

Stanford



Karim Sallam, MD

Assistant Professor of Medicine (Cardiovascular Medicine)

Medicine - Cardiovascular Medicine

CLINICAL OFFICE (PRIMARY)

- **Falk Cardiovascular Research Building**

300 Pasteur Dr

MC 5406

Stanford, CA 94305

Tel (650) 736-7878

Fax (650) 498-7452

Bio

BIO

Karim Sallam, MD, is trained in Cardiovascular Medicine and Advanced Heart Failure.

CLINICAL FOCUS

- Cardiovascular Medicine
- Advanced Heart Failure
- Advanced Heart Failure and Transplant Cardiology

ACADEMIC APPOINTMENTS

- Assistant Professor - University Medical Line, Medicine - Cardiovascular Medicine
- Member, Cardiovascular Institute

HONORS AND AWARDS

- Highest Performance in Medicine, James D. Heard Junior Prize (2006)
- Compassion and Humanism, Jeffrey Alan Grey Memorial Prize (2006)
- Empathetic, Sensitive and Respectful Behavior, Leonard Tow Humanism in Medicine Student Award (2006)
- Exemplary Professionalism Award, Stanford Medicine Residency Program (2007/2008)

PROFESSIONAL EDUCATION

- Fellowship, Stanford Hospital and Clinics , Advanced Heart Failure and Transplant (2015)
- Fellowship, Stanford Hospital and Clinics , Cardiovascular Medicine (2014)
- Residency, Stanford Hospital and Clinics , Internal Medicine (2009)
- Medical Education: University of Pittsburgh Medical Center (2006) PA

LINKS

- Get a Second Opinion: <https://stanfordhealthcare.org/second-opinion/overview.html>

Publications

PUBLICATIONS

- **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
- **Validating the Association Between Composite Metrics of Guideline-Directed Medical Therapy (GDMT) and Clinical Outcomes for Patients with Heart Failure with Reduced Ejection Fraction (HFrEF).** *Journal of cardiac failure*
Steverson, A., Calma, J., Hsiao, S., Sallam, K., Varshney, A. S., Golbus, J. R., Heidenreich, P. A., Sandhu, A. T.
2024
- **One-year real-world experience with mavacamten and its physiologic effects on obstructive hypertrophic cardiomyopathy** *FRONTIERS IN CARDIOVASCULAR MEDICINE*
Kim, D., Chu, E. L., Keamy-Minor, E. E., Paranjpe, I., Tang, W. L., O'Sullivan, J. W., Desai, Y. B., Liu, M. B., Munsey, E., Hecker, K., Cuenco, I., Kao, B., Bacolor, et al
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- **One-year real-world experience with mavacamten and its physiologic effects on obstructive hypertrophic cardiomyopathy.** *Frontiers in cardiovascular medicine*
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2024; 11: 1429230
- **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.
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- **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
- **Artificial intelligence predictive analytics in heart failure: results of the pilot phase of a pragmatic randomized clinical trial.** *Journal of the American Medical Informatics Association : JAMIA*
Sideris, K., Weir, C. R., Schmalfuss, C., Hanson, H., Pipke, M., Tseng, P. H., Lewis, N., Sallam, K., Bozkurt, B., Hanff, T., Schofield, R., Larimer, K., Kyriakopoulos, et al
2024
- **Almanac - Retrieval-Augmented Language Models for Clinical Medicine.** *NEJM AI*
Zakka, C., Shad, R., Chaurasia, A., Dalal, A. R., Kim, J. L., Moor, M., Fong, R., Phillips, C., Alexander, K., Ashley, E., Boyd, J., Boyd, K., Hirsch, et al
2024; 1 (2)
- **Uptake of sodium-glucose cotransporter-2 inhibitors in hospitalized patients with heart failure: insights from the veterans affairs healthcare system.** *Journal of cardiac failure*
Varshney, A. S., Calma, J., Kalwani, N. M., Hsiao, S., Sallam, K., Cao, F., Din, N., Schirmer, J., Bhatt, A. S., Ambrosy, A. P., Heidenreich, P., Sandhu, A. T.
2024
- **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.
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- **Generation of two induced pluripotent stem cell lines from hereditary amyloidosis patients with polyneuropathy carrying heterozygous transthyretin (TTR) mutation.** *Stem cell research*
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- **Generation of two induced pluripotent stem cell lines from dilated cardiomyopathy patients carrying heterozygous FLNC mutations.** *Stem cell research*
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- **Generation of two induced pluripotent stem cell lines carrying the phospholamban R14del mutation for modeling ARVD/C.** *Stem cell research*
Vera, C. D., Manhas, A., Shenoy, S. P., Wheeler, M. T., Sallam, K., Wu, J. C.
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- **Modeling Effects of Immunosuppressive Drugs on Human Hearts Using Induced Pluripotent Stem Cell-Derived Cardiac Organoids and Single-Cell RNA Sequencing.** *Circulation*
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- **Heterozygous LMNA mutation-carrying iPSC lines from three cardiac laminopathy patients.** *Stem cell research*
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- **Cardiovascular effects of immunosuppression agents.** *Frontiers in cardiovascular medicine*
Elezaby, A., Dexheimer, R., Sallam, K.
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- **Generation of two induced pluripotent stem cell lines from Brugada syndrome affected patients carrying SCN5A mutations.** *Stem cell research*
Belbachir, N., Lai, C., Rhee, J., Zhuge, Y., Perez, M. V., Sallam, K., Wu, J. C.
2021; 57: 102605
- **Coronary Artery Vasospasm Requiring Cardiac Autotransplantation Yet Controlled With Tobacco.** *JACC. Case reports*
Tran, M. V., Marceau, E., Liu, Y., Sallam, K., Medina, P., Liu, C., Sayed, N., Muller, M. D., Liang, D. H., Chen, I. Y.
2021; 3 (9): 1177-1181
- **Generation of three induced pluripotent stem cell lines from hypertrophic cardiomyopathy patients carrying MYH7 mutations.** *Stem cell research*
Cao, X., Jahng, J. W., Lee, C., Zha, Y., Wheeler, M. T., Sallam, K., Wu, J. C.
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- **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.
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- **The Unfolded Protein Response as a Compensatory Mechanism and Potential Therapeutic Target in PLN R14del Cardiomyopathy.** *Circulation*
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Sallam, K., Bhumireddy, G. P., Evuri, V. D., Abella, J. P., Haddad, F., Valentine, H. A., Nguyen, P. K., Pham, M. X.

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- **Clinical trial in a dish using iPSCs shows lovastatin improves endothelial dysfunction and cellular cross-talk in LMNA cardiomyopathy.** *Science translational medicine*
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- **Modeling Secondary Iron Overload Cardiomyopathy with Human Induced Pluripotent Stem Cell-Derived Cardiomyocytes.** *Cell reports*
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- **HIF1 β Regulates Early Metabolic Changes due to Activation of Innate Immunity in Nuclear Reprogramming.** *Stem cell reports*
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2019
- **Targeted and Selective Treatment of Pluripotent Stem Cell-derived Teratomas Using External Beam Radiation in a Small-animal Model** *JOVE-JOURNAL OF VISUALIZED EXPERIMENTS*
Sallam, K., Rhee, J., Chour, T., D'addabbo, J., Lee, A. S., Graves, E., Nguyen, P. K.
2019
- **Electronic Cigarettes: Where There Is Smoke There Is Disease.** *Journal of the American College of Cardiology*
Wu, J. C., Rhee, J. W., Sallam, K. n.
2019; 74 (25): 3121–23
- **Modelling diastolic dysfunction in induced pluripotent stem cell-derived cardiomyocytes from hypertrophic cardiomyopathy patients.** *European heart journal*
Wu, H. n., Yang, H. n., Rhee, J. W., Zhang, J. Z., Lam, C. K., Sallam, K. n., Chang, A. C., Ma, N. n., Lee, J. n., Zhang, H. n., Blau, H. M., Bers, D. M., Wu, et al
2019
- **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
- **The Incremental Value of Right Ventricular Size and Strain in the Risk Assessment of Right Heart Failure Post - Left Ventricular Assist Device Implantation.** *Journal of cardiac failure*
Aymami, M., Amsallem, M., Adams, J., Sallam, K., Moneghetti, K., Wheeler, M., Hiesinger, W., Teuteberg, J., Weisshaar, D., Verhoye, J., Woo, Y. J., Ha, R., Haddad, et al
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- **Genome Editing of Induced Pluripotent Stem Cells to Decipher Cardiac Channelopathy Variant.** *Journal of the American College of Cardiology*
Garg, P., Oikonomopoulos, A., Chen, H., Li, Y., Lam, C. K., Sallam, K., Perez, M., Lux, R. L., Sanguinetti, M. C., Wu, J. C.
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- **RIGHT HEART MALADAPTIVE PHENOTYPES AND PREDICTION OF RIGHT HEART FAILURE FOLLOWING CONTINUOUS-FLOW LEFT VENTRICULAR ASSIST DEVICE IMPLANTATION**
Aymami, M., Haddad, F., Amsallem, M., Wheeler, M., Moneghetti, K., Adams, J., Verhoye, J., Sallam, K., Woo, Y., Ha, R., Banerjee, D.
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- **Transcriptomic and epigenomic differences in human induced pluripotent stem cells generated from six reprogramming methods** *NATURE BIOMEDICAL ENGINEERING*
Churko, J. M., Lee, J., Ameen, M., Gu, M., Venkatasubramanian, M., Diecke, S., Sallam, K., Im, H., Wang, G., Gold, J. D., Salomonis, N., Snyder, M. P., Wu, et al
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- **Transcriptomic and epigenomic differences in human induced pluripotent stem cells generated from six reprogramming methods.** *Nature biomedical engineering*
Churko, J. M., Lee, J., Ameen, M., Gu, M., Venkatasubramanian, M., Diecke, S., Sallam, K., Im, H., Wang, G., Gold, J. D., Salomonis, N., Snyder, M. P., Wu, et al

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- **Simultaneous ramp right heart catheterization and echocardiography in a ReliantHeart left ventricular assist device.** *World journal of cardiology*
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- **Patient-Specific Induced Pluripotent Stem Cell-Based Disease Model for Pathogenesis Studies and Clinical Pharmacotherapy.** *Circulation. Arrhythmia and electrophysiology*
Li, Y. n., Sallam, K. n., Schwartz, P. J., Wu, J. C.
2017; 10 (6)
- **Patient-Specific and Genome-Edited Induced Pluripotent Stem Cell-Derived Cardiomyocytes Elucidate Single-Cell Phenotype of Brugada Syndrome.** *Journal of the American College of Cardiology*
Liang, P., Sallam, K., Wu, H., Li, Y., Itzhaki, I., Garg, P., Zhang, Y., Vermglinchan, V., Lan, F., Gu, M., Gong, T., Zhuge, Y., He, et al
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- **A Rapid, High-Quality, Cost-Effective, Comprehensive and Expandable Targeted Next-Generation Sequencing Assay for Inherited Heart Diseases.** *Circulation research*
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- **Modeling inherited cardiac disorders.** *Circulation journal*
Sallam, K., Kodo, K., Wu, J. C.
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- **Cardiac stem cell biology: glimpse of the past, present, and future.** *Circulation research*
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- **Prognostic Implications of Q Waves and T-Wave Inversion Associated With Early Repolarization** *MAYO CLINIC PROCEEDINGS*
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- **Embryonic stem cell biology: insights from molecular imaging.** *Methods in molecular biology (Clifton, N.J.)*
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