



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

- **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., Winkelmayr, 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
- **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.
2023; 6 (7): e2326326
- **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.
2023
- **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.
2023: 8850666231178759
- **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.
2022
- **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.
2020; 34 (7): 1824-32
- **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.
2017; 51 (12): 1293–94
- **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.
2015; 12 (8): 1235–39
- **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.
2012; 119 (15): E131–E138
- **Combining immunotherapy and targeted therapies in cancer treatment** *NATURE REVIEWS CANCER*
Vanneman, M., Dranoff, G.
2012; 12 (4): 237–51
- **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.
AMER SOC HEMATOLOGY.2010: 202
- **IAP inhibitors enhance co-stimulation to promote tumor immunity** *JOURNAL OF EXPERIMENTAL MEDICINE*
Dogan, M., Dogan, S., Slisz, J., Firestone, B., Vanneman, M., Draganov, D., Goyal, G., Li, W., Neuberger, D., Blumberg, R., Hacohen, N., Porter, D., Zawel, et al
2010; 207 (10): 2195–2206
- **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*

Ho, V. T., Vanneman, M., Kim, H., Sasada, T., Kang, Y., Pasek, M., Cutler, C., Koreth, J., Alyea, E., Sarantopoulos, S., Antin, J. H., Ritz, J., Canning, et al
2009; 106 (37): 15825–30

● **Protein disulfide isomerases are antibody targets during immune-mediated tumor destruction** *BLOOD*

Fonseca, C., Soiffer, R., Ho, V., Vanneman, M., Jinushi, M., Ritz, J., Neuberg, D., Stone, R., DeAngelo, D., Dranoff, G.
2009; 113 (8): 1681–88

● **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.
AMER SOC HEMATOLOGY.2008: 306

● **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.
NATURE PUBLISHING GROUP.2008: S408

● **MHC class I chain-related protein A antibodies and shedding are associated with the progression of multiple myeloma** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*

Jinushi, M., Vanneman, M., Munshi, N. C., Tai, Y., Prabhala, R. H., Ritz, J., Neuberg, D., Anderson, K. C., Carrasco, D., Dranoff, G.
2008; 105 (4): 1285–90