular genomics offers better accuracy in brain tumor typing and prediction of survival than either methodology alone. <i>International Journal of Oncology</i> , 2011, 38, 1113-27.	1.4	5
57	<i>Drosophila melanogaster</i> as a model for human intestinal infection and pathology. <i>DMM Disease Models and Mechanisms</i> , 2011, 4, 21-30.	1.2	254
58	Production of <i>Pseudomonas aeruginosa</i> Intercellular Small Signaling Molecules in Human Burn Wounds. <i>Journal of Pathogens</i> , 2011, 2011, 1-5.	0.9	17
59	Combined off-resonance imaging and T2 relaxation in the rotating frame for positive contrast MR imaging of infection in a murine burn model. <i>Journal of Magnetic Resonance Imaging</i> , 2010, 32, 1172-1183.	1.9	11
60	Magnetic Resonance Spectroscopy of live <i>Drosophila melanogaster</i> using Magic Angle Spinning. <i>Journal of Visualized Experiments</i> , 2010, . .	0.2	2
61	Analysis of factorial time-course microarrays with application to a clinical study of burn injury. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 9923-9928.	3.3	62
62	Homeostatic Interplay between Bacterial Cell-Cell Signaling and Iron in Virulence. <i>PLoS Pathogens</i> , 2010, 6, e1000810.	2.1	76
63	In vivo high-resolution magic angle spinning magnetic resonance spectroscopy of <i>Drosophila melanogaster</i> at 14.1 T shows trauma in aging and in innate immune-deficiency is linked to reduced insulin signaling. <i>International Journal of Molecular Medicine</i> , 2010, 26, 175-84.	1.8	17
64	The Pathogenic Properties of a Novel and Conserved Gene Product, KerV, in Proteobacteria. <i>PLoS ONE</i> , 2009, 4, e7167.	1.1	13
65	Synergy between bacterial infection and genetic predisposition in intestinal dysplasia. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 20883-20888.	3.3	200
66	Modeling <i>Pseudomonas aeruginosa</i> pathogenesis in plant hosts. <i>Nature Protocols</i> , 2009, 4, 117-124.	5.5	83
67	<i>Drosophila melanogaster</i> as a model host for studying <i>Pseudomonas aeruginosa</i> infection. <i>Nature Protocols</i> , 2009, 4, 1285-1294.	5.5	136
68	Dysfunctional expansion of hematopoietic stem cells and block of myeloid differentiation in lethal sepsis. <i>Blood</i> , 2009, 114, 4064-4076.	0.6	120
69	Microarray analysis suggests that burn injury results in mitochondrial dysfunction in human skeletal muscle. <i>International Journal of Molecular Medicine</i> , 2009, 24, 387-92.	1.8	22
70	Use of the lambda Red recombinase system to rapidly generate mutants in <i>Pseudomonas aeruginosa</i> . <i>BMC Molecular Biology</i> , 2008, 9, 20.	3.0	128
71	The roles of mucD and alginate in the virulence of <i>Pseudomonas aeruginosa</i> in plants, nematodes and mice. <i>Molecular Microbiology</i> , 2008, 41, 1063-1076.	1.2	98
72	Comparison of longitudinal leukocyte gene expression after burn injury or trauma-hemorrhage in mice. <i>Physiological Genomics</i> , 2008, 32, 299-310.	1.0	28

#	ARTICLE	IF	CITATIONS
73	Reduced rate of adenosine triphosphate synthesis by in vivo <sup>31</sup> P nuclear magnetic resonance spectroscopy and downregulation of PGC-1 $\beta$ in distal skeletal muscle following burn. <i>International Journal of Molecular Medicine</i> , 2008, , .	1.8	5
74	Burn trauma in skeletal muscle results in oxidative stress as assessed by in vivo electron paramagnetic resonance. <i>Molecular Medicine Reports</i> , 2008, 1, 813-819.	1.1	15
75	Reduced rate of adenosine triphosphate synthesis by in vivo <sup>31</sup> P nuclear magnetic resonance spectroscopy and downregulation of PGC-1 $\beta$ in distal skeletal muscle following burn. <i>International Journal of Molecular Medicine</i> , 2008, 21, 201-8.	1.8	11
76	Murine intramyocellular lipids quantified by NMR act as metabolic biomarkers in burn trauma. <i>International Journal of Molecular Medicine</i> , 2008, 21, 825-32.	1.8	12
77	Inhibitors of Pathogen Intercellular Signals as Selective Anti-Infective Compounds. <i>PLoS Pathogens</i> , 2007, 3, e126.	2.1	184
78	Dynorphin Activates Quorum Sensing Quinolone Signaling in <i>Pseudomonas aeruginosa</i> . <i>PLoS Pathogens</i> , 2007, 3, e35.	2.1	170
79	PqsA is required for the biosynthesis of 2,4-dihydroxyquinoline (DHQ), a newly identified metabolite produced by <i>Pseudomonas aeruginosa</i> and <i>Burkholderia thailandensis</i> . <i>Biological Chemistry</i> , 2007, 388, 839-845.	1.2	29
80	Combination of high-resolution magic angle spinning proton magnetic resonance spectroscopy and microscale genomics to type brain tumor biopsies. <i>International Journal of Molecular Medicine</i> , 2007, , .	1.8	14
81	The Effectiveness of Current Sterility Techniques in Natural Orifice Transluminal Endoscopic Surgery (NOTES). <i>Gastrointestinal Endoscopy</i> , 2007, 65, AB290.	0.5	3
82	Involvement of Skeletal Muscle Gene Regulatory Network in Susceptibility to Wound Infection Following Trauma. <i>PLoS ONE</i> , 2007, 2, e1356.	1.1	32
83	Combination of high-resolution magic angle spinning proton magnetic resonance spectroscopy and microscale genomics to type brain tumor biopsies. <i>International Journal of Molecular Medicine</i> , 2007, 20, 199-208.	1.8	42
84	Genomic analysis reveals that <i>Pseudomonas aeruginosa</i> virulence is combinatorial. <i>Genome Biology</i> , 2006, 7, R90.	13.9	479
85	Local and Distant Burn Injury Alter Immuno-Inflammatory Gene Expression in Skeletal Muscle. <i>Journal of Trauma</i> , 2006, 61, 280-292.	2.3	18
86	MvfR, a key <i>Pseudomonas aeruginosa</i> pathogenicity LTTR-class regulatory protein, has dual ligands. <i>Molecular Microbiology</i> , 2006, 62, 1689-1699.	1.2	273
87	Mutation analysis of the <i>Pseudomonas aeruginosa</i> mvfR and pqsABCDE gene promoters demonstrates complex quorum-sensing circuitry. <i>Microbiology (United Kingdom)</i> , 2006, 152, 1679-1686.	0.7	126
88	Uncoupling protein 3 expression and intramyocellular lipid accumulation by NMR following local burn trauma. <i>International Journal of Molecular Medicine</i> , 2006, 18, 1223-9.	1.8	8
89	Proton NMR spectroscopy shows lipids accumulate in skeletal muscle in response to burn trauma-induced apoptosis. <i>FASEB Journal</i> , 2005, 19, 1431-1440.	0.2	31
90	Application of genome-wide expression analysis to human health and disease. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 4801-4806.	3.3	238

#	ARTICLE	IF	CITATIONS
91	Profiling early infection responses: <i>Pseudomonas aeruginosa</i> eludes host defenses by suppressing antimicrobial peptide gene expression. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 2573-2578.	3.3	149
92	Burn injury causes mitochondrial dysfunction in skeletal muscle. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 5368-5373.	3.3	93
93	The broad host range pathogen <i>Pseudomonas aeruginosa</i> strain PA14 carries two pathogenicity islands harboring plant and animal virulence genes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 2530-2535.	3.3	364
94	Challenge of <i>Drosophila melanogaster</i> with <i>Cryptococcus neoformans</i> and Role of the Innate Immune Response. <i>Eukaryotic Cell</i> , 2004, 3, 413-419.	3.4	126
95	Analysis of <i>Pseudomonas aeruginosa</i> 4-hydroxy-2-alkylquinolines (HAQs) reveals a role for 4-hydroxy-2-heptylquinoline in cell-to-cell communication. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 1339-1344.	3.3	561
96	The contribution of MvfR to <i>Pseudomonas aeruginosa</i> pathogenesis and quorum sensing circuitry regulation: multiple quorum sensing-regulated genes are modulated without affecting lasRI, rhlRI or the production of N-acyl-L-homoserine lactones. <i>Molecular Microbiology</i> , 2004, 55, 998-1014.	1.2	396
97	Electrospray/mass spectrometric identification and analysis of 4-hydroxy-2-alkylquinolines (HAQs) produced by <i>Pseudomonas aeruginosa</i> . <i>Journal of the American Society for Mass Spectrometry</i> , 2004, 15, 862-869.	1.2	232
98	<i>Pseudomonas aeruginosa</i> -Plant Root Interactions. Pathogenicity, Biofilm Formation, and Root Exudation. <i>Plant Physiology</i> , 2004, 134, 320-331.	2.3	327
99	The <i>Drosophila melanogaster</i> Toll Pathway Participates in Resistance to Infection by the Gram-Negative Human Pathogen <i>Pseudomonas aeruginosa</i> . <i>Infection and Immunity</i> , 2003, 71, 4059-4066.	1.0	162
100	Identification of Virulence Genes in a Pathogenic Strain of <i>Pseudomonas aeruginosa</i> by Representational Difference Analysis. <i>Journal of Bacteriology</i> , 2002, 184, 952-961.	1.0	92
101	Use of plant and insect hosts to model bacterial pathogenesis. <i>Methods in Enzymology</i> , 2002, 358, 3-13.	0.4	8
102	COMMON MECHANISMS FOR PATHOGENS OF PLANTS AND ANIMALS. <i>Annual Review of Phytopathology</i> , 2001, 39, 259-284.	3.5	135
103	Differential Roles of the <i>Pseudomonas aeruginosa</i> PA14 rpoN Gene in Pathogenicity in Plants, Nematodes, Insects, and Mice. <i>Journal of Bacteriology</i> , 2001, 183, 7126-7134.	1.0	117
104	Elucidating the molecular mechanisms of bacterial virulence using non-mammalian hosts. <i>Molecular Microbiology</i> , 2000, 37, 981-988.	1.2	178
105	Positive Correlation between Virulence of <i>Pseudomonas aeruginosa</i> Mutants in Mice and Insects. <i>Journal of Bacteriology</i> , 2000, 182, 3843-3845.	1.0	475
106	Pathogenesis of the Human Opportunistic Pathogen <i>Pseudomonas aeruginosa</i> PA14 in Arabidopsis. <i>Plant Physiology</i> , 2000, 124, 1766-1774.	2.3	118
107	Molecular Mechanisms of Bacterial Virulence Elucidated Using a <i>Pseudomonas aeruginosa</i> <i>Caenorhabditis elegans</i> Pathogenesis Model. <i>Cell</i> , 1999, 96, 47-56.	13.5	721
108	Modulation of Expression of the ToxR Regulon in <i>Vibrio cholerae</i> by a Member of the Two-Component Family of Response Regulators. <i>Infection and Immunity</i> , 1998, 66, 5854-5861.	1.0	74

#	ARTICLE	IF	CITATIONS
109	Uncoupling protein 3 expression and intramyocellular lipid accumulation by NMR following local burn trauma. International Journal of Molecular Medicine, 0, , .	1.8	5
110	Murine intramyocellular lipids quantified by NMR act as metabolic biomarkers in burn trauma. International Journal of Molecular Medicine, 0, , .	1.8	7