



## Stefan Elde

- Resident in Cardiothoracic Surgery - Thoracic Surgery
- Affiliate, Department Funds

### Bio

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#### INSTITUTE AFFILIATIONS

- Member (Postdoc), Cardiovascular Institute

### Publications

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#### PUBLICATIONS

- **A Novel 3-Dimensional Reinforced Ringed Graft for Valve-Sparing Aortic Root Replacement.** *JACC. Asia*  
Kim, J. B., Park, M. H., Yajima, S., Elde, S., Zhu, Y., Choi, P. S., Paulsen, M., Woo, Y. J.  
2025; 5 (4): 599-602
- **Application of a degradable thin film to modulate perfusion to post-autotransplantation airways in rats.** *JTCVS open*  
Krishnan, A., Forouharshad, M., Heng, E., Garrison, A., Alnasir, D., Patil, S., Farazdaghi, A., Fawad, M., Elde, S., Guenthart, B. A., Ensign, L. M., Woo, Y. J., Parikh, et al  
2025; 24: 510-520
- **Design and evaluation of valve interventions using ex vivo biomechanical modeling: the Stanford experience.** *General thoracic and cardiovascular surgery*  
Weininger, G., Elde, S., Zhu, Y., Woo, Y. J.  
2025
- **Stromal cell-derived factor-encapsulated nanoparticles target ischemic myocardium and attenuate myocardial injury via proangiogenic effects.** *Biomaterials*  
Yajima, S., Lee, S. H., Yang, J., Vergel, M. D., Manna, M. K., Kusadokoro, S., Zhu, Y., Elde, S., Mullis, D. M., Venkatesh, A., Ethiraj, S., Ueyama, T., Takashima, et al  
2025; 318: 123167
- **Ex vivo lung perfusion of pediatric lungs for adult recipients.** *JTCVS techniques*  
Krishnan, A., Fawad, M. M., Elde, S., Shah, V. K., Shudo, Y., Dhillon, G., MacArthur, J. W., Ruaengsri, C., Woo, Y. J., Guenthart, B. A.  
2025; 29: 189-192
- **Ex vivo lung perfusion of pediatric lungs for adult recipients** *JTCVS TECHNIQUES*  
Krishnan, A., Fawad, M. M., Elde, S., Shah, V. K., Shudo, Y., Dhillon, G., MacArthur, J. W., Ruaengsri, C., Woo, Y., Guenthart, B. A., Guenthart, B. A.  
2025; 29: 189-192
- **Extracorporeal membrane oxygenation as a bridge to thoracic multiorgan transplantation.** *The Journal of heart and lung transplantation : the official publication of the International Society for Heart Transplantation*  
Heng, E. E., Krishnan, A., Elde, S., Garrison, A., Fawad, M., Ruaengsri, C., Shudo, Y., Guenthart, B. A., Joseph Woo, Y., MacArthur, J. W.  
2024
- **Heart-Liver Transplantation Utilizing the En Bloc Technique: A Single-Center Experience Over Two Decades.** *The Journal of thoracic and cardiovascular surgery*  
Mullis, D. M., Garrison, A., Heng, E., Zhu, Y., Elde, S., Nilkant, R., Boyd, J., Hiesinger, W., Lee, A., Shudo, Y., Gallo, A., Bonham, C. A., Woo, et al

2024

- **Survival, Function, and Immune Profiling after Beating Heart Transplantation.** *The Journal of thoracic and cardiovascular surgery*  
Krishnan, A., Elde, S., Ruaengsri, C., Guenthart, B. A., Zhu, Y., Fawad, M., Lee, A., Currie, M., Ma, M. R., Hiesinger, W., Shudo, Y., MacArthur, J. W., Woo, et al  
2024
- **Discussion to: Four decades of progress in heart-lung transplantation: Two hundred seventy-one cases at a single institution** *JOURNAL OF THORACIC AND CARDIOVASCULAR SURGERY*  
Elde, S., Huddleston, C., Woo, Y.  
2024; 168 (2): 593-594
- **Repair of giant pulmonary artery aneurysm by reimplantation valve-sparing pulmonic root replacement.** *JTCVS techniques*  
Wang, H., Elde, S., Zhu, Y., Woo, Y. J.  
2024; 26: 40-42
- **Repair of giant pulmonary artery aneurysm by reimplantation valve-sparing pulmonic root replacement** *JTCVS TECHNIQUES*  
Wang, H., Elde, S., Zhu, Y., Woo, Y.  
2024; 26: 40-42
- **Structural, angiogenic, and immune responses influencing myocardial regeneration: a glimpse into the crucible.** *NPJ Regenerative medicine*  
Baccouche, B. M., Elde, S., Wang, H., Woo, Y. J.  
2024; 9 (1): 18
- **Large Animal Translational Validation of 3 Mitral Valve Repair Operations for Mitral Regurgitation Using a Mitral Valve Prolapse Model: A Comprehensive In Vivo Biomechanical Engineering Analysis.** *Circulation. Cardiovascular interventions*  
Zhu, Y., Yajima, S., Park, M. H., Venkatesh, A., Stark, C. J., Tran, N. A., Walsh, S. K., Ethiraj, S., Wilkerson, R. J., Lin, L. E., Lee, S. H., Gates, K. Y., Arthur, et al  
2024; 17 (4): e013196
- **Stromal cell-derived factor-1 alpha improves cardiac function in a novel diet-induced coronary atherosclerosis model, the SR-B1ΔCT/ LDLR KO mouse.** *Atherosclerosis*  
Mullis, D. M., Padilla-Lopez, A., Wang, H., Zhu, Y., Elde, S., Bonham, S. A., Yajima, S., Kocher, O. N., Krieger, M., Woo, Y. J.  
2024: 117518
- **Four Decades of Progress in Heart-Lung Transplantation: 271 Cases at a Single Institution.** *The Journal of thoracic and cardiovascular surgery*  
Elde, S., Baccouche, B. M., Mullis, D. M., Leipzig, M. M., Deuse, T., Krishnan, A., Fawad, M., Dale, R., Walsh, S., Padilla-Lopez, A., Wesley, B., He, H., Yajima, et al  
2024
- **Beating Heart Transplantation: How to Do It.** *Innovations (Philadelphia, Pa.)*  
Krishnan, A., Guenthart, B. A., Ruengsri, C., Elde, S., Zhu, Y., MacArthur, J. W., Woo, Y. J.  
2024: 15569845231220678
- **Neochords: How long, how many, too many?** *JTCVS techniques*  
Elde, S., Woo, Y. J.  
2023; 22: 59-64
- **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
- **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
- **Revised Heart Allocation Policy Improved Waitlist Mortality and Waiting Time With Maintained Outcomes in En-Bloc Heart-Lung Transplant Candidates and Recipients.** *Transplant international : official journal of the European Society for Organ Transplantation*  
Shudo, Y., He, H., Elde, S., Woo, Y. J.

2023; 36: 11956

- **Surgical management of severe mitral annular calcification.** *Asian cardiovascular & thoracic annals*  
Elde, S., Zhu, Y., MacArthur, J. W., Woo, Y. J.  
2022: 2184923221136935
- **Outcomes of Heart Transplantation Using a Temperature-controlled Hypothermic Storage System.** *Transplantation*  
Zhu, Y., Shudo, Y., He, H., Kim, J. Y., Elde, S., Williams, K. M., Walsh, S. K., Koyano, T. K., Guenthart, B., Woo, Y. J.  
2022
- **Type A Aortic Dissection With Concurrent Aortic Valve Endocarditis, Subarachnoid Hemorrhage, and Disseminated Intravascular Coagulation.** *JACC. Case reports*  
Elde, S. F., Guenthart, B. A., de Biasi, A., Dalal, A. R., Casselman, K. G., Hiesinger, W., Burton, E. C.  
2022; 4 (14): 839-843
- **An automated line-clearing chest tube system after cardiac surgery.** *JTCVS open*  
Obafemi, O. O., Wang, H., Bajaj, S. S., O'Donnell, C. T., Elde, S., Boyd, J. H.  
2022; 10: 246-253
- **Ex vivo aortic valve replacement before orthotopic heart transplantation.** *JTCVS techniques*  
Elde, S. F., Guenthart, B. A., Shudo, Y., Woo, Y. J.  
2022; 12: 118-120
- **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
- **Analysis of the revised heart allocation policy and the influence of increased mechanical circulatory support on survival.** *The Journal of thoracic and cardiovascular surgery*  
Elde, S., He, H., Lingala, B., Baiocchi, M., Wang, H., Hiesinger, W., MacArthur, J. W., Shudo, Y., Woo, Y. J.  
1800
- **Extracorporeal Membrane Oxygenation Bridge to Heart-Lung Transplantation.** *ASAIO journal (American Society for Artificial Internal Organs : 1992)*  
Shudo, Y., Elde, S., Lingala, B., He, H., Casselman, K. G., Zhu, Y., Kasinpila, P., Woo, Y. J.  
2021
- **Operative Technique of Donor Organ Procurement for En Bloc Heart-Liver Transplantation.** *Transplantation*  
Elde, S. n., Brubaker, A. L., Than, P. A., Rinewalt, D. n., MacArthur, J. W., Alassar, A. n., Bonham, C. A., Esquivel, C. O., Shudo, Y. n., Concepcion, W. n., Woo, Y. J.  
2021
- **The Expanding Armamentarium of Innovative Bioengineered Strategies to Augment Cardiovascular Repair and Regeneration** *Frontiers in Bioengineering and Biotechnology*  
Elde, S., Wang, H., Woo, Y.  
2021: 674172
- **Navigating the Crossroads of Cell Therapy and Natural Heart Regeneration** *Frontiers in Cell and Developmental Biology*  
Elde, S., Wang, H., Woo, Y.  
2021: 674180
- **Extracorporeal Membrane Oxygenation Bridge to Heart-Lung Transplantation** *ASAIO*  
Shudo, Y., Elde, S., Lingala, B., He, H., Casselman, K. G., Zhu, Y., Kasinpila, P., Woo, Y.  
2021
- **A Novel Alternative to The Commando Procedure: Constructing a Neo-Aortic Root by Anchoring to the Sewing Ring of the Replaced Mitral Valve.** *JTCVS techniques*  
Elde, S., de Biasi, A., Woo, Y. J., Burton, E.  
2020

- **The Thoracic Surgery Social Media Network Experience During the COVID-19 Pandemic.** *The Annals of thoracic surgery*  
Luc, J. G., Archer, M. A., Arora, R. C., Bender, E. M., Blitz, A., Cooke, D. T., Elde, S., Guy, T. S., Halpern, A. L., Harrington, C., Hlci, T. N., Kidane, B., Olive, et al  
2020
- **The Impact of Donor Gender on Heart Transplantation Outcomes - A Study of over 60,000 Patients in the United States**  
Zhu, Y., Shudo, Y., Lingala, B., Elde, S., Woo, Y.  
ELSEVIER SCIENCE INC.2020: S42
- **Racial and Sex Disparities Persist in Modern Cardiac Surgical Outcomes.** *Annals of surgery*  
Elde, S. F., Woo, Y. J.  
2020; 272 (4): 668
- **Transplantation Outcomes in Adults With Congenital Heart Disease Have Room to Grow.** *The Canadian journal of cardiology*  
Elde, S. n., Woo, Y. J.  
2019
- **Tailored Approach to Surgical Exposure Reduces Surgical Site Complications after Bilateral Lung Transplantation** *SURGICAL INFECTIONS*  
Elde, S., Huddleston, S., Jackson, S., Kelly, R., Shumway, S., Loor, G.  
2017; 18 (8): 929-935