

# Glen F Tibbits

## List of Publications by Year in descending order

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101  
papers

2,115  
citations

212478

28  
h-index

325983

40  
g-index

107  
all docs

107  
docs citations

107  
times ranked

2270  
citing authors

#	ARTICLE	IF	CITATIONS
1	Investigating inherited arrhythmias using hiPSC-derived cardiomyocytes. <i>Methods</i> , 2022, 203, 542-557.	1.9	6
2	Atrial-specific hiPSC-derived cardiomyocytes in drug discovery and disease modeling. <i>Methods</i> , 2022, 203, 364-377.	1.9	9
3	RARG S427L attenuates the DNA repair response to doxorubicin in induced pluripotent stem cell-derived cardiomyocytes. <i>Stem Cell Reports</i> , 2022, 17, 756-765.	2.3	11
4	The effect of Mg <sup>2+</sup> on Ca <sup>2+</sup> binding to cardiac troponin C in hypertrophic cardiomyopathy associated <i>TNNC1</i> variants. <i>FEBS Journal</i> , 2022, 289, 7446-7465.	2.2	4
5	Drug screening platform using human induced pluripotent stem cell-derived atrial cardiomyocytes and optical mapping. <i>Stem Cells Translational Medicine</i> , 2021, 10, 68-82.	1.6	23
6	Binding of calcium and magnesium to human cardiac troponin C. <i>Journal of Biological Chemistry</i> , 2021, 296, 100350.	1.6	13
7	Electrophysiological characterization of the hERG R56Q LQTS variant and targeted rescue by the activator RPR260243. <i>Journal of General Physiology</i> , 2021, 153, .	0.9	8
8	Pediatric Catecholaminergic Polymorphic Ventricular Tachycardia: A Translational Perspective for the Clinician-Scientist. <i>International Journal of Molecular Sciences</i> , 2021, 22, 9293.	1.8	7
9	Using hiPSC-cMs to Examine Mechanisms of Catecholaminergic Polymorphic Ventricular Tachycardia. <i>Current Protocols</i> , 2021, 1, e320.	1.3	3
10	Mechanisms of Arrhythmogenicity of Hypertrophic Cardiomyopathy-Associated Troponin T (TNNT2) Variant I79N. <i>Frontiers in Cell and Developmental Biology</i> , 2021, 9, 787581.	1.8	13
11	Physiological phenotyping of the adult zebrafish heart. <i>Marine Genomics</i> , 2020, 49, 100701.	0.4	10
12	The hERG channel activator, RPR260243, enhances protective <i>Kr</i> current early in the refractory period reducing arrhythmogenicity in zebrafish hearts. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2020, 319, H251-H261.	1.5	18
13	Variation in RARG increases susceptibility to doxorubicin-induced cardiotoxicity in patient specific induced pluripotent stem cell-derived cardiomyocytes. <i>Scientific Reports</i> , 2020, 10, 10363.	1.6	34
14	Utility of Zebrafish Models of Acquired and Inherited Long QT Syndrome. <i>Frontiers in Physiology</i> , 2020, 11, 624129.	1.3	4
15	Investigating the utility of adult zebrafish ex vivo whole hearts to pharmacologically screen hERG channel activator compounds. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2019, 317, R921-R931.	0.9	8
16	Ibrutinib Displays Atrial-Specific Toxicity in Human Stem Cell-Derived Cardiomyocytes. <i>Stem Cell Reports</i> , 2019, 12, 996-1006.	2.3	43
17	In vitro analyses of suspected arrhythmogenic thin filament variants as a cause of sudden cardiac death in infants. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 6969-6974.	3.3	16
18	In vivo characterization of doxycycline-mediated protection of aortic function and structure in a mouse model of Marfan syndrome-associated aortic aneurysm. <i>Scientific Reports</i> , 2019, 9, 2071.	1.6	16

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19	ROCK2 promotes ryanodine receptor phosphorylation and arrhythmic calcium release in diabetic cardiomyocytes. <i>International Journal of Cardiology</i> , 2019, 281, 90-98.	0.8	16
20	Comparison of hERG and zERG Potassium Channel Function and Pharmacology. <i>Biophysical Journal</i> , 2018, 114, 294a.	0.2	0
21	Functional characterization of a novel hERG variant in a family with recurrent sudden infant death syndrome: Retracting a genetic diagnosis. <i>Forensic Science International</i> , 2018, 284, 39-45.	1.3	1
22	Binding of calcium and magnesium to cardiac Troponin C assessed through Isothermal Titration Calorimetry (ITC). <i>Journal of Molecular and Cellular Cardiology</i> , 2018, 124, 86.	0.9	2
23	The Arrhythmogenic Impact of the Familial Hypertrophic Cardiomyopathy-related Cardiac Troponin T mutation I79N. <i>Journal of Molecular and Cellular Cardiology</i> , 2018, 124, 86.	0.9	0
24	Investigating Cardiac Subtype-Specific Pharmacology Using Atrial-like Cardiomyocytes Derived from Human Induced Pluripotent Stem Cells (hiPSCs) and Optical Mapping. <i>Journal of Molecular and Cellular Cardiology</i> , 2018, 124, 110-111.	0.9	0
25	Selective inhibition and activation of retinoid pathways to create chamber specific cardiac subtypes from human induced pluripotent stem cells (hiPSCs). <i>Journal of Molecular and Cellular Cardiology</i> , 2018, 124, 111.	0.9	0
26	Acidosis Prolongs APD in Optically Mapped Adult Zebrafish Whole Hearts as a Result of hERG Channel Block. <i>Biophysical Journal</i> , 2018, 114, 490a.	0.2	0
27	Zebrafish as a model of mammalian cardiac function: Optically mapping the interplay of temperature and rate on voltage and calcium dynamics. <i>Progress in Biophysics and Molecular Biology</i> , 2018, 138, 69-90.	1.4	18
28	pH recovery from a proton load in rat cardiomyocytes: effects of chronic exercise. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2018, 314, H285-H292.	1.5	2
29	The mitochondrial metallochaperone SCO1 maintains CTR1 at the plasma membrane to preserve copper homeostasis in the murine heart. <i>Human Molecular Genetics</i> , 2017, 26, 4617-4628.	1.4	20
30	Changes in the dynamics of the cardiac troponin C molecule explain the effects of Ca <sup>2+</sup> -sensitizing mutations. <i>Journal of Biological Chemistry</i> , 2017, 292, 11915-11926.	1.6	30
31	Modeling Atrial Fibrillation using Human Embryonic Stem Cell-Derived Atrial Tissue. <i>Scientific Reports</i> , 2017, 7, 5268.	1.6	77
32	Investigating the Genetic Causes of Sudden Unexpected Death in Children Through Targeted Next-Generation Sequencing Analysis. <i>Circulation: Cardiovascular Genetics</i> , 2017, 10, .	5.1	27
33	Characterization of Zebrafish Cardiac and Slow Skeletal Troponin C Paralogs by MD Simulation and ITC. <i>Biophysical Journal</i> , 2016, 111, 38-49.	0.2	16
34	A Novel Tryptophan Analog Designed for Studying Calcium Induced Conformational Change of Troponin C. <i>Biophysical Journal</i> , 2016, 110, 124a.	0.2	0
35	Ischemia-reperfusion destabilizes rhythmicity in immature atrioventricular pacemakers: A predisposing factor for postoperative arrhythmias in neonate rabbits. <i>Heart Rhythm</i> , 2016, 13, 2348-2355.	0.3	5
36	The Zebrafish Heart as a Model of Mammalian Cardiac Function. <i>Reviews of Physiology, Biochemistry and Pharmacology</i> , 2016, 171, 99-136.	0.9	55

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37	Thermodynamics of Calcium Binding to Zebrafish Troponin C (TnC) Visualized through Isothermal Titration Calorimetry (ITC) and Molecular Dynamics (MD). <i>Biophysical Journal</i> , 2016, 110, 124a.	0.2	0
38	Potential of Mean Force Calculations and Isothermal Titration Calorimetry Measurements of the Human Cardiac Troponin C / Calcium Interaction Reveal Affinity Changes as a Function of Familial Hypertrophic Cardiomyopathy Associated Mutations. <i>Biophysical Journal</i> , 2016, 110, 325a.	0.2	0
39	Functional Divergence in Teleost Cardiac Troponin Paralogs Guides Variation in the Interaction of Tnl Switch Region with TnC. <i>Genome Biology and Evolution</i> , 2016, 8, 994-1011.	1.1	13
40	Functional Assessment of Cardiac Responses of Adult Zebrafish ( <i>Danio rerio</i> ) to Acute and Chronic Temperature Change Using High-Resolution Echocardiography. <i>PLoS ONE</i> , 2016, 11, e0145163.	1.1	33
41	Aortic and Cardiac Structure and Function Using High-Resolution Echocardiography and Optical Coherence Tomography in a Mouse Model of Marfan Syndrome. <i>PLoS ONE</i> , 2016, 11, e0164778.	1.1	36
42	Construction and use of a zebrafish heart voltage and calcium optical mapping system, with integrated electrocardiogram and programmable electrical stimulation. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2015, 308, R755-R768.	0.9	25
43	Abstract 14680: Evaluation of the Protective Effects of Long-term Doxycycline Treatment on Progression of Marfan-associated Aortic Aneurysm by High-resolution Ultrasound Imaging. <i>Circulation</i> , 2015, 132, .	1.6	0
44	Morphological phenotyping of mouse hearts using optical coherence tomography. <i>Journal of Biomedical Optics</i> , 2014, 19, 1.	1.4	13
45	Optical mapping of the electrical activity of isolated adult zebrafish hearts: acute effects of temperature. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2014, 306, R823-R836.	0.9	43
46	Automatic Cycle Averaging for Denoising Approximately Periodic Spatiotemporal Signals. <i>IEEE Transactions on Medical Imaging</i> , 2014, 33, 1749-1759.	5.4	4
47	Molecular Dynamics-Based Predictions of the Structural and Functional Effects of Disease-Causing Cardiac Troponin Mutations. <i>Biophysical Journal</i> , 2014, 106, 678a.	0.2	0
48	Molecular Dynamics-Based Predictions of the Structural and Functional Differences Between the Cardiac and Novel Slow-Skeletal Isoforms of Zebrafish Troponin C. <i>Biophysical Journal</i> , 2014, 106, 611a.	0.2	0
49	Phenotype-dependent role of the L-type calcium current in embryonic stem cell derived cardiomyocytes. <i>American Journal of Stem Cells</i> , 2014, 3, 37-45.	0.4	1
50	The structure of cardiac troponin C regulatory domain with bound Cd <sup>2+</sup> reveals a closed conformation and unique ion coordination. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2013, 69, 722-734.	2.5	9
51	Adult teleost heart expresses two distinct troponin C paralogs: cardiac TnC and a novel and teleost-specific ssTnC in a chamber- and temperature-dependent manner. <i>Physiological Genomics</i> , 2013, 45, 866-875.	1.0	27
52	On identification of sinoatrial node in zebrafish heart based on functional time series from optical mapping. , 2013, 2013, 6518-21.		2
53	Familial Hypertrophic Cardiomyopathy Related Cardiac Troponin C L29Q Mutation Alters Length-Dependent Activation and Functional Effects of Phosphomimetic Troponin I*. <i>PLoS ONE</i> , 2013, 8, e79363.	1.1	26
54	Temperature regulation of fish-specific paralogs of cardiac TnC. <i>FASEB Journal</i> , 2013, 27, 714.11.	0.2	0

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55	Familial Hypertrophic Cardiomyopathy (FHC)-Related Cardiac Troponin C (cTnC) L29Q Mutation Alters the Contractility and the Functional Effects of the Phosphomimetic cTnl. <i>Biophysical Journal</i> , 2012, 102, 358a.	0.2	0
56	Molecular mechanisms regulating cardiac contractility: subfunctionalization of fish-specific paralogs of troponin C in <i>Danio rerio</i> . <i>FASEB Journal</i> , 2012, 26, 886.5.	0.2	0
57	Crystal Structure of Cardiac Troponin C Regulatory Domain in Complex with Cadmium and Deoxycholic Acid Reveals Novel Conformation. <i>Journal of Molecular Biology</i> , 2011, 413, 699-711.	2.0	4
58	Isolation and Characterization of Atrioventricular Nodal Cells From Neonate Rabbit Heart. <i>Circulation: Arrhythmia and Electrophysiology</i> , 2011, 4, 936-946.	2.1	11
59	Calcium handling in zebrafish ventricular myocytes. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2011, 300, R56-R66.	0.9	48
60	Colocalization of voltage-gated Na <sup>+</sup> channels with the Na <sup>+</sup> /Ca <sup>2+</sup> exchanger in rabbit cardiomyocytes during development. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2011, 300, H300-H311.	1.5	20
61	Mechanistic basis for LQT1 caused by S3 mutations in the KCNQ1 subunit of <i>IKs</i> . <i>Journal of General Physiology</i> , 2010, 135, 433-448.	0.9	26
62	Characterization of zebrafish ( <i>Danio rerio</i> ) NCX4: a novel NCX with distinct electrophysiological properties. <i>American Journal of Physiology - Cell Physiology</i> , 2009, 296, C173-C181.	2.1	9
63	Distribution patterns of the Na <sup>+</sup> -Ca <sup>2+</sup> exchanger and caveolin-3 in developing rabbit cardiomyocytes. <i>Cell Calcium</i> , 2009, 45, 369-383.	1.1	15
64	Hyperpolarization-activated cyclic nucleotide-modulated <i>h</i> -HCN <sup>TM</sup> channels confer regular and faster rhythmicity to beating mouse embryonic stem cells. <i>Journal of Physiology</i> , 2008, 586, 701-716.	1.3	42
65	Gene Structure Evolution of the Na <sup>+</sup> -Ca <sup>2+</sup> Exchanger (NCX) Family. <i>BMC Evolutionary Biology</i> , 2008, 8, 127.	3.2	44
66	Ontogeny of Ca <sup>2+</sup> -induced Ca <sup>2+</sup> release in rabbit ventricular myocytes. <i>American Journal of Physiology - Cell Physiology</i> , 2008, 294, C516-C525.	2.1	36
67	Familial hypertrophic cardiomyopathy-related cardiac troponin C mutation L29Q affects Ca <sup>2+</sup> -binding and myofilament contractility. <i>Physiological Genomics</i> , 2008, 33, 257-266.	1.0	53
68	A KCNQ1 V205M missense mutation causes a high rate of long QT syndrome in a First Nations community of northern British Columbia: a community-based approach to understanding the impact. <i>Genetics in Medicine</i> , 2008, 10, 545-550.	1.1	31
69	SR Ca <sup>2+</sup> refilling upon depletion and SR Ca <sup>2+</sup> uptake rates during development in rabbit ventricular myocytes. <i>American Journal of Physiology - Cell Physiology</i> , 2007, 293, C1906-C1915.	2.1	17
70	Functional and evolutionary relationships of troponin C. <i>Physiological Genomics</i> , 2007, 32, 16-27.	1.0	51
71	Three-Dimensional Distribution of Cardiac Na <sup>+</sup> -Ca <sup>2+</sup> Exchanger and Ryanodine Receptor during Development. <i>Biophysical Journal</i> , 2007, 93, 2504-2518.	0.2	46
72	Real-time monitoring of intracellular calcium dynamic mobilization of a single cardiomyocyte in a microfluidic chip pertaining to drug discovery. <i>Electrophoresis</i> , 2007, 28, 4723-4733.	1.3	49

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73	L-type Ca <sup>2+</sup> channel function and expression in neonatal rabbit ventricular myocytes. American Journal of Physiology - Heart and Circulatory Physiology, 2006, 290, H2267-H2276.	1.5	27
74	Store-operated Ca <sup>2+</sup> entry modulates sarcoplasmic reticulum Ca <sup>2+</sup> loading in neonatal rabbit cardiac ventricular myocytes. American Journal of Physiology - Cell Physiology, 2006, 290, C1572-C1582.	2.1	55
75	Increasing mammalian cardiomyocyte contractility with residues identified in trout troponin C. Physiological Genomics, 2005, 22, 1-7.	1.0	32
76	Na <sup>+</sup> /Ca <sup>2+</sup> exchange activity in neonatal rabbit ventricular myocytes. American Journal of Physiology - Cell Physiology, 2005, 288, C195-C203.	2.1	43
77	Phylogeny of Na <sup>+</sup> /Ca <sup>2+</sup> exchanger (NCX) genes from genomic data identifies new gene duplications and a new family member in fish species. Physiological Genomics, 2005, 21, 161-173.	1.0	29
78	cDNA Cloning and Expression of the Cardiac Na <sup>+</sup> /Ca <sup>2+</sup> Exchanger from Mozambique Tilapia ( <i>Oreochromis mossambicus</i> ) Reveal a Teleost Membrane Transporter with Mammalian Temperature Dependence. Journal of Biological Chemistry, 2005, 280, 28903-28911.	1.6	11
79	Deconvolution of confocal images of dihydropyridine and ryanodine receptors in developing cardiomyocytes. Journal of Applied Physiology, 2004, 97, 1098-1103.	1.2	34
80	Effect of $\beta$ -adrenergic stimulation on the relationship between membrane potential, intracellular [Ca <sup>2+</sup> ] and sarcoplasmic reticulum Ca <sup>2+</sup> uptake in rainbow trout atrial myocytes. Journal of Experimental Biology, 2004, 207, 1369-1377.	0.8	11
81	Effect of Temperature on the Structure of Trout Troponin C. Biochemistry, 2004, 43, 4955-4963.	1.2	17
82	Effect of Temperature and the F27W Mutation on the Ca <sup>2+</sup> -Activated Structural Transition of Trout Cardiac Troponin C. Biochemistry, 2003, 42, 6418-6426.	1.2	19
83	Triggering of sarcoplasmic reticulum Ca <sup>2+</sup> release and contraction by reverse mode Na <sup>+</sup> /Ca <sup>2+</sup> exchange in trout atrial myocytes. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2003, 284, R1330-R1339.	0.9	27
84	Sequence mutations in teleost cardiac troponin C that are permissive of high Ca <sup>2+</sup> affinity of site II. American Journal of Physiology - Cell Physiology, 2003, 284, C1176-C1184.	2.1	30
85	Determinants of cardiac Na <sup>+</sup> /Ca <sup>2+</sup> exchanger temperature dependence: NH <sub>2</sub> -terminal transmembrane segments. American Journal of Physiology - Cell Physiology, 2002, 283, C512-C520.	2.1	12
86	Beating the cold: the functional evolution of troponin C in teleost fish. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2002, 132, 763-772.	0.8	46
87	Ontogeny of excitation-contraction coupling in the mammalian heart. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2002, 132, 691-698.	0.8	28
88	Temperature Dependence of Cardiac Na <sup>+</sup> /Ca <sup>2+</sup> Exchanger. Annals of the New York Academy of Sciences, 2002, 976, 109-112.	1.8	2
89	Temperature dependence of cloned mammalian and salmonid cardiac Na <sup>+</sup> /Ca <sup>2+</sup> exchanger isoforms. American Journal of Physiology - Cell Physiology, 2001, 281, C993-C1000.	2.1	40
90	Ca <sup>2+</sup> binding to cardiac troponin C: effects of temperature and pH on mammalian and salmonid isoforms. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2000, 279, R1707-R1715.	0.9	52

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91	Colocalization of dihydropyridine and ryanodine receptors in neonate rabbit heart using confocal microscopy. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2000, 279, H202-H209.	1.5	64
92	Cloning, expression, and characterization of the trout cardiac Na <sup>+</sup> /Ca <sup>2+</sup> exchanger. <i>American Journal of Physiology - Cell Physiology</i> , 1999, 277, C693-C700.	2.1	39
93	Effects of diabetes and hypertension on myocardial Na <sup>+</sup> -Ca <sup>2+</sup> exchange. <i>Canadian Journal of Physiology and Pharmacology</i> , 1999, 78, 12-19.	0.7	3
94	Cloning and Sequencing of Complementary DNA for Fatty Acid Binding Protein from Rainbow Trout Heart. <i>Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology</i> , 1998, 119, 213-217.	0.7	19
95	Towards a molecular explanation of the high performance of the tuna heart. <i>Comparative Biochemistry and Physiology A, Comparative Physiology</i> , 1996, 113, 77-82.	0.7	7
96	Myocardial sarcolemma isolated from skipjack tuna, <i>Katsuwonus pelamis</i> . <i>Canadian Journal of Zoology</i> , 1992, 70, 1240-1245.	0.4	10
97	Excitation-Contraction Coupling in the Teleost Heart. <i>Fish Physiology</i> , 1992, , 267-304.	0.2	39
98	Calcium transport and the regulation of cardiac contractility in teleosts: a comparison with higher vertebrates. <i>Canadian Journal of Zoology</i> , 1991, 69, 2014-2019.	0.4	73
99	Effects of active oxygen generated by DTTFe <sup>2+</sup> on cardiac Na <sup>+</sup> -Ca <sup>2+</sup> exchange and membrane permeability to Ca <sup>2+</sup> . <i>Journal of Molecular and Cellular Cardiology</i> , 1989, 21, 1009-1016.	0.9	38
100	Active oxygen in neuromuscular disorders. <i>Molecular and Cellular Biochemistry</i> , 1988, 84, 199-216.	1.4	27
101	Na <sup>+</sup> -dependent alkaline earth metal uptake in cardiac sarcolemmal vesicles. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1985, 817, 327-332.	1.4	19