

# Thomas D Mueller

## List of Publications by Year in descending order

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62  
papers

3,517  
citations

186265

28  
h-index

138484

58  
g-index

63  
all docs

63  
docs citations

63  
times ranked

4935  
citing authors

#	ARTICLE	IF	CITATIONS
1	Structural Biology and Evolution of the TGF- $\beta$ Family. Cold Spring Harbor Perspectives in Biology, 2016, 8, a022103.	5.5	267
2	Promiscuity and specificity in BMP receptor activation. FEBS Letters, 2012, 586, 1846-1859.	2.8	252
3	Molecular recognition of BMP-2 and BMP receptor IA. Nature Structural and Molecular Biology, 2004, 11, 481-488.	8.2	193
4	Structural insights into BMP receptors: Specificity, activation and inhibition. Cytokine and Growth Factor Reviews, 2016, 27, 13-34.	7.2	187
5	Salt Stress Triggers Phosphorylation of the Arabidopsis Vacuolar K <sup>+</sup> Channel TPK1 by Calcium-Dependent Protein Kinases (CDPKs). Molecular Plant, 2013, 6, 1274-1289.	8.3	152
6	TGF- $\beta$ family co-receptor function and signaling. Acta Biochimica Et Biophysica Sinica, 2018, 50, 12-36.	2.0	150
7	Distinct Modes of Inhibition by Sclerostin on Bone Morphogenetic Protein and Wnt Signaling Pathways. Journal of Biological Chemistry, 2010, 285, 41614-41626.	3.4	149
8	Exogenous TNFR2 activation protects from acute GvHD via host T reg cell expansion. Journal of Experimental Medicine, 2016, 213, 1881-1900.	8.5	143
9	A Single Residue of GDF-5 Defines Binding Specificity to BMP Receptor IB. Journal of Molecular Biology, 2005, 349, 933-947.	4.2	135
10	Molecular recognition in bone morphogenetic protein (BMP)/receptor interaction. Biological Chemistry, 2004, 385, 697-710.	2.5	130
11	Cumulin, an Oocyte-secreted Heterodimer of the Transforming Growth Factor- $\beta$ Family, Is a Potent Activator of Granulosa Cells and Improves Oocyte Quality. Journal of Biological Chemistry, 2015, 290, 24007-24020.	3.4	130
12	A silent H-bond can be mutationally activated for high-affinity interaction of BMP-2 and activin type IIB receptor. BMC Structural Biology, 2007, 7, 6.	2.3	129
13	Receptor oligomerization and beyond: a case study in bone morphogenetic proteins. BMC Biology, 2009, 7, 59.	3.8	116
14	Crystal Structure Analysis Reveals How the Chordin Family Member Crossveinless 2 Blocks BMP-2 Receptor Binding. Developmental Cell, 2008, 14, 739-750.	7.0	108
15	Type I receptor binding of bone morphogenetic protein-6 is dependent on N-glycosylation of the ligand. FEBS Journal, 2008, 275, 172-183.	4.7	92
16	Specification of BMP Signaling. Cells, 2019, 8, 1579.	4.1	90
17	Intricacies of BMP receptor assembly. Cytokine and Growth Factor Reviews, 2009, 20, 367-377.	7.2	85
18	NMR structure of the Wnt modulator protein Sclerostin. Biochemical and Biophysical Research Communications, 2009, 380, 160-165.	2.1	72

#	ARTICLE	IF	CITATIONS
19	The Nonspecific Lipid Transfer Protein AtLtp1-4 Is Involved in Suberin Formation of <i>Arabidopsis thaliana</i> Crown Galls. <i>Plant Physiology</i> , 2016, 172, 1911-1927.	4.8	54
20	A modular interface of IL-4 allows for scalable affinity without affecting specificity for the IL-4 receptor. <i>BMC Biology</i> , 2006, 4, 13.	3.8	52
21	First missense mutation in the SOST gene causing sclerosteosis by loss of sclerostin function. <i>Human Mutation</i> , 2010, 31, E1526-E1543.	2.5	52
22	Structure and Function of TPC1 Vacuole SV Channel Gains Shape. <i>Molecular Plant</i> , 2018, 11, 764-775.	8.3	52
23	Structure Analysis of Bone Morphogenetic Protein-2 Type I Receptor Complexes Reveals a Mechanism of Receptor Inactivation in Juvenile Polyposis Syndrome. <i>Journal of Biological Chemistry</i> , 2008, 283, 5876-5887.	3.4	51
24	Anti-Sclerostin Antibody Inhibits Internalization of Sclerostin and Sclerostin-Mediated Antagonism of Wnt/LRP6 Signaling. <i>PLoS ONE</i> , 2013, 8, e62295.	2.5	51
25	Structure Analysis of the IL-5 Ligand-Receptor Complex Reveals a Wrench-like Architecture for IL-5R $\alpha$ . <i>Structure</i> , 2011, 19, 1864-1875.	3.3	42
26	GDF-5 can act as a context-dependent BMP-2 antagonist. <i>BMC Biology</i> , 2015, 13, 77.	3.8	39
27	A supernumerary B-sex chromosome drives male sex determination in the Pach <sup>3</sup> n cavefish, <i>Astyanax mexicanus</i> . <i>Current Biology</i> , 2021, 31, 4800-4809.e9.	3.9	34
28	Identification of a Novel TGF- $\beta$ -Binding Site in the Zona Pellucida C-terminal (ZP-C) Domain of TGF- $\beta$ -Receptor-3 (TGFR-3). <i>PLoS ONE</i> , 2013, 8, e67214.	2.5	33
29	Site-Directed Immobilization of BMP-2: Two Approaches for the Production of Innovative Osteoinductive Scaffolds. <i>Biomacromolecules</i> , 2017, 18, 695-708.	5.4	32
30	BMP15 Mutations Associated With Primary Ovarian Insufficiency Reduce Expression, Activity, or Synergy With GDF9. <i>Journal of Clinical Endocrinology and Metabolism</i> , 2017, 102, 1009-1019.	3.6	31
31	New insights into the molecular mechanism of multiple synostoses syndrome (SYNS): Mutation within the GDF5 knuckle epitope causes noggin-resistance. <i>Journal of Bone and Mineral Research</i> , 2012, 27, 429-442.	2.8	30
32	Acidosis-induced activation of anion channel SLAH3 in the flooding-related stress response of <i>Arabidopsis</i> . <i>Current Biology</i> , 2021, 31, 3575-3585.e9.	3.9	29
33	Rat Organic Cation Transporter 1 Contains Three Binding Sites for Substrate 1-Methyl-4-phenylpyridinium per Monomer. <i>Molecular Pharmacology</i> , 2019, 95, 169-182.	2.3	28
34	Bioresponsive release of insulin-like growth factor-I from its PEGylated conjugate. <i>Journal of Controlled Release</i> , 2018, 279, 17-28.	9.9	27
35	Mutational Analysis of Sclerostin Shows Importance of the Flexible Loop and the Cystine-Knot for Wnt-Signaling Inhibition. <i>PLoS ONE</i> , 2013, 8, e81710.	2.5	27
36	Collagen I derived recombinant protein microspheres as novel delivery vehicles for bone morphogenetic protein-2. <i>Materials Science and Engineering C</i> , 2018, 84, 271-280.	7.3	24

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37	Growth differentiation factor 9:bone morphogenetic protein 15 (GDF9:BMP15) synergism and protein heterodimerization. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E2257.	7.1	23
38	Homozygous missense and nonsense mutations in BMPR1B cause acromesomelic chondrodysplasia-type Grebe. European Journal of Human Genetics, 2014, 22, 726-733.	2.8	23
39	A hypomorphic BMPR1B mutation causes du Pan acromesomelic dysplasia. Orphanet Journal of Rare Diseases, 2015, 10, 84.	2.7	18
40	Repulsive guidance molecules lock growth differentiation factor 5 in an inhibitory complex. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 15620-15631.	7.1	18
41	Assay Conditions Influence Affinities of Rat Organic Cation Transporter 1: Analysis of Mutagenesis in the Modeled Outward-Facing Cleft by Measuring Effects of Substrates and Inhibitors on Initial Uptake. Molecular Pharmacology, 2018, 93, 402-415.	2.3	17
42	Modifications of Human Growth Differentiation Factor 9 to Improve the Generation of Embryos From Low Competence Oocytes. Molecular Endocrinology, 2015, 29, 40-52.	3.7	16
43	Stabilization of desmoglein-2 binding rescues arrhythmia in arrhythmogenic cardiomyopathy. JCI Insight, 2020, 5, .	5.0	16
44	RGM co-receptors add complexity to BMP signaling. Nature Structural and Molecular Biology, 2015, 22, 439-440.	8.2	15
45	The sclerostin-neutralizing antibody AbD09097 recognizes an epitope adjacent to sclerostin's binding site for the Wnt co-receptor LRP6. Open Biology, 2016, 6, 160120.	3.6	12
46	A Selection Fit Mechanism in BMP Receptor IA as a Possible Source for BMP Ligand-Receptor Promiscuity. PLoS ONE, 2010, 5, e13049.	2.5	10
47	Mechanisms of BMP Receptor Interaction and Activation. Vitamins and Hormones, 2015, 99, 1-61.	1.7	10
48	Low doses of cholera toxin and its mediator cAMP induce CTLA-2 secretion by dendritic cells to enhance regulatory T cell conversion. PLoS ONE, 2017, 12, e0178114.	2.5	10
49	The Clip-Segment of the von Willebrand Domain 1 of the BMP Modulator Protein Crossveinless 2 Is Preformed. Molecules, 2013, 18, 11658-11682.	3.8	9
50	Purification, crystallization and preliminary data analysis of ligand-receptor complexes of growth and differentiation factor 5 (GDF5) and BMP receptor IB (BRIB). Acta Crystallographica Section F: Structural Biology Communications, 2009, 65, 779-783.	0.7	8
51	Protein RS1 ( <i>RSC1A1</i> ) Downregulates the Exocytotic Pathway of Glucose Transporter SGLT1 at Low Intracellular Glucose via Inhibition of Ornithine Decarboxylase. Molecular Pharmacology, 2016, 90, 508-521.	2.3	8
52	Molecular basis of cytokine signalling theme and variations. FEBS Journal, 2010, 277, 106-118.	4.7	5
53	An Activating Deletion Variant in the Submembrane Region of Natriuretic Peptide Receptor-B Causes Tall Stature. Journal of Clinical Endocrinology and Metabolism, 2020, 105, 2354-2366.	3.6	5
54	Crystallization and preliminary X-ray diffraction analysis of human growth and differentiation factor 5 (GDF-5). Acta Crystallographica Section F: Structural Biology Communications, 2005, 61, 134-136.	0.7	4

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55	The hypervariable region 4 (HV4) and position 93 of the $\alpha$ chain modulate CD1d-glycolipid binding of iNKT TCRs. <i>European Journal of Immunology</i> , 2015, 45, 2122-2133.	2.9	4
56	Structural Basis of Interleukin-5 Inhibition by the Small Cyclic Peptide AF17121. <i>Journal of Molecular Biology</i> , 2019, 431, 714-731.	4.2	4
57	A nonfunctional copy of the salmonid sex-determining gene ( <i>sdY</i> ) is responsible for the "apparent" XY females in Chinook salmon, <i>Oncorhynchus tshawytscha</i> . <i>G3: Genes, Genomes, Genetics</i> , 2022, 12, .	1.8	3
58	Site-Directed Immobilization of an Engineered Bone Morphogenetic Protein 2 (BMP2) Variant to Collagen-Based Microspheres Induces Bone Formation In Vivo. <i>International Journal of Molecular Sciences</i> , 2022, 23, 3928.	4.1	3
59	Purification, crystallization and preliminary data analysis of the ligand-receptor complex of the growth and differentiation factor 5 variant R57A (GDF5R57A) and BMP receptor IA (BRIA). <i>Acta Crystallographica Section F: Structural Biology Communications</i> , 2011, 67, 551-555.	0.7	2
60	Crystallization and preliminary X-ray crystallographic analysis of the sclerostin-neutralizing Fab AbD09097. <i>Acta Crystallographica Section F, Structural Biology Communications</i> , 2015, 71, 388-392.	0.8	2
61	Optimized expression and purification of a soluble BMP2 variant based on in-silico design. <i>Protein Expression and Purification</i> , 2021, 186, 105918.	1.3	2
62	Crystallization and preliminary X-ray analysis of the complex of the first von Willebrand type C domain bound to bone morphogenetic protein 2. <i>Acta Crystallographica Section F: Structural Biology Communications</i> , 2008, 64, 307-312.	0.7	1