

# Stanford

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## Danielle Maria Mullis

MD Student with Scholarly Concentration in Molecular Basis of Medicine / Cardiovascular-Pulmonary Sciences, expected graduation Spring 2025

### Bio

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#### INSTITUTE AFFILIATIONS

- Member (Student), Cardiovascular Institute

#### HONORS AND AWARDS

- Stanford Cardiovascular Institute Travel Award, Stanford Cardiovascular Institute (05/20/2023)
- CORES Open Science Innovator Prize, Stanford Data Science (05/12/2023)
- Medical Student Symposium 2022 Prize Winner, Stanford School of Medicine (05/05/2022)
- AATS Member for a Day Scholarship, American Association for Thoracic Surgery (05/01/2022)
- Research Fellowship Grant, Stanford School of Medicine Med Scholars Program (09/01/2021)
- Boring Trust Research Award, Stanford Cardiovascular Institute (06/01/2021)

#### PROFESSIONAL AFFILIATIONS AND ACTIVITIES

- Early Career Committee Member, Stanford Cardiovascular Institute (2021 - present)

### Publications

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#### PUBLICATIONS

- **Reconstruction of the aorta and pulmonary artery during heart-liver transplantation in an adult congenital patient.** *JTCVS techniques*  
Mullis, D. M., Limbu, L., Bonham, C. A., MacArthur, J. W.  
2023; 21: 129-131
- **Biomechanics and clinical outcomes of various conduit configurations in valve sparing aortic root replacement.** *Annals of cardiothoracic surgery*  
Zhu, Y., Park, M. H., Pandya, P. K., Stark, C. J., Mullis, D. M., Walsh, S. K., Kim, J. Y., Wu, C. A., Baccouche, B. M., Lee, S. H., Baraka, A. S., Joo, H., Yajima, et al  
2023; 12 (4): 326-337
- **Individual and program-related predictors of academic vascular surgery practice.** *Annals of vascular surgery*  
Fisher, A. T., Fereydooni, A., Mullis, D. M., Smith, B. K., Sgroi, M. D.  
2023
- **Results following implementation of a cardiac surgery ERAS protocol.** *PloS one*  
Obafemi, T., Mullis, D., Bajaj, S., Krishna, P., Boyd, J.  
2023; 18 (7): e0277868
- **Impact of Integrated Vascular Surgery Residency Training Pathway and Professional Development Time on Career Choice and Research Productivity**  
Fereydooni, A., Fisher, A. T., Mullis, D. M., Smith, B. K., Sgroi, M. D.  
MOSBY-ELSEVIER.2023: E37-E38

- **Trimmed central venous catheters do not increase endothelial injury in an ovine model.** *The journal of vascular access*  
Wang, H., Williams, K. M., Elde, S., Bulterys, P. L., Thakore, A. D., Lucian, H. J., Farry, J. M., Mullis, D. M., Zhu, Y., Paulsen, M. J., Woo, Y. J.  
2023: 11297298231153716
- **Twenty-Year Single-Center Experience of Catheter Ablation of Ventricular Tachycardia and Progression to Heart Transplantation** *Basic Cardiovascular Sciences Scientific Sessions 2023*  
Mullis, D. M., Obafemi, O. O., Kumar, S. S., Kang, A. W., Pelissero, O. G., Aparicio-Valenzuela, J., Haddad, F., Lee, A. M.  
2023
- **Results following implementation of a cardiac surgery ERAS protocol** *PLoS One*  
Obafemi, T., Mullis, D. M., Bajaj, S., Krishna, P., Boyd, J.  
2023
- **Social Isolation Decreases Survival and Worsens Cardiac Function in a Novel Murine Model of Coronary Atherosclerosis** *American Heart Association*  
Mullis, D. M., Wang, H., Zhu, Y., Bonham, S., Padilla-Lopez, A., Kocher, O., Krieger, M., Woo, Y.  
2023
- **Resection of a synovial cell sarcoma by cardiac autotransplantation: A case report.** *JTCVS techniques*  
Mullis, D. M., Zhu, Y., Guenthart, B. A., Bonham, S. A., Trope, W. L., Berry, G. J., Woo, Y. J., MacArthur, J. W.  
2022; 16: 123-127
- **The Critical Biomechanics of Aortomitral Angle and Systolic Anterior Motion: Engineering Native Ex Vivo Simulation.** *Annals of biomedical engineering*  
Park, M. H., Imbrie-Moore, A. M., Zhu, Y., Wilkerson, R. J., Wang, H., Park, G. H., Wu, C. A., Pandya, P. K., Mullis, D. M., Marin-Cuartas, M., Woo, Y. J.  
2022
- **A Novel Rheumatic Mitral Valve Disease Model with Ex Vivo Hemodynamic and Biomechanical Validation.** *Cardiovascular engineering and technology*  
Park, M. H., Pandya, P. K., Zhu, Y., Mullis, D. M., Wang, H., Imbrie-Moore, A. M., Wilkerson, R., Marin-Cuartas, M., Woo, Y. J.  
2022
- **Biomechanical Engineering Analysis of Pulmonary Valve Leaflet Hemodynamics and Kinematics in the Ross Procedure.** *Journal of biomechanical engineering*  
Zhu, Y., Wilkerson, R., Pandya, P., Mullis, D., Wu, C., Madira, S., Marin-Cuartas, M., Park, M. H., Imbrie-Moore, A., Woo, Y. J.  
2022
- **A novel photosynthetic biologic topical gel for enhanced localized hyperoxygenation augments wound healing in peripheral artery disease.** *Scientific reports*  
Zhu, Y., Jung, J., Anilkumar, S., Ethiraj, S., Madira, S., Tran, N. A., Mullis, D. M., Casey, K. M., Walsh, S. K., Stark, C. J., Venkatesh, A., Boakye, A., Wang, et al  
2022; 12 (1): 10028
- **Characteristics of Integrated Thoracic Surgery Residency Matriculants: A Survey of Program Directors.** *The Annals of thoracic surgery*  
Obafemi, O. O., Mullis, D. M., Rogers, A. B., Lee, A. M.  
2022
- **Electrophysiologic Conservation of Epicardial Conduction Dynamics After Myocardial Infarction and Natural Heart Regeneration in Newborn Piglets.** *Frontiers in cardiovascular medicine*  
Wang, H., Pong, T., Obafemi, O. O., Lucian, H. J., Aparicio-Valenzuela, J., Tran, N. A., Mullis, D. M., Elde, S., Tada, Y., Baker, S. W., Wang, C. Y., Cyr, K. J., Paulsen, et al  
2022; 9: 829546
- **From hardware store to hospital: a COVID-19-inspired, cost-effective, open-source, in vivo-validated ventilator for use in resource-scarce regions.** *Bio-design and manufacturing*  
Park, M. H., Zhu, Y., Wang, H., Tran, N. A., Jung, J., Paulsen, M. J., Imbrie-Moore, A. M., Baker, S., Wilkerson, R., Marin-Cuartas, M., Mullis, D. M., Woo, Y. J.  
2021: 1-8
- **Exvivo biomechanical analysis of the Ross procedure using the modified inclusion technique in a 3-dimensionally printed left heart simulator.** *The Journal of thoracic and cardiovascular surgery*  
Zhu, Y., Marin-Cuartas, M., Park, M. H., Imbrie-Moore, A. M., Wilkerson, R. J., Madira, S., Mullis, D. M., Woo, Y. J.  
2021
- **A neonatal leporine model of age-dependent natural heart regeneration after myocardial infarction.** *The Journal of thoracic and cardiovascular surgery*

Wang, H., Hironaka, C. E., Mullis, D. M., Lucian, H. J., Shin, H. S., Tran, N. A., Thakore, A. D., Anilkumar, S., Wu, M. A., Paulsen, M. J., Zhu, Y., Baker, S. W., Woo, et al  
2021

- **Reductively Stable Hydrogen-Bonding Ligands Featuring Appended CF<sub>2</sub>-H Units** *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY*  
Shanahan, J. P., Mullis, D. M., Zeller, M., Szymczak, N. K.  
2020; 142 (19): 8809–17