Stanford



Matthew William Vanneman

Clinical Associate Professor, Anesthesiology, Perioperative and Pain Medicine

Bio

ACADEMIC APPOINTMENTS

- Clinical Associate Professor, Anesthesiology, Perioperative and Pain Medicine

PROFESSIONAL EDUCATION

- Fellowship, Massachusetts General Hospital , Adult cardiothoracic anesthesiology (2019)
- Board Certification, American Board of Anesthesiology , Anesthesiology (2018)
- Residency, Massachusetts General Hospital , Anesthesiology (2017)
- Medical Education, Harvard Medical School (2013)

PATENTS

- Matthew Meyer, Rahul Bhattacharya, Wilton Levine, Sai Kantareddy, Dustin Long, Sanjay Sarma, David Bartels, Devan Bartles, Matthew Vanneman. "United States Patent WO2019/222139A1 Wireless-enabled suture needle", Massachusetts General Hospital and the Massachusetts Institute of Technology, Nov 21, 2019
- Glenn Dranoff, Ryan Sullivan, Matthew Vanneman. "United States Patent US20180355013 An NKG2D-Fc fusion protein for immunotherapy", Dana-Farber Cancer Insitute, Nov 11, 2016
- Glenn Dranoff, Matthew Vanneman, Gordon Freeman. "United States Patent US20110311535A1 NKG2D-Fc for immunotherapy", Dana-Farber Cancer Institute, Dec 18, 2009

Research & Scholarship

CLINICAL TRIALS

- Phase 3 Study on the Efficacy and Safety of Human Plasma Derived Antithrombin (Atenativ) in Heparin-Resistant Patients Scheduled to Undergo Cardiac Surgery Necessitating Cardiopulmonary Bypass, Recruiting

Publications

PUBLICATIONS

- **Who Needs Watching? Rethinking Percutaneous Left Atrial Appendage Devices.** *Journal of cardiothoracic and vascular anesthesia*
  Kiwakyou, L. M., Vanneman, M. W., Kothari, P.
  2026
- **The Year in Electrophysiology: Selected Highlights From 2025.** *Journal of cardiothoracic and vascular anesthesia*
  Poorsattar, S. P., Kumar, N., Vanneman, M. W., Kinney, D. A., Tang, J., Jelly, C. A., Bodmer, N. J., Bryant, J., Bardia, A.
  2026
- **2025 Update on Vascular Anesthesia.** *Journal of cardiothoracic and vascular anesthesia*
  Simpson, J. C., Barrett, K. E., Tang, J. E., Holloway, J., Neva, J., Vanneman, M. W., Lloyd, J. T.

2026

- **2025 Clinical Update in Liver Transplantation.** *Journal of cardiothoracic and vascular anesthesia*
  Rangrass, G., Karches, K., Bezinover, D., Drobish, J. K., Vanneman, M. W., Kassel, C. A.
  2026

- **Trends in US Cardiac Anesthesiologist Income, Work Patterns, and Compensation Satisfaction From 2020 to 2024: A Longitudinal Analysis of the Society of Cardiovascular Anesthesiologists Salary Survey.** *Anesthesia and analgesia*
  Vanneman, M. W., Choudhury, N., Fielding-Singh, V., Rhee, A., Klopman, M. A.
  2026

- **Highlights and Perioperative Implications from the 2025 American College of Cardiology and American Heart Association Guideline for the Management of Patients with Acute Coronary Syndromes.** *Journal of cardiothoracic and vascular anesthesia*
  Kothari, P., Robert Feng, T., Hermon, A. R., Ellis, J., Vanneman, M. W.
  2026

- **The Coronary Conundrum in Type A Dissection: Coronary Artery Bypass Grafting for All, or Just for Some?** *Journal of cardiothoracic and vascular anesthesia*
  Kothari, P., Madhok, J., Vanneman, M. W.
  2025

- **REUPing Cardiac Transplant Anesthesia: Innovation or Unknowns Ahead?** *Journal of cardiothoracic and vascular anesthesia*
  Bodmer, N. J., Vanneman, M. W.
  2025

- **Timing Is Everything-Or Is It? When to Perform Non-Cardiac Surgery after Cardiac Surgery.** *Journal of cardiothoracic and vascular anesthesia*
  Kothari, P., Bodmer, N. J., Vanneman, M. W.
  2025

- **The Year in Aortic Surgery: Selected Highlights from 2024.** *Journal of cardiothoracic and vascular anesthesia*
  Fernando, R. J., Coleman, S. R., Kothari, P., Vanneman, M. W., Kimlinger, M., Ochieng, P. O., Alghanem, F., Sanders, J., Augoustides, J. G.
  2025

- **Preoperative Dialysis Dose and Postoperative Outcomes in Patients Receiving Maintenance Hemodialysis.** *Kidney360*
  Fielding-Singh, V., Vanneman, M. W., Morris, A. M., Winkelmayer, W. C., Sun, L. Y., Roshanov, P. S., Montez-Rath, M., Chertow, G. M., Lin, E.
  2025

- **Highlights from the American College of Cardiology and American Heart Association 2024 Guideline for Perioperative Cardiovascular Management for Noncardiac Surgery.** *Journal of cardiothoracic and vascular anesthesia*
  Kothari, P., Vanneman, M. W., Choi, C., Diehl, R., Fielding-Singh, V.
  2025

- **2024 Clinical Update in Liver Transplantation** *JOURNAL OF CARDIOTHORACIC AND VASCULAR ANESTHESIA*
  Wilke, T. J., Vail, E. A., Gold, A. K., Mannes, P., Uman, A., Bezinover, D., Cywinski, J., Beresian, J., Vanneman, M. W., Kassel, C. A.
  2025; 39 (6): 1547-1555

- **The Year in Electrophysiology: Selected Highlights from 2024.** *Journal of cardiothoracic and vascular anesthesia*
  Poorsattar, S. P., Kumar, N., Vanneman, M. W., Kinney, D. A., Tang, J., Jelly, C. A., Bodmer, N. J., Bryant, J., Bardia, A.
  2025

- **Highlights and Perioperative Implications from the 2024 European Society of Cardiology Guidelines for the Management of Peripheral Arterial and Aortic Diseases.** *Journal of cardiothoracic and vascular anesthesia*
  Kothari, P., Bodmer, N. J., Vanneman, M. W., Nguyen, Q. S., Kiwakyou, L. M.
  2025

- **Association of Kidney Function With Inpatient Mortality and Morbidity After Cardiac Surgery.** *Annals of thoracic surgery short reports*
  Fielding-Singh, V., Vanneman, M. W., Hong, T., Sun, L. Y., Morris, A. M., Chertow, G. M., Lin, E.
  2024; 2 (4): 877-883

- **Updating "Optimal" Perioperative Care for Stable Angina.** *Journal of cardiothoracic and vascular anesthesia*
  Bodmer, N. J., Vanneman, M. W.

2024

- **Artificial Intelligence in Perioperative Care: Opportunities and Challenges.** *Anesthesiology*
  Han, L., Char, D. S., Aghaeepour, N.
  2024; 141 (2): 379-387
- **Navigating Coronary Calcifications: Updates and Anesthetic Implications from the Society for Cardiovascular Angiography and Interventions.** *Journal of cardiothoracic and vascular anesthesia*
  Kothari, P., Vanneman, M. W.
  2024
- **Heartfelt Healing: Charting New Trajectories in Postsurgical Pain.** *Anesthesia and analgesia*
  Vanneman, M. W., Kiwakyou, L. M., Harrison, T. K., Mariano, E. R.
  2024; 138 (6): 1187-1191
- **2023 Update on Vascular Anesthesia.** *Journal of cardiothoracic and vascular anesthesia*
  Smeltz, A. M., Newton, E. J., Kumar, P. A., Isaak, R. S., Doyal, A., Fernando, R. J., Vanneman, M. W., Augoustides, J. G.
  2024
- **The Year in Aortic Surgery: Selected Highlights From 2023.** *Journal of cardiothoracic and vascular anesthesia*
  Fernando, R. J., Coleman, S. R., Alghanem, F., Sanders, J., Kothari, P., Vanneman, M. W., Ochieng, P. O., Augoustides, J. G.
  2024
- **The Year in Electrophysiology: Selected Highlights From 2023.** *Journal of cardiothoracic and vascular anesthesia*
  Poorsattar, S. P., Kumar, N., Vanneman, M., Kinney, D., Jelly, C. A., Bodmer, N., Lefevre, R., Dalia, A., Bardia, A.
  2024
- **Prolonged Postoperative Euglycemic Diabetic Ketoacidosis in a Lung Transplant Recipient With Preoperative SGLT2 Inhibitor Use.** *Journal of cardiothoracic and vascular anesthesia*
  Choi, C. H., Singh, S., Cheung, A. T., Vanneman, M., Madhok, J.
  2024
- **Beating Heart Transplants-Overview and Implications for Anesthesiologists.** *Journal of cardiothoracic and vascular anesthesia*
  Kothari, P., Kiwakyou, L. M., Guenthart, B. A., Vanneman, M.
  2023
- **Variability and relative contribution of surgeon and anesthesia specific time components to total procedural time in cardiac surgery.** *The Journal of thoracic and cardiovascular surgery*
  Vanneman, M. W., Thuraiappah, M., Feinstein, I., Fielding-Singh, V., Peterson, A., Kronenberg, S., Angst, M. S., Aghaeepour, N.
  2023
- **Disparities in the Timing of Preoperative Hemodialysis Among Patients With End-Stage Kidney Disease.** *JAMA network open*
  Fielding-Singh, V., Vanneman, M. W., Morris, A. M., Chertow, G. M., Lin, E.
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- **Infectious Risk of Arterial Lines: A Narrative Review.** *Journal of cardiothoracic and vascular anesthesia*
  Card, S., Piersa, A., Kaplon, A., Vanneman, M. W., Dalia, A., Weaver, B., Hao, D.
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- **ABO Blood Group and Bleeding and Survival in VA-ECMO Patients.** *Journal of intensive care medicine*
  Sun, G. H., Ortoleva, J. P., Lu, S. Y., Vanneman, M. W., Tanaka, K., Mazzeffi, M., Dalia, A. A.
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- **The Year in Electrophysiology: Selected Highlights From 2022.** *Journal of cardiothoracic and vascular anesthesia*
  Poorsattar, S. P., Kumar, N., Jelly, C. A., Bodmer, N. J., Tang, J. E., Lefevre, R., Essandoh, M. K., Dalia, A., Vanneman, M. W., Bardia, A.
  2023
- **Preoperative Hemodialysis Timing and Postoperative Mortality in Patients With End-stage Kidney Disease-Reply.** *JAMA*
  Fielding-Singh, V., Vanneman, M. W., Lin, E.
  2023; 329 (11): 939-940

- **2022 Clinical Updates in Liver Transplantation.** *Journal of cardiothoracic and vascular anesthesia*
  Quandahl, R., Vanneman, M. W., Wilke, T. J., Kassel, C. A.
  2023
- **The Art of the Null Hypothesis-Considerations for Study Design and Scientific Reporting.** *Journal of cardiothoracic and vascular anesthesia*
  O'Donnell, C. T., Fielding-Singh, V., Vanneman, M. W.
  2023
- **Association Between Preoperative Hemodialysis Timing and Postoperative Mortality in Patients With End-stage Kidney Disease.** *JAMA*
  Fielding-Singh, V., Vanneman, M. W., Grogan, T., Neelankavil, J. P., Winkelmayer, W. C., Chang, T. I., Liu, V. X., Lin, E.
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- **Trends in Cardiac Anesthesiologist Compensation, Work Patterns, and Training From 2010 to 2020: A Longitudinal Analysis of the Society of Cardiovascular Anesthesiologists Salary Survey.** *Anesthesia and analgesia*
  Dalia, A. A., Vanneman, M. W., Bhatt, H. V., Troianos, C. A., Morewood, G. H., Klopman, M. A.
  2022
- **ABO Blood Group and Bleeding in VA-ECMO Patients**
  Sun, G. H., Ortoleva, J., Lu, D., Vanneman, M. W., Colon, K., Shelton, K. T., Dalia, A.
  LIPPINCOTT WILLIAMS & WILKINS.2022: 149-153
- **Intraoperative Considerations in a Patient on Intravenous Epoprostenol Undergoing Minimally Invasive Cardiac Surgery.** *Journal of cardiothoracic and vascular anesthesia*
  Tull, C. M., Abraham, A. M., MacArthur, J. W., Vanneman, M. W., Feng, T. R.
  2022
- **SGLT-2 Inhibitors: Proliferating Indications and Perioperative Pitfalls.** *Journal of cardiothoracic and vascular anesthesia*
  Madhok, J., Vanneman, M. W.
  2022
- **The Year in Electrophysiology: Selected Highlights from 2021.** *Journal of cardiothoracic and vascular anesthesia*
  Vanneman, M., Kothari, P., Bodmer, N. J., Convissar, D., Desai, G. A., Kumar, N., Iyer, M. H., Neuburger, P. J., Essandoh, M. K., Cronin, B., Dalia, A. A.
  2022
- **Transcatheter Aortic Valve Dissemination: The More the Merrier or Too Much of a Good Thing?** *Journal of cardiothoracic and vascular anesthesia*
  Bodmer, N. J., Fielding-Singh, V., Vanneman, M. W.
  1800
- **Focusing on the Long Game: Updates on Aortic Valve Research From the Valve Academic Research Consortium.** *Journal of cardiothoracic and vascular anesthesia*
  Weimer, J. M., Vanneman, M. W.
  2021
- **Anesthetic Considerations for Percutaneous Coronary Intervention for Chronic Total Occlusions-A Narrative Review.** *Journal of cardiothoracic and vascular anesthesia*
  Vanneman, M. W.
  2021
- **Perioperative Implications of the 2020 American Heart Association Scientific Statement on Drug-Induced Arrhythmias-A Focused Review.** *Journal of cardiothoracic and vascular anesthesia*
  Vanneman, M. W., Madhok, J., Weimer, J. M., Dalia, A. A.
  2021
- **Predicting Post-Liver Transplant Outcomes-Rise of the Machines or a Foggy Crystal Ball?** *Journal of cardiothoracic and vascular anesthesia*
  Vanneman, M. W., Fielding-Singh, V., Aghaeepour, N.
  2021
- **A Focused Transesophageal Echocardiography Protocol for Intraoperative Management During Orthotopic Liver Transplantation** *JOURNAL OF CARDIOTHORACIC AND VASCULAR ANESTHESIA*

Vanneman, M. W., Dalia, A. A., Crowley, J. C., Luchette, K. R., Chitilian, H., Shelton, K. T.
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- **Positioning for Perioperative Success: Insights from the European Society of Cardiology Statement on Atrial Fibrillation and Acute Heart Failure.** *Journal of cardiothoracic and vascular anesthesia*
  Vanneman, M. W., Dalia, A. A.
  2020
- **Perioperative and Echocardiographic Considerations for the Inspiris Resilia Aortic Valve--Current and Future.** *Journal of cardiothoracic and vascular anesthesia*
  Vanneman, M. W., Dalia, A. A.
  2020
- **Anesthesiologists Guide to the 2019 AHA/ACC/HRS Focused Update for the Management of Patients With Atrial Fibrillation.** *Journal of cardiothoracic and vascular anesthesia*
  Dalia, A. A., Kuo, A. n., Vanneman, M. n., Crowley, J. n., Elhassan, A. n., Lai, Y. n.
  2020; 34 (7): 1925–32
- **Improving Transfusion Safety in the Operating Room With a Barcode Scanning System Designed Specifically for the Surgical Environment and Existing Electronic Medical Record Systems: An Interrupted Time Series Analysis.** *Anesthesia and analgesia*
  Vanneman, M. W., Balakrishna, A. n., Lang, A. L., Eliason, K. D., Payette, A. M., Xu, X. n., Driscoll, W. D., Donovan, K. M., Deng, H. n., Dzik, W. H., Levine, W. C.
  2020
- **TRACKing Down Perioperative Transfusion in Cardiac Surgery** *JOURNAL OF CARDIOTHORACIC AND VASCULAR ANESTHESIA*
  Vanneman, M. W., Dalia, A. A.
  2019; 33 (10): 2676–78
- **Vasoplegia During Cardiopulmonary Bypass: Current Literature and Rescue Therapy Options.** *Journal of cardiothoracic and vascular anesthesia*
  Ortoleva, J. n., Shapeton, A. n., Vanneman, M. n., Dalia, A. A.
  2019
- **Studies on the effectiveness of flipped classrooms: are we comparing apples to apples?** *Medical education*
  Vanneman, M. n., Baker, K. n., Saddawi-Konefka, D. n.
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- **A Young Man with a Mediastinal Mass and Sudden Cardiac Arrest.** *Annals of the American Thoracic Society*
  Vanneman, M. W., Fikry, K. n., Quraishi, S. A., Schoenfeld, W. n.
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- **Compartment-specific bioluminescence imaging platform for the high-throughput evaluation of antitumor immune function** *BLOOD*
  McMillin, D. W., Delmore, J., Negri, J. M., Vanneman, M., Koyama, S., Schlossman, R. L., Munshi, N. C., Laubach, J., Richardson, P. G., Dranoff, G., Anderson, K. C., Mitsiades, C. S.
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- **Combining immunotherapy and targeted therapies in cancer treatment** *NATURE REVIEWS CANCER*
  Vanneman, M., Dranoff, G.
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- **Immune Surveillance and Therapy of Lymphomas Driven by Epstein-Barr Virus Protein LMP1 in a Mouse Model** *CELL*
  Zhang, B., Kracker, S., Yasuda, T., Casola, S., Vanneman, M., Homig-Holzel, C., Wang, Z., Derudder, E., Li, S., Chakraborty, T., Cotter, S. E., Koyama, S., Currie, et al
  2012; 148 (4): 739–51
- **Compartment-Specific Bioluminescence Imaging Platform for the Open-Ended Identification of Novel Immunomodulatory Agents and High-Throughput Evaluation of Anti-Tumor Immune Function**
  McMillin, D. W., Delmore, J., Vanneman, M. W., Schlossman, R. L., Feather, J., Munshi, N. C., Laubach, J. P., Richardson, P. G., Dranoff, G., Anderson, K. C., Mitsiades, C. S.
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- **IAP inhibitors enhance co-stimulation to promote tumor immunity** *JOURNAL OF EXPERIMENTAL MEDICINE*
  Dougan, M., Dougan, S., Slisz, J., Firestone, B., Vanneman, M., Draganov, D., Goyal, G., Li, W., Neuberg, D., Blumberg, R., Hacohen, N., Porter, D., Zawel, et al
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- **Biologic activity of irradiated, autologous, GM-CSF-secreting leukemia cell vaccines early after allogeneic stem cell transplantation** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
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- **Protein disulfide isomerases are antibody targets during immune-mediated tumor destruction** *BLOOD*
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- **GM-CSF Secreting Leukemia Cell Vaccination after Allogeneic Reduced Intensity Hematopoietic Stem Cell Transplantation for Advanced Myeloid Malignancies**
  Ho, V., Dranoff, G., Kim, H., Vanneman, M., Pasek, M., Cutler, C., Koreth, J., Alyea, E., Antin, J. H., Jerome, R., Soiffer, R. J.
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- **GM-CSF secreting leukaemia cell vaccinations after allogeneic reduced-intensity peripheral blood stem cell transplantation for advanced myeloid malignancies**
  Ho, V., Dranoff, G., Kim, H., Vanneman, M., Cutler, C., Alyea, E., Koreth, J., Antin, J., Ritz, J., Soiffer, R.
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