CURRICULUM VITAE

Li Qian, Ph.D.

PERSONAL INFORMATION

Affiliation:

1. McAllister Heart Institute
2. Department of Pathology and Laboratory Medicine
3. Department of Medicine
4. Chromatin and Epigenetics Program
5. Computational Medicine Program
6. Precision Medicine Initiative
7. Lineberger Comprehensive Cancer Center

Training Program Affiliation (as Mentoring Faculty in T32)

8. Graduate Program in Pathobiology and Translational Science (PTS)
9. Graduate Program in Cell Biology and Physiology (CBP)
10. Graduate Training Program in Integrative Vascular Biology (IVB)
11. Graduate Training Program in Translational Medicine
12. Postdoc Training Program in Cancer Epigenetics
13. Medical Scientist Training Program (MSTP)

University of North Carolina at Chapel Hill

14. Comparative Medicine Institute (CMI), NC State University

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Date of Birth: Oct 27th, 1979
Marital Status: Married (2001) to Jiandong Liu, Ph.D., Professor with Tenure (https://jliulab.com/)
Children: Smin Liu (b. 2006, UNC-CH 2028 Class) and Jasmin Liu (b. 2010)

EDUCATION

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	YEAR(s)	FIELD OF STUDY
University of Michigan, Ann Arbor, MI	Ph.D.	2001-2006	Molecular, Cellular and Developmental Biology
Fudan University, China	B.S.	1997-2001	Biology

PROFESSIONAL EXPERIENCE

2024-present	Co-Director, UNC McAllister Heart Institute
2023-present	Professor with Tenure, University of North Carolina at Chapel Hill
2018-2024	Associate Director, UNC McAllister Heart Institute
2016-present	Faculty Director, UNC Human Pluripotent Stem Cell Core
2018-2023	Associate Professor with Tenure, University of North Carolina at Chapel Hill
2012-2018	Assistant Professor, University of North Carolina at Chapel Hill
2007-2012	Postdoctoral Fellow (*Advisor: Dr. Deepak Srivastava*), Gladstone Institute for Cardiovascular Research, UCSF
2001-2006	Graduate Student (*Advisor: Dr. Rolf Bodmer*), University of Michigan, Ann Arbor
2003-2006	Visiting Graduate Student, Sanford-Burnham Institute, UCSD

HONORS AND AWARDS

Faculty:

2022	Faculty Award for Excellence in Doctoral Mentoring (one across all schools), UNC-Chapel Hill
2022	Mentorship Appreciation, for commitment to HBCU (Historically Black Colleges and Universities) Scholar Program, AHA
2021-2027	Emerging Investigator Award, NIH/NHLBI
2021-2025	Established Investigator Award, AHA
2020	EII Innovative Award, Eshelman Institute for Innovation, UNC
2020	Yang Family Biomedical Scholar, Yang Family Society of Biomedical Scholars
2019	Named by Cell Press to be one of their best reviewers, invited to share philosophy on peer review in the special Leading Edge "Voices" article published in ***Cell*** *179(1):40-45*
2019	Phillip and Ruth Hettleman Prizes for Artistic and Scholarly Achievement by Young Faculty Featured story at "Endeavor" magazine
2019	Rising Star Award, 2019 Health Care Heroes, Triangle Business Journal
2018	Transformational Project Award, American Heart Association
2017-2019	Three-time Nominee for ISSCR Outstanding Young Investigator Award, International Society for Stem Cell Research
2017	Outstanding Postdoctoral Mentor Award (youngest awardee), UNC-Chapel Hill
2017	Finalist for NYSCF-Robertson Stem Cell Investigator Awards, NYSCF
2017	Featured at Research Features Magazine (UK)
2016-2020	Jefferson Pilot Award in Academic Medicine, Medical Foundation of North Carolina
2016-2018	McAllister Young Investigator Award, UNC-Chapel Hill
2016	Named "Hometown Hero", WCHL (affiliate of CBS)/Chapelboro.com
2016	Boyalife, Science and STM Award in Stem Cells and Regenerative Medicine, *Science/AAAS* Award assay "Hope for the brokenhearted" is published in ***Science***
2016	URC 2016 Publication Award, UNC-Chapel Hill
2016	Early Career Scientist Travel Award, The Company of Biologists
2014	5th Annual NPAW, Featured Postdoc Alumna, Gladstone Institute, UCSF
2014	MHI/Cardiology 20K Award for Cardiovascular Research, UNC-Chapel Hill
2014	IBM Junior Faculty Development Award, UNC-Chapel Hill
2013-2017	Ellison New Scholar, The Ellison Medical Foundation
2013-2017	Scientist Development Grant (National), American Heart Association (AHA)
2013	Featured "Woman in Cardiovascular Health Care", UNC Social Media
2012	Top 10 Advances in Heart Disease and Stroke Research (ranked #2), AHA

Postdoctoral:

2012 Award for Excellence in Science, Gladstone Institute, UCSF
2011 Louis N. and Arnold M. Katz Basic Science Research Prize for Young Investigator, AHA
2011-2012 Roddenberry Fellowship, Roddenberry Foundation
2011 Above and Beyond Award, Gladstone Institute, UCSF
2011 Travel Award for 2011 International Society for Stem Cell Research (ISSCR) Annual Meeting
2011 Travel Award for 2011 Weinstein Cardiovascular Conference, Weinstein Committee
2011 Award for Exemplary Leadership, Gladstone Institute, UCSF
2010-2011 Lynda and Stewart Resnick Fellowship, Lynda and Stewart Resnick Foundation
2010 Above and Beyond Award, Gladstone Institute, UCSF
2009-2012 California Institute for Regenerative Medicine (CIRM) Scholarship, CIRM, California

Graduate School:

2003-2006 American Heart Association Midwest Affiliate Pre-doctoral Fellowship
2005 Graduate Student in Science Focus, The Buzz Newsletter, Burnham Institute
2005 Top 10 research articles (ranked #4) in Current Biology, CellPress
2003 Horace H. Rackham School Pre-candidate Fellowship, University of Michigan, Ann Arbor
2002 Horace H. Rackham School Travel Grant, University of Michigan, Ann Arbor

Undergraduate:

1999-2001 Chun-Tsung Scholarship (National), Chu Tsung Endowment
1999 Inchcape HKU China Scholarship, Hong Kong University-Fudan University
1999 SUMI TOMO Corporation Scholarship (National), SUMI TOMO Corporation
1998 BaoSteel Corporation Educational Scholarship (National), BaoSteel Corporation
1997-2001 People Scholarship, Fudan University

Prior to colleague (major academic awards):
1997 Provincial Honor Student at High School Graduation
1993 China National Chemistry Olympiad Competition, First Place

Professional Membership

- International Society for Stem Cell Research (ISSCR)
- American Association for the Advancement of Science (AAAS)
- American Heart Association (AHA/ASA)
- American College of Cardiology (ACC)
- International Society for Heart Research(ISHR) North American Section
- North American Vascular Biology Organization (NAVBO)
- Genetics Society of American (GSA)

Publications

1. Spurlock B.M., Xie Y, Song Y, Ricketts S.N., Hua J.R., Chi H.R., Nishtala M., Salmenov R., Liu J and **Qian L.** (2025) Mitochondrial fusion and cristae reorganization facilitate acquisition of cardiomyocyte identity during reprogramming of murine fibroblasts. ***Cell Reports*** (in press)

2. Farber G., Takasugi P., Ricketts S., Wang H., Xie Y., Farber E., Liu J. and **Qian L.** (2025) Sox17 and Erg synergistically activate endothelial cell fate in reprogramming fibroblasts. ***J Mol Cell Cardiol.*** 199, 33-45

3. Huang P.*, Xu J.*, Keepers B., Xie Y., Near D., Xu Y. Hua J.R., Spurlock B., Ricketts S., Liu J., Wang L.[#] and **Qian L.**[#] (2024) Direct Cardiac Reprogramming via Combined CRISPRa-Mediated Endogenous Gata4 Activation and Exogenous Mef2c and Tbx5 Expression. ***Mol Ther Nucleic Acids***. 35 (4), 102390.

4. Song Y., Wang L., Wang H., Ma H., Xu J., Liu J. and **Qian L.** (2024) Decoding Aging in the Heart via Single Cell Dual Omics of Non-Cardiomyocytes. ***iScience*** 27 (12), 111469

5. Song Y., Spurlock B., Liu J and **Qian L** (2024) Cardiac Aging in the Multi-Omics Era: High-Throughput Sequencing Insights. ***Cells*** 13, 1683. https://doi.org/10.3390/cells13201683web

6. Ambroise R., Takasugi P., Liu J and **Qian L** (2024) Direct Cardiac Reprogramming in the Age of Computational Biology ***J Cardiovasc Dev Dis***. 11, 273. https://doi.org/10.3390/jcdd11090273

7. Shi H, Spurlock B, Liu J and **Qian L** (2024) Control of cell fate upon transcription factor-driven cardiac reprogramming. ***Curr. Opin. Genet. Dev.*** 89:102226. https://doi.org/10.1016/j.gde.2024.102226

8. Farber G, Dong Y, Wang Q, Rathod M, Wang H, Dixit M, Keepers B, Xie Y, Butz K, Polacheck WJ, Liu J, **Qian L** (2024) Direct conversion of cardiac fibroblast into endothelial-like cells using Sox17 and Erg. ***Nature Communication*** 15, 4170. https://doi.org/10.1038/s41467-024-48354-6

9. Takasugi P and **Qian L.** (2024) Differentiating the Human Heart: A Focus on Atrioventricular Canal Cardiomyocytes. ***Cell Reports*** 43(4):114085. doi: 10.1016/j.celrep.2024.114085.

10. Dong Y., Yang Y., Wang H., Feng D., Nist E., Yapundich N., Craft M., **Qian L** and Liu J (2024) Single-cell chromatin accessibility profiling identifies intrinsic genetic program that activates transient pro-regenerative cell states of major non-myocyte cell types. ***Science Advances*** 10, eadk4694. DOI: 10.1126/sciadv.adk 4694

11. Garbutt TA, Wang Z, Wang H, Ma H, Ruan H, Dong Y, Xie Y, Tan L, Phookan R, Stouffer J, Vedantham V, Yang Y[#], **Qian L**[#], and Liu J[#] (2024) Epigenetic regulation of cardiomyocyte maturation by arginine methyltransferase Carm1. ***Circulation*** 149 (19), 1501-1515.

12. Fang J, Yang Q, Maas RGC, Buono M, Meijlink B, Bruinenberg DL, Benavente ED, Mokry M, van Mil A, **Qian L**, Goumans MJ, Schiffelers R, Lei Z, Sluijter JPG (2024) Vitamin C facilitates direct cardiac reprogramming by inhibiting reactive oxygen species. ***Stem Cell Res Ther*** 15, 19. https://doi.org /10.1186/s13287-023-03615-x

13. Xie Y, Van Handel B, **Qian L** and Ardehali R (2023) Recent advances and future prospects in direct cardiac reprogramming. ***Nat Cardiovasc Res*** 2, 1148–1158

14. Xie Y, Wang Q, Yang Y, Near D, Wang H, Colon M, Slattery C, Nguyen C, Keepers B, Farber G, Wang T-W, Lee S-H, Shih YYI, Liu J and **Qian L.** (2023) Translational landscape of direct cardiac reprogramming reveals a role of Ybx1 in repressing cardiac fate acquisition. ***Nat Cardiovasc Res*** 2, 1060–1077

15. Spurlock B, Liu J and **Qian L** (2023) Can We Stop One Heart from Breaking: Triumphs and Challenges in Cardiac Reprogramming. ***Curr. Opin. Genet. Dev.*** 83, 102116.doi: 10.1016/j.gde.2023.102116.

16. Wang Q, Spurlock B, Liu J and **Qian L.** (2023) Fibroblast Reprogramming in Cardiac Repair. ***JACC Basic Transl Sci*** 9 (1) 145–160. DOI: 10.1016/j.jacbts.2023.06.012

17. Spurlock B. and **Qian L.** (2023) Tracing the history of a heart. ***eLife*** 2023;12:e89988 DOI: https://doi.org/10.7554/eLife.89988

18. **Qian L.** and Pereira C-F (2023) At the Heart of In Vivo Reprogramming--An Interview with Dr. Li Qian. ***Cellular Reprogramming*** 25 (3)

19. **Qian L.**, Zhou B. and Yang H-T (2023) Editorial: Cardiomyocyte proliferation and reprogramming for cardiac regeneration. ***J Mol Cell Cardiol.*** 179:1.doi: 10.1016/j.yjmcc.2023.03.014. Epub 2023 Apr 3.

20. Takasugi P. and **Qian L.** (2023) Exploring the Inner Workings of Direct Cardiac Reprogramming. ***Current Cardiology Reports***. doi:10.1007/s11886-023-01868-9. Published online: 03 April 2023

21. Wang H., Keepers B., Liu J. and **Qian L.** (2023) Optimized protocol for direct cardiac reprogramming in mice using Ascl1 and Mef2c. ***STAR Protocols.*** 4(2):102204.doi: 10.1016/j.xpro.2023.102204

22. Missinato M.A., Murphy S., Lynott M., Yu M.S., Kervadec A., Chang Y-L., Kannan S., Loreti M., Lee C., Amatya P., Tanaka H., Huang C-T., Puri P.L., Kwon C., Adams P.D., **Qian L.**, Sacco A., Andersen P, Colas A.R. (2023) Conserved Transcription Factors Promote Cell Fate Stability and Restrict Reprogramming Potential in Differentiated Cells. ***Nat Commun.*** 14(1):1709. doi: 10.1038/s41467-023-37256-8.

23. Yang H-T, Zhou B. and **Qian L.** (2023) Editorial: Introduction to the special issue on stem cells and their products for cardiac repair and regeneration. ***J Mol Cell Cardiol.*** 176, 97.doi:10.1016/j.yjmcc.2023.01.012.

24. Jasiewicz N.E., Mei K-C, Oh H.M., Chansoria P., Hendy D.A., Bonacquisti E.E., Bachelder E.M., Ainslie K.M. Yin H., **Qian L**., Jensen B.C., Nguyen J.(2022) ZipperCells Exhibit Enhanced Accumulation and Retention at the Site of Myocardial Infarction. ***Adv Healthc Mater.*** 2022 Nov 9; e2201094. doi: 10.1002/adhm.202201094. Online ahead of print.

25. Wang H.*, Keepers B.*, Qian Y., Xie Y., Colon M., Liu J. and **Qian L.** (2022) Cross-lineage Potential of Ascl1 Uncovered by Comparing Diverse Reprogramming Regulatomes ***Cell Stem Cell*** 29 (10), 1491-1504

26. Ricketts S. and **Qian L.** (2022) The heart of cardiac reprogramming: the cardiac fibroblasts. ***J Mol Cell Cardiol.*** 172, 90-99

27. Lancaster M. Morris S.A., Takebe T., **Qian L.**, Gao S., Huch M. (2022) Anniversary reflections: Inspiring discoveries and the future of the field. ***Cell Stem Cell*** 29 (6) 879-881

28. Harris N.R., Nielsen N.R., Pawlak J.B., Aghajanian A., Rangarajan K., Serafin D.S., Farber G., Dy D.M., Nelson-Maney N.P., Xu W., Ratra D., Hurr S.H., **Qian L.**, Scallan J. and Caron K.M. (2022) VE-Cadherin Is Required for Cardiac Lymphatic Maintenance and Signaling. ***Circulation Research*** 130, 5-23

29. Farber G., Liu J., **Qian L.** (2022) OSKM-mediated reversible reprogramming of cardiomyocytes regenerates injured myocardium. ***Cell Regeneration*** 11, Article number: 6 (2022)

30. Xie Y., Liu J., **Qian L.** (2022). Direct cardiac reprogramming comes of age: recent advance and remaining challenges. ***Seminars in Cell and Developmental Biology***. 122, 37-43

31. Wang H., Yang Y., Qian Y., Liu J. and **Qian L.** (2021) Delineating Chromatin Accessibility Re-patterning at Single Cell Level during Early Stage of Direct Cardiac Reprogramming. ***J Mol Cell Cardiol.*** 162, 62-71

32. Ma H., Liu Z., Yang Y., Feng D., Dong Y., Garbutt T.A., Hu Z., Wang L., Cooper C.D., Li Y., Welch J.D.[#], **Qian L.**[#], Liu J[#] (2021). Functional coordination of non-myocytes plays a key role in in *de novo* heart regeneration. ***EMBO Rep.*** 2021 Nov 4;22(11):e52901.doi: 10.15252/embr.202152901. Epub 2021 Sep 15.

33. Li G., Luan C., Dong Y., Xie Y., Zentz S., Zelt R., Roach J., Liu J., **Qian L.**, Li Y., Yang Y. (2021) ExpressHeart: Web Portal to Visualize Transcriptome Profiles of Non-Cardiomyocyte Cells ***Int J Mol Sci.*** 22(16), 8943.

34. Zhang M., **Qian L.**, Liu C., Huang G.N., Tao G. (2021) Cardiomyocyte Maturation-Novel Insights for Regenerative Medicine. ***Front. Cell Dev. Biol.*** doi: 10.3389/fcell.2021.730622

35. Wang L., Yang Y., Ma H., Xu J., Near D., Wang H., Garbutt T., Hu Z., Li Y., Liu J. and **Qian L.** (2021) Single cell dual-omics reveals the transcriptomic and epigenomic diversity of cardiac non-myocytes. ***Cardiovascular Research*** 2021 Apr 11:cvab134, https://doi.org/10.1093/cvr/cvab134

36. Dong Y., **Qian L.**, Liu J. (2021). Molecular and cellular basis of cardiac chamber maturation. ***Semin Cell Dev Biol***. 118, 144-149.

37. Jiang W., Yang Y., Mercer-Smith A., Valdivia A., Bago J.R., Woodell A.S., Burckley A., Marand M., **Qian L.**, Anders C.K., Hingtgen S. (2021) Development of Next-generation Tumor-homing Induced Neural Stem Cells to Enhance Treatment of Metastatic Cancers. ***Science Advances*** 09 Jun 2021:Vol. 7, no. 24, eabf1526. DOI: 10.1126/sciadv.abf1526

38. Tang Y., Zhao L., Yu X., Zhang J., **Qian L.**, Jin J., Lu R. and Zhou Y. (2021) Inhibition of EZH2 Primes the Cardiac Gene Activation via Removal of Epigenetic Repression during Human Direct Cardiac Reprogramming ***Stem Cell Research*** 2021 May;53:102365.doi: 10.1016/j.scr.2021.102365.

39. Yang, Y., Li, G., Xie, Y., Wang, L., Lagler, T., Yang, Y., Liu, J., **Qian, L.**[#], Li, Y[#]. (2021) iSMNN: Batch Effect Correction for Single-cell RNA-seq data via Iterative Supervised Mutual Nearest Neighbor Refinement. ***Briefings in Bioinformatics*** 2021 Apr 12;bbab122. doi: 10.1093/bib/bbab122.

40. Wang H., Yang Y., Liu J. and **Qian L.** (2021) Direct Cell Reprogramming: approaches and mechanisms. ***Nat Rev Mol Cell Biol.*** 22, 410–424.

41. Wang L., Ma H., Huang P., Xie Y., Near D., Wang H., Xu J., Yang Y., Xu Y., Garbutt T., Zhou Y., Liu Z., Yin C., Bressan M., Taylor J.M., Liu J. and **Qian L.** (2020) Downregulation of Beclin1 promotes direct cardiac reprogramming. ***Sci Transl Med.*** Oct 21;12(566):eaay7856. doi: 10.1126/scitranslmed.aay7856.

42. Farber G. and **Qian L.** (2020) Reprogramming of Non-myocytes into Cardiomyocyte-like Cells: Challenges and Opportunities. ***Current Cardiology Reports***. 22(8):54, DOI: 10.1007/s11886-020-01322-0, PMID: 32562156

43. Xu J., Wang L, Liu J. and **Qian L.** (2020) *In Vitro* Conversion of Murine Fibroblasts into Cardiomyocyte-like Cells. *Cardiac Regeneration: Methods and Protocols* ***Methods in Molecular Biology***, vol. 2158, Kenneth Poss and Bernhard Ku¨ hn (eds.), *p* 155-170

44. Wang L., Huang P., Near D., Ravi K., Xu Y., Liu J., and **Qian L.** (2020) Isoform Specific Effects of Mef2C during Direct Cardiac Reprogramming. ***Cells.*** 2020 Jan 22;9(2). pii: E268. doi: 10.3390/cells9020268.

45. Garbutt T.A., Zhou Y., Keepers B., Liu J. and **Qian L.** (2020) An Optimized Protocol for Human Direct Cardiac Reprogramming. ***STAR Protocols.*** Online Feb 7, 2020; DOI: 10.1016/j.xpro.2019.100010

46. Garbutt T.A., Liu J. and **Qian L.** (2020) Heart Regeneration Using Somatic Cells. In: ***Emerging Technologies for Heart Diseases*** (Udi Nussinovitch ed) Elsevier Publishing Group. *p.259-283*

47. Advice from Cell Press Reviewers. Others and **Qian L.** (2019) ***Cell.*** Sep 19;179(1):40-45. doi: 10.1016/j.cell.2019.08.044. Epub 2019 Sep 13. PubMed PMID: 31526487.
    - Sharing peer-review philosophy as one of the best reviewers named by Cell Press.
    - Highlighted by Cell: “peer review is a conversation, not an argument” by Qian

48. Zhou Y., Liu Z., Welch J.D., Gao X., Wang L., Garbutt T., Keepers B., Ma H., Prins J.F., Shen W., Liu J. and **Qian L.** (2019) Singe cell transcriptomic analyses of cell fate transitions during human cardiac reprogramming. ***Cell Stem Cell.*** 25(1): 149-164.E9

49. Huang P., Wang L., Li Q., Tian X., Xu J., Xu J., Xiong Y., Chen G., Qian H., Jin C., Yu Y., Cheng K., **Qian L.** [#], Yang Y. [#] (2019) Atorvastatin Enhances the Therapeutic Efficacy of Mesenchymal Stem Cells Derived Exosomes in Acute Myocardial Infarction via Up-regulating Long Non-coding RNA H19. ***Cardiovascular Research***. 22 May 2019, cvz139, https://doi.org/10.1093/cvr/cvz139.

50. Xu J., Xiong Y-Y., Li Q., Hu M-J., Huang P-S., Xu J-Y., Tian X-Q., Jin C., Liu J., **Qian L.**[#], Yang Y.[#] (2019) Optimization of Timing and Times for Administration of Atorvastatin-pretreated Mesenchymal Stem Cells in a Preclinical Model of Acute Myocardial Infarction. ***Stem Cells Transl Med.*** 8(10):1068-1083.

51. Huang P., Wang L., Li Q., Xu J., Xu J., Xiong Y., Chen G., Qian H., Jin C., Yu Y., Liu J., **Qian L.** [#], Yang Y[#] (2019) Combinatorial Treatment of Acute Myocardial Infarction Using Stem Cells and Their Derived Exosomes Resulted in Improved Heart Performance. ***Stem Cell Research & Therapy.*** 10(1):300. doi: 10.1186/s13287-019-1353-3.

52. Tian X-Q., Yang Y-J., Li Q., Xu J., Huang P-S., Xiong Y-Y., Li X-D., Jin C., Qi K., Jiang L-P., Chen G-H., **Qian L.**, Liu J., Geng Y-J. (2019) Combined therapy with atorvastatin and atorvastatin-pretreated mesenchymal stem cells enhances cardiac performance after acute myocardial infarction by activating SDF-1/CXCR4 axis. ***Am J Transl Res.*** 11(7):4214-4231.

53. Keepers B., Liu J. and **Qian L.** (2019) What's in a cardiomyocyte - And how do we make one through reprogramming? ***Biochim Biophys Acta Mol Cell Res.*** 2019 Mar 25. pii: S0167-4889(18)30396-3. doi: 10.1016/j.bbamcr.2019.03.011. [Epub ahead of print]

54. Ma H, Yu S, Liu X, Zhang Y, Fakadej T, Liu Z, Yin C, Shen W, Locasale JW, Taylor J, **Qian L**[#], Liu J[#]. (2019). Lin28a regulates pathological cardiac hypertrophic growth through Pck2-mediated enhancement of anabolic synthesis. ***Circulation.*** 139, 1725-1740

55. Zhou Y., Liu J. and **Qian L.** (2019) Epigenomic Reprogramming in Cardiovascular Disease. In: ***Computational Epigenetics and Diseases*** (V9 in Translational Epigenetics, Loo Keat Wei ed) Elsevier. *p149-163*

56. Su T., Huang K., Ma H., Liang H., Dinh P.U., Chen J., Shen D., Allen T.A., Qiao L., Li Z., Hu S., Cores J., Frame B.N., Young A.T., Yin Q., Liu J., **Qian L.**, Caranasos T.G., Brudno Y., Ligler F.S., Cheng K. (2018)

Platelet-Inspired Nanocells for Targeted Heart Repair After Ischemia/Reperfusion Injury. ***Advanced Functional Materials*** 2018, 1803567. https://doi.org/10.1002/adfm.201803567

57. Fleming N., Samsa L.A., Hassel D., **Qian L.** and Liu J. (2018) Rapamycin attenuates pathological hypertrophy caused by an absence of trabecular formation ***Sci Rep.*** 8:8584. doi:10.1038/s41598-018-26843-1

58. Wang D., Hu X., Lee S.H., Chen F., Jiang K., Tu Z., Liu Z, Du J., Wang L., Yin C., Liao Y., Shang H., Martin K., Herzog R., Young L., **Qian L.** [#], Hwa J. [#] and Xiang Y. [#] (2018) Diabetes exacerbates myocardial ischemia reperfusion injury by downregulation of microRNA and upregulation of O-GlcNAcylation. ***JACC Basic Transl Sci***. 3(3): 350-362.

59. Tang J., Cores J., Huang K., Cui X., Lan L., Zhang J., Li T., **Qian L.** and Cheng K. (2018) Is Cardiac Cell Therapy Dead? Embarrassing trial outcomes and new directions for the future. ***Stem Cells Transl Med****.* 7(4):354-359.

60. Vandergriff A., Huang K., Hensley M.T., Caranasos T.G., **Qian L.** and Cheng K. (2018) Targeting regenerative exosomes to myocardial infarction using cardiac homing peptide. ***Theranostics***. 8(7):1869-1878.

61. Zhou Y., Alimohamadi S., Wang L., Liu Z., Wall J.B., Yin C., Liu J. and **Qian L.** (2018) A Loss of Function Screen of Epigenetic Modifiers and Splicing Factors during Early Stage of Cardiac Reprogramming. ***Stem Cells Int.*** 2018:3814747. doi: 10.1155/2018/3814747.

62. Zuo S., Kong D., Wang C., Liu J., Wang Y., Wan Q., Yan S., Zhang J., Tang J., Zhang Q., Lyu L., Li X., Shan Z., **Qian L.**, Shen Y.[#] and Yu Y. [#] (2018) CRTH2 promotes endoplasmic reticulum stress-induced cardiomyocyte apoptosis through m-calpain. ***EMBO Mol Med*** 10, e8237.

63. Sauls K., Greco T.M., Wang L., Zou M., Villasmil M., **Qian L.**, Cristea I.M.and Conlon F.L. (2018) Initiating Events in Direct Cardiac Reprogramming. ***Cell Reports*** 22(7):1913-1922.

64. Brown D., Samsa L.A., Ito C., Hong M., Batres K., Arnaout R., **Qian L.** and Liu J. (2018) Neuregulin-1 is essential for nerve plexus formation during cardiac maturation. ***J Cell Mol Med*** 22(3):2007-2017.

65. Miyamoto K, Akiyama M, Tamura F, Isomi M, Yamakawa H, Sadahiro T, Muraoka N, Kojima H, Haginiwa S, Kurotsu S, Tani H, Wang L, **Qian L**., Inoue M, Ide Y, Kurokawa J, Yamamoto T, Seki T, Aeba R, Yamagishi H, Fukuda K, Ieda M. (2018) Direct In Vivo Reprogramming with Sendai Virus Vectors Improves Cardiac Function after Myocardial Infarction. ***Cell Stem Cell.*** 22(1):91-103.e5

66. Liu Z*., Wang L.*, Welch J.*, Ma H., Zhou Y., Vaseghi H.R., Yu S., Wall J.B., Alimohamadi S., Zheng M., Yin C., Shen W., Prins J., Liu J. [#] and **Qian L.** [#] (2017) Single cell transcriptomics reconstructs fate conversion from fibroblast to cardiomyocyte. ***Nature*** 551(7678):100-104.
    - Top 10 Nature papers of the month
    - Highlighted at Node (hosted by *Development*)
    - Reported by various media groups

67. Zhou Y., Wang L., Liu Z., Alimohamadi S., Liu J. and **Qian L.** (2017) Comparative gene expression analyses reveal distinct molecular signature between differentially reprogrammed cardiomyocytes. ***Cell Reports*** 20(13):3014-3024.

68. Wang L., Liu J. and **Qian L.** (2017) *In vivo* Lineage Reprogramming of Fibroblasts to Cardiomyocytes for Heart Regeneration. In: ***In Vivo Reprogramming in Regenerative Medicine*** (*Stem Cell Biology and Regenerative Medicine*) (Yilmazer ed) Springer International Publishing AG. *p45-63*

69. Liu Z., Chen O., Wall J.B., Zheng M., Zhou Y., Wang L., Vaseghi H., **Qian L.**[#] and Liu J.[#] (2017) Systematic comparison of 2A peptides for cloning multi-genes in a polycistronic vector. ***Sci Rep.*** 7, 2193 DOI:10.1038/s41598-017-02460-2

70. Vaseghi H., Liu J. and **Qian L.** (2017) Molecular barriers to direct cardiac reprogramming. ***Protein & Cell.*** doi: 10.1007/s13238-017-0402-x. [Epub ahead of print]

71. Ma H., Wang L, Liu J. and **Qian L.** (2017) Direct cardiac reprogramming as a novel therapeutic strategy for treatment of myocardial infarction. ***Methods Mol Biol.*** 1521:69-88

72. Samsa, L.A., Cade, I.E., Brown D.R., **Qian L.** and Liu J. (2016). IgG-containing isoforms of Neuregulin-1 are dispensable for cardiac trabeculation in zebrafish. ***Plos One*** 11(11):e0166734. doi: 10.1371/journal.pone.0166734

73. Liu L., Lei I., Hacer K., Li Y., Wang L., Gnatovskiy L., Dou Y., Wang S., **Qian L.** and Wang Z. (2016) Targeting Mll1 H3K4 methyltransferase activity to guide cardiac lineage specific reprogramming of fibroblasts. ***Cell Discovery*** 2, 16036 (2016) doi:10.1038/celldisc.2016.36

74. Zhou Y. and **Qian L.** (2016) Advanced Technologies Lead iNto New Reprogramming Routes ***Cell Stem Cell*** 19(3), 286-288

75. Ma H., Yin C., Zhang Y., **Qian L.** and Liu J. (2016) ErbB2 is required for cardiomyocyte proliferation in murine neonatal hearts. ***Gene*** 592(2), 325-330

76. Vaseghi H., Zhou Y., Wang L., Yin C., Liu J. and **Qian L.** (2016) Generation of an inducible fibroblast cell line for studying direct cardiac reprogramming. ***Genesis*** 54 (7), 398–406

77. **Qian L.** (2016) Hope for the brokenhearted: cellular reprogramming improves cardiac function in a mouse model of myocardial infarction. ***Science*** 352 (6292), 1400-1401
    - Highlighted by editor on www.sciencemag.org
    - Award winning assay for Boyalife Prize in Stem Cell and Regenerative Medicine
    - Featured in Science/AAAS News Story

78. Ma H., Liu J. and **Qian L.** (2016) Fat for Fostering: Regenerating Injured Heart Using Local Adipose Tissue. ***EBioMedicine*** 7, 25-26

79. Brown D.R., Samsa L.A., **Qian L.** and Liu J. (2016) Advances in the study of heart development and disease using zebrafish. ***J. Cardiovasc. Dev. Dis.*** 3(2), 13; doi: 10.3390/jcdd3020013

80. Zhou Y., Wang L., Vaseghi H., Liu Z., Lu R., Alimohamadi S., Yin C., Fu J., Wang G.G., Liu J. and **Qian L.** (2016) Bmi1 is a key epigenetic barrier to direct cardiac reprogramming. ***Cell Stem Cell*** 18(3), 382-395.
    - Highlighted and discussed in the June 2nd issue of *Cell Stem Cell* 18(6), 692-694 "First Author Journal Club: 2016 Selections"

81. Liu Z., Chen O., Zheng M., Wang L., Zhou Y., Yin C., Liu J. and **Qian L.** (2016) Re-patterning of H3K27me3, H3K4me3 and DNA methylation during fibroblast conversion into induced cardiomyocytes. ***Stem Cell Research*** 16(2), 507-518.

82. Samsa L.A., Fleming N., Magness S.T., **Qian L.**, Liu J. (2016) Isolation and characterization of single cells from zebrafish embryos. ***J Vis Exp*** (109), e53877, doi:10.3791/53877

83. Ma H., Wang L., Yin C., Liu J. and **Qian L.** (2015) *In vivo* cardiac reprogramming using an optimal single polycistronic construct. ***Cardiovascular Research*** 108(2):217-9. doi:10.1093/cvr/cvv223.
    - Editor's Choice

84. Samsa L.A., Givens C., Tzima E., Stainier D.R.Y., **Qian L.**, and Liu J. (2015). Cardiac contraction activates endocardial Notch signaling to modulate cardiac chamber maturation. ***Development***. 142, 4080-4091; doi: 10.1242/dev.125724
    - Highlighted Research Article
    - Previewed in "*Cilia: at the heart of chamber maturation*" *Development* 2015 142:e2302

85. Wang L., Liu Z., Yin C., Zhou Y., Liu J. and **Qian L.** (2015) Improved generation of induced cardiomyocytes using a polycistronic construct expressing optimal ratio of Gata4, Mef2c and Tbx5. ***J Vis Exp****.* 105, e53426, doi:10.3791/53426

86. Chen O. and **Qian L.** (2015) Direct Cardiac Reprogramming: Advances in Cardiac Regeneration. ***Biomed Res Int.*** doi:10.1155/2015/580406

87. Qiang Z. and **Qian L.** (2015) Induced cardiomyocytes from non-myocytes for cardiac repair. ***Ch J Hypertens.*** 23, 206-209

88. Wang L., Liu Z., Yin C., Asfour H., Chen O., Li Y., Bursac N., Liu J. and **Qian L.** (2015) Stoichiometry of Gata4, Mef2c and Tbx5 influences the efficiency and quality of iCM reprogramming. ***Circ Res***. 116, 237-244
    - Editor's Pick, highlighted on cover,
    - Previewed in Muraoka et al *Circ Res* 116:216-218.

89. Guo C., Deng Y., Liu J. and **Qian L.** (2015) Cardiomyocyte-specific role of miR-24 in promoting cell survival. ***J Cell Mol Med*** 19, 103-112

90. Fuller A.M. and **Qian L.** (2014) miRiad roles for microRNAs in cardiac development and regeneration. ***Cells*** 3(3), 724-750

91. Wang L. and **Qian L.** (2014) miR-24 regulates intrinsic apoptosis pathway in mouse cardiomyocytes. ***Plos One*** 9(1):e85389

92. Bird K. and **Qian L.** (2013) Cellular reprogramming for cardiovascular disease. ***J Tissue Sci Eng.*** 4, 127

93. Guo C., Patel K. and **Qian L.** (2013) Direct somatic cell reprogramming: treatment of cardiac diseases. ***Curr Gene Ther.*** 13, 133-138.

94. Fu J.D., Stone N.R., Liu L., Spencer C.I., **Qian L.**, Hayashi Y., Delgado-Olguin P., Ding S., Bruneau B.G. and Srivastava D. (2013) Direct reprogramming of human fibroblasts toward the cardiomyocyte lineage. ***Stem Cell Reports*** 1, 235-247

95. **Qian L.** and Srivastava D. (2013) Direct Cardiac Reprogramming: From Developmental Biology to Cardiac Regeneration. ***Circ Res.*** 113, 915-21

96. **Qian L.**, Berry E.C., Fu J.D., Ieda M., and Srivastava D. (2013) Reprogramming of mouse fibroblasts into cardiomyocyte-like cells *in vitro.* ***Nat Protoc.*** 8, 1204-15
    - **"***Featured Protocol***"** highlighted by *www.Nature.com*

97. Srivastava D, Ieda M, Fu J, **Qian L.** (2012) Cardiac repair with thymosin β4 and cardiac reprogramming factors. ***Ann N Y Acad Sci.*** 1270,66-72.

98. **Qian L.**, Huang Y, Spencer CI, Foley A, Vedantham V, Liu L., Conway SJ, Fu JD, Srivastava D. (2012) In vivo reprogramming of murine cardiac fibroblasts into cardiomyocytes. ***Nature****.* 485, 593–598
    - 2nd of the *Top 10 Advances in Heart Disease and Stroke Research* in 2012, AHA
    - Editor's Pick, highlighted on cover
    - previewed in *Nature* 485, 585-586; *The New England Journal of Medicine* 364,177-178; *Cir Res* 110, 1392-1394; *Cell Research* 22:1521–1523; *JMCC* 53(3):311-3; ect.

99. **Qian L.** and Bodmer R. (2012) Probing the polygenic basis of cardiomyopathies in *Drosophila* ***J Cell Mol Med****.* 16, 972-7

100. **Qian L.**#(co-correspondance) *, Wythe J.D. *, Liu J., Ocoor K., Mohapatra B., Otway R.T., Fatkin D., Semsarian S., Winlaw D., Dunwoodie S., Vogler G., Cartry J., Huang Y., Crawley T., Taghli-Lamallem O., Srivastava D., Towbin J.A., Harvey R.P., Bruneau B.G., Bodmer R#. (2011) Tinman/Nkx2-5 acts via miR-1 and upstream of Cdc42 to regulate heart function across species ***J Cell Biol.*** 193, 1181-96
    - paper **"***In Focus***"** for the issue, previewed in Editorial

101. King I.N.*, **Qian L.*** (co-first author), Liang J., Huang Y., Shieh J., Kwon C. and Srivastava D. (2011) A Genome-wide Screen Reveals a Role for microRNA-1 in Modulating Cardiac Cell Polarity. ***Developmental Cell*** 20, 497-510

102. **Qian L.** *, Van Laake LW. *, Huang Y. and Srivastava D. (2011) miR-24 inhibits apoptosis and represses Bim in mouse cardiomyocytes. ***J Exp Med***. 208, 549-560

103. Van Laake L.W.*, **Qian L.*** (co-first author), Cheng P., Huang Y., Hsiao E.C., Conklin B., Srivastava D. (2010) Reporter-Based Isolation of Induced Pluripotent Stem Cell- and Embryonic Stem Cell-Derived Cardiomyocytes Reveals Limited Gene Expression Variance. ***Circ Res***. 107:304–347 *(Cover Paper)*

104. **Qian L.** and Srivastava D. (2010) Monkeying around with cardiac progenitors. ***J Clin Invest.*** 120,1034-1036

105. **Qian L.** and Bodmer R. (2009) Partial loss of GATA factor Pannier impairs adult heart function in *Drosophila*. ***Hum Mol Genet.*** 18, 3153-3163

106. Kwon C., **Qian L.** *, Cheng P. *, Nigam V., Arnold J. and Srivastava D. (2009) A Regulatory Pathway Involving Notch1/β-Catenin/Isl1 Determines Cardiac Progenitor Cell Fate. ***Nat. Cell Bio.*** 11, 951-7

107. Leal S.M., **Qian L.**, Lacin H., Bodmer R., Skeath J.B. (2009) Neuromancer1 and Neuromancer2 regulate cell fate specification in the developing embryonic CNS of *Drosophila melanogaster*. ***Dev. Biol.*** 325,138-50

108. **Qian L.**, Mohapatra B., Akasaka T., Liu J., Ocorr K., Towbin J.A., Bodmer R. (2008) Transcription factor *neuromancer/TBX20* is required for cardiac function in *Drosophila* with implications for human heart disease. ***P.N.A.S.*** 105,19833-8

109. Liu J., **Qian L.**, Han Z. and Bodmer R. (2008) Spatial specificity of mesodermal even-skipped expression relies on multiple repressors. ***Dev. Biol.*** 313, 876-86

110. **Qian L.**, Liu J. and Bodmer R. (2008) Heart development in *Drosophila*. In: ***Cardiovascular Development*** (*Advances in Developmental Biology*. Vol. 18) (Bodmer R. ed) Elsevier, Amsterdam, New York. *p.1-29.*

111. Ocorr K., Perrin L., Lim HY., **Qian L.**, Wu X., Bodmer R. (2007) Genetic control of heart function and aging in *Drosophila*. ***Trends Cardiovasc Med.*** 17, 177-82.

112. Zaffran S., Reim I., **Qian L.**, Lo P.C., Bodmer R. and Frasch M. (2006) Cardioblast-intrinsic Tinman activity controls proper diversification and differentiation of myocardial cells in *Drosophila.* ***Development.*** 133, 4073-4083

113. Wang D., **Qian L.**, Xiong H., Liu J., Neckameyer W.S., Oldham S., Wang J., Bodmer R. and Zhang Z. (2006) Antioxidants protect PINK1-dependent dopaminergic neurons in *Drosophila*. ***P.N.A.S.***103, 13520-13525 *(Cover Paper)*

114. Liu J., **Qian L.**, Wessells RJ., Bidet Y., Jagla K., and Bodmer R. (2006) Hedgehog and RAS pathways cooperate in the anterior-posterior specification and positioning of cardiac progenitor cells. ***Dev.Biol*.** 290, 373-385

115. **Qian L.**, Liu J., and Bodmer R. (2005) Slit and Robo control cardiac cell polarity and morphogenesis. ***Curr. Biol.***15, 2271-2278
   - Top 10 Research Article in *Current Biology*, CellPress

116. **Qian L.**, Liu J., and Bodmer R. (2005) *Neuromancer (H15/midline)* T-box20-related genes promote cell fate specification and morphogenesis of the *Drosophila* heart. ***Dev. Biol.*** 279, 509–524.

* equal contribution

Invited Talks at International Conferences

2025 May 11-14
2025 ISHR World Congress, Nara, Japan
Reprogramming Approaches for Heart Disease
2024 November 16-18
American Heart Association's Scientific Sessions 2024, Chicago, IL
Fibroblast reprogramming for heart repair
2024 Oct 17-19
2024 Additional Ventures Single Ventricle Investigator Meeting, Denver, Colorado
Translational regulation of fibroblast reprogramming into cardiomyocyte
2024 May 22-25
The 8th Annual Cardiovascular Bioengineering Symposium, Houston, TX
Single cell omics approach to study direct cardiac reprogramming
2024 April 15-19
Keystone Symposia on Cardiovascular Epigenetics and Gene Regulation, Hannover, Germany
Epigenetic regulation of cardiac reprogramming
2023 October 6
Triangle Regenerative Biology Symposium, Durham, NC
(Keynote) Programming and Reprogramming: What Does It Take to Make a Cardiomyocyte?
2023 October 10-14
Cell State Conversions, Cold Spring Harbor Laboratory, New York
Recent Advance in Direct Cardiac Reprogramming
2023 August 9-11
MAD SSCi 2023 Conference, Chapel Hill, NC
Mending a Broken Heart
2023 June 27-30
The 42nd ISHR-NAS Conference, Madison, Wisconsin
Cellular reprogramming for cardiac repair
2023 June 18-23
Epigenetic Regulation of Cardiovascular Diseases Gordon Research Conference, Ventura, CA
The Wonderland of Epigenetic Reprogramming

2023 May 29-31
NIH/Keio 7th PCTC Cardiovascular Bioengineering (CVBE) Symposium, Kyoto, Japan
Reprogramming for heart repair

2022 Nov 16
American Society of Gene and Cell Therapy (ASGCT) Insight Series (Virtual)
Cellular reprogramming for cardiac repair

2022 Sept 13-18
China Heart Congress (CHC) 2022, Beijing, China (Virtual Format)
Progress and Challenge in Direct Cardiac Reprogramming

2022 July 25-28
AHA BCVS Scientific Sessions 2022, Chicago
Recent Advance in Direct Cardiac Reprogramming

2022 June 12-15
2022 ISHR World Congress, Belin, Germany
Single cell omics approach to study direct cardiac reprogramming

2022 March 24-25
Frontiers in Stem Cell & Organoid Medicine Symposium
Platform talk: *Reprogramming Approach for Heart Regeneration*

2021 Sept 23-26
15th Qian-jiang International Cardiovascular Conference (QICC), China
Frontiers in Cardiovascular Medicine and Sciences Forum
Recent Advance in Direct Cardiac Reprogramming

2021 Feb 1-4 (canceled due to COVID-19)
Keystone Symposia at the Keystone Resort in Keystone, Colorado
Cardiac Development, Repair and Disease Modeling
Altering Cardiac Cell Fate for Repair

2020 December 6-7
ISHR North American Section (NAS) 2020 (Virtual)
Part II Epigenetics/Omics session
Single Cell Omics Approach to Study Direct Cardiac Reprogramming

2020 November 14-16
American Heart Association Scientific Sessions
Session: New Frontiers in Myocardial Regeneration
Advances in Direct Cardiac Reprogramming

2020 Sept 3-5
14th Qian-jiang International Cardiovascular Conference (QICC), China
Basic/Translational International Research Forum
Direct Reprogramming Approach for Heart Repair

2020 June 24-27
International Society for Stem Cell Research (ISSCR) Annual Meeting, Boston
Plenary Session VI: Reprogramming and Regeneration
Next Generation of Cardiac Reprogramming

2020 March 1-6
Keystone Symposia at the Keystone Resort in Keystone, Colorado
Charting a New Course for Heart Failure: From Discovery to Data
Altering Cardiac Cell Destiny

2020 January 2-6
BMES Cell and Molecular Bioengineering (CMBE) Conference, Puerto Rico
Epigenetic reprogramming for cellular bioengineering

2019 November 12 (declined due to conflict)
International Transplant Science (ITS) Meeting, Clearwater Beach FL

Organ repair in situ: transcriptional reprogramming of diseased organs

2019 November 11

Riley Cardiovascular Developmental Biology Symposium, Indianapolis

Programming and Reprogramming: What Does It Take to Make a Cardiomyocyte?

2019 May 26-31

Gordon Research Conference-Epigenetic Regulation of Cardiovascular Disease, Hong Kong

Epigenetic Regulation of Direct Cardiac Reprogramming

2019 March 1-2

The 5th NIH Progenitor Cell Translational Consortium Cardiovascular Bioengineering Symposium (CVBE 2019) Sydney, Australia

Molecular Basis of Cardiomyocyte Specification and Maturation

2019 January 20

DABE Preconference Symposium of the International Embryo Technologies Society Annual Meeting, New Orleans,

In Vivo Reprogramming to Repair Injured Tissues

2018 July 30-Aug 2

AHA BCVS Scientific Sessions 2018 “Innovating in Cardiovascular Research”, San Antonio, Texas

Single Cell Transcriptomics to Study Cardiomyocyte Cell Fate Control

2018 April 22-26

9th International Ascona Workshop on Cardiomyocyte Biology, Ascona, Switzerland

Single Cell Omics to Dissect Cell Fate Determination

2017 April 6-9

19th South China International Congress of Cardiology, Guangzhou, China

Reprogramming Approaches for Cardiac Regeneration

2017 March 26-30

Keystone Symposium “Molecular Mechanisms of Heart Development”

Single cell transcriptomics to study cardiac cell fate acquisition in non-myocytes

2016 November 4-6

11th International Conference on Genomics, Shenzhen, China

Featured Speaker: Single cell transcriptomics to dissect cellular programming and reprogramming

2016 September 25-27

Cell Symposia: 10 Years of iPSCs, Berkeley, CA

Single cell transcriptomics reveals a deterministic trajectory of cell fate conversion during direct cardiac reprogramming

2016 August 11-14

China Heart Congress, Beijing, China

Cardiac regeneration using reprogramming techniques

2016 June 22-25

International Society for Stem Cell Research (ISSCR) Annual Meeting, San Francisco

“Direct Cellular Reprogramming” Session

Molecular Mechanisms of Cardiac Reprogramming

2016 June 21-22

Awards Ceremony for the Inaugural Boyalife, Science, and Science Translational Medicine Prize in Stem Cells and Regenerative Medicine, San Francisco

Hope for the brokenhearted

2016 May 19-21

Cardiovascular Development and Regeneration Symposium, San Francisco, CA

Barriers to cardiac reprogramming

2016 February 7-10

Transdifferentiation and Tissue Plasticity in Cardiovascular Rejuvenation, Steyning, UK

Bmi1 functions as a critical epigenetic modulator during early phase of direct cardiac reprogramming

2015 November 3-8
American Society of Nephrology (ASN) Kidney Week 2015, San Diego, CA
Session "*Uremic cardiomyopathy: what we know and where we are going?*"
Mending a broken heart by reprogramming fibroblasts
2015 June 7-10
International Society for Heart Research (ISHR) Annual Meeting of the North American Section, "Heart Failure: 21st Century Research and Therapeutics", Seattle, WA
Barriers to Direct Cardiac Reprogramming
2015 April 30-May 2
22nd Weinstein Cardiovascular Development Conference, Boston, MA
Controversies and trends in cardiac development (speaker and panelist)
2015 March 14-16
American College of Cardiology (ACC) 64th Annual Scientific Session, San Diego, CA
Cardiac Reprogramming: from mouse to human (speaker and panelist)
2015 March 1-6
Keystone Symposium on Molecular and Cellular Biology:
Heart Disease and Regeneration: Insights from Development, Copper Mountain, Colorado, USA
Stoichiometry of Gata4, Mef2c and Tbx5 Influences the Efficiency and Quality of iCM Reprogramming
2013 October 23-26
World Conference on Regenerative Medicine, Leipzig, Germany
Reprogramming fibroblasts towards cardiomyocyte-like cells
2012 December 14-15
The 3rd EACTS-meeting on Cardiac and Pulmonary Regeneration, Berlin, Germany
Direct reprogramming technology

Trainee Phase (selected oral presentation from abstract submission):
2011 The 34th Annual Meeting of the Molecular Biology Society of Japan, Yokohama, Japan
In vivo reprogramming of murine cardiac fibroblasts into cardiomyocytes.
2011 American Heart Association Scientific Session, Orlando, FL
In vivo reprogramming of murine cardiac fibroblasts into cardiomyocytes.
2011 The 3rd Annual Progenitor Cell Biology Consortium (PCBC) Meeting, Boston, MA
Direct conversion of cardiac fibroblasts into cardiomyocyte-like cells
2011 International Society for Stem Cell Research (ISSCR) Annual Meeting, Toronto, Canada
In vivo reprogramming of murine cardiac fibroblasts into cardiomyocytes.
2011 Weinstein Cardiovascular Development Conference, Cincinnati, OH
How many transcription factors does it take to make a myocyte?
2010 California Institute for Regenerative Medicine Scholar Annual Meeting, San Francisco, CA
miR-24 inhibits embryonic stem cell apoptosis by inhibiting Bim
2006 Developmental Vascular Biology Workshop, Asilomar, CA
Slit and Robo control cardiac cell polarity and morphogenesis
2004 45th Annual Drosophila Research Conference, Washington DC
Control of cardiac cell polarity and morphogenesis

Invited Talks at Other Universities and Institutes (82)

2025.8 *Scholar-In-Residence & Keynote Speaker* for 2025 Research Symposium, Department of Pharmacological and Pharmaceutical Sciences (PPS) at the **University of Houston**
2025.3 Robert M Berne Cardiovascular Research Center Seminar Series, **University of Virginia** School of Medicine, Charlottesville, VA
2025.2 Distinguished Lectures in Pharmacology and Systems Physiology, **University of Cincinnati** College of Medicine, Department of Pharmacology and Systems Physiology, Cincinnati, OH

2024.12 Feinberg Cardiovascular and Renal Research Institute (FCVRRI) Seminar Series, **Northwestern University** School of Medicine, Chicago, IL
2024.4 Seminar Series in Cardiovascular Biology, **UT Southwestern**, Dallas, TX
2023.11 T32 Muscle Seminar Series, **University of Maryland** School of Medicine
2023.10 Penn Cardiovascular Institute (CVI), **University of Pennsylvania**, PA
2023.9 Center for Cardiovascular Research at Nationwide Children's Hospital (NCH) and The **Ohio State University** (OSU) College of Medicine
2023.4 **Children's National Hospital**, Georgetown University, Washington DC
2023.4 Center for Biotechnology & Genomic Medicine (CBGM), **Augusta University**
2023.3 Molecular Medicine Seminar, **University of Iowa**
2023.2 Cardiovascular Center Seminar Series, **Medical College of Wisconsin**
2023.1 Cardiovascular Science Conference Series, **University of California at San Diego**
2023.1 Cardiovascular Science Frontiers seminar series, **Stanford University**
2022.12 Center for Molecular & Translational Medicine, **Georgia State University**
2022.11 Basic Biomedical Sciences, **University of South Dakota** School of Medicine
2022.11 Department of Cell Biology and Anatomy, **University of South Carolina** School of Medicine
2022.6 Yale Stem Cell Center Seminar Series, **Yale University**
2022.5 **University of California, Los Angeles** CVR Seminar Series
2022.4 **University of Wisconsin, Madison** Frontiers in Cardiovascular Sciences Seminars
2022.3 Emergency Medicine Grand Rounds, **Thomas Jefferson University**
2022.2 **Virginia Tech** Pioneers in Biomedical Research Seminar
2022.1 CVRC Seminar Series, School of Medicine, **Yale University**
2022.1 **University of Pittsburgh** VMI/HVI Seminar Series
2022.1 Dr. Hans G. Folkesson Memorial Seminar Series, **Northeast Ohio Medical University**
2021.12 CVR Seminar Series, Boston Children's Hospital, **Harvard Medical School**
2021.11 Center for Cardiovascular Research at Nationwide Children's Hospital (NCH) and The **Ohio State University** (OSU) College of Medicine
2021.4 Heart Institute, **Cincinnati Children's Hospital** Medical Center, Virtual Webinar
2021.4 **UCLA** Vascular Biology Seminar Series, Virtual Webinar
2021.3 CVRI Seminar Series, **Baylor College of Medicine**, TX (Zoom Videoconferencing)
2021.2 ACRE Seminar Series, Zoom Videoconferencing
2021.1 Penn Cardiovascular Institute (CVI), **University of Pennsylvania**, PA
2020.10 Stanford Cardiovascular Science Frontiers seminar series, **Stanford University**, CA Virtual Webinar (due to COVID19)
2020.9 NCCSEA Seminar Series Virtual Webinar (due to COVID19), NC
2020.9 SCBA Texas Chapter, Faculty Virtual Webinar (due to COVID19), TX
2020.4 Shanghai Institutes for Biological Sciences (SIBS), **Chinese Academy of Sciences** (Canceled due to COVID19)
2020.4 School of Medicine, **Nanjing University**, China (Canceled due to COVID19)
2020.3 Department of Biochemistry and Molecular Genetics (BMG) Seminar Series, **University of Alabama at Birmingham** (Canceled due to COVID19)
2020.2 Department of Molecular Pharmacology and Therapeutics, Stritch School of Medicine **Loyola University Chicago**
2020.1 Distinguished Lecture Speaker, Center for Cardiovascular Biology, Mitochondria Metabolism Center, **University of Washington, Seattle**
2019.11 Herman B Wells Center for Pediatric Research, **Indiana University** School of Medicine
2019.9 Aab Cardiovascular Research Institute (CVRI), **University of Rochester** Medical Center
2019.6 Zilkha Neurogenetic Institute (ZNI), Keck School of Medicine, **University of Southern California**
2019.5 CVRI, Weill Cornell Medical College, **Cornell University**
2019.3 School of Medicine, joint with School of Life Science, **Tongji University**, Shanghai, China

2019.3 Department of Cell Biology & Molecular Medicine, New Jersey Medical School, Rutgers, The **State University of New Jersey**
2019.2 Institute for Molecular Bioscience, **University of Queensland**, Brisbane, Australia
2018.10 Fuwai Hospital, **Chinese Academy of Medical Sciences**, Beijing, China
2018.8 Hospital for Sick Children, **University of Toronto**, Canada
2018.7 Center for Translational Medicine, **Temple University**
2018.5 Department of Developmental Biology, **University of Pittsburg**
2018.5 Institute for Genomic Medicine, **University of California, San Diego**
joint with Cell and Developmental Biology, Cardiovascular Medicine, UCSD
2018.3 School of Life Science, **Shanghai Jiao Tong University**, China
2018.3 School of Life Science and Biotechnology, **Tongji University**, Shanghai, China
2018.3 Program in Molecular & Developmental Biology, co-hosted with Molecular Cardiovascular Biology Group at **Cincinnati Children's Hospital** Medical Center
2017.11 Comparative Medicine Institute, **North Carolina State University**
2017.11 Regenerative Medicine Center, UMC Utrecht, **Utrecht University**,
Joint with **Hubrecht Institute**, Netherlands
2017.9 Department of Medicine, **Emory University**
2017.9 Gladstone Institute for Cardiovascular Research, co-hosted with Cardiovascular Research Institute at the **University of California, San Francisco**
2017.8 CMI Research and Innovation Summit, **NCSU**
2017.4 Dept of Molecular and Cellular Physiology, **Albany Medical College**, New York, NY
2016.11 Molecular Physiology and Biophysics Department, **Baylor College of Medicine**
2016.9 Epigenetics and Stem Cell Biology Laboratory, **NIH/NIEHS**
2016.8 Institute of Molecular Medicine, **Beijing University**, Beijing, China
2016.8 School of Life Science, **Tongji University**, Shanghai, China
2016.5 **Gladstone Institute**, UCSF, CA
2015.11 **Sanford-Burnham-Prebys Medical Discovery Institute**, UCSD, CA
2014.11 Frankel Cardiovascular Center, **University of Michigan at Ann Arbor**
2014.8 College of Veterinary Medicine, **North Carolina State University**
2014.4 Laboratory of Signal Transduction, **National Institute of Environmental Health Science**
2012 **Berlin-Brandenburg Center for Regenerative Therapies**, Berlin, Germany
2012 Aab Cardiovascular Research Institute, School of Medicine, **University of Rochester**
2012 Department of Cardiac Surgery, **University of Michigan at Ann Arbor**
2012 McAllister Heart Institute, **University of North Carolina at Chapel Hill**
2012 Department of Cell Biology & Molecular Medicine,
University of Medicine and Dentistry of New Jersey, **Rutgers University**
2012 Broad Stem Cell Research Center; CVRL, **University of California at Los Angeles**
2012 Lillehei Heart Institute, **University of Minnesota-Minneapolis**
2012 Department of Biological Sciences, **Vanderbilt University**
2011 Institute of Molecular and Cellular Biosciences, **University of Tokyo**, Tokyo, Japan
2011 **System Biosciences** (SBI) Inc., Mountain View, CA
2011 National Student Leadership Conference, **Gladstone Institute, UCSF**
2006 The Center for Heart Development, **Hunan Normal University**, Changsha, China
2006 Xiangya Hospital of **Central South University**, China

Invited Talks at UNC-Chapel Hill

2022 Department of Pathology and Laboratory Medicine Grand Rounds
2021 MSTP Monday Night Seminar Series
2021 Science without Borders Seminar, Global Perspectives in Biomedicine at UNC
2020 Yang Family Biomedical Scholar Seminar

2019 Hettleman Prize Awardee TEDx Talk
2018 Annual CBP Research Day
2017 Department of Pathology and Laboratory Medicine Grand Rounds
2016 Carolina Chromatin Consortium Seminar Series
2016 UNC Annual Translational Medicine Symposium (Keynote Speaker)
2016 UNC Stem Cell Seminar Series
2015 Department of Pathology and Laboratory Medicine Grand Rounds
2015 Department of Cardiology Grand Rounds
2014 McAllister Heart Institute Faculty Seminar Series
2014 Department of Genetics Seminar Series
2014 Molecular and Cellular Pathology Graduate Program Recruitment Seminars
2014 UNC Stem Cell Seminar Series
2013 Department of Pathology and Laboratory Medicine Annual Retreat
2013 NCSU-UNC Regenerative Medicine Symposium
2013 Vascular Group Seminar Series
2013 McAllister Heart Institute Heart Club
2013 Integrative Vascular Biology Training Program Seminar Series
2013 Biological and Biomedical Sciences Program Recruitment Seminar
2012 Department of Pathology and Laboratory Medicine Grand Rounds

TEACHING/MENTORING RECORD

Teaching at UNC-Chapel Hill

2024 Fall Lecturer, Pathology 766-*Current Topics in Cardiovascular Biology*
2024 Fall Lecturer, CBPH 852-*Experimental Physiology of Human Health and Disease*
2024 Fall Lecturer, Pathology 713-*Molecular and Cellular Pathophysiologic Basis of Disease*
2024 Spring Lecturer, Path 767-*Molecular and Cellular Biology of Cardiovascular Disease*
2023 Fall Lecturer, Pathology 766-*Current Topics in Cardiovascular Biology*
2023 Fall Lecturer, CBPH 852-*Experimental Physiology of Human Health and Disease*
2023 Fall Lecturer, Pathology 713-*Molecular and Cellular Pathophysiologic Basis of Disease*
2023 Spring Lecturer, Path 767-*Molecular and Cellular Biology of Cardiovascular Disease*
2022 Fall Lecturer, Pathology 713-*Molecular and Cellular Pathophysiologic Basis of Disease:*
2022 Fall Guest Lecturer, BIO590H-*Cardiovascular Biology*
2022 Fall Lecturer, Pathology 766-*Current Topics in Cardiovascular Biology*
2022 Fall Lecturer, CBPH 852-*Experimental Physiology of Human Health and Disease*
2022 Spring Lecturer, BIOC/PHCO 744-*Stem Cell Biology and Regenerative Medicine*
2022 Spring Lecturer, Path 767-*Molecular and Cellular Biology of Cardiovascular Disease*
2021 Fall Lecturer, Pathology 766-*Current Topics in Cardiovascular Biology*
2021 Fall Lecturer, CBPH 852-*Experimental Physiology of Human Health and Disease*
2021 Spring Lecturer, Path 767-*Molecular and Cellular Biology of Cardiovascular Disease*
2020 Fall Guest Lecturer, BIO590H-*Cardiovascular Biology*
2020 Fall Lecturer, Pathology 766-*Current Topics in Cardiovascular Biology*
2020 Fall Lecturer, CBPH 852-*Experimental Physiology of Human Health and Disease*
2020 Spring Lecturer, BIOC/PHCO 744-*Stem Cell Biology and Regenerative Medicine*
2020 Spring Lecturer, Path 767-*Molecular and Cellular Biology of Cardiovascular Disease*
2019 Fall Guest Lecturer, BIO590H-*Cardiovascular Biology*
2019 Fall Lecturer, Pathology 766-*Current Topics in Cardiovascular Biology*
2019 Fall Lecturer, CBPH 852-*Experimental Physiology of Human Health and Disease*
2018 Fall Lecturer, Pathology 766-*Current Topics in Cardiovascular Biology*
2018 Fall Lecturer, CBPH 852-*Experimental Physiology of Human Health and Disease*
2018 Spring Lecturer, BIOC/PHCO 744-*Stem Cell Biology and Regenerative Medicine*

2017 Fall	Lecturer, Pathology 766-*Current Topics in Cardiovascular Biology*
2017 Fall	Lecturer, CBPH 852-*Experimental Physiology of Human Health and Disease*
2017 Spring	Lecturer, Path 767-*Molecular and Cellular Biology of Cardiovascular Disease*
2016 Fall	Lecturer, Pathology 766-*Current Topics in Cardiovascular Biology*
2016 Fall	Lecturer, Physiology 702-*Experimental Physiology of Health and Disease*
2016 Spring	Lecturer, BIOC/PHCO 744-*Stem Cell Biology and Regenerative Medicine*
2016 Spring	Invited Lecturer, BIO -*Cardiac Development and Regeneration*
2016 Spring	Lecturer, Path 767-*Molecular and Cellular Biology of Cardiovascular Disease*
2015 Fall	Lecturer, Pathology 766-*Current Topics in Cardiovascular Biology*
2015 Fall	Lecturer, Physiology 702-*Experimental Physiology of Health and Disease*
2015 Spring	Lecturer, Path 767-*Molecular and Cellular Biology of Cardiovascular Disease*
2014 Fall	Lecturer, Pathology 766-*Current Topics in Cardiovascular Biology*
2014 Fall	Lecturer, Physiology 702-*Experimental Physiology of Health and Disease*
2014 Spring	Lecturer, BIOC/PHCO 744-*Topics on Stem Cells and Development*
2013 Fall	Lecturer, Pathology 766-*Current Topics in Cardiovascular Biology*
2013 Fall	Lecturer, Physiology 702-*Experimental Physiology of Health and Disease*
2013 Spring	Lecturer, Pathology 667-*Pathobiology of Cardiovascular Disease*

Mentoring at UNC-Chapel Hill

Junior Faculty (on mentoring committee or being the faculty mentor)

Ongoing:

2024 spring~present — **Whitney Edwards**, Ph.D
Assistant Professor
Department of Cell Biology and Physiology
School of Medicine, UNC-CH

2024 Spring~present — **Lu Han**, Ph.D
Assistant Professor
Department of Pediatrics
Medical College of Wisconsin

2024 spring~present — **Dicle Berfin Azizoglu**, Ph.D
Assistant Professor
Department of Cell Biology and Physiology
School of Medicine, UNC-CH

2023 Fall~present — **Haofei Wang**, Ph.D
Assistant Professor
Department of Pathology and Laboratory Medicine
School of Medicine, UNC-CH

2023 Jan~present — **Boa Kim**, Ph.D
Assistant Professor
Department of Pathology and Laboratory Medicine
School of Medicine, UNC-CH

2021 Fall~present — **Jessica L. Bowser**, Ph.D.
Assistant Professor
Department of Pathology and Laboratory Medicine
School of Medicine, UNC-CH

2020 Fall~ present **Christoph Daniel Rau**, PhD
Assistant Professor
Department of Genetics
School of Medicine, UNC-CH

Past/Graduated:

2021 Spring~2024 Spring **Yang Yang**, Ph.D
Research Assistant Professor
Department of Pathology and Laboratory Medicine
School of Medicine, UNC-CH

2020 Spring ~ 2021 Fall **Yuchen Yang**, Ph.D
Research Assistant Professor
Department of Pathology and Laboratory Medicine
School of Medicine, UNC-CH
Now: Associate Professor

2017 Summer~2020 Fall **Mohammad Javed Equbal**, Ph.D.
Assistant Professor
Biomedical Institute for Regenerative Research (BIRR)
Department of Biological and Environmental Sciences
McFarland Science Building #241 | P.O. Box 3011
Texas A&M University−Commerce
Commerce, Texas - 75429, United States
Co-Mentor for AHA Career Development Award

2016 Fall~2019 Fall **Adriana S. Beltran**, PhD
Assistant Professor,
Director of Human Pluripotent Stem Cell Core,
Department of Pharmacology, School of Medicine, UNC-CH
Now: Associate Professor of Genetics

<u>Postdoctoral Fellows</u>

Ongoing:

2024 June~present Mentor, **Yu Zhao**, PhD, UNC-Chapel Hill
2021 July~present Mentor, **Brian Spurlock**, PhD (**LGBTQ+ postdoc**), UNC-Chapel Hill
2019 Nov~present Mentor, **Yifang Xie**, PhD, UNC-Chapel Hill

Past/Graduated:

2019 Aug~2024 Aug Mentor, **Gregory Michael Farber**, PhD, UNC-Chapel Hill
Current: Senior Scientist at Genetch Inc
2022 Oct~2024 May Mentor, **Huitong Shi**, PhD, UNC-Chapel Hill
2019 March~2023 Aug Mentor, **Haofei Wang**, PhD, UNC-Chapel Hill
Current: Assistant Professor at UNC
2017 Aug~2020 April Mentor, **Tiffany Garbutt**, PhD, (**minority postdoc**), UNC-Chapel Hill
Current: Assistant Director for Research Communication and Media
Department of Cell Biology and Physiology, UNC-CH
Assistant Professor of CBP, UNC-CH
Prior positions: Assistant Science Editor then Senior Editor at The Scientist

2013 June~2020 Aug Mentor, **Li Wang**, PhD, UNC-Chapel Hill
Current: Professor at Wuhan University in China

2013 June~2019 Sept Co-Mentor, **Hong Ma**, MD,PhD, (Liu Lab), UNC-Chapel Hill
Current: Professor at Zhejiang University in China
Cardiology Chief at the Zhejiang University Affiliated Second Hospital

2016 Spring~fall Co-Mentor, **Michelle Kimberly Sauls**, PhD, (Conlon Lab), UNC-Chapel Hill
Current: Biotech Company

2015 Fall~2017 Aug Co-Mentor, **Daniel Brown**, PhD, (Liu Lab), UNC-Chapel Hill
Current: Assistant Professor at Western Carolina University

2014 May~2018 Dec Mentor, **Yang Zhou**, PhD, UNC-Chapel Hill
Current: Assistant Professor at University of Alabama at Birmingham

2014 March~2017 Oct Mentor, **Ziqing Liu**, PhD, UNC-Chapel Hill
Current: Assistant Professor at Medical College Wisconsin

2012 Fall~2015 Fall Co-Mentor, **Michelle Villasmil**, PhD, (**minority postdoc**)(Conlon Lab), UNC-CH
Current: Assistant Director, Regulatory Strategy at Cato Research

Graduate Students

Ongoing:

Thesis Mentor:

2024 Summer~ Thesis mentor, MD/PhD student, **Chelsea Li**, Department of Pathology
MSTP & IVB Training Program, UNC-CH

2024 Spring~ Thesis mentor, MD/PhD student, **Rachelle Ambroise** (**minority student**),
Department of Pathology, MSTP & IVB Training Program, UNC-CH

2023 Summer~ Research mentor, PhD student, **Yiran Song**
Department of Biostatistics, School of Public Health, UNC-CH

2022 Summer~ Thesis mentor, MD/PhD student, **Paige Takasugi**, Department of Pathology
MSTP & IVB Training Program, UNC-CH

2021 Summer~ Thesis mentor, PhD student, **Shea Ricketts**
Department of Pathology and Laboratory Medicine, UNC-CH

Thesis Committee:

2023 Spring~ Thesis Committee (Chair), PhD student,
Lucia Gabrielle Grandison (**minority student**)
Frank Conlon Lab, Pathobiology and Translational Science

2022 Fall~ Thesis Committee, PhD student, **Brian Gural**
Christoph Rau Lab, Department of Genetics

2022 Spring~ Thesis Committee (Chair), PhD student, **Danica Dy**
Robert Wirka Lab, Department of Cell Biology and Physiology

Past/Graduated:

Thesis Mentor:

2018 Summer~2022 Spring MD/PhD student, **Benjamin Keepers**, Department of Pathology
MSTP & IVB Training Program, UNC-Chapel Hill
Current: PSTP at Yale University

2015 Winter~2020 Spring PhD student, **Haley Vaseghi**, Department of Pathology
IVB Training Program, UNC-Chapel Hill

Thesis Committee:

2022 Spring~2024 Fall Thesis Committee,PhD student, **Michelle Fiamingo**
Mehdi Hazari Lab, Curriculum in Toxicology, UNC-CH Joint with EPA(.gov)

2018 Spring~2023 Fall Thesis Committee, PhD student, **Matthew Combs**
Joan Taylor Lab, Department of Pathology

2023 Spring~2023 Fall	Thesis Committee (Chair),PhD student, **Jennifer Nwako** (**minority student**) Frank Conlon Lab, Department of Cell Biology and Physiology
2022 Fall~2023 Fall	Thesis Committee, PhD student, **Dana Hammouri** Tamer Mohamed Lab, University of Louisville
2021 Spring~2023 Fall	Thesis Committee, PhD student, **Peyton Sandroni** Brian Jensen Lab, Department of Pharmacology
2019 Fall~2023 Spring	Thesis Committee, PhD student, **Cherise Glodowski** Charles Perou Lab, Department of Pathology
2020 Spring~2023 Spring	Thesis Committee, PhD student, **Sonja Mihailovic** Jeremy Purvis Lab, Department of Genetics
2020 Fall~2023 Spring	Thesis Committee, PhD student, **Jacqueline Larouche** Carlos Aguilar Lab, University of Michigan, Ann Arbor
2023 Spring	Thesis examiner ad hoc, PhD student, **Julia Plakhotnik** Jason Maynes Lab, Hospital for Sick Children, University of Toronto
2020 Fall~2023 Spring	Thesis Committee, PhD student, **Natalie Smith** (**minority student**) Juliane Nguyen Lab, School of Pharmacy
2019 Fall~2022 Spring	Thesis Committee, PhD student, **Meng Zou** Chris Mack Lab, Department of Pathology
2020 Fall~2022 Fall	Thesis Committee, PhD student, **Emily Bonacquisti** (**minority student**) Juliane Nguyen Lab, School of Pharmacy
2021 Spring~2022	Thesis Committee, PhD student, **Yuriko Harigaya** Yuchao Jiang Lab, Bioinformatics and Computational Biology Program
2018 Spring~2021	Thesis Committee, PhD student, **Kandace Thomas** (**minority student**) Michael Bressan Lab, Department of Cell Biology and Physiology
2018 Fall~2021 Spring	Thesis Committee, PhD student, **Wulin Jiang** Shaw D. Hingtgen Lab, School of Pharmacy
2016 Fall~2020 Fall	Thesis Committee, PhD student, **Natalie R.Nielsen**, Kathleen Caron Lab, Department of Cell Biology and Physiology
2017 Summer~2020 Spring	Thesis Committee, PhD student, **Qiang Zhu** Joan Taylor Lab, Department of Pathology
2015 Fall~2018 Summer	Thesis Committee,PhD student, **Kimberly Stratford** (**minority student**) Mehdi Hazari Lab, Curriculum in Toxicology, UNC-CH Joint with EPA(.gov)
2014 Fall~2017 Spring	Thesis Committee, PhD student, **Caralynn M Wilczewski**, Frank Conlon Lab, Department of Genetics, UNC-Chapel Hill
2014 Winter~2016	Thesis Committee, PhD student, **Pamela Lockyer**, Cam Patterson Lab, Department of Pathology, UNC-Chapel Hill
2013 Winter~2015 Fall	Thesis Committee (Chair), PhD student, **Kerry Dorr**, Frank Conlon Lab, Department of Genetics, UNC-Chapel Hill

Visiting MD/PhD Student Mentor:

2022 Summer~ 2023	**Ziyang Yang**, Southern Medical University, China
2021 Fall~2022 Fall	**Qiaozi Wang**, Zhongshan Hospital, Fudan University, China
2018 Fall~2019 Fall	**Jun Xu**, Fuwai Hospital, Peking Union Medical College, China *Current: Resident at Fuwai Hospital*
2018 Fall~2017 Spring	**Peisen Huang**, Fuwai Hospital, Peking Union Medical College, China *Current: Resident at Zhongshan Hospital*

MD Research Mentor:

2022 Spring~ present	Research Mentor, MD student, **Grace E. Fuller**, UNC-Chapel Hill
2015 Summer~2017	Research Mentor, MD student, **Yingao Zhang**, UNC-Chapel Hill
2013 Fall~2017 Spring	Research Mentor, MD student, **Olivia Chen**, UNC-Chapel Hill

Current: Resident at University of Michigan, Ann Arbor

Undergraduate Students (Bio 295, 395 and/or honor thesis)

Ongoing:

2024 Fall~	Research Mentor, **Shay Rooney**, UNC-Chapel Hill
2024 Fall~	Research Mentor, **Alicia Lin**, UNC-Chapel Hill
2024 Fall~	AHA-HBCU Mentor, **Taya Davis** (**minority student**), NC Central University
2023 Fall~2024	Research Mentor, **Dhruv Garg**, UNC-Chapel Hill
2023 Fall~	Research Mentor, **Michael Wang**, UNC-Chapel Hill
2023 Fall~	Research Mentor, **Celine Keles**, UNC-Chapel Hill
2023 Summer~	Research Mentor, **James Rock Hua**, Davison College
2022 Spring~	Research Mentor, **Xingyan(Cindy) Liu**, UNC-Chapel Hill
2021 Fall~2023	Research Mentor, **Ramya Meenakshi Nishtala**, UNC-Chapel Hill
2021 Spring~2023	Research Mentor, **Christopher Tri Nguyen**, UNC-Chapel Hill

Past/Graduated:

2023 Fall~2024 Spring	AHA-HBCU Mentor, **Skye Franklin** (**minority student**), NC Central University
2022 Fall~2023 Spring	AHA-HBCU Mentor, **Ta'Leah N. Bacote** (**minority student**), NC Central University
2021 Fall~2023 Spring	Research Mentor, **Marazzano Colon** (**minority student**), UNC-Chapel Hill *Post-graduation: PhD student at University of Washington*
2021 Summer~2023	Research Mentor, **Elaine Tsui**, UNC-Chapel Hill
2019 Fall~2023 Spring	Research Mentor, **Yunzhe (Bella) Qian** (honor thesis), UNC-Chapel Hill *Post-graduation: Biostat student at Harvard University*
2020 Fall~2023 Spring	Research Mentor, **Michelle Dixit**, UNC-Chapel Hill
2021 Fall~2022 Spring	AHA-HBCU Mentor, **Chisom Ezenwenyi** (**minority student**), NC Central University
2018 Spring~2020 Spring	Research Mentor, **Ranan Phookan**, UNC-Chapel Hill *Post-graduation: MSTP student at Medical University of South Carolina*
2018 Spring~2020 Spring	Research Mentor, **Yangxi Xu**, UNC-Chapel Hill
2018 Spring~2020 Fall	Research Mentor, **Sam Michael Shut**, UNC-Chapel Hill *Post-graduation: MPH program, UNC Gillings School of Global Public Health*
2019 Fall~202 Spring	Research Mentor, **Meixuan (Mei) Zhu**, UNC-Chapel Hill
2018 Spring~2019 Spring	Research Mentor, **Joy Stouffer**, UNC-Chapel Hill *Post-graduation: MD Student (Class of 2024) at Virginia Commonwealth University*
2016 Fall~2022 Spring	Research Mentor, **David J. Near**, UNC-Chapel Hill *Post-graduation: Clinical Scientist at Duke University*
2017 Spring~2018	Research Mentor, **Karan Ravi**, UNC-Chapel Hill
2015 Fall~2017 Spring	Research Mentor, **J. Blake Wall** (honor thesis), UNC-Chapel Hill *Post-graduation: MD student (Class of 2021) at New York Medical College*
2015 Winter~2016 Spring	Research Mentor, **Steve Mow**, UNC-Chapel Hill
2014 Fall~2017 Spring	Research Mentor, **Sahar Alimohamadi** (honor thesis), UNC-Chapel Hill *Post-graduation: MD student (Class of 2021) at Medical College of Georgia* *Vascular Surgeon Residency at U of Pittsburgh*
2014 Fall~2016 Spring	Research Mentor, **Michael Zheng** (honor thesis), UNC-Chapel Hill *Post-graduation: research associate at Victoria Bautch Lab*
2014 Summer	Research Mentor, **Alricka Jackson**, UNC-Chapel Hill **(minority student)**
2013 Fall	Research Mentor, **Jordan Meaza**, UNC-Chapel Hill **(minority student)**
2012 Fall~2013 Spring	Research Mentor, **Kishan Patel**, UNC-Chapel Hill *Post-graduation: specialist at Lenovo*
2012 Fall~2014	Research Mentor, **Chuner Guo** (honor thesis), UNC-Chapel Hill *Post-graduation: MD/PhD student at Washington University at St Louis;* *Residency at Stanford University*

Teaching and Mentoring at Gladstone Institute, UCSF

2011 Spring~2012 Co-Mentor, PhD student **Nicole Stone (minority student)**, UCSF
2011 Summer Lecturer, National Student Leadership Conference, NSLC
July 2011 Lecturer, Science for Administrators, Gladstone Institute
2010 Fall~2012 Co-Mentor, PhD student **Emily Berry (minority student)**, UCSF
2010 Summer Section Instructor, National Student Leadership Conference, NSLC
Jan.2010~July 2010 Co-Mentor, Master student **Sabine den Hartogh** Internship at Gladstone Institute
Oct. 2009 Lecturer, Stem cell lecture series, Gladstone outreach program
2009 Summer Section Instructor, National Student Leadership Conference, NSLC
March 2009 Lecturer, Heart development and stem cell, Gladstone outreach program
2008 Summer Section Instructor, National Student Leadership Conference, NSLC

Teaching at University of Michigan-Ann Arbor
Sept. 2002~Dec. 2002 TA, Molecular Biology (MCDB 427), University of Michigan-Ann Arbor
Jan. 2002~April 2002 TA, Genetics (Bio 305), University of Michigan-Ann Arbor
Sept. 2001~Dec. 2001 TA, Introductory Biology (Bio 162), University of Michigan-Ann Arbor

SERVICE AND ACTIVITIES

UNC-Chapel Hill
2024-present Internal Advisory Committee, UNC Microscopy Services Laboratory (MSL)
2024 Internal Review committee, The Searle Scholars Program
2024-present SOM Dean Advisory Committee
2024-present Co-Director, McAllister Heart Institute, UNC-CH
2024 Review committee, Yang Biomedical Scholars Awards
2023 Review Committee, The Faculty Award for Excellence in Doctoral Mentoring
2021 Invited Panelist/Inaugural Speaker, UNC Global Perspective in Biomedicine
2021 Search Committee for the new Chair of Department of Biochemistry and Biophysics
2021-present Department of Pathology (DPLM) Faculty Mentoring Committee
2021-present Integrative Vascular Biology (IVB) Training Program Executive Committee
2021-present UNC Physician Scientist Training Program (PSTP) Review Committee
2020 Review Committee of UNC-CH Policy on Use of Human Embryonic Stem Cells in Research, Research Integrity, Ethics and Education, Office of the Vice Chancellor for Research
2020 Research Integrity and Misconduct Committee, UNC SOM
2019 Search Committee for Department of Pathology Tenure-track Assistant Professor
2019 Chair, Search Committee for UNC Animal Surgery Core Director
2019-present SOM Bridge and Boost Funding Review Committee
2018-2024 Associate Director, McAllister Heart Institute
2018 Co-Chair, MHI Inaugural Faculty Retreat Organizing Committee
2018-2023 Cell Biology and Physiology (CBP) Preliminary Examination Committee
2018-2022 Faculty Mentor, MD-PhD Woman in Science
2018-present Faculty Recruiter, UNC MD-PhD Program
2018 UNC MSTP NIH review on-site visit committee
2017 Faculty Judge, 50th Annual Medical Student Research Day
2017 Search Committee for Research Assistant Professor in Department of Pathology
2017 Search Committee for the new chair of Department of Genetics
2017 IVB Selection Committee
2017-2021 Faculty Judge, Woman in Science (WinS) Symposium
2016-present Faculty Director, Human Pluripotent Stem Cell Core
2015-2017 McAllister Heart Institute Executive Committee
2015 Chair, Pathology Preliminary Examination Committee

collecting, designing, grading exams and organizing meeting to discuss

2014-2024 Chair of Animal Core Directors, UNC Core Facility Advocacy Committee (CFAC)
overseeing 15 animal cores serving locally, nationally and internationally

2014-2015 Search Committee for CBP/MHI Faculty
2014-2015 Search Committee for NCSU/UNC Regenerative Medicine Faculty
2014,2015 Graduate Program Education Committee, Dept of Pathology and Laboratory Medicine
2014-2016 Graduate Program Executive Committee, Dept of Pathology and Laboratory Medicine
2014-2018 School of Medicine Assistant Professor Advisory Committee (APAC)
2014-2024 Research Advisory Committee (RAC), Dept of Pathology and Laboratory Medicine
2014-2015 IVB/MHI Annual Symposium Organizing Committee
2013-2014 Pathology Preliminary Examination Committee
2013 Pathology Departmental Retreat Organizing Committee
2013-2015 Co-Chair, MHI Seminar Series Organizing Committee
2013-2023 Faculty Speaker/Interviewer, BBSP Graduate Student Recruitment
2013 Faculty Judge, Annual University Research Day Scientific Sessions
2012-2022 Human Pluripotent Stem Cell Core Faculty Mentoring Committee

Regional, National and International

2025-2027 AHA **BCVS Leadership Committee** (*term*:7/1/2025-6/30/2027)
2025-2027 **Chair,** AHA BCVS Membership Committee (*term*:7/1/2025-6/30/2027)
2024-2026 AHA **BCVS Specialty Conference Program Committee** (*term*:7/1/2024-6/30/2026)
2023-present **Chair, AHA BCVS-FAHA Review Committee**
2023-present Organization Committee, AHA BCVS Scientific Session
2023-present Cardiovascular Gene & Cell Therapy Committee,
American Society of Gene & Cell Therapy (ASGCT)
2023 AHA BCVS Early Career Webinar "Publishing in High-Impact Journals: Perspectives from Journal Editors and Authors", Panel Member
2023-present **President, International Chinese Stem Cell Foundation (ICSCF)**
2022 American Society of Gene and Cell Therapy, Symposium Panelist
2022 Global Talents in Science International Symposium, Session Co-Chair
2022-2024 AHA BCVS Specialty Conference Program Committee (*term*:7/1/2022-6/30/2024)
2022-2024 Chair Elect, AHA BCVS Membership & Communications Committee (*term*:7/1/2022-6/30/2024)
2022 ACS-BCVS Annual Symposium, Program Co-Chair
2021-present AHA-HBCU (Historically Black Colleges and Universities) Scholar Mentor
2021 CHC Annual Conference, Session Co-chair
2021-present ACRE/BCVS Symposium Review Committee, Session Co-Chair
2020-present Program Chair, Board of Directors
ACRE (Academy of Cardiovascular Research Excellence), ACS
2020 ISSCR/COVID-19 Global Network Weekly Meetings Co-chair
2020-present AHA FAHA Review Committee
2020-2022 AHA BCVS Membership & Communications Committee (*term*:7/1/2020-6/30/2022)
2020 AHA BCVS Meeting, Chair of Session "Molecular and Cellular Therapy for Heart Failure"
2020 ISSCR Annual Conference, Chair of Session "Cellular Identity: Cardiac and Muscle"
2018-present AHA BCVS Abstract Review Committee
2017-present Abstract Review Committee, American Heart Association Annual Scientific Sessions
2017 Co-Moderator/Chair for "Heart Regeneration" session & Abstract Review Committee &"Woman in Science" Panelist
Weinstein Cardiovascular Research Conference

2016-present	Abstract Review Committee, International Society of Stem Cell Research (ISSCR) Annual Meeting	
2016	International Conference and Exhibition on Cardiology and Cardiovascular Health Research	Scientific Committee Member
2016	Weinstein Cardiovascular Research Conference "Stem Cell and Bioengineering" platform section	Organizing Committee Session Chair
2015-present	Carolina Chromatin Consortium	Faculty Member
2014-present	RTP Cardiac Regeneration Research Group	Faculty Member
2013-present	North Carolina Regenerative Medicine Program	Faculty Member

Journal reviewer:

Advanced Science, ACS Nano, Acta Pharmaceutica Sinica B (APSB), American Journal of Translational Research (AJTR), Biomaterials, Biomedicine, Biochemistry and Cell Biology, Biomedicine &Pharmacotherapy, BMC Biotechnology, BMC Medical Genomics, British Journal of Medicine and Medical Research (BJMMR), Canadian Journal of Cardiology, Cardiovascular Research, Cell Cycle, Clinical Medicine Insights: Endocrinology and Diabetes, Cell Reports, Cell Regeneration, Cell and Tissue Research, Cell Stem Cell, Cell Transplantation, Circulation, Circulation Research, Clinical and Translational Medicine, Current Opinions in Genetics and Development (COGEDE), Development, Development Cell, EBioMedicine, eLife, European Heart Journal, Experimental Biology and Medicine, Gene, Human Molecular Genetics, Hypertension (AHA journal), International Journal of Molecular Sciences (IJMS), iScience, Journal of Cardiovascular Development and Disease (JCDD), Journal of Cardiovascular Translational Research (JCTR), Journal of Clinical Investigation (JCI), JCI Insights, Journal of Cellular and Molecular Medicine (JCMM), *Journal of Stem Cell and Transplantation Biology (JSTB)*, *Journal of Visualized Experiments (JoVE), Nano Letters, Nature, Nature Biomedical Engineering, Nature Communication, Nature Chemical Biology, Nature Cardiovascular Research, Nature Medicine, Nature Metabolism, Nature Protocols, Plos One*, *Proceedings of the National Academy of Sciences (PNAS), Protein & Cell, Science, Stem Cells International (SCI), Scientific Reports ,Theranostics, etc.*

Frequent reviewer for*: Cell Stem Cell, Dev Cell, Cell Reports, Circulation, Circulation Research, Development, JCI, JMCC*

Named as "**Best Reviewers**" by Cell Press, highlighted in *Cell 179(1), 40-45*, Sept 2019

Advisory/Editorial Board:

Cell Reports (2024-present)
Journal of Molecular and Cellular Cardiology (2023-present)
Life Medicine (2022-present)
Cell Regeneration (2021-present)
Cell Stem Cell (2020-2023)
Cardiology Discovery (2020-present)
Development (2019-present)
Frontiers (2019-present)
Scientific Reports (2018-2022)

Invited National and International Grant Reviewer:
(international invitations were highlighted in blue)

1. Feb 2014 NCSU Center for Comparative Medicine and Translational Research Grant
2. March 2015 Italian Ministry of Health (MoH) Research Project (RP) Grant

3. Dec 2015 US Department of Defense (DoD) Congressionally Directed Medical Research Programs (CDMRP),Cardiovascular Health Panel, FY 15 Focused Program Award
4. Feb 2016 *Ad hoc* reviewer, NIH/NHLBI, CDD Study Section (Declined due to COI)
5. April 2016 Research Grants Council (RGC) of Hong Kong, External Reviewer, General Research Fund (GRF)
6. May 2016 French National Research Agency (ANR), Scientific Evaluation Committee "Genetics, genomics, gene expression and regulatory RNAs", PRC - Projets de recherche collaborative
7. Sep 2016 US Department of Defense (DoD) Congressionally Directed Medical Research Programs (CDMRP), Peer Reviewed Medical Research (PRMRP), Discovery Award Heart Disease
8. Nov 2016 Italian Ministry of Health (MoH) Research Project (RP) Grant, Scientific Expert Reviewer for CDD, CCHF, MIM, ESTA
9. March 2017 Carolina Medical Student Research Program, Basic Science Study Section
10. March 2017 Research Grants Council (RGC) of Hong Kong, External Reviewer, General Research Fund (GRF)
11. April 2017 American Heart Association (AHA), Cardiac Bio BSc3 Committee, Peer Reviewer
12. May 2017 Integrative Vascular Biology Training Grant, Faculty Reviewer
13. July 2017 Italian Medicines Agency (AIFA), Clinical Research Grant, Scientific Expert Reviewer
14. Aug 2017 US Department of Defense (DoD) Congressionally Directed Medical Research Programs (CDMRP), Peer Reviewed Medical Research (PRMRP), Heart Disease
15. Sep 2017 European Research Council, Consolidator Grant 2017 Call, Remote Reviewer
16. Dec 2017 US Department of Defense (DoD) Congressionally Directed Medical Research Programs (CDMRP), Panel Member for Investigator-Initiated Research Award (HD panel)
17. Jan 2018 AHA Cardiac Bio Bsc2 Committee, Peer Reviewer
18. March 2018 Research Grants Council (RGC) of Hong Kong, External Reviewer, General Research Fund (GRF)
19. Dec 2018 American Heart Association (AHA), Career Development Award, Peer Reviewer Basic Cardiac Science (Cardiac Biology BSc & Cardiovascular Development BSc)
20. Feb 2019 *Ad hoc* reviewer, NIH/NHLBI, CDD Study Section
21. March 2019 *Ad hoc* reviewer, NIH/NHLBI, PPG panel
22. June 2019 *Ad hoc* reviewer, UNC SOM Bridge/Boost Funding
23. June 2019 *Ad hoc* reviewer, NIH/NHLBI, CCHF Study Section
24. Oct 2019 *Ad hoc* reviewer, NIH/NHLBI, CCHF Study Section
25. Feb 2020 American Heart Association (AHA), Career Development Award, Peer Reviewer Basic Cardiac Science (Cardiac Biology BSc & Cardiovascular Development BSc)
26. March 2020 *Ad hoc* reviewer, NIH/NHLBI, CCHF Study Section
27. April 2020 Research Grants Council (RGC) of Hong Kong, External Reviewer, General Research Fund (GRF)
28. May 2020 *Ad hoc* reviewer, NIH/NHLBI, PPG panel
29. June 2020 *Ad hoc* reviewer, NIH The Human BioMolecular Atlas Program (huBMAP) U54 panel
30. June 2020 *Ad hoc* reviewer, NIH/NHLBI, CCHF Study Section
31. July 2020 US Department of Defense (DoD) Congressionally Directed Medical Research Programs (CDMRP), Peer Reviewed Medical Research (PRMRP), Congenital Heart Disease-Discovery Award (DIS-CHD) Review Panel

July 1, 2020-June 30, 2024
Member of NIH **CCHF** (Cardiac Contractility, Hypertrophy, and Failure) Study Section
then transferred to **MPPA** study section (term: June 2024), served as the **Co-Chair** throughout the term

32. Jan 2021 *Ad hoc* reviewer, NIH/NHLBI, P01 panel
33. Feb 2021 Co-chair, NIH/NHLBI MPPA Study Section

34. May 2021 American Heart Association (AHA), Career Development Award, Peer Reviewer Basic Cardiac Science (Cardiac Biology BSc & Cardiovascular Development BSc)
35. June 2021 Co-chair, NIH/NHLBI MPPA Study Section
36. Oct 2021 Co-chair, NIH/NHLBI MPPA Study Section
37. Nov 2021 *Ad hoc* reviewer, Additional Ventures SVRF (Single Ventricle Research Fund) Award
38. May 2022 AHA Established Investigator Award, Reviewer
39. June 2022 Invited Reviewer, Advancing a Healthier Wisconsin Endowment Grants
40. June 2022 Co-chair, NIH/NHLBI MPPA Study Section
41. Aug 2022 *Ad hoc* reviewer, NIH/NHLBI, PPG panel
42. Sept 2022 *Ad hoc* reviewer, NIH/NHLBI, PPG panel
43. Oct 2022 International peer reviewer, New Cornerstone Investigator Program, China
44. Nov 2022 Co-chair, NIH/NHLBI MPPA Study Section
45. Dec 2022 Invited reviewer, CIRM (California Institute for Regenerative Medicine) Scholarship
46. Jan 2023 Invited international reviewer, Stem Cell Network, Canada
47. Feb 2023 American Heart Association (AHA), Career Development Award, Peer Reviewer
48. Feb 2023 Co-chair, NIH/NHLBI MPPA Study Section
49. March 2023 *Ad hoc* reviewer, NHLBI Loan Repayment Program (LRP)
50. June 2023 International expert reviewer, CORE program, Luxembourg National Research Fund
51. July 2023 International expert reviewer, Swiss National Science Foundation
52. Aug 2023 International peer reviewer, New Cornerstone Investigator Program, China
53. Oct 2023 *Ad hoc* reviewer, NIH/NHLBI, PPG panel
54. Oct 2023 Co-chair, NIH/NHLBI MPPA Study Section
55. Nov 2023 International expert reviewer, UK Research and Innovation (UKRI)
56. Dec 2023 Invited reviewer, CIRM (California Institute for Regenerative Medicine) Scholarship
57. Feb 2024 Co-chair, NIH/NHLBI MPPA Study Section
58. March 2024 AHA Established Investigator Award, Reviewer
59. June 2024 International expert reviewer, Swiss National Science Foundation
60. July 2024 Co-chair, NIH/NHLBI MPPA Study Section
61. July 2024 *Ad hoc* reviewer, NIH/NHLBI R35 OIA
62. Sept 2024 International expert reviewer, ZonMw (the Netherlands Organization for Health Research and Development) Open Competition Programme Round 2024
63. Nov 2024 AHA Established Investigator Award, LOI, Reviewer
64. Nov 2024 International expert reviewer, UK Research and Innovation (UKRI)
65. Dec 2024 Invited reviewer, CIRM (California Institute for Regenerative Medicine) Scholarship
66. Jan 2025 Invited international reviewer, Stem Cell Network, Canada
67. Feb 2025 AHA Established Investigator Award, Reviewer
68. March 2025 NIH/NHLBI Catalyze Award (R61/R33), Reviewer

GRANTS

Ongoing

Emerging Investigator Award (1R35HL155656), NIH/NHLBI
Role: PI (Qian) $6,500,000
1/13/2021-11/30/2027
“Altering Cardiac Cell Fate for Heart Repair”

Established Investigator Award (20EIA35310348), American Heart Association
Role: PI (Qian) $400,000
1/1/2021-12/31/2025
“Next Generation of Direct Cardiac Reprogramming”

Research Project Grant Program (R01HL164933), NIH/NHLBI
Role: Co-I (Liu) $1,500,000
04/01/2023-03/31/2027
“Macrophage functional dynamics in adult heart regeneration”

Research Project Grant Program (R01HL174774), NIH/NHLBI
Role: Co-I (Liu) $1,700,000
06/15/2024-05/31/2028
“Role of RBP in programming and reprogramming of cardiac fibroblasts”

Research Project Grant Program (R01HL164933), NIH/NHLBI (receiving 2% priority score)
Role: Co-I (Liu) $1,900,000
01/01/2025-11/30/2028
“Carm1-mediated transcriptional and posttranscriptional regulation of cardiomyocyte maturation”

Completed

Research Project Grant Program (1R01HL139976), NIH/NHLBI
Role: co-investigator (PI: Liu) $1,400,000
07/15/2019 – 06/30/2023
“The role of RNA-binding protein Lin28a in hypertrophic cardiomyopathy”

Yang Family Biomedical Scholarship, Yang Family Society of Biomedical Scholars
Role: PI (Qian) $25,000
1/1/2020-12/31/2024
“Modeling cardiomyocyte cell fate acquisition in human cells”

EII (Eshelman Institute for Innovation) Innovative Award, UNC-Chapel Hill
Role: Co-PI (Qian, Nguyen) $200,000
6/1/2020-5/30/2022
“Highly Loaded Exosomes as Cell-free Therapeutics for Tissue Regeneration”

Transformational Project Award (18TPA34180058), American Heart Association
Role: PI (Qian) $300,000
7/1/2018-6/30/2021
“Single Cell Transcriptomics to Reconstruct Trajectory of Human Cardiac Reprogramming”

Research Project Grant Program (1R01HL144551), NIH/NHLBI
Role: PI (Qian) $1,200,000
01/01/2019-12/31/2022 (*Note: Relinquished on 1/1/2021 due to acceptance of R35*)
“Understanding Human Cardiomyocyte Fate Acquisition”

Research Project Grant Program (1R01HL128331), NIH/NHLBI
Role: PI (Qian) $1,250,000
04/15/2016-03/31/2021 (*Note: Relinquished on 1/1/2021 due to acceptance of R35*)
“Molecular mechanisms of direct cardiac reprogramming”

Research Supplements to Promote Diversity in Health-Related Research (1R01HL128331-03S1), NIH/NHLBI
Role: PI (Qian) $300,000
04/15/2018-04/31/2020
Minority Supplement to R01HL128331 "Molecular Mechanisms of Direct Cardiac Reprogramming"

Research Project Grant Program (1R01HD089275), NIH/NICHD
Role: co-I (PIs: Conlon, Cristea) $ 1,900,000
09/01/2017-6/30/2020
"Cardiac interaction networks as determinants of transcriptional specificity"

Jefferson Pilot Award, School of Medicine, UNC-Chapel Hill
Role: PI (Qian) $20,000
11/1/2016-10/30/2020
"Modeling cardiomyocyte cell fate acquisition in human cells"

McAllister Young Investigator Award, MHI, UNC-Chapel Hill
Role: PI (Qian) $50,000
7/1/2016-6/30/2018
"Multidisciplinary approaches to study molecular cascades underlying direct cardiac reprogramming"

Ellison New Scholar in Aging (AG-NS-1064-13), The Ellison Medical Foundation
Role: PI (Qian) $400,000
12/31/2013-12/30/2017
"Reprogramming fibroblasts into cardiomyocyte-like cells in the aging heart"

UNC MHI/Cardiology 20K Grant, UNC MHI and Department of Cardiology
Role: PI (Qian, Liu) $20,000
1/1/2014-12/31/2017
"CRISPR-based gene editing system for cardiovascular disease modeling using human pluripotent stem cells"

Comparative Medicine Institute Functional Tissue Engineering Seed Grant
Role: Lead PI (Qian, Cheng) $10,000
1/1/2017-12/31/2017
"Cardiac reprogramming using target-specific nanoparticles"

Scientist Development Grant (13SDG17060010), American Heart Association
Role: PI (Qian) $300,000
7/1/2013-6/30/2017
"The role of cell proliferation and p53 in cardiac fibroblast reprogramming"

UNC URC Publication Grant, University Research Council
Role: PI (Qian) $2,000
5/1/2016-4/30/2017
"Bmi1 is the key epigenetic barrier to direct cardiac reprogramming"

UNC Junior Faculty Award, UNC Provost Office
Role: PI $7,500
1/1/2014-12/31/2014
"GMT-mediated transdifferentiation in chronic heart failure"

NCBC Institutional Development Grant (Equipment Grant)
Role: co-I (Magness) $200,000
4/15/2013-3/31/2014
“Fluidigm C1 platform for single cell analyses”

Trainee Phase:

California Institute for Regenerative Medicine (CIRM) Scholarship
TG2-01160; Role: PI $77,000
8/1/2011-7/31/2012
“miR-24 based stem cell therapy in mouse myocardial infarction model”

California Institute for Regenerative Medicine (CIRM) Scholarship
TG2-01160; Role: PI $154,000
8/1/2009-7/31/2011
“Promoting cell survival of stem cell-derived cardiomyocytes”

American Heart Association Midwest Affiliate Pre-doctoral Fellowship
0515442Z; Role: PI $25,000
7/1/2005-6/30/2006
“Mechanisms of nmr regulation on cardiac morphogenesis and physiology”

American Heart Association Midwest Affiliate Pre-doctoral Fellowship
0315208Z; Role: PI $50,000
7/1/2003-6/30/2005
“Role of neuromancer/Tbx20 in Drosophila heart development”

Mentored/Sponsored Fellowships/Awards

Rachelle Ambroise (MD/PhD Student 2024-present)

2024-2026 NIH T32-UNC IVB Training Program Pre-doctoral Fellowship

Brian Spurlock (Postdoc Fellow 2019-present)

2024-2027 NHLBI Ruth L. Kirschstein Postdoctoral Individual National Research Service Award F32

2024-2026 American Heart Association Postdoctoral Fellowship

(Relinquished after 6 months’ funding due to acceptance of F32)

Paige Takasugi (MD/PhD Student 2022-present)

2024 Katherine Pryzwansky Young Investigator Award

2022-2024 NIH T32-UNC IVB Training Program Pre-doctoral Fellowship

Grace Fuller (MD Student 2021-2025)

2022 Carolina Medical Student Research Program Fellowship

Shea Ricketts (PhD Student 2021-present)

2024	American Society for Investigative Pathology (ASIP) Annual Meeting
	Gall Excellence in Cardiovascular Research, Trainee Scholar Award
2023-2025	American Heart Association Pre-doctoral Fellowship
2021-2023	NIH T32-UNC IVB Training Program Pre-doctoral Fellowship

Yifang Xie (Postdoc Fellow 2019-present)

2024-2029	NIH/NHLBI K99/R00 Path to Independence Award
2023-2025	American Heart Association Postdoctoral Fellowship
2022	Poster Award, ACS-BCVS 2022, AHA

Haofei Wang (Postdoc Fellow 2019-2023, RAP 2023- present)

2024	Louis N. and Arnold M. Katz Basic Science Research Prize for Early Career Investigators Finalist, AHA
2023	ISHR-NAS Young Investigator Competition Awards Finalist
2023-2028	(declined due to the promotion to Research Assistant Professor) NIH/NHLBI K99/R00 Path to Independence Award
2023-2026	American Heart Association Career Development Award
2022	BCVS 2022 New Investigator Travel Award, AHA
2022	Outstanding Young Investigators Award, ACS 2022, AHA
2021-2023	American Heart Association Postdoctoral Fellowship

Greg Farber (Postdoc Fellow 2019-present)

2021-2023	American Heart Association Postdoctoral Fellowship

Bella Qian (Undergraduate Student 2019-2022)

2022	Summer Undergraduate Research Fellowship (SURF)
2021	Honor Thesis Research Award

Benjamin Keepers (MD/PhD Student 2018-2022)

2022	Katherine Pryzwansky Young Investigator Award
2021	Winner of *Art in Science*, UNC SOM

2020-2024 NIH MSTP F30 Fellowship

2020 DPLM Trainee Choice Award

2018-2020 NIH T32-UNC IVB Training Program Pre-doctoral Fellowship

Yang Zhou (Postdoc Fellow 2014-2018)

2018-2019 Postdoctoral Award for Research Excellence

Now: Assistant Professor at UAB

2020 AHA BCVS Outstanding Early Investigator Award Finalist

2021 AHA Melvin L. Marcus Early Career Investigator Award Finalist

Tiffany Garbutt (Postdoc Fellow 2017-2020)

2019 Excellence in Research Presentation Award

2018-2021 NHLBI Diversity Supplement Award

Now: Assistant Director for Research Communication and Media

Department of Cell Biology and Physiology, UNC-CH

Assistant Professor of CBP, UNC-CH

Prior positions: Assistant Science Editor then Senior Editor at The Scientist

Li Wang (Postdoc Fellow 2013-2020, delayed start due to COVID-19 pandemics)

2018-2021 American Heart Association Career Development Award

Now: Professor at Wuhan University

Haley Vaseghi (PhD Student 2015-2020)

2018-2020 American Heart Association Pre-doctoral Fellowship

2018 Pryzwansky Young Investigator Award

2015-2018 NIH T32-UNC IVB Training Program Pre- doctoral Fellowship

2016 RTP-DMDG Winter Symposium Travel Award

2015-2016 Bill Sykes Scholarship

Yingao Zhao (MD Student 2015-2017)

2016 Carolina Medical Student Research Program Fellowship

Olivia Chen (MD Student 2013-2017)

2014 Carolina Medical Student Research Program Fellowship