

Stanford



Xulei Qin

Instructor, Cardiovascular Institute

Bio

ACADEMIC APPOINTMENTS

- Instructor, Cardiovascular Institute

HONORS AND AWARDS

- Scientist Development Grant (SDG) Award, American Heart Association: Association-wide (2017-2019)
- Outstanding Reviewer Award, Physics in Medicine and Biology (2018)
- BioADD Research Award, Stanford University (2017)
- Research Excellence for Heart Disease, American Heart Association Great Bay Area (2017)
- Vevo Travel Award, Fujifilm Visualsonics (2017)
- Progenitor Cell Biology Consortium (PCBC) Hub Site Research Award, National Institutes of Health: National Heart, Lung, and Blood Institute (2016-2017)
- Translational Research and Applied Medicine (TRAM) Fellow Award, Stanford University (2016-2017)
- Stanford Cardiovascular Institute Travel Award, Stanford University (2016)
- Outstanding Doctoral Dissertation Award, Xi'an Jiaotong University (2011)
- National Scholarship Award, Ministry of Education of China (2002)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member, American Heart Association (2015 - present)
- Member, IEEE Engineering in Medicine and Biology Society (2012 - present)

PROFESSIONAL EDUCATION

- Postdoctoral Fellow, Stanford University , Molecular Imaging and Regenerative Therapy (2016)
- Postdoctoral Fellow, Emory University , Cardiac Imaging (2014)
- Ph.D., Xi'an Jiaotong University , Biophysics (2010)
- B.E., Xi'an Jiaotong University , Biomedical Engineering (2005)

PATENTS

- Baowei Fei, Xulei Qin. "United States Patent 9142030 Systems, methods and computer readable storage media storing instructions for automatically segmenting images of a region of interest", Emory University

Publications

PUBLICATIONS

- **Molecular imaging of cardiac regenerative medicine** *Current Opinion in Biomedical Engineering*
Qin, X., Han, D., Wu, J. C.
2019; 9: 66-73
- **An in Vivo miRNA Delivery System for Restoring Infarcted Myocardium.** *ACS nano*
Yang, H., Qin, X., Wang, H., Zhao, X., Liu, Y., Wo, H. T., Liu, C., Nishiga, M., Chen, H., Ge, J., Sayed, N., Abilez, O. J., Ding, et al
2019
- **Radiolabeled Duramycin: Promising Translational Imaging of Myocardial Apoptosis.** *JACC. Cardiovascular imaging*
Wu, J. C., Qin, X., Neofytou, E.
2018
- **Prolonged survival of transplanted stem cells after ischaemic injury via the slow release of pro-survival peptides from a collagen matrix.** *Nature biomedical engineering*
Lee, A. S., Inayathullah, M., Lijkwan, M. A., Zhao, X., Sun, W., Park, S., Hong, W. X., Parekh, M. B., Malkovskiy, A. V., Lau, E., Qin, X., Pothineni, V. R., Sanchez-Freire, et al
2018; 2 (2): 104–13
- **Comparison of Non-human Primate versus Human Induced Pluripotent Stem Cell-Derived Cardiomyocytes for Treatment of Myocardial Infarction.** *Stem cell reports*
Zhao, X., Chen, H., Xiao, D., Yang, H., Itzhaki, I., Qin, X., Chour, T., Aguirre, A., Lehmann, K., Kim, Y., Shukla, P., Holmström, A., Zhang, et al
2018; 10 (2): 422–35
- **Photoacoustic Imaging of Embryonic Stem Cell-Derived Cardiomyocytes in Living Hearts with Ultrasensitive Semiconducting Polymer Nanoparticles** *Advanced Functional Materials*
Qin, X., Chen, H., Yang, H., Wu, H., Zhao, X., Wang, H., Chour, T., Neofytou, E., Ding, D., Daldrup-Link, H., Heilshorn, S. C., Li, K., Wu, et al
2017
- **Imaging Cardiac Stem Cell Therapy** *Cardiac Regeneration*
Qin, X., Chen, I. Y., Wu, J. C.
Springer.2017: 241–258
- **Comparison of Non-Coding RNAs in Exosomes and Functional Efficacy of Human Embryonic Stem Cell- Versus Induced Pluripotent Stem Cell-Derived Cardiomyocytes.** *Stem cells (Dayton, Ohio)*
Lee, W. H., Chen, W., Shao, N. Y., Xiao, D., Qin, X., Baker, N., Bae, H. R., Shukla, P., Wu, H., Kodo, K., Ong, S. G., Wu, J. C.
2017
- **Detection and delineation of squamous neoplasia with hyperspectral imaging in a mouse model of tongue carcinogenesis.** *Journal of biophotonics*
Lu, G., Wang, D., Qin, X., Muller, S., Wang, X., Chen, A. Y., Chen, Z. G., Fei, B.
2017
- **Magnetic Resonance Imaging of Cardiac Strain Pattern Following Transplantation of Human Tissue Engineered Heart Muscles** *CIRCULATION-CARDIOVASCULAR IMAGING*
Qin, X., Riegler, J., Tiburcy, M., Zhao, X., Chour, T., Ndoye, B., Michael Nguyen, M., Adams, J., Ameen, M., Denney, T. S., Yang, P. C., Patricia Nguyen, P., Zimmermann, et al
2016; 9 (11)
- **Comparison of Magnetic Resonance Imaging and Serum Biomarkers for Detection of Human Pluripotent Stem Cell-Derived Teratomas** *STEM CELL REPORTS*
Riegler, J., Ebert, A., Qin, X., Shen, Q., Wang, M., Ameen, M., Kodo, K., Ong, S., Lee, W. H., Lee, G., Neofytou, E., Gold, J. D., Connolly, et al
2016; 6 (2): 176-187
- **Framework for hyperspectral image processing and quantification for cancer detection during animal tumor surgery** *JOURNAL OF BIOMEDICAL OPTICS*
Lu, G., Wang, D., Qin, X., Halig, L., Muller, S., Zhang, H., Chen, A., Pogue, B. W., Chen, Z. G., Fei, B.
2015; 20 (12)

- **Simulating cardiac ultrasound image based on MR diffusion tensor imaging** *MEDICAL PHYSICS*
Qin, X., Wang, S., Shen, M., Lu, G., Zhang, X., Wagner, M. B., Fei, B.
2015; 42 (9): 5144-5156
- **DTI template-based estimation of cardiac fiber orientations from 3D ultrasound** *MEDICAL PHYSICS*
Qin, X., Fei, B.
2015; 42 (6): 2915-2924
- **Spectral-spatial classification for noninvasive cancer detection using hyperspectral imaging** *JOURNAL OF BIOMEDICAL OPTICS*
Lu, G., Halig, L., Wang, D., Qin, X., Chen, Z. G., Fei, B.
2014; 19 (10)
- **Measuring myofiber orientations from high-frequency ultrasound images using multiscale decompositions** *PHYSICS IN MEDICINE AND BIOLOGY*
Qin, X., Fei, B.
2014; 59 (14): 3907-3924
- **Targeted Iron-Oxide Nanoparticle for Photodynamic Therapy and Imaging of Head and Neck Cancer** *ACS NANO*
Wang, D., Fei, B., Halig, L. V., Qin, X., Hu, Z., Xu, H., Wang, Y. A., Chen, Z., Kim, S., Shin, D. M., Chen, Z. (.
2014; 8 (7): 6620-6632
- **Automatic segmentation of right ventricular ultrasound images using sparse matrix transform and a level set** *PHYSICS IN MEDICINE AND BIOLOGY*
Qin, X., Cong, Z., Fei, B.
2013; 58 (21): 7609-7624
- **Measuring body layer vibration of vocal folds by high-frame-rate ultrasound synchronized with a modified electroglottograph** *JOURNAL OF THE ACOUSTICAL SOCIETY OF AMERICA*
Tang, S., Zhang, Y., Qin, X., Wang, S., Wan, M.
2013; 134 (1): 528-538
- **Characterization of the homogeneous tissue mixture approximation in breast imaging dosimetry** *MEDICAL PHYSICS*
Sechopoulos, I., Bliznakova, K., Qin, X., Fei, B., Feng, S. S.
2012; 39 (8): 5050-5059
- **Measuring Body-Cover Vibration of Vocal Folds Based on High-Frame-Rate Ultrasonic Imaging and High-Speed Video** *IEEE TRANSACTIONS ON BIOMEDICAL ENGINEERING*
Qin, X., Wu, L., Jiang, H., Tang, S., Wang, S., Wan, M.
2011; 58 (8)
- **Improving Reliability and Accuracy of Vibration Parameters of Vocal Folds Based on High-Speed Video and Electroglottography** *IEEE TRANSACTIONS ON BIOMEDICAL ENGINEERING*
Qin, X., Wang, S., Wan, M.
2009; 56 (6): 1744-1754