Jennifer J Linderman

List of Publications by Citations

56	1,782	26	41
papers	citations	h-index	g-index
57	2,259	4.7	5
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
56	Nanoscale Adhesion Ligand Organization Regulates Osteoblast Proliferation and Differentiation. *Nano Letters*, **2004**, 4, 1501-1506	11.5	154
55	Multiscale computational modeling reveals a critical role for TNF-receptor 1 dynamics in tuberculosis granuloma formation. *Journal of Immunology*, **2011**, 186, 3472-83	5.3	134
54	Macrophage polarization drives granuloma outcome during Mycobacterium tuberculosis infection. *Infection and Immunity*, **2015**, 83, 324-38	3.7	103
53	Multi-scale modeling predicts a balance of tumor necrosis factor-and interleukin-10 controls the granuloma environment during Mycobacterium tuberculosis infection. *PLoS ONE*, **2013**, 8, e68680	3.7	90
52	Dynamic balance of pro- and anti-inflammatory signals controls disease and limits pathology. *Immunological Reviews*, **2018**, 285, 147-167	11.3	84
51	Differential risk of tuberculosis reactivation among anti-TNF therapies is due to drug binding kinetics and permeability. *Journal of Immunology*, **2012**, 188, 3169-78	5.3	73
50	Lipid raft-mediated regulation of G-protein coupled receptor signaling by ligands which influence receptor dimerization: a computational study. *PLoS ONE*, **2009**, 4, e6604	3.7	68
49	NF-B Signaling Dynamics Play a Key Role in Infection Control in Tuberculosis. *Frontiers in Physiology*, **2012**, 3, 170	4.6	67
48	Strategies for efficient numerical implementation of hybrid multi-scale agent-based models to describe biological systems. *Cellular and Molecular Bioengineering*, **2015**, 8, 119-136	3.9	65
47	Computational modeling predicts IL-10 control of lesion sterilization by balancing early host immunity-mediated antimicrobial responses with caseation during mycobacterium tuberculosis infection. *Journal of Immunology*, **2015**, 194, 664-77	5.3	55
46	A computational tool integrating host immunity with antibiotic dynamics to study tuberculosis treatment. *Journal of Theoretical Biology*, **2015**, 367, 166-179	2.3	49
45	Characterizing the dynamics of CD4+ T cell priming within a lymph node. *Journal of Immunology*, **2010**, 184, 2873-85	5.3	48
44	Improved Tumor Penetration and Single-Cell Targeting of Antibody-Drug Conjugates Increases Anticancer Efficacy and Host Survival. *Cancer Research*, **2018**, 78, 758-768	10.1	48
43	Mathematical and computational approaches can complement experimental studies of host-pathogen interactions. *Cellular Microbiology*, **2009**, 11, 531-539	3.9	45
42	Identification of key processes that control tumor necrosis factor availability in a tuberculosis granuloma. *PLoS Computational Biology*, **2010**, 6, e1000778	5	44
41	CXCR7 controls competition for recruitment of arrestin 2 in cells expressing both CXCR4 and CXCR7. *PLoS ONE*, **2014**, 9, e98328	3.7	42
40	Tuneable resolution as a systems biology approach for multi-scale, multi-compartment computational models. *Wiley Interdisciplinary Reviews: Systems Biology and Medicine*, **2014**, 6, 289-309	6.6	41

39	Comparing efficacies of moxifloxacin, levofloxacin and gatifloxacin in tuberculosis granulomas using a multi-scale systems pharmacology approach. *PLoS Computational Biology*, **2017**, 13, e1005650	5	37
38	Modeling of G-protein-coupled receptor signaling pathways. *Journal of Biological Chemistry*, **2009**, 284, 5427-31	5.4	36
37	A review of computational and mathematical modeling contributions to our understanding of Mycobacterium tuberculosis within-host infection and treatment. *Current Opinion in Systems Biology*, **2017**, 3, 170-185	3.2	31
36	In silico evaluation and exploration of antibiotic tuberculosis treatment regimens. *BMC Systems Biology*, **2015**, 9, 79	3.5	30
35	A Comprehensive Analysis of CXCL12 Isoforms in Breast Cancer. *Translational Oncology*, **2014**, 7, 429-429	4.9	30
34	Computational and Empirical Studies Predict Mycobacterium tuberculosis-Specific T Cells as a Biomarker for Infection Outcome. *PLoS Computational Biology*, **2016**, 12, e1004804	5	30
33	Harnessing the heterogeneity of T cell differentiation fate to fine-tune generation of effector and memory T cells. *Frontiers in Immunology*, **2014**, 5, 57	8.4	29
32	Multiscale Model of Mycobacterium tuberculosis Infection Maps Metabolite and Gene Perturbations to Granuloma Sterilization Predictions. *Infection and Immunity*, **2016**, 84, 1650-1669	3.7	28
31	Deletion of TGF-β Increases Bacterial Clearance by Cytotoxic T Cells in a Tuberculosis Granuloma Model. *Frontiers in Immunology*, **2017**, 8, 1843	8.4	27
30	Fluoroquinolone Efficacy against Tuberculosis Is Driven by Penetration into Lesions and Activity against Resident Bacterial Populations. *Antimicrobial Agents and Chemotherapy*, **2019**, 63,	5.9	24
29	Computational Modeling Predicts Simultaneous Targeting of Fibroblasts and Epithelial Cells Is Necessary for Treatment of Pulmonary Fibrosis. *Frontiers in Pharmacology*, **2016**, 7, 183	5.6	24
28	Identifying mechanisms driving formation of granuloma-associated fibrosis during Mycobacterium tuberculosis infection. *Journal of Theoretical Biology*, **2017**, 429, 1-17	2.3	22
27	Validation of flow cytometric competitive binding protocols and characterization of fluorescently labeled ligands. *Cytometry*, **2001**, 45, 102-14		20
26	A multi-scale approach to designing therapeutics for tuberculosis. *Integrative Biology (United Kingdom)*, **2015**, 7, 591-609	3.7	19
25	Identifying Mechanisms of Homeostatic Signaling in Fibroblast Differentiation. *Bulletin of Mathematical Biology*, **2015**, 77, 1556-82	2.1	17
24	Cell, isoform, and environment factors shape gradients and modulate chemotaxis. *PLoS ONE*, **2015**, 10, e0123450	3.7	17
23	Short-term cellular memory tunes the signaling responses of the chemokine receptor CXCR4. *Science Signaling*, **2019**, 12,	8.8	15
22	Emergence and selection of isoniazid and rifampin resistance in tuberculosis granulomas. *PLoS ONE* , **2018**, 13, e0196322	3.7	13

21. Global sensitivity analysis of biological multi-scale models. *Current Opinion in Biomedical Engineering*, **2019**, 11, 109-116 — 4.4 — 13

20. models of infection provide a route to new therapies. *Drug Discovery Today: Disease Models*, **2015**, 15, 37-41 — 1.3 — 12

19. Strategic Priming with Multiple Antigens can Yield Memory Cell Phenotypes Optimized for Infection with Mycobacterium tuberculosis: A Computational Study. *Frontiers in Microbiology*, **2015**, 6, 1477 — 5.7 — 12

18. Applying optimization algorithms to tuberculosis antibiotic treatment regimens. *Cellular and Molecular Bioengineering*, **2017**, 10, 523-535 — 3.9 — 11

17. An Agent-Based Systems Pharmacology Model of the Antibody-Drug Conjugate Kadcyla to Predict Efficacy of Different Dosing Regimens. *AAPS Journal*, **2020**, 22, 29 — 3.7 — 10

16. Both Pharmacokinetic Variability and Granuloma Heterogeneity Impact the Ability of the First-Line Antibiotics to Sterilize Tuberculosis Granulomas. *Frontiers in Pharmacology*, **2020**, 11, 333 — 5.6 — 10

15. A computational model tracks whole-lung Mycobacterium tuberculosis infection and predicts factors that inhibit dissemination. *PLoS Computational Biology*, **2020**, 16, e1007280 — 5 — 9

14. A Two-Pulse Cellular Stimulation Test Elucidates Variability and Mechanisms in Signaling Pathways. *Biophysical Journal*, **2019**, 116, 962-973 — 2.9 — 7

13. The CXCL12/CXCR7 signaling axis, isoforms, circadian rhythms, and tumor cellular composition dictate gradients in tissue. *PLoS ONE*, **2017**, 12, e0187357 — 3.7 — 7

12. The Role of Dimensionality in Understanding Granuloma Formation. *Computation*, **2018**, 6, — 2.2 — 7

11. Integrating Non-human Primate, Human, and Mathematical Studies to Determine the Influence of BCG Timing on H56 Vaccine Outcomes. *Frontiers in Microbiology*, **2018**, 9, 1734 — 5.7 — 6

10. Data-Driven Model Validation Across Dimensions. *Bulletin of Mathematical Biology*, **2019**, 81, 1853-1866 — 2.1 — 5

9. Spatial Organization and Recruitment of Non-Specific T Cells May Limit T Cell-Macrophage Interactions Within Granulomas. *Frontiers in Immunology*, **2020**, 11, 613638 — 8.4 — 4

8. : A Calibration Protocol That Utilizes Parameter Density Estimation to Explore Parameter Space and Calibrate Complex Biological Models. *Cellular and Molecular Bioengineering*, **2021**, 14, 31-47 — 3.9 — 3

7. Simulating the Selection of Resistant Cells with Bystander Killing and Antibody Coadministration in Heterogeneous HER2 Positive Tumors. *Drug Metabolism and Disposition*, **2021**, — 4 — 2

6. A multi-scale pipeline linking drug transcriptomics with pharmacokinetics predicts in vivo interactions of tuberculosis drugs. *Scientific Reports*, **2021**, 11, 5643 — 4.9 — 2

5. Neutrophil Dynamics Affect Granuloma Outcomes and Dissemination. *Frontiers in Immunology*, **2021**, 12, 712457 — 8.4 — 1

4. Mathematical Models of Anti-TNF Therapies and their Correlation with Tuberculosis83-104 — 1

4

LIST OF PUBLICATIONS

3	Pre-existing Cell States Control Heterogeneity of Both EGFR and CXCR4 Signaling. *Cellular and Molecular Bioengineering*, **2021**, 14, 49-64	3.9	1
2	A virtual host model of Mycobacterium tuberculosis infection identifies early immune events as predictive of infection outcomes.. *Journal of Theoretical Biology*, **2022**, 111042	2.3	0
1	Computational methods for characterizing and learning from heterogeneous cell signaling data. *Current Opinion in Systems Biology*, **2021**, 26, 98-108	3.2	0