Frederic J De Sauvage

List of Publications by Year in Descending Order

134 papers	31,903 citations	85 h-index	146 g-index
146 ext. papers	35,810 ext. citations	18.8 avg, IF	7.04 L-index

#	Paper	IF	Citations
134	Gremlin 1 fibroblastic niche maintains dendritic cell homeostasis in lymphoid tissues. *Nature Immunology*, **2021**, 22, 571-585	19.1	13
133	IL-1R1-dependent signaling coordinates epithelial regeneration in response to intestinal damage. *Science Immunology*, **2021**, 6,	28	8
132	Tissue regeneration: Reserve or reverse?. *Science*, **2021**, 371, 784-786	33.3	11
131	Distinct Mesenchymal Cell Populations Generate the Essential Intestinal BMP Signaling Gradient. *Cell Stem Cell*, **2020**, 26, 391-402.e5	18	84
130	Lgr5+ ́telocytes are a signaling source at the intestinal villus tip. *Nature Communications*, **2020**, 11, 1936	17.4	43
129	The great escape: tumour cell plasticity in resistance to targeted therapy. *Nature Reviews Drug Discovery*, **2020**, 19, 39-56	64.1	169
128	Modeling Colorectal Cancer Progression Through Orthotopic Implantation of Organoids. *Methods in Molecular Biology*, **2020**, 2171, 331-346	1.4	0
127	Atoh1 secretory progenitors possess renewal capacity independent of Lgr5 cells during colonic regeneration. *EMBO Journal*, **2019**, 38,	13	32
126	A Clinically Applicable Gene-Expression Classifier Reveals Intrinsic and Extrinsic Contributions to Consensus Molecular Subtypes in Primary and Metastatic Colon Cancer. *Clinical Cancer Research*, **2019**, 25, 4431-4442	12.9	21
125	NRG1 is a critical regulator of differentiation in TP63-driven squamous cell carcinoma. *ELife*, **2019**, 8,	8.9	7
124	Cellular Plasticity in Intestinal Homeostasis and Disease. *Cell Stem Cell*, **2019**, 24, 54-64	18	67
123	A selective peptide inhibitor of Frizzled 7 receptors disrupts intestinal stem cells. *Nature Chemical Biology*, **2018**, 14, 582-590	11.7	27
122	Grking the Smoothened signal. *Science Signaling*, **2018**, 11,	8.8	3
121	A cell identity switch allows residual BCC to survive Hedgehog pathway inhibition. *Nature*, **2018**, 562, 429-433	50.4	65
120	Subtle Changes in the Levels of BCL-2 Proteins Cause Severe Craniofacial Abnormalities. *Cell Reports*, **2018**, 24, 3285-3295.e4	10.6	21
119	Parasitic helminths induce fetal-like reversion in the intestinal stem cell niche. *Nature*, **2018**, 559, 109-113	50.4	116
118	Stem cell plasticity enables hair regeneration following Lgr5 cell loss. *Nature Cell Biology*, **2017**, 19, 666-676	13.4	43

117	A distinct role for Lgr5 stem cells in primary and metastatic colon cancer. *Nature*, **2017**, 543, 676-680	50.4	419
116	Replacement of Lost Lgr5-Positive Stem Cells through Plasticity of Their Enterocyte-Lineage Daughters. *Cell Stem Cell*, **2016**, 18, 203-13	18	332
115	Comprehensive genomic analysis of malignant pleural mesothelioma identifies recurrent mutations, gene fusions and splicing alterations. *Nature Genetics*, **2016**, 48, 407-16	36.3	497
114	Genomic analysis identifies new drivers and progression pathways in skin basal cell carcinoma. *Nature Genetics*, **2016**, 48, 398-406	36.3	242
113	Targeting PTPRK-RSPO3 colon tumours promotes differentiation and loss of stem-cell function. *Nature*, **2016**, 529, 97-100	50.4	149
112	Genomic analysis of smoothened inhibitor resistance in basal cell carcinoma. *Cancer Cell*, **2015**, 27, 327-41	24.3	241
111	Regulation of the oncoprotein Smoothened by small molecules. *Nature Chemical Biology*, **2015**, 11, 246-55	15.7	93
110	Translational value of mouse models in oncology drug development. *Nature Medicine*, **2015**, 21, 431-9	50.5	192
109	Opposing activities of Notch and Wnt signaling regulate intestinal stem cells and gut homeostasis. *Cell Reports*, **2015**, 11, 33-42	10.6	128
108	Randomized Phase Ib/II Study of Gemcitabine Plus Placebo or Vismodegib, a Hedgehog Pathway Inhibitor, in Patients With Metastatic Pancreatic Cancer. *Journal of Clinical Oncology*, **2015**, 33, 4284-92	2.2	323
107	Stromal Indian hedgehog signaling is required for intestinal adenoma formation in mice. *Gastroenterology*, **2015**, 148, 170-180.e6	13.3	29
106	A comprehensive transcriptional portrait of human cancer cell lines. *Nature Biotechnology*, **2015**, 33, 306-12	44.5	407
105	Spectrum of diverse genomic alterations define non-clear cell renal carcinoma subtypes. *Nature Genetics*, **2015**, 47, 13-21	36.3	247
104	Efficacy of Hedgehog pathway inhibitors in Basal cell carcinoma. *Molecular Cancer Therapeutics*, **2015**, 14, 633-41	6.1	56
103	Intestinal crypt homeostasis revealed at single-stem-cell level by in vivo live imaging. *Nature*, **2014**, 507, 362-365	50.4	341
102	Comparative oncogenomics identifies PSMB4 and SHMT2 as potential cancer driver genes. *Cancer Research*, **2014**, 74, 3114-26	10.1	90
101	Integrated exome and transcriptome sequencing reveals ZAK isoform usage in gastric cancer. *Nature Communications*, **2014**, 5, 3830	17.4	66
100	Lgr5+ stem cells are indispensable for radiation-induced intestinal regeneration. *Cell Stem Cell*, **2014**, 14, 149-59	18	353

99	Discovery and preclinical development of vismodegib. *Expert Opinion on Drug Discovery*, **2014**, 9, 969-84	6.2	43
98	Induction of ectopic taste buds by SHH reveals the competency and plasticity of adult lingual epithelium. *Development (Cambridge)*, **2014**, 141, 2993-3002	6.6	51
97	Lgr5-expressing cells are sufficient and necessary for postnatal mammary gland organogenesis. *Cell Reports*, **2013**, 3, 70-8	10.6	157
96	Influence of tumour micro-environment heterogeneity on therapeutic response. *Nature*, **2013**, 501, 346-54	38.4	1579
95	PTEN loss mitigates the response of medulloblastoma to Hedgehog pathway inhibition. *Cancer Research*, **2013**, 73, 7034-42	10.1	48
94	Oncogenic ERBB3 mutations in human cancers. *Cancer Cell*, **2013**, 23, 603-17	24.3	277
93	Recapitulating human cancer in a mouse. *Nature Biotechnology*, **2013**, 31, 392-5	44.5	5
92	Recurrent R-spondin fusions in colon cancer. *Nature*, **2012**, 488, 660-4	50.4	711
91	Direct histological processing of EUS biopsies enables rapid molecular biomarker analysis for interventional pancreatic cancer trials. *Pancreatology*, **2012**, 12, 8-15	3.8	46
90	The effects of hepatitis B virus integration into the genomes of hepatocellular carcinoma patients. *Genome Research*, **2012**, 22, 593-601	9.7	202
89	Comprehensive genomic analysis identifies SOX2 as a frequently amplified gene in small-cell lung cancer. *Nature Genetics*, **2012**, 44, 1111-6	36.3	712
88	Genome and transcriptome sequencing of lung cancers reveal diverse mutational and splicing events. *Genome Research*, **2012**, 22, 2315-27	9.7	158
87	A reserve stem cell population in small intestine renders Lgr5-positive cells dispensable. *Nature*, **2011**, 478, 255-9	50.4	820
86	TMEFF2 is a PDGF-AA binding protein with methylation-associated gene silencing in multiple cancer types including glioma. *PLoS ONE*, **2011**, 6, e18608	3.7	33
85	Targeting superficial or nodular Basal cell carcinoma with topically formulated small molecule inhibitor of smoothened. *Clinical Cancer Research*, **2011**, 17, 3378-87	12.9	52
84	Small molecule inhibition of GDC-0449 refractory smoothened mutants and downstream mechanisms of drug resistance. *Cancer Research*, **2011**, 71, 435-44	10.1	285
83	Hedgehog fights back: mechanisms of acquired resistance against Smoothened antagonists. *Cancer Research*, **2011**, 71, 5057-61	10.1	133
82	Prostate-specific Klf6 inactivation impairs anterior prostate branching morphogenesis through increased activation of the Shh pathway.. *Journal of Biological Chemistry*, **2011**, 286, 43587	5.4	78

81	TRPS1 targeting by miR-221/222 promotes the epithelial-to-mesenchymal transition in breast cancer. *Science Signaling*, **2011**, 4, ra41	8.8	205
80	miR-221/222 targeting of trichorhinophalangeal 1 (TRPS1) promotes epithelial-to-mesenchymal transition in breast cancer. *Science Signaling*, **2011**, 4, pt5	8.8	88
79	Canonical hedgehog signaling augments tumor angiogenesis by induction of VEGF-A in stromal perivascular cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 9589-94	11.5	89
78	Pharmacokinetic-pharmacodynamic analysis of vismodegib in preclinical models of mutational and ligand-dependent Hedgehog pathway activation. *Clinical Cancer Research*, **2011**, 17, 4682-92	12.9	85
77	Vive la science! Vive le hﬁsson!. *EMBO Reports*, **2010**, 11, 566-8	6.5	
76	The mutation spectrum revealed by paired genome sequences from a lung cancer patient. *Nature*, **2010**, 465, 473-7	50.4	403
75	Diverse somatic mutation patterns and pathway alterations in human cancers. *Nature*, **2010**, 466, 869-73	50.4	1003
74	A mouse knockout library for secreted and transmembrane proteins. *Nature Biotechnology*, **2010**, 28, 749-55	44.5	258
73	Hedgehog signaling regulates the generation of ameloblast progenitors in the continuously growing mouse incisor. *Development (Cambridge)*, **2010**, 137, 3753-61	6.6	126
72	Hedgehog pathway antagonist 5E1 binds hedgehog at the pseudo-active site. *Journal of Biological Chemistry*, **2010**, 285, 26570-80	5.4	101
71	IL-27 supports germinal center function by enhancing IL-21 production and the function of T follicular helper cells. *Journal of Experimental Medicine*, **2010**, 207, 2895-906	16.6	160
70	Kinetics of hedgehog-dependent full-length Gli3 accumulation in primary cilia and subsequent degradation. *Molecular and Cellular Biology*, **2010**, 30, 1910-22	4.8	190
69	Clinical experience with Hedgehog pathway inhibitors. *Journal of Clinical Oncology*, **2010**, 28, 5321-6	2.2	161
68	Second generation 2-pyridyl biphenyl amide inhibitors of the hedgehog pathway. *Bioorganic and Medicinal Chemistry Letters*, **2010**, 20, 6748-53	2.9	14
67	Antibody-drug conjugates for the treatment of non-Hodgkin's lymphoma: target and linker-drug selection. *Cancer Research*, **2009**, 69, 2358-64	10.1	199
66	Paracrine Hedgehog signaling in cancer. *Cancer Research*, **2009**, 69, 6007-10	10.1	179
65	Hedgehog signaling is restricted to the stromal compartment during pancreatic carcinogenesis. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 4254-9	11.5	335
64	Prostate-specific Klf6 inactivation impairs anterior prostate branching morphogenesis through increased activation of the Shh pathway. *Journal of Biological Chemistry*, **2009**, 284, 21057-65	5.4	21

63	Smoothened mutation confers resistance to a Hedgehog pathway inhibitor in medulloblastoma. *Science*, **2009**, 326, 572-4	33.3	676
62	The mammalian Cos2 homolog Kif7 plays an essential role in modulating Hh signal transduction during development. *Current Biology*, **2009**, 19, 1320-6	6.3	183
61	Somatic mutations in p85alpha promote tumorigenesis through class IA PI3K activation. *Cancer Cell* , **2009**, 16, 463-74	24.3	241
60	The structure of SHH in complex with HHIP reveals a recognition role for the Shh pseudo active site in signaling. *Nature Structural and Molecular Biology*, **2009**, 16, 691-7	17.6	108
59	Structural ties between cholesterol transport and morphogen signaling. *Cell*, **2009**, 138, 1055-6	56.2	34
58	Hedgehog signaling is dispensable for adult murine hematopoietic stem cell function and hematopoiesis. *Cell Stem Cell*, **2009**, 4, 559-67	18	136
57	Mechanisms of Hedgehog pathway activation in cancer and implications for therapy. *Trends in Pharmacological Sciences*, **2009**, 30, 303-12	13.2	533
56	Inhibition of the hedgehog pathway in advanced basal-cell carcinoma. *New England Journal of Medicine*, **2009**, 361, 1164-72	59.2	916
55	Treatment of medulloblastoma with hedgehog pathway inhibitor GDC-0449. *New England Journal of Medicine*, **2009**, 361, 1173-8	59.2	818
54	Pronounced thrombocytosis in transgenic mice expressing reduced levels of Mpl in platelets and terminally differentiated megakaryocytes. *Blood*, **2009**, 113, 1768-77	2.2	54
53	A paracrine requirement for hedgehog signalling in cancer. *Nature*, **2008**, 455, 406-10	50.4	800
52	Interleukin-22 mediates early host defense against attaching and effacing bacterial pathogens. *Nature Medicine*, **2008**, 14, 282-9	50.5	1429
51	Kinome siRNA screen identifies regulators of ciliogenesis and hedgehog signal transduction. *Science Signaling*, **2008**, 1, ra7	8.8	70
50	Cutting edge: IL-27 is a potent inducer of IL-10 but not FoxP3 in murine T cells. *Journal of Immunology*, **2008**, 180, 2752-6	5.3	172
49	Abstract LB-138: Efficacy data of GDC-0449, a systemic Hedgehog pathway antagonist, in a first-in-human, first-in-class Phase I study with locally advanced, multifocal or metastatic basal cell carcinoma patients **2008**,		6
48	Highly efficient somatic-mutation identification using Escherichia coli mismatch-repair detection. *Nature Methods*, **2007**, 4, 713-5	21.6	5
47	Regulation of myeloid progenitor cell proliferation/survival by IL-31 receptor and IL-31. *Experimental Hematology*, **2007**, 35, 78-86	3.1	23
46	IL-31-IL-31R interactions negatively regulate type 2 inflammation in the lung. *Journal of Experimental Medicine*, **2007**, 204, 481-7	16.6	65

45	The hedgehog signaling pathway in cancer. *Clinical Cancer Research*, **2006**, 12, 5924-8	12.9	206
44	IL-27 limits IL-2 production during Th1 differentiation. *Journal of Immunology*, **2006**, 176, 237-47	5.3	182
43	Interleukin-27R (WSX-1/T-cell cytokine receptor) gene-deficient mice display enhanced resistance to leishmania donovani infection but develop severe liver immunopathology. *American Journal of Pathology*, **2006**, 168, 158-69	5.8	115
42	Structure of SAP18: a ubiquitin fold in histone deacetylase complex assembly. *Biochemistry*, **2006**, 45, 11974-82	3.2	9
41	Notch signaling is required for normal prostatic epithelial cell proliferation and differentiation. *Developmental Biology*, **2006**, 290, 66-80	3.1	119
40	Interleukin 27 limits autoimmune encephalomyelitis by suppressing the development of interleukin 17-producing T cells. *Nature Immunology*, **2006**, 7, 929-36	19.1	681
39	Targeting the Hedgehog pathway in cancer. *Nature Reviews Drug Discovery*, **2006**, 5, 1026-33	64.1	624
38	Positive and negative regulation of the IL-27 receptor during lymphoid cell activation. *Journal of Immunology*, **2005**, 174, 7684-91	5.3	139
37	Loss of the serine/threonine kinase fused results in postnatal growth defects and lethality due to progressive hydrocephalus. *Molecular and Cellular Biology*, **2005**, 25, 7054-68	4.8	100
36	Maternal embryonic leucine zipper kinase/murine protein serine-threonine kinase 38 is a promising therapeutic target for multiple cancers. *Cancer Research*, **2005**, 65, 9751-61	10.1	133
35	Suppressor of fused regulates Gli activity through a dual binding mechanism. *Molecular and Cellular Biology*, **2004**, 24, 8627-41	4.8	96
34	Activity-dependent internalization of smoothened mediated by beta-arrestin 2 and GRK2. *Science*, **2004**, 306, 2257-60	33.3	240
33	Compromised humoral and delayed-type hypersensitivity responses in IL-23-deficient mice. *Journal of Immunology*, **2004**, 172, 2827-33	5.3	167
32	The endothelial-cell-derived secreted factor Egfl7 regulates vascular tube formation. *Nature*, **2004**, 428, 754-8	50.4	310
31	IL-27 regulates IL-12 responsiveness of naive CD4+ T cells through Stat1-dependent and -independent mechanisms. *Proceedings of the National Academy of Sciences of the United States of America*, **2003**, 100, 15047-52	11.5	367
30	Interleukin-23 promotes a distinct CD4 T cell activation state characterized by the production of interleukin-17. *Journal of Biological Chemistry*, **2003**, 278, 1910-4	5.4	1382
29	Inhibition of epithelial ductal branching in the prostate by sonic hedgehog is indirectly mediated by stromal cells. *Journal of Biological Chemistry*, **2003**, 278, 18506-13	5.4	76
28	A novel type I cytokine receptor is expressed on monocytes, signals proliferation, and activates STAT-3 and STAT-5. *Journal of Biological Chemistry*, **2002**, 277, 16831-6	5.4	60

27	Requirement for mitogen-activated protein kinase activation in the response of embryonic stem cell-derived hematopoietic cells to thrombopoietin in vitro. *Blood*, **2002**, 99, 1174-82	2.2	13
26	Activation of expression of hedgehog target genes in basal cell carcinomas. *Journal of Investigative Dermatology*, **2001**, 116, 739-42	4.3	111
25	Downregulation of Hedgehog signaling is required for organogenesis of the small intestine in Xenopus. *Developmental Biology*, **2001**, 229, 188-202	3.1	42
24	The seven-transmembrane receptor smoothened cell-autonomously induces multiple ventral cell types. *Nature Neuroscience*, **2000**, 3, 41-6	25.5	124
23	Gli regulation by the opposing activities of fused and suppressor of fused. *Nature Cell Biology*, **2000** , 2, 310-2	23.4	117
22	Development of Th1-type immune responses requires the type I cytokine receptor TCCR. *Nature*, **2000**, 407, 916-20	50.4	321
21	Embryonic stem cell differentiation to hematopoietic cells: A model to study the function of various regions of the intracytoplasmic domain of cytokine receptors in vitro. *Experimental Hematology*, **2000**, 28, 1363-72	3.1	10
20	Characterization of novel neutralizing monoclonal antibodies specific to human neurturin. *Hybridoma*, **2000**, 19, 303-15		8
19	Smoothened activates Galphai-mediated signaling in frog melanophores. *Journal of Biological Chemistry*, **2000**, 275, 26322-7	5.4	91
18	Role of the distal half of the c-Mpl intracellular domain in control of platelet production by thrombopoietin in vivo. *Molecular and Cellular Biology*, **2000**, 20, 507-15	4.8	48
17	Sonic hedgehog signaling by the patched-smoothened receptor complex. *Current Biology*, **1999**, 9, 76-846.3		264
16	Hedgehog signal transduction: from flies to vertebrates. *Experimental Cell Research*, **1999**, 253, 25-33	4.2	104
15	Activating Smoothened mutations in sporadic basal-cell carcinoma. *Nature*, **1998**, 391, 90-2	50.4	1087
14	Regulation of megakaryocytopoiesis and platelet production: lessons from animal models. *Translational Research*, **1998**, 131, 496-501		21
13	Hematopoietic deficiencies in c-mpl and TPO knockout mice. *Stem Cells*, **1998**, 16, 1-6	5.8	81
12	Persephin, a novel neurotrophic factor related to GDNF and neurturin. *Neuron*, **1998**, 20, 245-53	13.9	421
11	Distinct expression patterns of notch family receptors and ligands during development of the mammalian inner ear. *Mechanisms of Development*, **1998**, 78, 159-63	1.7	94
10	Role of c-mpl in Early Hematopoiesis. *Blood*, **1998**, 92, 4-10	2.2	316

9	Primary Role of the Liver in Thrombopoietin Production Shown by Tissue-Specific Knockout. *Blood*, **1998**, 92, 2189-2191	2.2	91
8	Human Platelets as a Model for the Binding and Degradation of Thrombopoietin. *Blood*, **1997**, 89, 2782-2788	2.2	132
7	Regulation of the Serum Concentration of Thrombopoietin in Thrombocytopenic NF-E2 Knockout Mice. *Blood*, **1997**, 90, 1821-1827	2.2	64
6	Normal Platelets and Megakaryocytes Are Produced In Vivo in the Absence of Thrombopoietin. *Blood*, **1997**, 90, 3423-3429	2.2	117
5	Physical mapping and genomic structure of the human TNFR2 gene. *Genomics*, **1996**, 35, 94-100	4.3	60
4	The tumour-suppressor gene patched encodes a candidate receptor for Sonic hedgehog. *Nature*, **1996**, 384, 129-34	50.4	971
3	Stimulation of megakaryocytopoiesis and thrombopoiesis by the c-Mpl ligand. *Nature*, **1994**, 369, 533-8	50.4	1165
2	Decreased sensitivity to tumour-necrosis factor but normal T-cell development in TNF receptor-2-deficient mice. *Nature*, **1994**, 372, 560-3	50.4	533
1	Molecular cloning of a retina-specific membrane guanylyl cyclase. *Neuron*, **1992**, 9, 727-37	13.9	214