Lucy M Collinson

List of Publications by Year in Descending Order

123 papers	5,255 citations	42 h-index	70 g-index
142 ext. papers	6,318 ext. citations	10.5 avg, IF	5.48 L-index

#	Paper	IF	Citations
123	Correlative Light and Electron Microscopy (CLEM): Bringing Together the Best of Both Worlds to Study Neuronal Autophagy. *Neuromethods*, **2022**, 135-147	0.4	
122	Functional and multiscale 3D structural investigation of brain tissue through correlative in vivo physiology, synchrotron microtomography and volume electron microscopy. *Nature Communications*, **2022**, 13,	17.4	4
121	Inhibition of protein N-myristoylation blocks Plasmodium falciparum intraerythrocytic development, egress and invasion. *PLoS Biology*, **2021**, 19, e3001408	9.7	1
120	Adipose triglyceride lipase protects renal cell endocytosis in a Drosophila dietary model of chronic kidney disease. *PLoS Biology*, **2021**, 19, e3001230	9.7	4
119	Deep learning for automatic segmentation of the nuclear envelope in electron microscopy data, trained with volunteer segmentations. *Traffic*, **2021**, 22, 240-253	5.7	8
118	REMBI: Recommended Metadata for Biological Images-enabling reuse of microscopy data in biology. *Nature Methods*, **2021**, 18, 1418-1422	21.6	16
117	The receptor DNGR-1 signals for phagosomal rupture to promote cross-presentation of dead-cell-associated antigens. *Nature Immunology*, **2021**, 22, 140-153	19.1	28
116	Autophagy modulates endothelial junctions to restrain neutrophil diapedesis during inflammation. *Immunity*, **2021**, 54, 1989-2004.e9	32.3	10
115	YAP1/TAZ drives ependymoma-like tumour formation in mice. *Nature Communications*, **2020**, 11, 2380	17.4	16
114	The zebrafish as a novel model for the study of replication and interaction with macrophages. *DMM Disease Models and Mechanisms*, **2020**, 13,	4.1	6
113	A lipocalin mediates unidirectional heme biomineralization in malaria parasites. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 16546-16556	11.5	6
112	Mycobacterium tuberculosis cords within lymphatic endothelial cells to evade host immunity. *JCI Insight*, **2020**, 5,	9.9	10
111	Marked and rapid effects of pharmacological HIF-2□antagonism on hypoxic ventilatory control. *Journal of Clinical Investigation*, **2020**, 130, 2237-2251	15.9	13
110	Enteric glia as a source of neural progenitors in adult zebrafish. *ELife*, **2020**, 9,	8.9	11
109	The malaria parasite sheddase SUB2 governs host red blood cell membrane sealing at invasion. *ELife*, **2020**, 9,	8.9	5
108	Semantic segmentation of HeLa cells: An objective comparison between one traditional algorithm and four deep-learning architectures. *PLoS ONE*, **2020**, 15, e0230605	3.7	3
107	infection of human iPSC-derived macrophages reveals complex membrane dynamics during xenophagy evasion. *Journal of Cell Science*, **2020**, 134,	5.3	8

106	Engineering transplantable jejunal mucosal grafts using patient-derived organoids from children with intestinal failure. *Nature Medicine*, **2020**, 26, 1593-1601	50.5	31
105	Segmentation and Modelling of the Nuclear Envelope of HeLa Cells Imaged with Serial Block Face Scanning Electron Microscopy. *Journal of Imaging*, **2019**, 5,	3.1	8
104	The Plasmodium falciparum rhoptry bulb protein RAMA plays an essential role in rhoptry neck morphogenesis and host red blood cell invasion. *PLoS Pathogens*, **2019**, 15, e1008049	7.6	10
103	Origins of Enterovirus Replication Organelles Established by Whole-Cell Electron Microscopy. *MBio*, **2019**, 10,	7.8	27
102	Entosis Controls a Developmental Cell Clearance in C.´elegans. *Cell Reports*, **2019**, 26, 3212-3220.e4	10.6	15
101	Subcellular antibiotic visualization reveals a dynamic drug reservoir in infected macrophages. *Science*, **2019**, 364, 1279-1282	33.3	67
100	The Importance of Sample Processing for Correlative Imaging (or, Rubbish In, Rubbish Out) **2019**, 37-66		2
99	Smart Microscopy: Automation of CLEM using In situ Fluorescence Detection. *Microscopy and Microanalysis*, **2019**, 25, 1018-1019	0.5	
98	Harnessing the Power of the Crowd for Bioimage Analysis. *Microscopy and Microanalysis*, **2019**, 25, 1372-1373	0.5	1
97	Integrated Light and Electron Microscopy **2019**, 119-135		5
96	It Ts a Small, Small World **2019**, 1-21		2
95	Correlating Data from Imaging Modalities **2019**, 191-210		2
94	Cryo-Correlative Light and Electron Microscopy **2019**, 137-153		3
93	Can Correlative Microscopy Ever Be Easy? An Array Tomography Viewpoint **2019**, 81-98		0
92	Big Data in Correlative Imaging **2019**, 211-222		
91	3D CLEM **2019**, 67-79		1
90	Correlative Cryo Soft X-ray Imaging **2019**, 155-169		1
89	Differential requirements for cyclase-associated protein (CAP) in actin-dependent processes of. *ELife*, **2019**, 8,	8.9	13

88	Lipid species affect morphology of endoplasmic reticulum: a sea urchin oocyte model of reversible manipulation. *Journal of Lipid Research*, **2019**, 60, 1880-1891	6.3	7
87	Individual response variations in scaffold-guided bone regeneration are determined by independent strain- and injury-induced mechanisms. *Biomaterials*, **2019**, 194, 183-194	15.6	34
86	Acute depletion of diacylglycerol from the -Golgi affects localized nuclear envelope morphology during mitosis. *Journal of Lipid Research*, **2018**, 59, 1402-1413	6.3	4
85	The Rényi divergence enables accurate and precise cluster analysis for localization microscopy. *Bioinformatics*, **2018**, 34, 4102-4111	7.2	4
84	Automated Segmentation of HeLa Nuclear Envelope from Electron Microscopy Images. *Communications in Computer and Information Science*, **2018**, 241-250	0.3	2
83	The Actinomyosin Motor Drives Malaria Parasite Red Blood Cell Invasion but Not Egress. *MBio*, **2018**, 9,	7.8	35
82	The 2018 correlative microscopy techniques roadmap. *Journal Physics D: Applied Physics*, **2018**, 51, 443001	3.1	63
81	Automated detection of fluorescent cells in in-resin fluorescence sections for integrated light and electron microscopy. *Journal of Microscopy*, **2018**, 271, 109-119	1.9	11
80	eC-CLEM: flexible multidimensional registration software for correlative microscopies. *Nature Methods*, **2017**, 14, 102-103	21.6	152
79	replicates within necrotic human macrophages. *Journal of Cell Biology*, **2017**, 216, 583-594	7.3	60
78	A switch from canonical to noncanonical autophagy shapes B cell responses. *Science*, **2017**, 355, 641-647	33.3	61
77	Correlative two-photon and serial block face scanning electron microscopy in neuronal tissue using 3D near-infrared branding maps. *Methods in Cell Biology*, **2017**, 140, 245-276	1.8	13
76	Correlative super-resolution fluorescence and electron microscopy using conventional fluorescent proteins in vacuo. *Journal of Structural Biology*, **2017**, 199, 120-131	3.4	44
75	Correlating 3D light to 3D electron microscopy for systems biology. *Current Opinion in Biomedical Engineering*, **2017**, 3, 49-55	4.4	10
74	Soft X-Ray Tomography: Filling the Gap Between Light and Electrons for Imaging Hydrated Biological Cells. *Microscopy and Microanalysis*, **2017**, 23, 986-987	0.5	
73	Epithelial-Cell-Derived Phospholipase A Group 1B Is an Endogenous Anthelmintic. *Cell Host and Microbe*, **2017**, 22, 484-493.e5	23.4	22
72	Vps34 PI 3-kinase inactivation enhances insulin sensitivity through reprogramming of mitochondrial metabolism. *Nature Communications*, **2017**, 8, 1804	17.4	37
71	Mitosis can drive cell cannibalism through entosis. *ELife*, **2017**, 6,	8.9	56

70	Actomyosin drives cancer cell nuclear dysmorphia and threatens genome stability. *Nature Communications*, **2017**, 8, 16013	17.4	50
69	3D correlative light and electron microscopy of cultured cells using serial blockface scanning electron microscopy. *Journal of Cell Science*, **2017**, 130, 278-291	5.3	62
68	Evaluation of helper-dependent canine adenovirus vectors in a 3D human CNS model. *Gene Therapy* , **2016**, 23, 86-94	4	13
67	Next Gen CLEM: super-accurate correlation and intelligent image acquisition **2016**, 995-996		
66	A Polar and Nucleotide-Dependent Mechanism of Action for RAD51 Paralogs in RAD51 Filament Remodeling. *Molecular Cell*, **2016**, 64, 926-939	17.6	25
65	Targeting protein homeostasis in sporadic inclusion body myositis. *Science Translational Medicine*, **2016**, 8, 331ra41	17.5	69
64	Molecular Genetic Regulation of Slc30a8/ZnT8 Reveals a Positive Association With Glucose Tolerance. *Molecular Endocrinology*, **2016**, 30, 77-91		51
63	Lymphatic endothelial cells are a replicative niche for Mycobacterium tuberculosis. *Journal of Clinical Investigation*, **2016**, 126, 1093-108	15.9	53
62	ultraLM and miniLM: Locator tools for smart tracking of fluorescent cells in correlative light and electron microscopy. *Wellcome Open Research*, **2016**, 1, 26	4.8	18
61	The intracellular plasma membrane-connected compartment in the assembly of HIV-1 in human macrophages. *BMC Biology*, **2016**, 14, 50	7.3	22
60	Autophagy initiation by ULK complex assembly on ER tubulovesicular regions marked by ATG9 vesicles. *Nature Communications*, **2016**, 7, 12420	17.4	172
59	Rad51 Paralogs Remodel Pre-synaptic Rad51 Filaments to Stimulate Homologous Recombination. *Cell*, **2015**, 162, 271-286	56.2	95
58	Modeling human neural functionality in vitro: three-dimensional culture for dopaminergic differentiation. *Tissue Engineering - Part A*, **2015**, 21, 654-68	3.9	33
57	Standard fluorescent proteins as dual-modality probes for correlative experiments in an integrated light and electron microscope. *Journal of Chemical Biology*, **2015**, 8, 179-188		14
56	Placing Molecules in a Cellular Context Using Light, Eelectron and X-Ray Microscopy. *Microscopy and Microanalysis*, **2015**, 21, 385-386	0.5	3
55	Centriolar satellite- and hMsd1/SSX2IP-dependent microtubule anchoring is critical for centriole assembly. *Molecular Biology of the Cell*, **2015**, 26, 2005-19	3.5	19
54	Cdc42 is a key regulator of B cell differentiation and is required for antiviral humoral immunity. *Journal of Experimental Medicine*, **2015**, 212, 53-72	16.6	51
53	Cdc42 is a key regulator of B cell differentiation and is required for antiviral humoral immunity. *Journal of Cell Biology*, **2015**, 208, 2081OIA235	7.3	

52	Cryo-soft X-ray tomography: a journey into the world of the native-state cell. *Protoplasma*, **2014**, 251, 449-58	3.4	73
51	Exploring the third dimension: volume electron microscopy comes of age. *Micron*, **2014**, 61, 9-19	2.3	226
50	Correlative and integrated light and electron microscopy of in-resin GFP fluorescence, used to localise diacylglycerol in mammalian cells. *Ultramicroscopy*, **2014**, 143, 3-14	3.1	98
49	Principle of duality in phospholipids: regulators of membrane morphology and dynamics. *Biochemical Society Transactions*, **2014**, 42, 1335-42	5.1	4
48	Imaging endosomes and autophagosomes in whole mammalian cells using correlative cryo-fluorescence and cryo-soft X-ray microscopy (cryo-CLXM). *Ultramicroscopy*, **2014**, 143, 77-87	3.1	92
47	Integrated light and scanning electron microscopy of GFP-expressing cells. *Methods in Cell Biology*, **2014**, 124, 363-89	1.8	24
46	Correlative cryo-fluorescence and cryo-soft X-ray tomography of adherent cells at European synchrotrons. *Methods in Cell Biology*, **2014**, 124, 151-78	1.8	16
45	Mitotic catenation is monitored and resolved by a PKC-regulated pathway. *Nature Communications* , **2014**, 5, 5685	17.4	17
44	A 3D cellular context for the macromolecular world. *Nature Structural and Molecular Biology*, **2014**, 21, 841-5	17.6	33
43	Biological applications of cryo-soft X-ray tomography. *Journal of Microscopy*, **2014**, 255, 65-70	1.9	42
42	A human genome-wide screen for regulators of clathrin-coated vesicle formation reveals an unexpected role for the V-ATPase. *Nature Cell Biology*, **2013**, 15, 50-60	23.4	88
41	Asymmetric segregation of polarized antigen on B cell division shapes presentation capacity. *Science*, **2012**, 335, 475-9	33.3	106
40	Clathrin potentiates vaccinia-induced actin polymerization to facilitate viral spread. *Cell Host and Microbe*, **2012**, 12, 346-59	23.4	38
39	Correlative light and volume electron microscopy: using focused ion beam scanning electron microscopy to image transient events in model organisms. *Methods in Cell Biology*, **2012**, 111, 357-82	1.8	16
38	Centralspindlin links the mitotic spindle to the plasma membrane during cytokinesis. *Nature*, **2012**, 492, 276-9	50.4	107
37	Acute manipulation of diacylglycerol reveals roles in nuclear envelope assembly & endoplasmic reticulum morphology. *PLoS ONE*, **2012**, 7, e51150	3.7	54
36	Endothelial basement membrane limits tip cell formation by inducing Dll4/Notch signalling in vivo. *EMBO Reports*, **2011**, 12, 1135-43	6.5	109
35	The Hippo pathway regulates apical-domain size independently of its growth-control function. *Journal of Cell Science*, **2009**, 122, 2360-70	5.3	90

34	In vitro reconstitution of fusion between immature autophagosomes and endosomes. *Autophagy*, **2009**, 5, 676-89	10.2	31
33	Intravital imaging reveals transient changes in pigment production and Brn2 expression during metastatic melanoma dissemination. *Cancer Research*, **2009**, 69, 7969-77	10.1	162
32	An E2-F12 complex is required for intracellular enveloped virus morphogenesis during vaccinia infection. *Cellular Microbiology*, **2009**, 11, 808-24	3.9	32
31	Towards native-state imaging in biological context in the electron microscope. *Journal of Chemical Biology*, **2009**, 3, 101-12		25
30	Imaging transient blood vessel fusion events in zebrafish by correlative volume electron microscopy. *PLoS ONE*, **2009**, 4, e7716	3.7	54
29	A radiochemical technique with potential for revealing novel fungal metabolites according to expression of specific biosynthetic activities. *Mycological Research*, **2008**, 112, 271-6		5
28	The dystonia-associated protein torsinA modulates synaptic vesicle recycling. *Journal of Biological Chemistry*, **2008**, 283, 7568-79	5.4	85
27	Membranous structures transfer cell surface proteins across NK cell immune synapses. *Traffic*, **2007**, 8, 1190-204	5.7	36
26	High-pressure freezing provides insights into Weibel-Palade body biogenesis. *Journal of Cell Science*, **2007**, 120, 2117-25	5.3	65
25	Regulated and polarized PtdIns(3,4,5)P3 accumulation is essential for apical membrane morphogenesis in photoreceptor epithelial cells. *Current Biology*, **2006**, 16, 140-9	6.3	135
24	Amorosia littoralis gen. sp. nov., a new genus and species name for the scorpinone and caffeine-producing hyphomycete from the littoral zone in The Bahamas. *Mycological Research*, **2006**, 110, 1371-8		19
23	The physiological function of von Willebrand's factor depends on its tubular storage in endothelial Weibel-Palade bodies. *Developmental Cell*, **2006**, 10, 223-32	10.2	110
22	Constitutive sharing of recycling synaptic vesicles between presynaptic boutons. *Nature Neuroscience*, **2006**, 9, 315-21	25.5	173
21	An ultrastructural readout of fluorescence recovery after photobleaching using correlative light and electron microscopy. *Nature Protocols*, **2006**, 1, 988-94	18.8	35
20	HIV-1 trafficking to the dendritic cell-T-cell infectious synapse uses a pathway of tetraspanin sorting to the immunological synapse. *Traffic*, **2005**, 6, 488-501	5.7	188
19	An AP-1/clathrin coat plays a novel and essential role in forming the Weibel-Palade bodies of endothelial cells. *Journal of Cell Biology*, **2005**, 170, 627-36	7.3	85
18	Cell surface organization of stress-inducible proteins ULBP and MICA that stimulate human NK cells and T cells via NKG2D. *Journal of Experimental Medicine*, **2004**, 199, 1005-10	16.6	91
17	The leaden gene product is required with Rab27a to recruit myosin Va to melanosomes in melanocytes. *Traffic*, **2002**, 3, 193-202	5.7	128

16	Cell-specific abnormal prenylation of Rab proteins in platelets and melanocytes of the gunmetal mouse. *British Journal of Haematology*, **2002**, 117, 414-23	4.5	24
15	The regulation of platelet-dense granules by Rab27a in the ashen mouse, a model of Hermansky-Pudlak and Griscelli syndromes, is granule-specific and dependent on genetic background. *Blood*, **2002**, 100, 128-35	2.2	53
14	The Hermansky-Pudlak syndrome 1 (HPS1) and HPS2 genes independently contribute to the production and function of platelet dense granules, melanosomes, and lysosomes. *Blood*, **2002**, 99, 1651-1658	2.2	57
13	Functional redundancy of Rab27 proteins and the pathogenesis of Griscelli syndrome. *Journal of Clinical Investigation*, **2002**, 110, 247-257	15.9	132
12	Functional redundancy of Rab27 proteins and the pathogenesis of Griscelli syndrome. *Journal of Clinical Investigation*, **2002**, 110, 247-57	15.9	61
11	Rab27a regulates the peripheral distribution of melanosomes in melanocytes. *Journal of Cell Biology*, **2001**, 152, 795-808	7.3	283
10	Human VPS34 is required for internal vesicle formation within multivesicular endosomes. *Journal of Cell Biology*, **2001**, 155, 1251-64	7.3	204
9	Altered expression and modification of proteases from an avirulent mutant of Porphyromonas gingivalis W50 (W50/BE1). *Microbiology (United Kingdom)*, **1998**, 144 (Pt 9), 2487-2496	2.9	11
8	The malaria parasite sheddase SUB2 governs host red blood cell membrane sealing at invasion		1
7	Mycobacterium tuberculosis cording in the cytosol of live lymphatic endothelial cells		1
6	In vivo control of Toxoplasma gondii by zebrafish macrophages		1
5	Citizen science, cells and CNNs □deep learning for automatic segmentation of the nuclear envelope in electron microscopy data, trained with volunteer segmentations		6
4	Adipose Triglyceride Lipase protects the endocytosis of renal cells on a high fat diet in Drosophila		1
3	Human GBP1 differentially targetsSalmonellaandToxoplasmato license recognition of microbial ligands and caspase-mediated death		3
2	Global analysis of putative phospholipases in the malaria parasite Plasmodium falciparum reveals critical factors for parasite proliferation		1
1	Functional and multiscale 3D structural investigation of brain tissue through correlative in vivo physiology, synchrotron micro-tomography and volume electron microscopy		2