Stanford

Nazish Sayed MD, PhD

Associate Professor (Research) of Surgery (Vascular Surgery)

Surgery - Vascular Surgery

CONTACT INFORMATION

- **Administrative Assistant**

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Bio

BIO

Dr. Nazish Sayed, MD, PhD, is an Associate Professor in the Division of Vascular Surgery, Department of Surgery, and The Stanford Cardiovascular Institute at Stanford University School of Medicine. He also serves as Director of the Baszucki Vascular Surgery Biobank. Dr. Sayed received his MD from the University of Mumbai, India, a PhD in Pharmacology and Physiology from Rutgers New Jersey Medical School, and a Master's degree in Molecular Biology from Montclair State University. Following postdoctoral training in cardiovascular and regenerative medicine at Stanford University, he joined the Stanford faculty and established an independent research program focused on vascular biology, cardiovascular disease modeling, and regenerative medicine.

Dr. Sayed's laboratory investigates how endothelial dysfunction contributes to cardiovascular disease and leverages human stem cell technologies to identify novel therapeutic strategies. His research integrates patient-derived induced pluripotent stem cells (iPSCs), engineered cardiac tissues, cardiac organoids, human biospecimens, genome engineering, spatial transcriptomics, and single-cell multi-omics to uncover mechanisms underlying inherited and acquired cardiovascular diseases.

A major focus of the laboratory is understanding endothelial–cardiomyocyte communication in cardiomyopathy. Using patient-specific iPSCs, human cardiac organoids, engineered heart tissues, and multi-omic approaches, his group studies how endothelial dysfunction drives myocardial fibrosis, inflammation, and heart failure. Current efforts include investigations into LMNA-related dilated cardiomyopathy, endothelial-to-mesenchymal transition (EndoMT), and mechanisms of fibrotic remodeling. The laboratory has also developed innovative human disease models to study cardiovascular complications associated with cancer therapies, including tyrosine kinase inhibitors and immune checkpoint inhibitors, leading to the identification of novel pathways involved in treatment-related cardiotoxicity.

Additional areas of research include cardiovascular aging, toxic environmental exposures, rare vascular diseases, and precision cardiovascular medicine. By combining human tissues, advanced stem cell models, artificial intelligence, and systems-level biology, the laboratory aims to accelerate the discovery of therapies that improve cardiovascular health and patient outcomes.

Dr. Sayed's research has been supported by multiple NIH awards, including two NHLBI R01 grants and the prestigious NHLBI R35 Emerging Investigator Award, as well as funding from the American Heart Association Strategically Focused Research Network, the Department of Defense, the California Tobacco-Related Disease Research Program, and industry partnerships. His work has resulted in more than 85 peer-reviewed publications in leading journals, including Science Translational Medicine, Cell Stem Cell, Nature Aging, Nature Cardiovascular Research, Circulation, Cell, and The New England Journal of Medicine.

Dr. Sayed has received numerous honors, including the American Heart Association ATVB Young Investigator Award, the Jay D. Coffman Young Investigator Award from the Society of Vascular Medicine, and the Stanford Cardiovascular Institute Recognition Award. Through his research, mentorship, and collaborative leadership, he is committed to advancing precision cardiovascular medicine while fostering an inclusive and supportive environment for the next generation of scientists and physician-investigators.

ACADEMIC APPOINTMENTS

- Associate Professor (Research), Surgery - Vascular Surgery
- Member, Bio-X
- Member, Cardiovascular Institute
- Member, Maternal & Child Health Research Institute (MCHRI)
- Member, Stanford Medicine Children's Health Center for IBD and Celiac Disease

HONORS AND AWARDS

- Stanford Cardiovascular Institute Manuscript Award, Stanford University (Feb 2022)
- Stanford Cardiovascular Institute Manuscript Award, Stanford University (Feb 2021)
- Stanford WSDM Seed Grant, Stanford University (November 2017)
- Stanford Lyme Disease Seed Grant, Stanford University (November 2017)
- Translational Research and Applied Medicine (TRAM) Pilot Grant, Stanford University (October 2017)
- Cardiovascular Institute Travel Award, Stanford University (May 2017)
- NHLBI - K01 HL135455 Grant, National Institute of Health (January 2017)
- Cardiovascular Institute Poster Prize, Stanford University (October 2016)
- Cardiovascular Institute Seed Grant - Co-PI, Stanford University (October 2016)
- Cardiovascular Institute Seed Grant - Co-PI, Stanford University (October 2015)
- Winner - President's Award- Peer Reviewed Publication, Houston Methodist Research Institute (March 2015)
- NHLBI - PCBC Pilot Grant, National Institute of Health (March 2014)
- American Heart Association Specialty Conferences: Arteriosclerosis, Thrombosis and Vascular Biology, American Heart Association (November 2013)
- American Heart Association Scientist Development Grant (SDG) 2013-2017, American Heart Association (July 2013)
- Basic Cardiovascular Science New Investigator Travel Award, American Heart Association (July 2013)
- Winner - Jay D. Coffman Young Investigator Award, Society of Vascular Medicine (June 2013)
- Arteriosclerosis, Thrombosis and Vascular Biology Early Career Travel Award, American Heart Association (May 2013)
- NIH - NRSA Individual Postdoctoral Fellowship (F32), National Institute of Health (January 2013)
- Winner - ATVB Young Investigator Award, American Heart Association (November 2012)
- Cardiovascular Institute Poster Prize, Stanford University (September 2012)

- NIH - NRSA Institutional Research Training Grant Recipient (T32), National Institute of Health (July 2010)
- Nomination, Stanley S. Bergen, Jr., M.D. Medal of Excellence award, Rutgers New Jersey Medical School (2007)
- Nomination, Morris Schaffer Endowed Scholarship Fund, Rutgers New Jersey Medical School (2006)
- Travel Scholarship to pursue studies overseas, Khoja Foundation of India
- Deans List, K. J. Somaiya Medical College, Mumbai, India
- Distinction Award for State Merit List, KC College, Mumbai, India
- Silver Medal – Sinhal Classes, KC College, Mumbai, India
- The Dr. Abraham Shellim Proficiency Shield, Sir Jacob Sassoon High School

PROFESSIONAL EDUCATION

- PhD, Rutgers New Jersey Medical School , Pharmacology/Physiology (2008)
- MS, Montclair State University, NJ , Molecular Biology (2003)
- MD, University of Bombay, India , Medicine (1999)

PATENTS

- Cooke JP, Sayed N, Lee J. "United States Patent PCT/US2013/021954 Activation of Innate Immunity for Enhanced Reprogramming of Cells to Pluripotency.", Leland Stanford University,, Jan 1, 2012

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

The Sayed Laboratory investigates how endothelial dysfunction contributes to cardiovascular disease and leverages human stem cell technologies to identify novel therapeutic strategies. Our research integrates patient-derived induced pluripotent stem cells (iPSCs), engineered cardiac tissues, organoids, human biospecimens, and multi-omic technologies to uncover mechanisms underlying inherited and acquired cardiovascular diseases.

A major focus of the laboratory is understanding endothelial–cardiomyocyte communication in cardiomyopathy. Using patient-specific iPSCs, human cardiac organoids, engineered heart tissues, spatial transcriptomics, and single-cell multi-omics, we study how endothelial dysfunction drives myocardial fibrosis, inflammation, and heart failure. Current efforts include investigations into LMNA-related dilated cardiomyopathy, endothelial-to-mesenchymal transition (EndoMT), and mechanisms of fibrotic remodeling.

A second major area of research is cardio-oncology. The laboratory develops human disease models to understand cardiovascular complications associated with cancer therapies, including tyrosine kinase inhibitors and immune checkpoint inhibitors. These studies have identified novel vascular mechanisms underlying treatment-related hypertension, cardiomyopathy, and heart failure.

The laboratory also investigates cardiovascular aging, toxic environmental exposures, rare vascular diseases, and regenerative medicine. By integrating human tissues, advanced stem cell models, genome engineering, spatial biology, and artificial intelligence–enabled multi-omic analyses, our goal is to develop precision therapeutic strategies that improve cardiovascular health and patient outcomes.

Teaching

STANFORD ADVISEES

Postdoctoral Faculty Sponsor

Lu Liu, Fatima Narsinh

Publications

PUBLICATIONS

- **Profiling Immune-Independent Response to Immune Checkpoint Inhibitors on Stem Cell-Derived Cardiomyocytes, Organoids, and Mouse Models.** *Circulation*
  Thomas, D., Manhas, A., Liu, Y., Venkateshappa, R., Belbachir, N., Zhao, S. R., Juguilon, C., Chen, I. Y., Moslehi, J., Sayed, N., Wu, J. C.
  2026; 153 (2): 132-135

- **Harnessing iPSCs, 3D organoids, and multiomics to model rare vascular diseases: Emerging new approach methodologies.** *Vascular medicine (London, England)*
  Liu, L., Wu, D., Tsao, P. S., Leeper, N. J., Sayed, N.
  2026: 1358863X251394285

- **Multiscale profiling of tyrosine kinase inhibitor cardiotoxicity reveals mechanosensitive ion channel PIEZO1 as cardioprotective.** *Science translational medicine*
  Manhas, A., Liu, Y., Noishiki, C., Wu, D., Tripathi, D., Mirza, S., Thomas, D., Liu, L., Guha, A., Nguyen, P. K., Chen, I. Y., Chitalia, V., Cheng, et al
  2025; 17 (829): eadv9403

- **Generation of an induced pluripotent stem cell line from a patient with Varicose veins.** *Stem cell research*
  Noishiki, C., Manhas, A., Adkar, S. S., Tripathi, D., Wu, D., Sadat, S., Liu, L., Sallam, K., Leeper, N. J., Fukaya, E., Sayed, N.
  2025; 89: 103850

- **Decoding long COVID-associated cardiovascular dysfunction: Mechanisms, models, and new approach methodologies.** *Journal of molecular and cellular cardiology*
  Thomas, D., Yang, P. C., Wu, J. C., Sayed, N.
  2025

- **Are We There Yet?** *JAMA*
  Sayed, N.
  2025

- **Olmesartan Restores LMNA Function in Haploinsufficient Cardiomyocytes.** *Circulation*
  Kort, E. J., Sayed, N., Liu, C., Mondéjar-Parreño, G., Forsberg, J., Eugster, E., Wu, S. M., Wu, J. C., Jovinge, S.
  2025

- **CCL2-mediated endothelial injury drives cardiac dysfunction in long COVID.** *Nature cardiovascular research*
  Thomas, D., Noishiki, C., Gaddam, S., Wu, D., Manhas, A., Liu, Y., Tripathi, D., Kathale, N., Adkar, S. S., Garhyan, J., Liu, C., Xu, B., Ross, et al
  2024; 3 (10): 1249-1265

- **Cardiovascular Toxicity in Cancer Therapy: Protecting the Heart while Combating Cancer.** *Current cardiology reports*
  Manhas, A., Tripathi, D., Thomas, D., Sayed, N.
  2024

- **Generation of two iPSC lines from vascular Ehlers-Danlos Syndrome (vEDS) patients carrying a missense mutation in COL3A1 gene.** *Stem cell research*
  Manhas, A., Tripathi, D., Noishiki, C., Wu, D., Liu, L., Sallam, K., Lee, J. T., Fukaya, E., Sayed, N.
  2024; 79: 103485

- **Harnessing iPSCs to Dissect Causality in Anthracycline-Induced Cardiotoxicity: All That Fits Are Not Hits.** *JACC. CardioOncology*
  Thomas, D., Manhas, A., Sayed, N.
  2024; 6 (1): 51-54

- **Statins improve endothelial function via suppression of epigenetic-driven EndMT.** *Nature cardiovascular research*
  Liu, C., Shen, M., Tan, W. L., Chen, I. Y., Liu, Y., Yu, X., Yang, H., Zhang, A., Liu, Y., Zhao, M. T., Ameen, M., Zhang, M., Gross, et al
  2023; 2 (5): 467-485

- **An Alternate Explanation.** *The New England journal of medicine*
  Alsaigh, T., Dhaliwal, G., Fukaya, E., Leeper, N. J., Sayed, N.
  2023; 388 (14): 1318-1324

- **An evidence appraisal of heart organoids in a dish and commensurability to human heart development in vivo.** *BMC cardiovascular disorders*
  Thomas, D., de Jesus Perez, V. A., Sayed, N.
  2022; 22 (1): 122

- **An inflammatory aging clock (iAge) based on deep learning tracks multimorbidity, immunosenescence, frailty and cardiovascular aging.** *Nature aging*
  Sayed, N., Huang, Y., Nguyen, K., Krejciova-Rajaniemi, Z., Grawe, A. P., Gao, T., Tibshirani, R., Hastie, T., Alpert, A., Cui, L., Kuznetsova, T., Rosenberg-Hasson, Y., Ostan, et al
  2021; 1: 598-615

- **A protocol for transdifferentiation of human cardiac fibroblasts into endothelial cells via activation of innate immunity.** *STAR protocols*
  Liu, C., Medina, P., Thomas, D., Chen, I. Y., Sallam, K., Sayed, D., Sayed, N.
  2021; 2 (2): 100556

- **Building Multi-Dimensional Induced Pluripotent Stem Cells-Based Model Platforms to Assess Cardiotoxicity in Cancer Therapies.** *Frontiers in pharmacology*
  Thomas, D. n., Shenoy, S. n., Sayed, N. n.
  2021; 12: 607364

- **Generation of Human iPSCs by Protein Reprogramming and Stimulation of TLR3 Signaling.** *Methods in molecular biology (Clifton, N.J.)*
  Liu, C., Ameen, M., Himmati, S., Thomas, D., Sayed, N.
  2021; 2239: 153–62

- **An inflammatory aging clock (iAge) based on deep learning tracks multimorbidity, immunosenescence, frailty and cardiovascular aging** *Nature Aging*
  Sayed, N., Huang, Y., Nguyen, K., Krejciova-Rajaniemi, Z., Grawe, A. P., Gao, T., Tibshirani, R., Hastie, T., Alpert, A., Cui, L., Kuznetsova, T., Rosenberg-Hasson, Y., Ostan, et al
  2021: 598–615

- **Clinical trial in a dish using iPSCs shows lovastatin improves endothelial dysfunction and cellular cross-talk in LMNA cardiomyopathy.** *Science translational medicine*
  Sayed, N., Liu, C., Ameen, M., Himmati, F., Zhang, J. Z., Khanamiri, S., Moonen, J., Wnorowski, A., Cheng, L., Rhee, J., Gaddam, S., Wang, K. C., Sallam, et al
  2020; 12 (554)

- **HIF1α Regulates Early Metabolic Changes due to Activation of Innate Immunity in Nuclear Reprogramming.** *Stem cell reports*
  Liu, C. n., Ruan, H. n., Himmati, F. n., Zhao, M. T., Chen, C. C., Makar, M. n., Chen, I. Y., Sallam, K. n., Mocarski, E. S., Sayed, D. n., Sayed, N. n.
  2020; 14 (2): 192–200

- **Personalized medicine in cardio-oncology: the role of induced pluripotent stem cell** *CARDIOVASCULAR RESEARCH*
  Sayed, N., Ameen, M., Wu, J. C.
  2019; 115 (5): 949–59

- **Marked Vascular Dysfunction in a Case of Peripartum Cardiomyopathy.** *Journal of vascular research*
  Khanamiri, S. n., Rhee, J. W., Paik, D. T., Chen, I. Y., Liu, C. n., Sayed, N. n.
  2019; 56 (1): 11–15

- **Human Induced Pluripotent Stem Cell Model of Trastuzumab-Induced Cardiac Dysfunction in Breast Cancer Patients.** *Circulation*
  Kitani, T. n., Ong, S. G., Lam, C. K., Rhee, J. W., Zhang, J. Z., Oikonomopoulos, A. n., Ma, N. n., Tian, L. n., Lee, J. n., Telli, M. L., Witteles, R. M., Sharma, A. n., Sayed, et al
  2019

- **Determining the Pathogenicity of a Genomic Variant of Uncertain Significance Using CRISPR/Cas9 and Human-Induced Pluripotent Stem Cells.** *Circulation*
  Ma, N., Zhang, J., Itzhaki, I., Zhang, S. L., Chen, H., Haddad, F., Kitani, T., Wilson, K. D., Tian, L., Shrestha, R., Wu, H., Lam, C. K., Sayed, et al
  2018

- **Cancer therapy-induced cardiomyopathy: can human induced pluripotent stem cell modelling help prevent it?** *European heart journal*
  Stack, J. P., Moslehi, J. n., Sayed, N. n., Wu, J. C.
  2018

- **Paying the Toll in Nuclear Reprogramming.** *Frontiers in cell and developmental biology*
  Liu, C., Himmati, F., Sayed, N.
  2017; 5: 70
- **Retinoic Acid Inducible Gene 1 Protein (RIG1)-Like Receptor Pathway Is Required for Efficient Nuclear Reprogramming** *STEM CELLS*
  Sayed, N., Ospino, F., Himmati, F., Lee, J., Chanda, P., Mocarski, E. S., Cooke, J. P.
  2017; 35 (5): 1197-1207
- **Towards Cardio-Precision medicine** *EUROPEAN HEART JOURNAL*
  Sayed, N., Wu, J. C.
  2017; 38 (14): 1014–16
- **Translation of Human-Induced Pluripotent Stem Cells From Clinical Trial in a Dish to Precision Medicine** *JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY*
  Sayed, N., Liu, C., Wu, J. C.
  2016; 67 (18): 2161-2176
- **Transdifferentiation of human fibroblasts to endothelial cells: role of innate immunity.** *Circulation*
  Sayed, N., Wong, W. T., Ospino, F., Meng, S., Lee, J., Jha, A., Dexheimer, P., Aronow, B. J., Cooke, J. P.
  2015; 131 (3): 300-309
- **Therapeutic transdifferentiation: can we generate cardiac tissue rather than scar after myocardial injury?** *Methodist DeBakey cardiovascular journal*
  Sayed, N., Wong, W. T., Cooke, J. P.
  2013; 9 (4): 210-212
- **Activation of Innate Immunity Is Required for Efficient Nuclear Reprogramming** *CELL*
  Lee, J., Sayed, N., Hunter, A., Au, K. F., Wong, W. H., Mocarski, E. S., Pera, R. R., Yakubov, E., Cooke, J. P.
  2012; 151 (3): 547-558
- **Nitroglycerin-induced S-nitrosylation and desensitization of soluble guanylyl cyclase contribute to nitrate tolerance** *CIRCULATION RESEARCH*
  Sayed, N., Kim, D. D., Fioramonti, X., Iwahashi, T., Duran, W. N., Beuve, A.
  2008; 103 (6): 606-614
- **Desensitization of soluble guanylyl cyclase, the NO receptor, by S-nitrosylation** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
  Sayed, N., Baskaran, P., Ma, X., van den Akker, F., Beuve, A.
  2007; 104 (30): 12312-12317
- **Generation of an induced pluripotent stem cell line from a patient with Loeys-Dietz syndrome.** *Stem cell research*
  Liu, L., Manhas, A., Noishiki, C., Wu, D., Tripathi, D., Turbes, N., Sallam, K., Lee, J. T., Sayed, N.
  2026; 94: 103981
- **Generation of two induced pluripotent stem cell lines from hypertrophic cardiomyopathy patients carrying MYBPC3 mutations.** *Stem cell research*
  Wu, C. A., Wu, M. A., Zhao, S. R., Sun, J., Flores-Banuelos, A. G., Walther, P., Wheeler, M., Sayed, N.
  2026; 94: 103982
- **Preeclamptic iPSC-Derived Endothelial Cells Exhibit Global Dysfunction With Heterogeneous Defects In Nitric Oxide Signaling and Vascular Barrier Integrity**
  Plummer, X., Wu, Y., Iyer, P., Sayed, N., Winn, V.
  SPRINGER HEIDELBERG.2026
- **A murine model of cardiovascular-kidney-metabolic syndrome demonstrates compromised limb function in the ischemic hind limb**
  Lotfollahzadeh, S., Siracuse, J., Cabral, H., Malikova, M., Sayed, N., Chitalia, V.
  LIPPINCOTT WILLIAMS & WILKINS.2025
- **A Murine Model of Cardiovascular-Kidney-Metabolic Syndrome Demonstrates Compromised Limb Function in the Ischemic Hind Limb.** *Kidney360*

Lotfollahzadeh, S., Paul, H., Bonifacio, J., Almiron, R., Hockestra, I., Przekop, K., Yamamoto, T., Piqueras, M. C., Yin, W., Sethuraman, K., Jose, A., Malikova, M., Siracuse, et al
2025

- **Constitutive expression of cardiomyocyte Klf9 precipitates metabolic dysfunction and spontaneous cardiomyopathy.** *Cellular signalling*
Thakkar, C., Alikunju, S., Venkatasubramanian, A., D'Mello, D., Abbas, H., Yang, Z., Andreas, I., Sayed, N., Abdellatif, M., Sayed, D.
2025: 112146

- **Immunosuppression Drugs Exhibit Differential Effects on Endothelial Cell Function.** *Journal of vascular research*
Elezaby, A., Dexheimer, R., Wu, D., Chan, S. Y., Tacco, I. R., Chen, I. Y., Sayed, N., Sallam, K.
2025: 1-13

- **Investigating the Risk of Arrhythmogenesis Associated With Fentanyl Abuse Using Human and Mouse Cardiomyocytes.** *Circulation*
Mondéjar-Parreño, G., Zhao, S. R., Cao, X., Liu, Y., Yang, J. Y., Jahng, J. W., Leitz, J., Wu, D., Sayed, N., Jalife, J., Wu, J. C.
2025; 152 (8): 563-566

- **Generation of an induced pluripotent stem cell line from a malignant melanoma patient who developed the immune checkpoint inhibitor-related myasthenia gravis, myositis, and myocarditis overlap syndrome.** *Stem cell research*
Huynh, D. T., Noishiki, C., Lai, J., Yarahmadi, P., Le, T., Tripathi, D., Tacco, I. R., Manhas, A., Sallam, K., Chen, I. Y., Sayed, N., Nguyen, P. K.
2025; 87: 103797

- **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

- **Characterization of induced pluripotent stem cell lines from patients of African American ancestry**
Wu, M., Wu, C., Zhao, S., Zhang, J., Sayed, N.
LIPPINCOTT WILLIAMS & WILKINS.2025

- **Generation of induced pluripotent stem cell lines from hypertrophic cardiomyopathy patients carrying MYBPC3 mutations**
Wu, C., Wu, M., Zhao, S., Woo, Y., Sayed, N.
LIPPINCOTT WILLIAMS & WILKINS.2025

- **CLIC2 AS A NOVEL REGULATOR OF RYR2 AND SR Ca²⁺ HOMEOSTASIS IN CARDIAC PHYSIOLOGY**
Sanghvi, S., Sridharan, D., Bhachu, H., Malhotra, N., Raut, S., Fernandes, S., Sayed, N., El Refaey, M., Khan, M., Singh, H.
LIPPINCOTT WILLIAMS & WILKINS.2025

- **Characterization of iPSC lines from dilated cardiomyopathy patients carrying a mutation in the RBM20 gene**
Rajasekaran, S., Manhas, A., Sayed, N., Wu, J.
LIPPINCOTT WILLIAMS & WILKINS.2025

- **Preeclamptic and Normotensive iPSC-Derived Endothelial Cells Have Distinct Responses to Maternal Circulating Factors**
Plummer, X. D., Wu, Y., Iyer, P., Medina, P., Sayed, N., Winn, V. D.
SPRINGER HEIDELBERG.2025: 69A

- **Constitutive expression of cardiomyocyte Klf9 precipitates metabolic dysfunction and spontaneous heart failure.** *bioRxiv : the preprint server for biology*
Thakkar, C., Alikunju, S., Venkatasubramanium, A., Yang, Z., Sayed, N., Abdellatif, M., Sayed, D.
2025

- **Generation of induced pluripotent stem cell line from a patient with long COVID.** *Stem cell research*
Wu, D., Manhas, A., Noishiki, C., Tripathi, D., Liu, L., Turbes, N., Thomas, D., Sallam, K., Lee, J. T., Sayed, N.
2025; 83: 103652

- **Generation and characterization of three induced pluripotent stem cell lines for modeling coronary artery vasospasm.** *Stem cell research*
Ross Tacco, I., Olshausen, J., Chan, T. Y., Turbes, N., Hung, M. Y., Yeh, C. T., Nguyen, P. K., Sallam, K., Sayed, N., Chen, I. Y.
2024; 82: 103644

- **CRISPRi/a screens in human iPSC-cardiomyocytes identify glycolytic activation as a druggable target for doxorubicin-induced cardiotoxicity.** *Cell stem cell*
Liu, C., Shen, M., Liu, Y., Manhas, A., Zhao, S. R., Zhang, M., Belbachir, N., Ren, L., Zhang, J. Z., Caudal, A., Nishiga, M., Thomas, D., Zhang, et al

2024

- **A Novel Stem Cell Model to Study Preeclampsia Endothelial Dysfunction.** *Reproductive sciences (Thousand Oaks, Calif.)*
  Wu, Y., Sun, T., Medina, P., Narasimhan, P., Stevenson, D. K., Von Versen-Höynck, F., Armstrong, J., Wu, J. C., Sayed, N., Winn, V. D.
  2024
- **Generation of two iPSC lines from dilated cardiomyopathy patients with pathogenic variants in the SCN5A gene.** *Stem cell research*
  Dexheimer, R., Manhas, A., Wu, D., Tripathi, D., Yu Chan, S., Li, J., Yu, R., Sayed, N., Wu, J. C., Sallam, K.
  2024; 80: 103498
- **Single-cell analysis identifies conserved features of immune dysfunction in simulated microgravity and spaceflight.** *Nature communications*
  Wu, F., Du, H., Overbey, E., Kim, J., Makhijani, P., Martin, N., Lerner, C. A., Nguyen, K., Baechle, J., Valentino, T. R., Fuentealba, M., Bartleson, J. M., Halaweh, et al
  2024; 15 (1): 4795
- **Understanding Cardiovascular Risk in Prostate Cancer: Role of Disparities, Diabetes, and Aging** *CURRENT TREATMENT OPTIONS IN CARDIOVASCULAR MEDICINE*
  Nain, P., Seth, L., Patel, V., Jiang, S., Gopu, G., Singh, R., Stabellini, N., Reddy, R., Weintraub, N. L., Harris, R. A., Cullen, J., Agarwal, N., Moore, et al
  2024
- **Chloride intracellular ion channel 2 regulates the cellular calcium through modulation of cardiac ryanodine receptor channels**
  Sanghvi, S. K., Sridharan, D., Bhachu, H. R., Ponnalagu, D., Sayed, N., Khan, M., Singh, H.
  CELL PRESS.2024: 518A
- **Generation of induced pluripotent stem cell line from a patient suffering from arterial calcification due to deficiency of CD73 (ACDC).** *Stem cell research*
  Tripathi, D., Manhas, A., Noishiki, C., Wu, D., Adkar, S., Sallam, K., Fukaya, E., Leeper, N. J., Sayed, N.
  2023; 75: 103285
- **Utilizing an induced pluripotent stem cell platform to model arterial calcification resulting from deficiency of CD73**
  Noishiki, C., Alsaigh, T., Wu, D., Adkar, S., Chandra, V., Klarin, D., Lee, J., Fukaya, E., Leeper, N., Sayed, N.
  SAGE PUBLICATIONS LTD.2023: 499-500
- **An Alternate Explanation. Reply.** *The New England journal of medicine*
  Alsaigh, T., Leeper, N. J., Sayed, N.
  2023; 389 (13): 1251
- **Cardiovascular Toxicities Associated with Tyrosine Kinase Inhibitors.** *Current cardiology reports*
  Sayegh, N., Yirerong, J., Agarwal, N., Addison, D., Fradley, M., Cortes, J., Weintraub, N. L., Sayed, N., Raval, G., Guha, A.
  2023
- **A novel in vitro stem cell model to study maternal endothelial function in preeclampsia**
  Wu, Y., Sun, T., Medina, P., Iyer, P., Stevenson, D. K., Wu, J., Sayed, N., Winn, V. D.
  MOSBY-ELSEVIER.2023: S10
- **Biodegradable external wrapping promotes favorable adaptation in an ovine vein graft model.** *Acta biomaterialia*
  Ramachandra, A. B., Wang, H., Wnorowski, A., Schwarz, E. L., Pickering, J., Heiler, J. C., Lucian, H. J., Hironaka, C. E., Tran, N. A., Liu, Y., Khan, M. O., Obafemi, O., Tada, et al
  2022
- **HMOX1 Genetic Polymorphisms Display Ancestral Diversity and May Be Linked to Hypertensive Disorders in Pregnancy.** *Reproductive sciences (Thousand Oaks, Calif.)*
  Sun, T., Cruz, G. I., Mousavi, N., Maric, I., Brewer, A., Wong, R. J., Aghaeepour, N., Sayed, N., Wu, J. C., Stevenson, D. K., Leonard, S. A., Gymrek, M., Winn, et al
  2022
- **Cannabinoid receptor 1 antagonist genistein attenuates marijuana-induced vascular inflammation.** *Cell*
  Wei, T. T., Chandy, M., Nishiga, M., Zhang, A., Kumar, K. K., Thomas, D., Manhas, A., Rhee, S., Justesen, J. M., Chen, I. Y., Wo, H. T., Khanamiri, S., Yang, et al
  2022

- **Modeling Effects of Immunosuppressive Drugs on Human Hearts Using Induced Pluripotent Stem Cell-Derived Cardiac Organoids and Single-Cell RNA Sequencing.** *Circulation*
  Sallam, K., Thomas, D., Gaddam, S., Lopez, N., Beck, A., Beach, L., Rogers, A. J., Zhang, H., Chen, I. Y., Ameen, M., Hiesinger, W., Teuteberg, J. J., Rhee, et al
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