Stanford



Ioannis Karakikes

Associate Professor (Research) of Cardiothoracic Surgery

Bio

ACADEMIC APPOINTMENTS

- Associate Professor-Research, Cardiothoracic Surgery
- Member, Bio-X
- Member, Cardiovascular Institute
- Member, Maternal & Child Health Research Institute (MCHRI)

HONORS AND AWARDS

- K99/R00 Pathway to Independence Award, NIH/NHLBI (2012)

LINKS

- Lab Website: karakikeslab.com

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

The Karakikes Lab aims to uncover fundamental new insights into the molecular mechanisms and functional consequences of pathogenic mutations associated with familial cardiovascular diseases.

Teaching

COURSES

2026-27

- Cardiovascular and Pulmonary Sciences Seminar: MED 223 (Aut, Win)

2025-26

- Cardiovascular and Pulmonary Sciences Seminar: MED 223 (Aut, Win)

2024-25

- Cardiovascular and Pulmonary Sciences Seminar: MED 223 (Aut, Win)

2023-24

- Cardiovascular and Pulmonary Sciences Seminar: MED 223 (Aut, Win)

STANFORD ADVISEES

Postdoctoral Faculty Sponsor

Maryam Kay

Publications

PUBLICATIONS

- **Artery-on-Chip Demonstrates Mechanical and Functional Features of Healthy and Diseased Living Smooth Muscle Tissue** *ADVANCED FUNCTIONAL MATERIALS*
  Yarbrough, D., Chen, R., Katsouleas, K., Shoemaker, J., Brady, T., Yu, T., Ataam, J., Amelung, C., Santhanam, L., Karakikes, I., Gerecht, S.
  2026

- **Enhancing cardiac serine biosynthesis mitigates the progression of dilated cardiomyopathy.** *Metabolism: clinical and experimental*
  Kay, M., Samuelsson, A. M., Bharucha, N., Li, X., Ramchandani, R., Baum, R. E., Ruiz, D., Laguerre, A., Lajevardi, S., Kambhampati, S., Metallo, C. M., Kapiloff, M. S., Karakikes, et al
  2025: 156395

- **Gastruloids enable modeling of the earliest stages of human cardiac and hepatic vascularization.** *Science (New York, N.Y.)*
  Abilez, O. J., Yang, H., Guan, Y., Shen, M., Yildirim, Z., Zhuge, Y., Venkateshappa, R., Zhao, S. R., Gomez, A. H., El-Mokahal, M., Dunkenberger, L., Ono, Y., Shibata, et al
  2025; 388 (6751): eadu9375

- **Integrative single-cell analysis of cardiogenesis identifies developmental trajectories and non-coding mutations in congenital heart disease.** *Cell*
  Ameen, M., Sundaram, L., Shen, M., Banerjee, A., Kundu, S., Nair, S., Shcherbina, A., Gu, M., Wilson, K. D., Varadarajan, A., Vadgama, N., Balsubramani, A., Wu, et al
  2022; 185 (26): 4937

- **Serine biosynthesis as a novel therapeutic target for dilated cardiomyopathy.** *European heart journal*
  Perea-Gil, I., Seeger, T., Bruyneel, A. A., Termglinchan, V., Monte, E., Lim, E. W., Vadgama, N., Furihata, T., Gavidia, A. A., Arthur Ataam, J., Bharucha, N., Martinez-Amador, N., Ameen, et al
  2022

- **The Unfolded Protein Response as a Compensatory Mechanism and Potential Therapeutic Target in PLN R14del Cardiomyopathy.** *Circulation*
  Feyen, D. A., Perea-Gil, I., Maas, R. G., Harakalova, M., Gavidia, A. A., Arthur Ataam, J., Wu, T., Vink, A., Pei, J., Vadgama, N., Suurmeijer, A. J., Te Rijdt, W. P., Vu, et al
  2021

- **Activation of PDGF pathway links LMNA mutation to dilated cardiomyopathy.** *Nature*
  Lee, J. n., Termglinchan, V. n., Diecke, S. n., Itzhaki, I. n., Lam, C. K., Garg, P. n., Lau, E. n., Greenhaw, M. n., Seeger, T. n., Wu, H. n., Zhang, J. Z., Chen, X. n., Gil, et al
  2019

- **Generation of two homozygous iPSC lines carrying variants of uncertain significance in LMNA associated with cardiomyopathy.** *Stem cell research*
  Liu, L., Wu, D., Manhas, A., Noishiki, C., Tripathi, D., Sadat, S., Bharucha, N., Karakikes, I., Sallam, K., Sayed, N.
  2026; 95: 104086

- **Autonomic Innervation Enables Spontaneous Arrhythmogenesis in Catecholaminergic Polymorphic Ventricular Tachycardia Neuro-Cardiac Assembloids**
  Badarello, K., Kreymerman, A., Vadgama, N., Karakikes, I., Wagner, J., Macklis, J., Bezzerides, V., Lee, R.
  LIPPINCOTT WILLIAMS & WILKINS.2026: AWed141

- **The MIRO1-BAX Complex Dictates Life and Death at the Mitochondrial Gate.** *bioRxiv : the preprint server for biology*
  Sainz, A. G., Kwak, C. S., Cho, K. B., Sripadanna, S. A., Bergsneider, B. H., Zizzo, Z., Durairaj, A. S., Du, Z., Cooney, I., Venida, A., Bharucha, N., Karakikes, I., Chiu, et al
  2026

- **CRISPR-MiX: A pooled single-stranded donor strategy to enhance HDR efficiency in human iPSCs.** *Molecular therapy. Nucleic acids*
  Baum, R., Telugu, N., Bruyneel, A. A., Kay, M., Nair, P., Perea-Gil, I., Termglinchan, V., Bharucha, N., Lee, E., Mercola, M., Diecke, S., Karakikes, I.
  2026; 37 (1): 102820

- **Connexin-43 Restoration Alleviates Desmosomal Arrhythmogenic Cardiomyopathy.** *Circulation. Heart failure*
  Zhang, J., Zanella, F., Ellis, M. W., Bradford, W. H., Gutierrez-Lara, E. J., Wang, T. M., Fujita, K., Duron, C., Karakikes, I., Lyon, R. C., Mezzano, V., Roberts, J. D., Carromeu, et al
  2026: e013801

- **Leveraging Single-Nucleus Chromatin Accessibility and Transcriptome Profiling to Define the Regulatory Landscape of Dilated Cardiomyopathy**
  Dunkenberger, L., Gilles, C., Belbachir, N., Metzl Raz, E., Limbu, L., Bonham, S., Arthur, J., Dalal, A., Kay, M., Baum, R., Neofytou, E., Ramchandani, R., Ameen, et al
  LIPPINCOTT WILLIAMS & WILKINS.2025

- **Light-evoked activity and BDNF regulate mitochondrial dynamics and mitochondrial localized translation in CNS axons** *ISCIENCE*
  Kreymerman, A., Weinstein, J. E., Vadgama, N., Shah, S. H., Nahmou, M. M., Belle, K. C., Ji, M. H., Xia, X., Faust, A., van der Merwe, Y., Buickians, D. N., Cho, I., Huynh, et al
  2025; 28 (10)

- **Light-evoked activity and BDNF regulate mitochondrial dynamics and mitochondrial localized translation in CNS axons.** *iScience*
  Kreymerman, A., Weinstein, J. E., Vadgama, N., Shah, S. H., Nahmou, M. M., Belle, K. C., Ji, M. H., Xia, X., Faust, A., Van Der Merwe, Y., Buickians, D. N., Cho, I. J., Huynh, et al
  2025; 28 (10): 113563

- **Carboxypeptidase D deficiency causes hearing loss amenable to treatment.** *The Journal of clinical investigation*
  Ramzan, M., Ortiz-Vega, N., Zafeer, M. F., Lobato, A. G., Atik, T., Abad, C., Vadgama, N., Duman, D., Bozan, N., Avcı Durmuşalioğlu, E., Greene, S., Guo, S., Tokgöz-Yılmaz, et al
  2025

- **Generation of human induced pluripotent stem cell lines from patients with PHACE syndrome.** *Stem cell research*
  Ramchandani, R., Cheawsamoot, C., Torres, G. A., Arthur Ataam, J., Siegel, D., Karakikes, I.
  2025; 87: 103802

- **Connexin-43 Gene Therapy Targets Desmosomal Gene Expression To Rescue Cardiac End-Stage Deficits in Mouse and Human Models of Arrhythmogenic Cardiomyopathy**
  Zhang, J., Zanella, F., Bradford, W., Ellis, M., Fujita, K., Karakikes, I., Lyon, R., Mezzano, V., Roberts, J., Gu, Y., Martin, J., Muotri, A., Scheinman, et al
  LIPPINCOTT WILLIAMS & WILKINS.2025

- **Exploration of Underlying Mechanisms of Vascular Ehlers-Danlos Syndrome in Patients' iPSCs-Derived Endothelial Cells**
  Liu, L., Wu, D., Bharucha, N., Turbes, N., Noishiki, C., Manhas, A., Tripathi, D., Adkar, S., Lee, J., Fukaya, E., Leeper, N., Karakikes, I., Sayed, et al
  LIPPINCOTT WILLIAMS & WILKINS.2025

- **Decoding human cardiovascular development and disease through single-cell transcriptomic and epigenomic profiling.** *Trends in cell biology*
  Dunkenberger, L., Li, D. Y., Karakikes, I., Quertermous, T.
  2025

- **Development of a Novel AAV Gene Therapy for the Treatment of Dilated Cardiomyopathy**
  Chiola, S., Sen, D., Kay, M., Xu, J., Champe, M., Urbinati, F., Karakikes, I.
  CELL PRESS.2025

- **Genetic analysis and multimodal imaging confirm m.12148 T > C mitochondrial variant pathogenicity leading to multisystem dysfunction.** *Molecular genetics and metabolism*
  Belle, K., Kreymerman, A., Young, J. L., Vadgama, N., Ji, M. H., Randhawa, S., Caicedo, J., Wong, M., Muscat, S. P., Gifford, C. A., Lee, R. T., Nasir, J., Enns, et al
  2025; 144 (3): 109049

- **Empagliflozin Attenuates Arrhythmias in an iPSC-Based Model of Hypertrophy Cardiomyopathy.** *Circulation. Genomic and precision medicine*
  Arthur Ataam, J., Belbachir, N., Perea-Gil, I., Termglincan, V., Vadgama, N., Garg, P., Ramchandani, R., Gavidia, A. A., Roura, S., Gálvez-Montón, C., Wu, J. C., Bayés-Genis, A., Karakikes, et al
  2024: e004526

- **Personalized transcriptome signatures in a cardiomyopathy stem cell biobank.** *bioRxiv : the preprint server for biology*

Monte, E., Furihata, T., Wang, G., Perea-Gil, I., Wei, E., Chaib, H., Nair, R., Guevara, J. V., Mares, R., Cheng, X., Zhuge, Y., Black, K., Serrano, et al
2024

- **Precision unleashed: tackling DNA mismatch repair for enhanced prime editing.** *Molecular therapy. Nucleic acids*
  Ramchandani, R., Bharucha, N., Karakikes, I.
  2023; 34: 102061

- **Identification of constrained sequence elements across 239 primate genomes.** *Nature*
  Kuderna, L. F., Ulirsch, J. C., Rashid, S., Ameen, M., Sundaram, L., Hickey, G., Cox, A. J., Gao, H., Kumar, A., Aguet, F., Christmas, M. J., Clawson, H., Haeussler, et al
  2023

- **Generation of human induced pluripotent stem cell lines derived from four patients with a pathogenic ALPK3 variant associated with adult-onset hypertrophic cardiomyopathy (HCM).** *Stem cell research*
  Cheawsamoot, C., Ramchandani, R., Ameen, M., Arthur Ataam, J., Khongphatthanayothin, A., Shotelersuk, V., Karakikes, I.
  2023; 73: 103233

- **Transcription factor stoichiometry, motif affinity and syntax regulate single-cell chromatin dynamics during fibroblast reprogramming to pluripotency.** *bioRxiv : the preprint server for biology*
  Nair, S., Ameen, M., Sundaram, L., Pampari, A., Schreiber, J., Balsubramani, A., Wang, Y. X., Burns, D., Blau, H. M., Karakikes, I., Wang, K. C., Kundaje, A.
  2023

- **Non-viral in vivo cytidine base editing in hepatocytes using focused ultrasound targeted microbubbles.** *Molecular therapy. Nucleic acids*
  Anderson, C. D., Arthur, J. A., Zhang, Y., Bharucha, N., Karakikes, I., Shohet, R. V.
  2023; 33: 733-737

- **A deep learning platform to assess drug proarrhythmia risk.** *Cell stem cell*
  Serrano, R., Feyen, D. A., Bruyneel, A. A., Hnatiuk, A. P., Vu, M. M., Amatya, P. L., Perea-Gil, I., Prado, M., Seeger, T., Wu, J. C., Karakikes, I., Mercola, M.
  2022

- **Isoform changes of action potential regulators in the ventricles of arrhythmogenic phospholamban-R14del humanized mouse hearts.** *Metabolism: clinical and experimental*
  Rogalska, M. E., Vafiadaki, E., Erpapazoglou, Z., Haghighi, K., Green, L., Mantzoros, C. S., Hajjar, R. J., Tranter, M., Karakikes, I., Kranias, E. G., Stillitano, F., Kafasla, P., Sanoudou, et al
  2022: 155344

- **De novo and inherited variants in coding and regulatory regions in genetic cardiomyopathies.** *Human genomics*
  Vadgama, N., Ameen, M., Sundaram, L., Gaddam, S., Genomics England Research Consortium, Gifford, C., Nasir, J., Karakikes, I.
  2022; 16 (1): 55

- **The potential of CRISPR-Cas9 prime editing for cardiovascular disease research and therapy.** *Current opinion in cardiology*
  Bharucha, N., Arias, A., Karakikes, I.
  2022

- **Mutations in MINAR2 encoding membrane integral NOTCH2-associated receptor 2 cause deafness in humans and mice.** *Proceedings of the National Academy of Sciences of the United States of America*
  Bademci, G., Lachgar-Ruiz, M., Deokar, M., Zafeer, M. F., Abad, C., Yildirim Baylan, M., Ingham, N. J., Chen, J., Sineni, C. J., Vadgama, N., Karakikes, I., Guo, S., Duman, et al
  2022; 119 (26): e2204084119

- **Generation of a dual edited human induced pluripotent stem cell Myl7-GFP reporter line with inducible CRISPRi/dCas9.** *Stem cell research*
  Metzl-Raz, E., Bharucha, N., Arthur Ataam, J., Gavidia, A. A., Greenleaf, W. J., Karakikes, I.
  2022; 61: 102754

- **Targeting mAKAPbeta expression as a therapeutic approach for ischemic cardiomyopathy.** *Gene therapy*
  Martinez, E. C., Li, J., Ataam, J. A., Tokarski, K., Thakur, H., Karakikes, I., Dodge-Kafka, K., Kapiloff, M. S.
  1800

- **SARS-CoV-2 Susceptibility and ACE2 Gene Variations Within Diverse Ethnic Backgrounds.** *Frontiers in genetics*

Vadgama, N., Kreymerman, A., Campbell, J., Shamardina, O., Brugger, C., Research Consortium, G. E., Deaconescu, A. M., Lee, R. T., Penkett, C. J., Gifford, C. A., Mercola, M., Nasir, J., Karakikes, et al
2022; 13: 888025

- **Insulin Growth Factor Phenotypes in Heart Failure with Preserved Ejection Fraction, an INSPIRE Registry and CATHGEN Study: IGF axis in HFpEF.** *Journal of cardiac failure*
  Haddad, F., Ataam, J. A., Amsallem, M., Cauwenberghs, N., Kuznetsova, T., Rosenberg-Hasson, Y., Zamanian, R. T., Karakikes, I., Horne, B. D., Muhlestein, J. B., Kwee, L., Shah, S., Maecker, et al
  1800
- **Generation of AAVS1 integrated doxycycline-inducible CRISPR-Prime Editor human induced pluripotent stem cell line.** *Stem cell research*
  Bharucha, N., Ataam, J. A., Gavidia, A. A., Karakikes, I.
  2021; 57: 102610
- **Small-molecule probe reveals a kinase cascade that links stress signaling to TCF/LEF and Wnt responsiveness.** *Cell chemical biology*
  Cheng, J. n., Tsuda, M. n., Okolotowicz, K. n., Dwyer, M. n., Bushway, P. J., Colas, A. R., Lancman, J. J., Schade, D. n., Perea-Gil, I. n., Bruyneel, A. A., Lee, J. n., Vadgama, N. n., Quach, et al
  2021
- **Activation of CaMKII Signaling Pathway Contributes to the Pathogenesis of Genetic Hypertrophic Cardiomyopathy**
  Gil, I., Bellbachir, N., Gavidia, A. A., Arthur, J., Zhang, Y., Vadgama, N., Oikonomopoulos, A., Roura, S., Wu, J. C., Bayes-Genis, A., Karakikes, I.
  LIPPINCOTT WILLIAMS & WILKINS.2020
- **Disruption of the Genome Architecture at the PRRX1 Locus is Associated With the Pathogenesis of LMNA-related Dilated Cardiomyopathy**
  Zhang, Y., Ameen, M., Gil, I., Arthur, J., Gavidia, A. A., Bharucha, N., Wang, K. C., Karakikes, I.
  LIPPINCOTT WILLIAMS & WILKINS.2020
- **Molecular Signatures of Beneficial Class Effects of Statins on Human Induced Pluripotent Stem Cell-Derived Cardiomyocytes.** *Circulation*
  Tian, L., Oikonomopoulos, A., Liu, C., Kitani, T., Shrestha, R., Chen, C. L., Ong, S., Smeets, M., Karakikes, I., Sayed, N., Wu, J. C.
  2020; 141 (14): 1208–10
- **Pharmacological Silencing of MicroRNA-152 Prevents Pressure Overload-Induced Heart Failure.** *Circulation. Heart failure*
  LaRocca, T. J., Seeger, T. n., Prado, M. n., Perea-Gil, I. n., Neofytou, E. n., Mecham, B. H., Ameen, M. n., Chang, A. C., Pandey, G. n., Wu, J. C., Karakikes, I. n.
  2020; 13 (3): e006298
- **Endogenous Retrovirus-Derived lncRNA BANCR Promotes Cardiomyocyte Migration in Humans and Non-human Primates.** *Developmental cell*
  Wilson, K. D., Ameen, M. n., Guo, H. n., Abilez, O. J., Tian, L. n., Mumbach, M. R., Diecke, S. n., Qin, X. n., Liu, Y. n., Yang, H. n., Ma, N. n., Gaddam, S. n., Cunningham, et al
  2020
- **Translating Genomic Insights into Cardiovascular Medicines: Opportunities and Challenges of CRISPR-Cas9.** *Trends in cardiovascular medicine*
  Zhang, Y. n., Karakikes, I. n.
  2020
- **A Novel Recessive Mutation in SPEG Causes Early Onset Dilated Cardiomyopathy.** *PLoS genetics*
  Levitas, A. n., Muhammad, E. n., Zhang, Y. n., Perea Gil, I. n., Serrano, R. n., Diaz, N. n., Arafat, M. n., Gavidia, A. A., Kapiloff, M. S., Mercola, M. n., Etzion, Y. n., Parvari, R. n., Karakikes, et al
  2020; 16 (9): e1009000
- **iPSC Modeling of RBM20-Deficient DCM Identifies Upregulation of RBM20 as a Therapeutic Strategy.** *Cell reports*
  Briganti, F. n., Sun, H. n., Wei, W. n., Wu, J. n., Zhu, C. n., Liss, M. n., Karakikes, I. n., Rego, S. n., Cipriano, A. n., Snyder, M. n., Meder, B. n., Xu, Z. n., Millat, et al
  2020; 32 (10): 108117
- **Concise Review: Precision Matchmaking: Induced Pluripotent Stem Cells Meet Cardio-Oncology** *STEM CELLS TRANSLATIONAL MEDICINE*
  Nair, P., Prado, M., Perea-Gil, I., Karakikes, I.
  2019; 8 (8): 758–67

- **Treatment of volumetric muscle loss in mice using nanofibrillar scaffolds enhances vascular organization and integration** *COMMUNICATIONS BIOLOGY*
  Nakayama, K. H., Quarta, M., Paine, P., Alcazar, C., Karakikes, I., Garcia, V., Abilez, O. J., Calvo, N. S., Simmons, C. S., Rando, T. A., Huang, N. F.
  2019; 2
- **Treatment of volumetric muscle loss in mice using nanofibrillar scaffolds enhances vascular organization and integration.** *Communications biology*
  Nakayama, K. H., Quarta, M., Paine, P., Alcazar, C., Karakikes, I., Garcia, V., Abilez, O. J., Calvo, N. S., Simmons, C. S., Rando, T. A., Huang, N. F.
  2019; 2: 170
- **Concise Review: Precision Matchmaking: Induced Pluripotent Stem Cells Meet Cardio-Oncology.** *Stem cells translational medicine*
  Nair, P., Prado, M., Perea-Gil, I., Karakikes, I.
  2019
- **AlleleProfileR: A versatile tool to identify and profile sequence variants in edited genomes.** *PloS one*
  Bruyneel, A. A., Colas, A. R., Karakikes, I., Mercola, M.
  2019; 14 (12): e0226694
- **Treatment of volumetric muscle loss in mice using nanofibrillar scaffolds enhances vascular organization and integration.** *Communications biology*
  Nakayama, K. H., Quarta, M. n., Paine, P. n., Alcazar, C. n., Karakikes, I. n., Garcia, V. n., Abilez, O. J., Calvo, N. S., Simmons, C. S., Rando, T. A., Huang, N. F.
  2019; 2 (1): 170
- **High-Throughput Phenotypic Screening Using Induced Pluripotent Stem Cell Derived Cardiomyocytes Identifies Compounds That Rescue Genetic Dilated Cardiomyopathy**
  Perea-Gil, I., Prado, M., Bruyneel, A. A., McKeithan, W. L., Feyen, D. A., Nair, P., Mercola, M., Karakikes, I.
  LIPPINCOTT WILLIAMS & WILKINS.2018: E72
- **Mechanosensitive miR-376c Modulates Arrhythmia Susceptibility Via Regulation Of KCNJ2 In hiPSC-derived Cardiomyocytes**
  Wahlquist, C. A., Rojas-Munoz, A., Brunyeel, A. A., Greenhaw, M., Chung, R., Vu, M., Karakikes, I., Mercola, M.
  LIPPINCOTT WILLIAMS & WILKINS.2018: E79
- **A Premature Termination Codon Mutation in MYBPC3 Causes Hypertrophic Cardiomyopathy via Chronic Activation of Nonsense-Mediated Decay.** *Circulation*
  Seeger, T., Shrestha, R., Lam, C. K., Chen, C., McKeithan, W. L., Lau, E., Wnorowski, A., McMullen, G., Greenhaw, M., Lee, J., Oikonomopoulos, A., Lee, S., Yang, et al
  2018
- **Telomere shortening is a hallmark of genetic cardiomyopathies.** *Proceedings of the National Academy of Sciences of the United States of America*
  Chang, A. C., Chang, A. C., Kirillova, A., Sasagawa, K., Su, W., Weber, G., Lin, J., Termglinchan, V., Karakikes, I., Seeger, T., Dainis, A. M., Hinson, J. T., Seidman, et al
  2018
- **Recent Progress in Genome Editing Approaches for Inherited Cardiovascular Diseases.** *Current cardiology reports*
  Kaur, B., Perea-Gil, I., Karakikes, I.
  2018; 20 (7): 58
- **SETD7 Drives Cardiac Lineage Commitment through Stage-Specific Transcriptional Activation.** *Cell stem cell*
  Lee, J. n., Shao, N. Y., Paik, D. T., Wu, H. n., Guo, H. n., Termglinchan, V. n., Churko, J. M., Kim, Y. n., Kitani, T. n., Zhao, M. T., Zhang, Y. n., Wilson, K. D., Karakikes, et al
  2018; 22 (3): 428–44.e5
- **Patient-Specific iPSC-Derived Endothelial Cells Uncover Pathways that Protect against Pulmonary Hypertension in BMPR2 Mutation Carriers** *CELL STEM CELL*
  Gu, M., Shao, N., Sa, S., Li, D., Termglinchan, V., Ameen, M., Karakikes, I., Sosa, G., Grubert, F., Lee, J., Cao, A., Taylor, S., Ma, et al
  2017; 20 (4): 490-?
- **A Comprehensive TALEN-Based Knockout Library for Generating Human Induced Pluripotent Stem Cell-Based Models for Cardiovascular Diseases.** *Circulation research*

Karakikes, I., Termglinchan, V., Cepeda, D. A., Lee, J., Diecke, S., Hendel, A., Itzhaki, I., Ameen, M., Shrestha, R., Wu, H., Ma, N., Shao, N., Seeger, et al
2017

- **Mending a Broken Heart: The Evolution Of Biological Therapeutics.** *Stem cells*
  Chen, C., Termglinchan, V., Karakikes, I.
  2017

- **Modeling susceptibility to drug-induced long QT with a panel of subject-specific induced pluripotent stem cells** *ELIFE*
  Stillitano, F., Hansen, J., Kong, C., Karakikes, I., Faunck-Brentano, C., Geng, L., Scott, S., Reynier, S., Wu, M., Valogne, Y., Desseaux, C., Salem, J., Jeziorowska, et al
  2017; 6

- **Efficient Genome Editing in Induced Pluripotent Stem Cells with Engineered Nucleases In Vitro.** *Methods in molecular biology (Clifton, N.J.)*
  Termglinchan, V., Seeger, T., Chen, C., Wu, J. C., Karakikes, I.
  2017; 1521: 55-68

- **Efficient Genome Editing in Induced Pluripotent Stem Cells with Engineered Nucleases In Vitro** *CARDIAC GENE THERAPY: METHODS AND PROTOCOLS*
  Termglinchan, V., Seeger, T., Chen, C., Wu, J. C., Karakikes, I.
  edited by Ishikawa, K.
  2017; 1521: 55–68

- **Molecular and functional resemblance of differentiated cells derived from isogenic human iPSCs and SCNT-derived ESCs.** *Proceedings of the National Academy of Sciences of the United States of America*
  Zhao, M. T., Chen, H. n., Liu, Q. n., Shao, N. Y., Sayed, N. n., Wo, H. T., Zhang, J. Z., Ong, S. G., Liu, C. n., Kim, Y. n., Yang, H. n., Chour, T. n., Ma, et al
  2017

- **Passive Stretch Induces Structural and Functional Maturation of Engineered Heart Muscle as Predicted by Computational Modeling.** *Stem cells (Dayton, Ohio)*
  Abilez, O. J., Tzatzalos, E. n., Yang, H. n., Zhao, M. T., Jung, G. n., Zöllner, A. M., Tiburcy, M. n., Riegler, J. n., Matsa, E. n., Shukla, P. n., Zhuge, Y. n., Chour, T. n., Chen, et al
  2017

- **Gene Transfer in Cardiomyocytes Derived from ES and iPS Cells.** *Methods in molecular biology (Clifton, N.J.)*
  Stillitano, F., Karakikes, I., Hajjar, R. J.
  2017; 1521: 183-193

- **Patient-Specific iPSC-Derived Endothelial Cells Uncover Pathways that Protect against Pulmonary Hypertension in BMPR2 Mutation Carriers.** *Cell stem cell*
  Gu, M., Shao, N., Sa, S., Li, D., Termglinchan, V., Ameen, M., Karakikes, I., Sosa, G., Grubert, F., Lee, J., Cao, A., Taylor, S., Ma, et al
  2016

- **iPSC-derived cardiomyocytes reveal abnormal TGF-ß signalling in left ventricular non-compaction cardiomyopathy.** *Nature cell biology*
  Kodo, K., Ong, S., Jahanbani, F., Termglinchan, V., Hirono, K., Inanloorahatloo, K., Ebert, A. D., Shukla, P., Abilez, O. J., Churko, J. M., Karakikes, I., Jung, G., Ichida, et al
  2016; 18 (10): 1031-1042

- **Transcriptome Profiling of Patient-Specific Human iPSC-Cardiomyocytes Predicts Individual Drug Safety and Efficacy Responses In Vitro.** *Cell stem cell*
  Matsa, E., Burridge, P. W., Yu, K., Ahrens, J. H., Termglinchan, V., Wu, H., Liu, C., Shukla, P., Sayed, N., Churko, J. M., Shao, N., Woo, N. A., Chao, et al
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