Laura M Bohn

List of Publications by Year in Descending Order

112 papers	9,179 citations	45 h-index	95 g-index
124 ext. papers	10,402 ext. citations	9.5 avg, IF	6.07 L-index

#	Paper	IF	Citations
112	Community Guidelines for GPCR Ligand Bias: IUPHAR Review XX.. *British Journal of Pharmacology*, **2022**,	8.6	10
111	Improved cyclobutyl nabilone analogs as potent CB1 receptor agonists.. *European Journal of Medicinal Chemistry*, **2021**, 230, 114027	6.8	
110	G protein signaling-biased mu opioid receptor agonists that produce sustained G protein activation are noncompetitive agonists. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	1
109	Comparison of morphine, oxycodone and the biased MOR agonist SR-17018 for tolerance and efficacy in mouse models of pain. *Neuropharmacology*, **2021**, 185, 108439	5.5	7
108	Novel Functionalized Cannabinoid Receptor Probes: Development of Exceptionally Potent Agonists. *Journal of Medicinal Chemistry*, **2021**, 64, 3870-3884	8.3	3
107	Decaf or regular? Energizing the caffeine receptor. *Cell*, **2021**, 184, 1659-1660	56.2	
106	Some effects of putative G-protein biased mu-opioid receptor agonists in male rhesus monkeys. *Behavioural Pharmacology*, **2021**, 32, 453-458	2.4	0
105	Structure□ctivity relationship investigation of triazole-based kappa opioid receptor agonists. *Medicinal Chemistry Research*, **2021**, 30, 1386-1396	2.2	
104	Low Intrinsic Efficacy Alone Cannot Explain the Improved Side Effect Profiles of New Opioid Agonists. *Biochemistry*, **2021**,	3.2	8
103	A Genetically Encoded F-19 NMR Probe Reveals the Allosteric Modulation Mechanism of Cannabinoid Receptor 1. *Journal of the American Chemical Society*, **2021**, 143, 16320-16325	16.4	5
102	Activation and Signaling Mechanism Revealed by Cannabinoid Receptor-G Complex Structures. *Cell*, **2020**, 180, 655-665.e18	56.2	88
101	Toward Directing Opioid Receptor Signaling to Refine Opioid Therapeutics. *Biological Psychiatry*, **2020**, 87, 15-21	7.9	44
100	Arrestin recruitment to dopamine D2 receptor mediates locomotion but not incentive motivation. *Molecular Psychiatry*, **2020**, 25, 2086-2100	15.1	32
99	A G protein signaling-biased agonist at the □pioid receptor reverses morphine tolerance while preventing morphine withdrawal. *Neuropsychopharmacology*, **2020**, 45, 416-425	8.7	36
98	Probing the CB Cannabinoid Receptor Binding Pocket with AM6538, a High-Affinity Irreversible Antagonist. *Molecular Pharmacology*, **2019**, 96, 619-628	4.3	3
97	Quantitating Ligand Bias Using the Competitive Model of Ligand Activity. *Methods in Molecular Biology*, **2019**, 1957, 235-247	1.4	2
96	Expression of different adenylyl cyclase isoforms impacts ligand bias downstream of the kappa opioid receptor. *FASEB Journal*, **2019**, 33, 503.11	0.9	

95	Crystal Structure of the Human Cannabinoid Receptor CB2. *Cell*, **2019**, 176, 459-467.e13	56.2	175
94	Arrestins: Ligand-Directed Regulators of 5-HT2A Receptor Trafficking and Signaling Events **2018**, 31-55		1
93	O6C-20-nor-salvinorin A is a stable and potent KOR agonist. *Bioorganic and Medicinal Chemistry Letters*, **2018**, 28, 2770-2772	2.9	8
92	G protein signaling-biased agonism at the opioid receptor is maintained in striatal neurons. *Science Signaling*, **2018**, 11,	8.8	25
91	The effect of quinine in two bottle choice procedures in C57BL6 mice: Opioid preference, somatic withdrawal, and pharmacokinetic outcomes. *Drug and Alcohol Dependence*, **2018**, 191, 195-202	4.9	8
90	Biased agonism and opioid receptor-mediated analgesia. *Proceedings for Annual Meeting of the Japanese Pharmacological Society*, **2018**, WCP2018, SY85-4	0	
89	Repurposing of a Nucleoside Scaffold from Adenosine Receptor Agonists to Opioid Receptor Antagonists. *ACS Omega*, **2018**, 3, 12658-12678	3.9	8
88	Optimization of a Series of Mu Opioid Receptor (MOR) Agonists with High G Protein Signaling Bias. *Journal of Medicinal Chemistry*, **2018**, 61, 8895-8907	8.3	38
87	Stolonidiol: Synthesis, Target Identification, and Mechanism for Choline Acetyltransferase Activation. *Journal of the American Chemical Society*, **2017**, 139, 5865-5869	16.4	12
86	Approaches to Assess Biased Signaling at the CB1R Receptor. *Methods in Enzymology*, **2017**, 593, 259-279	1.7	4
85	Dynamic Strategic Bond Analysis Yields a Ten-Step Synthesis of 20-nor-Salvinorin A, a Potent OR Agonist. *ACS Central Science*, **2017**, 3, 1329-1336	16.8	23
84	Bias Factor and Therapeutic Window Correlate to Predict Safer Opioid Analgesics. *Cell*, **2017**, 171, 1165-1175.e13	56.2	179
83	Seeking (and Finding) Biased Ligands of the Kappa Opioid Receptor. *ACS Medicinal Chemistry Letters*, **2017**, 8, 694-700	4.3	23
82	Crystal structures of agonist-bound human cannabinoid receptor CB. *Nature*, **2017**, 547, 468-471	50.4	270
81	5-HT1A Autoreceptors in the Dorsal Raphe Nucleus Convey Vulnerability to Compulsive Cocaine Seeking. *Neuropsychopharmacology*, **2016**, 41, 1210-22	8.7	30
80	RasGRP1 promotes amphetamine-induced motor behavior through a Rhes interaction network ("Rhesactome") in the striatum. *Science Signaling*, **2016**, 9, ra111	8.8	25
79	Crystal Structure of the Human Cannabinoid Receptor CB. *Cell*, **2016**, 167, 750-762.e14	56.2	323
78	Biased agonism: An emerging paradigm in GPCR drug discovery. *Bioorganic and Medicinal Chemistry Letters*, **2016**, 26, 241-250	2.9	167

77	Recruitment of β-Arrestin into Neuronal Cilia Modulates Somatostatin Receptor Subtype 3 Ciliary Localization. *Molecular and Cellular Biology*, **2016**, 36, 223-35	4.8	45
76	Synthetic Ligands of Cannabinoid Receptors Affect Dauer Formation in the Nematode Caenorhabditis elegans. *G3: Genes, Genomes, Genetics*, **2016**, 6, 1695-705	3.2	5
75	Biased agonists of the kappa opioid receptor suppress pain and itch without causing sedation or dysphoria. *Science Signaling*, **2016**, 9, ra117	8.8	128
74	Synthesis of Kappa Opioid Antagonists Based On Pyrrolo[1,2-a]quinoxalinones Using an N-Arylation/Condensation/Oxidation Reaction Sequence. *Journal of Organic Chemistry*, **2016**, 81, 10538-10550	4.2	6
73	Potency enhancement of the δ opioid receptor antagonist probe ML140 through sulfonamide constraint utilizing a tetrahydroisoquinoline motif. *Bioorganic and Medicinal Chemistry*, **2015**, 23, 3948-56	2.4	6
72	A novel method for analyzing extremely biased agonism at G protein-coupled receptors. *Molecular Pharmacology*, **2015**, 87, 866-77	4.3	56
71	Fulfilling the Promise of "Biased" G Protein-Coupled Receptor Agonism. *Molecular Pharmacology*, **2015**, 88, 579-88	4.3	153
70	Characterization of kappa opioid receptor mediated, dynorphin-stimulated [35S]GTPγS binding in mouse striatum for the evaluation of selective KOR ligands in an endogenous setting. *Neuropharmacology*, **2015**, 99, 131-41	5.5	16
69	Structure-activity relationship studies of functionally selective kappa opioid receptor agonists that modulate ERK 1/2 phosphorylation while preserving G protein over β-arrestin2 signaling bias. *ACS Chemical Neuroscience*, **2015**, 6, 1411-9	5.7	43
68	Molecular-interaction and signaling profiles of AM3677, a novel covalent agonist selective for the cannabinoid 1 receptor. *ACS Chemical Neuroscience*, **2015**, 6, 1400-10	5.7	19
67	Exploring the Biology of G Protein-Coupled Receptors from In Vitro to In Vivo. *Molecular Pharmacology*, **2015**, 88, 534-5	4.3	2
66	Investigation of the role of β-arrestin2 in kappa opioid receptor modulation in a mouse model of pruritus. *Neuropharmacology*, **2015**, 99, 600-9	5.5	28
65	Approaches to Assess Functional Selectivity in GPCRs: Evaluating G Protein Signaling in an Endogenous Environment. *Methods in Molecular Biology*, **2015**, 1335, 177-89	1.4	9
64	Functional selectivity of GPCR signaling in animals. *Current Opinion in Cell Biology*, **2014**, 27, 102-8	9	48
63	Clozapine acts as an agonist at serotonin 2A receptors to counter MK-801-induced behaviors through a β-arrestin2-independent activation of Akt. *Neuropsychopharmacology*, **2014**, 39, 1902-13	8.7	37
62	β-arrestins: regulatory role and therapeutic potential in opioid and cannabinoid receptor-mediated analgesia. *Handbook of Experimental Pharmacology*, **2014**, 219, 427-43	3.2	54
61	Development of functionally selective, small molecule agonists at kappa opioid receptors. *Journal of Biological Chemistry*, **2013**, 288, 36703-16	5.4	109
60	Functional selectivity of 6Sguanidinonaltrindole (6SGNTI) at δ opioid receptors in striatal neurons. *Journal of Biological Chemistry*, **2013**, 288, 22387-98	5.4	65

59	Differential signaling properties at the kappa opioid receptor of 12-epi-salvinorin A and its analogues. *Bioorganic and Medicinal Chemistry Letters*, **2012**, 22, 1023-6	2.9	22
58	Antinociceptive effects of herkinorin, a MOP receptor agonist derived from salvinorin A in the formalin test in rats: new concepts in mu opioid receptor pharmacology: from a symposium on new concepts in mu-opioid pharmacology. *Drug and Alcohol Dependence*, **2012**, 121, 181-8	4.9	48
57	arrestin2 regulates cannabinoid CB1 receptor signaling and adaptation in a central nervous system region-dependent manner. *Biological Psychiatry*, **2012**, 71, 714-24	7.9	76
56	Discovery of Small Molecule Kappa Opioid Receptor Agonist and Antagonist Chemotypes through a HTS and Hit Refinement Strategy. *ACS Chemical Neuroscience*, **2012**, 3, 221-236	5.7	36
55	GIRK channel modulation by assembly with allosterically regulated RGS proteins. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 19977-82	11.5	32
54	Beta-arrestin2 Contributes to the Development of Opioid- Induced Constipation. *FASEB Journal*, **2012**, 26, 1123.6	0.9	1
53	The role of beta-arrestin2 in clozapines actions at the serotonin 2A receptor. *FASEB Journal*, **2012**, 26, lb573	0.9	
52	The role of beta-arrestin2 in the severity of antinociceptive tolerance and physical dependence induced by different opioid pain therapeutics. *Neuropharmacology*, **2011**, 60, 58-65	5.5	134
51	Synthesis of conolidine, a potent non-opioid analgesic for tonic and persistent pain. *Nature Chemistry*, **2011**, 3, 449-53	17.6	41
50	Functional selectivity at the opioid receptor: implications for understanding opioid analgesia and tolerance. *Pharmacological Reviews*, **2011**, 63, 1001-19	22.5	194
49	Lubiprostone reverses the inhibitory action of morphine on mucosal secretion in human small intestine. *Digestive Diseases and Sciences*, **2011**, 56, 330-8	4	26
48	Agonist-directed interactions with specific beta-arrestins determine mu-opioid receptor trafficking, ubiquitination, and dephosphorylation. *Journal of Biological Chemistry*, **2011**, 286, 31731-41	5.4	98
47	Detecting the Role of Arrestins in G Protein-Coupled Receptor Regulation. *Neuromethods*, **2011**, 347-358	0.4	
46	Serotonin, but not N-methyltryptamines, activates the serotonin 2A receptor via a arrestin2/Src/Akt signaling complex in vivo. *Journal of Neuroscience*, **2010**, 30, 13513-24	6.6	112
45	Lubiprostone reverses the inhibitory action of morphine on intestinal secretion in guinea pig and mouse. *Journal of Pharmacology and Experimental Therapeutics*, **2010**, 334, 333-40	4.7	39
44	Seeking Ligand Bias: Assessing GPCR Coupling to Beta-Arrestins for Drug Discovery. *Drug Discovery Today: Technologies*, **2010**, 7, e37-e42	7.1	14
43	Serotonin receptor signaling and regulation via arrestins. *Critical Reviews in Biochemistry and Molecular Biology*, **2010**, 45, 555-66	8.7	37
42	Stimulation of mucosal secretion by lubiprostone (SPI-0211) in guinea pig small intestine and colon. *American Journal of Physiology - Renal Physiology*, **2009**, 296, G823-32	5.1	26

41	Physiological and pharmacological implications of beta-arrestin regulation **2009**, 121, 285-93		76
40	Morphine-induced physiological and behavioral responses in mice lacking G protein-coupled receptor kinase 6. *Drug and Alcohol Dependence*, **2009**, 104, 187-96	4.9	31
39	Pharmacological characterization of a selective agonist for bombesin receptor subtype-3. *Biochemical and Biophysical Research Communications*, **2009**, 387, 283-8	3.4	13
38	Selectivity for G Protein or Arrestin-Mediated Signaling **2009**, 71-85		6
37	Kappa opioids promote the proliferation of astrocytes via Gbetagamma and beta-arrestin 2-dependent MAPK-mediated pathways. *Journal of Neurochemistry*, **2008**, 107, 1753-65	6	72
36	Herkinorin analogues with differential beta-arrestin-2 interactions. *Journal of Medicinal Chemistry*, **2008**, 51, 2421-31	8.3	52
35	Agonist-directed signaling of the serotonin 2A receptor depends on beta-arrestin-2 interactions in vivo. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 1079-84	11.5	161
34	Post-activation-mediated changes in opioid receptors detected by N-terminal antibodies. *Journal of Biological Chemistry*, **2008**, 283, 10735-44	5.4	19
33	Mu Opioid Receptor Regulation and Opiate Responsiveness **2008**, 617-624		
32	A comparison of noninternalizing (herkinorin) and internalizing (DAMGO) mu-opioid agonists on cellular markers related to opioid tolerance and dependence. *Synapse*, **2007**, 61, 166-75	2.4	51
31	An opioid agonist that does not induce mu-opioid receptor--arrestin interactions or receptor internalization. *Molecular Pharmacology*, **2007**, 71, 549-57	4.3	187
30	Constitutive trafficking--more than just running in circles?. *Molecular Pharmacology*, **2007**, 71, 957-8	4.3	10
29	Opioid receptor signaling: relevance for gastrointestinal therapy. *Current Opinion in Pharmacology*, **2006**, 6, 559-63	5.1	35
28	How specific are "target-specific" drugs? Celecoxib as a case in point. *Molecular Interventions: Pharmacological Perspectives From Biology, Chemistry and Genomics*, **2006**, 6, 196-8		
27	Mu opioid receptor regulation and opiate responsiveness. *AAPS Journal*, **2005**, 7, E587-91	3.7	66
26	Characterization of conditioned place preference to cocaine in congenic dopamine transporter knockout female mice. *Psychopharmacology*, **2005**, 180, 408-13	4.7	29
25	Morphine side effects in beta-arrestin 2 knockout mice. *Journal of Pharmacology and Experimental Therapeutics*, **2005**, 314, 1195-201	4.7	427
24	Opioid receptor homo- and heterodimerization in living cells by quantitative bioluminescence resonance energy transfer. *Molecular Pharmacology*, **2005**, 67, 2173-84	4.3	131

23	Relative opioid efficacy is determined by the complements of the G protein-coupled receptor desensitization machinery. *Molecular Pharmacology*, **2004**, 66, 106-12	4.3	138
22	Drosophila CG8422 encodes a functional diuretic hormone receptor. *Journal of Experimental Biology*, **2004**, 207, 743-8	3	78
21	Desensitization of G protein-coupled receptors and neuronal functions. *Annual Review of Neuroscience*, **2004**, 27, 107-44	17	677
20	G protein-coupled receptor kinase/beta-arrestin systems and drugs of abuse: psychostimulant and opiate studies in knockout mice. *NeuroMolecular Medicine*, **2004**, 5, 41-50	4.6	30
19	Identification of Drosophila neuropeptide receptors by G protein-coupled receptors-beta-arrestin2 interactions. *Journal of Biological Chemistry*, **2003**, 278, 52172-8	5.4	103
18	Enhanced rewarding properties of morphine, but not cocaine, in beta(arrestin)-2 knock-out mice. *Journal of Neuroscience*, **2003**, 23, 10265-73	6.6	167
17	Dopaminergic supersensitivity in G protein-coupled receptor kinase 6-deficient mice. *Neuron*, **2003**, 38, 291-303	13.9	194
16	Sustained elevation of extracellular dopamine causes motor dysfunction and selective degeneration of striatal GABAergic neurons. *Proceedings of the National Academy of Sciences of the United States of America*, **2003**, 100, 11035-40	11.5	119
15	Differential mechanisms of morphine antinociceptive tolerance revealed in (beta)arrestin-2 knock-out mice. *Journal of Neuroscience*, **2002**, 22, 10494-500	6.6	218
14	Apparent loss-of-function mutant GPCRs revealed as constitutively desensitized receptors. *Biochemistry*, **2002**, 41, 11981-9	3.2	72
13	Glutamatergic modulation of hyperactivity in mice lacking the dopamine transporter. *Proceedings of the National Academy of Sciences of the United States of America*, **2001**, 98, 11047-54	11.5	135
12	Mitogenic signaling via endogenous kappa-opioid receptors in C6 glioma cells: evidence for the involvement of protein kinase C and the mitogen-activated protein kinase signaling cascade. *Journal of Neurochemistry*, **2000**, 74, 564-73	6	75
11	Mu-opioid agonist inhibition of kappa-opioid receptor-stimulated extracellular signal-regulated kinase phosphorylation is dynamin-dependent in C6 glioma cells. *Journal of Neurochemistry*, **2000**, 74, 574-81	6	40
10	Mice lacking the norepinephrine transporter are supersensitive to psychostimulants. *Nature Neuroscience*, **2000**, 3, 465-71	25.5	383
9	Mu-opioid receptor desensitization by beta-arrestin-2 determines morphine tolerance but not dependence. *Nature*, **2000**, 408, 720-3	50.4	709
8	Potentiated opioid analgesia in norepinephrine transporter knock-out mice. *Journal of Neuroscience* , **2000**, 20, 9040-5	6.6	97
7	Requirement of receptor internalization for opioid stimulation of mitogen-activated protein kinase: biochemical and immunofluorescence confocal microscopic evidence. *Journal of Neuroscience*, **1999** , 19, 56-63	6.6	119
6	Enhanced morphine analgesia in mice lacking beta-arrestin 2. *Science*, **1999**, 286, 2495-8	33.3	815

5	Muscarinic supersensitivity and impaired receptor desensitization in G protein-coupled receptor kinase 5-deficient mice. *Neuron*, **1999**, 24, 1029-36	13.9	168
4	Brain opioid receptor adaptation and expression after prenatal exposure to buprenorphine. *Developmental Brain Research*, **1998**, 111, 35-42		24
3	Kappa-opioid receptor binding varies inversely with tumor grade in human gliomas. *Cancer*, **1998**, 83, 2561-6	6.4	6
2	Evidence for kappa- and mu-opioid receptor expression in C6 glioma cells. *Journal of Neurochemistry*, **1998**, 70, 1819-25	6	17
1	Low intrinsic efficacy alone cannot explain the improved side effect profiles of new opioid agonists		2