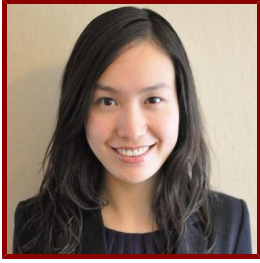


Stanford



Han Zhu

Instructor, Medicine

CLINICAL OFFICES

- **Stanford Health Care Cardiovascular Medicine**

870 Quarry Rd Rm CV2C83

Stanford, CA 94305

Tel (650) 736-1319 **Fax** (650) 725-1599

- **Medicine**

300 Pasteur Dr Rm JC007

Stanford, CA 94305

Tel (650) 725-5071 **Fax** (650) 725-8381

Bio

BIO

Dr. Zhu is a general cardiologist with specialized clinical and research training in cardio-oncology and cardio-immunology. She focuses on the cardiovascular care of patients undergoing therapies for cancer, with a particular focus on the effects of immunotherapies on the heart. She completed clinical cardiology fellowship and internal medicine residency training at Stanford University School of Medicine. During her post-doctoral training, Dr. Zhu's research focuses on myocarditis, cardiac inflammation, and the effects of cancer therapeutics on the cardiovascular system. Her current research employs clinical data, bio-banked samples, and animal models to study T-cell toxicities in the heart. Dr. Zhu's clinic sees cardio-oncology and cardio-immunology patients and focuses on devising new methods for minimizing cardiovascular complications in the cancer patient population.

CLINICAL FOCUS

- Cardiovascular Disease
- Cardio-Oncology
- Cardio-Immunology

ACADEMIC APPOINTMENTS

- Instructor, Medicine

HONORS AND AWARDS

- Melvin L. Marcus Early Career Investigator Award Finalist, American Heart Association (AHA) - Basic Cardiovascular Sciences (BCVS) (2021)
- Gerald Reaven Basic Science Research Award, Stanford University (2020)
- Sarnoff Scholar Career Development Award, Sarnoff Cardiovascular Foundation (2020)
- Sanofi Innovation Awards (iAwards), Sanofi (2019-2021)

- NIH F32 Ruth Kirschstein National Research Service Award Grant, National Institute of Health (NIH) (2019)
- Stanford Cancer Institute (SCI) Innovation Award, Stanford Cancer Institute (SCI) (2019)
- Alpha Omega Alpha (AOA) Member, Alpha Omega Alpha (AOA) (2014)
- Myron F. Kanter and Lawrence J. Kanter Endowment Fund Award, Myron F. Kanter and Lawrence J. Kanter Foundation (2014)
- Sarnoff Cardiovascular Research Foundation Fellowship, Sarnoff Cardiovascular Foundation (2012-2013)
- Irwin H. Lepow Research Award, Irwin H. Lepow Research Foundation (2011)
- American Federation of Aging Research (AFAR) Grant Recipient, American Federation of Aging Research (AFAR) (2010)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Assistant Editor, JACC: CardioOncology (2020 - present)
- Committee Member, AHA Statement on Preclinical Models in Cardio-Oncology Writing Group (2020 - present)
- Cardio-Oncology Subcommittee Member, American Heart Association (AHA) (2019 - present)
- Committee Member, American College of Cardiology Cardio-Oncology - California Chapter (2020 - present)
- Member, Society of Cardiovascular Computed Tomography (SCCT) (2019 - present)
- Member, American Society of Echocardiography (2019 - present)

PROFESSIONAL EDUCATION

- Board Certification, American College of Cardiology/ABIM , Cardiovascular Disease (2020)
- Fellowship: Stanford University Cardiovascular Medicine Fellowship (2020) CA
- Board Certification, Society of Cardiovascular Computer Tomography (SCCT) , Cardiac CT (2019)
- Board Certification: Adult Comprehensive Echocardiography, National Board of Echocardiography (2019)
- Board Certification: Internal Medicine, American Board of Internal Medicine (2017)
- Residency: Stanford University Internal Medicine Residency (2017) CA
- Medical Education: Case Western Reserve School of Medicine (2014) OH
- Residency, Stanford University , Internal Medicine (2017)
- Doctor of Medicine, Case Western Reserve University School of Medicine , Medicine (2014)
- Bachelor of Science, Massachusetts Institute of Technology (MIT) , Biological Engineering (2009)

Publications

PUBLICATIONS

- **Myocarditis Surveillance with High-Sensitivity Troponin I During Cancer Treatment with Immune Checkpoint Inhibitors.** *JACC. CardioOncology* Waliany, S., Neal, J. W., Reddy, S., Wakelee, H., Shah, S. A., Srinivas, S., Padda, S. K., Fan, A. C., Colevas, A. D., Wu, S. M., Witteles, R. M., Zhu, H. 2021; 3 (1): 137–39
- **Preclinical Models of Cancer Therapy-Associated Cardiovascular Toxicity: A Scientific Statement From the American Heart Association.** *Circulation research* Asnani, A. n., Moslehi, J. J., Adhikari, B. B., Baik, A. H., Beyer, A. M., de Boer, R. A., Ghigo, A. n., Grumbach, I. M., Jain, S. n., Zhu, H. n. 2021: RES0000000000000473
- **Immune checkpoint inhibitor cardiotoxicity: Breaking barriers in the cardiovascular immune landscape.** *Journal of molecular and cellular cardiology* Zhu, H., Ivanovic, M., Nguyen, A., Nguyen, P. K., Wu, S. M. 2021
- **Immune Checkpoint Inhibitor Cardiotoxicity: Understanding Basic Mechanisms and Clinical Characteristics and Finding a Cure.** *Annual review of pharmacology and toxicology* Waliany, S. n., Lee, D. n., Witteles, R. M., Neal, J. W., Nguyen, P. n., Davis, M. M., Salem, J. E., Wu, S. M., Moslehi, J. J., Zhu, H. n.

2020

- **Pharmacovigilance analysis of cardiac toxicities associated with targeted therapies for metastatic non-small cell lung carcinoma.** *Journal of thoracic oncology : official publication of the International Association for the Study of Lung Cancer*
Waliyany, S., Zhu, H., Wakelee, H., Padda, S. K., Das, M., Ramchandran, K., Myall, N. J., Chen, T., Witteles, R. M., Neal, J. W.
2021
- **Immune Profiling and Causal Antigen Discovery in Mouse and Human Models of Immune Checkpoint Inhibitor-induced Myocarditis**
Zhu, H., Lee, D., Sarah, W., Galdos, F. X., D'Addabbo, J., Fowler, M. B., Reddy, S., Heather, W., Neal, J. W., Witteles, R., Maecker, H. T., Davis, M., Nguyen, et al
LIPPINCOTT WILLIAMS & WILKINS.2020
- **Correction to: Cardiovascular Complications in Patients with COVID-19: Consequences of Viral Toxicities and Host Immune Response.** *Current cardiology reports*
Zhu, H., Rhee, J., Cheng, P., Waliyany, S., Chang, A., Witteles, R. M., Maecker, H., Davis, M. M., Nguyen, P. K., Wu, S. M.
2020; 22 (5): 36
- **Cardiovascular Complications in Patients with COVID-19: Consequences of Viral Toxicities and Host Immune Response** *Curr Cardiol Rep*
Zhu, H., Rhee, J., Cheng, P., Waliyany, S., Chang, A., Witteles, R. M., Maecker, H., Davis, M. M., Nguyen, P. K., Wu, S. M.
2020; 22 (5)
- **Cardiovascular Risks in Patients with COVID-19: Potential Mechanisms and Areas of Uncertainty.** *Current cardiology reports*
Cheng, P. n., Zhu, H. n., Witteles, R. M., Wu, J. C., Quertermous, T. n., Wu, S. M., Rhee, J. W.
2020; 22 (5): 34
- **Low Wall Shear Stress Is Associated with Saphenous Vein Graft Stenosis in Patients with Coronary Artery Bypass Grafting.** *Journal of cardiovascular translational research*
Khan, M. O., Tran, J. S., Zhu, H. n., Boyd, J. n., Packard, R. R., Karlsberg, R. P., Kahn, A. M., Marsden, A. L.
2020
- **A Case of Early Immune Checkpoint Inhibitor Myocarditis Detected on Routine Troponin Monitoring** *Advancing the Cardiovascular Care of the Oncology Patient*
Zhu, H., Waliyany, S., Neal, J., Wakelee, H., Wu, S. M., Witteles, R. M.
2020
- **Immune Profiling and Causal Antigen Discovery in Mouse and Human Models of Immune Checkpoint Inhibitor-induced Myocarditis** *Basic Cardiovascular Sciences (BCVS) Scientific Sessions*
Zhu, H., Lee, D., Waliyany, S., Galdos, F., D'Addabbo, J., Fowler, M. B., Reddy, S., Wakelee, H., Neal, J. W., Witteles, R. M., Maecker, H. T., Davis, M. M., Nguyen, et al
2020
- **NOVEL ALPHA-ACTININ 2 MUTATIONS ARE ASSOCIATED WITH CARDIOMYOPATHY AND HYPERTROPHY IN HUMAN CARDIAC TISSUE AND IPSC-DERIVED CARDIOMYOCYTES**
Lindholm, M., Zhu, H., Huang, Y., Ashley, E. A., Wheeler, M.
ELSEVIER SCIENCE INC.2019: 1027
- **Computational Fluid Dynamics (BypassCFD) Trumps Anatomic Predictors of Saphenous Vein Graft Failure in CABG Patients**
Khan, M., Tran, J. S., Zhu, H., Packard, R. S., Karlsberg, R. P., Kahn, A., Marsden, A. L.
LIPPINCOTT WILLIAMS & WILKINS.2018
- **Computational Fluid Dynamics (BypassCFD) Trumps Anatomic Predictors of Saphenous Vein Graft Failure in CABG Patients** *American Heart Association*
Kahn, O., Tran, J. S., Zhu, H., Packard, R. S., Karlsberg, R. P., Kahn, A., Marsden, A.
2018
- **Sinoatrial node toxicity after stereotactic ablative radiation therapy to lung tumors.** *Practical radiation oncology*
Qian, Y. n., Zhu, H. n., Pollom, E. L., Durkee, B. Y., Chaudhuri, A. A., Gensheimer, M. F., Diehn, M. n., Shultz, D. B., Loo, B. W.
2017
- **ACTN2 Mutations Are Associated With Cardiomyopathy and Cardiomyocyte Hypertrophy**
Zhu, H., Ashley, E., Wheeler, M.

LIPPINCOTT WILLIAMS & WILKINS.2016

- **Glucocorticoids enhance muscle endurance and ameliorate Duchenne muscular dystrophy through a defined metabolic program.** *Proceedings of the National Academy of Sciences of the United States of America*
Morrison-Nozik, A. n., Anand, P. n., Zhu, H. n., Duan, Q. n., Sabeh, M. n., Prosdocimo, D. A., Lemieux, M. E., Nordsborg, N. n., Russell, A. P., MacRae, C. A., Gerber, A. N., Jain, M. K., Haldar, et al
2015; 112 (49): E6780–9
- **miR-222 is necessary for exercise-induced cardiac growth and protects against pathological cardiac remodeling.** *Cell metabolism*
Liu, X. n., Xiao, J. n., Zhu, H. n., Wei, X. n., Platt, C. n., Damilano, F. n., Xiao, C. n., Bezzerides, V. n., Boström, P. n., Che, L. n., Zhang, C. n., Spiegelman, B. M., Rosenzweig, et al
2015; 21 (4): 584–95
- **Kruppel-like factor 15 is a critical regulator of cardiac lipid metabolism.** *The Journal of biological chemistry*
Prosdocimo, D. A., Anand, P. n., Liao, X. n., Zhu, H. n., Shelkay, S. n., Artero-Calderon, P. n., Zhang, L. n., Kirsh, J. n., Moore, D. n., Rosca, M. G., Vazquez, E. n., Kerner, J. n., Akat, et al
2014; 289 (9): 5914–24
- **Kruppel-like factor 15 regulates skeletal muscle lipid flux and exercise adaptation.** *Proceedings of the National Academy of Sciences of the United States of America*
Haldar, S. M., Jeyaraj, D. n., Anand, P. n., Zhu, H. n., Lu, Y. n., Prosdocimo, D. A., Eapen, B. n., Kawanami, D. n., Okutsu, M. n., Brotto, L. n., Fujioka, H. n., Kerner, J. n., Rosca, et al
2012; 109 (17): 6739–44
- **Elevated fibroblast growth factor-2 increases tumor necrosis factor-alpha induced endothelial cell death in high glucose.** *Journal of cellular physiology*
Clyne, A. M., Zhu, H. n., Edelman, E. R.
2008; 217 (1): 86–92
- **A porous photocurable elastomer for cell encapsulation and culture.** *Biomaterials*
Gerecht, S. n., Townsend, S. A., Pressler, H. n., Zhu, H. n., Nijst, C. L., Bruggeman, J. P., Nichol, J. W., Langer, R. n.
2007; 28 (32): 4826–35