

BIOGRAPHICAL

Name: Trent David Emerick

Business Address:

UPMC Falk Pain Medicine, 3601 Fifth Avenue,
Sixth Floor, Pittsburgh, PA, 15213

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EDUCATION and TRAINING

UNDERGRADUATE

Aug 2003 – May 2006	Grove City College Grove City, PA	Bachelor of Science (2006)	Biochemistry
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GRADUATE

Aug 2006 – May 2010	Georgetown University School of Medicine Washington, DC	MD (2010)	Medicine (AOA Honorary)
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Aug 2013 – Aug 2016	The Pennsylvania State University, Behrend Campus, Black School of Business, Erie, PA	MBA (2016)	Business Administration
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Aug 2021 – Present	Rush University College of Health Sciences, Chicago, IL	PhD Candidate	PhD in Health Sciences
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POSTGRADUATE

June 2010 – June 2014	University of Pittsburgh Medical Center, Pittsburgh, PA	Residency, PGY1-PGY4 (Junior Chief of Scholarly Activity 2012- 2013; Associate Chief Resident 2013-2014)	Anesthesiology
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July 2014 – June 2015	University of Pittsburgh Medical Center, Pittsburgh, PA	Fellowship, PGY5	Chronic Pain Medicine
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APPOINTMENTS and POSITIONS

ACADEMIC

2015 – 2016	Staff Anesthesiologist, UPMC South Side
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2015 – Present	Chronic Pain Physician, UPMC Presbyterian Shadyside	
2015 – 2017	University of Pittsburgh School of Medicine, Dept of Anesthesiology and Perioperative Medicine, Pittsburgh, PA	Clinical Assistant Professor
2017 – 2021	University of Pittsburgh School of Medicine, Dept of Anesthesiology and Perioperative Medicine, Pittsburgh, PA	Assistant Professor
2018 – 2020	University of Pittsburgh Medical Center, Chronic Pain Medicine Fellowship	Associate Program Director
2020 – Present	University of Pittsburgh Medical Center, Chronic Pain Medicine Fellowship	Program Director
2021 – 2022	University of Pittsburgh Medical Center, Chronic Pain Division	Interim Medical Director
2022 – Present	University of Pittsburgh School of Medicine, Dept of Anesthesiology and Perioperative Medicine, Pittsburgh, PA	Associate Professor
2022 – Present	Department of Bioengineering, University of Pittsburgh, Pittsburgh, PA	Secondary Appointment
2023 – Present	Associate Chief and Medical Director, Pain Medicine	
2023 – Present	University of Pittsburgh Clinical and Translational Science (CTSI) Institute	Secondary Appointment

NON-ACADEMIC

2017 – 2018	University of Pittsburgh Physicians (UPP)	Board of Directors (elected, two-year term)
2017 - 2019	Interim Pediatric Chronic Pain Specialist	Children’s Hospital of Pittsburgh of UPMC
2017 – Present	University of Pittsburgh Medical Center, Dept. of Anesthesiology and Perioperative Medicine, Chronic Pain Division	Director of Quality Improvement and Innovation, Chronic Pain Division
2019 – Present	Pittsburgh Steelers (NFL)	Designated Team Pain Physician/Specialist

2021 – Present

Founder, CEO, and President

Vanish Therapeutics, Inc.

CERTIFICATION and LICENSURE

SPECIALTY/SUBSPECIALTY BOARD CERTIFICATION:

American Board of Anesthesiology 2015

Subspecialty Board Certification in Pain Management,
American Board of Anesthesiology 2015

Subspecialty Board Certification in Addiction Medicine,
American Board of Preventative Medicine 2020

MEDICAL or OTHER PROFESSIONAL LICENSURE:

Pennsylvania State Medical License 2015 – Present

Certified Six Sigma Green Belt (American Society for Quality) 2020 – Present

Certified Six Sigma Black Belt (American Society for Quality) 2021 – Present

MEMBERSHIP in PROFESSIONAL and SCIENTIFIC SOCIETIES

American Society of Anesthesiologists 2010 – Present

Pennsylvania Society of Anesthesiologists 2010 – Present

Society for Education in Anesthesia 2011 – 2015

International Spine Intervention Society 2016 – 2018, 2020-2021

North American Neuromodulation Society 2017 – 2018

American Academy of Pain Medicine 2018 – 2020, 2021-present

Pennsylvania Medical Society 2019 – 2020

American Society for Quality (ASQ) 2020 – Present

Association of Pain Program Directors (APPD) 2020 – Present

Society of Academic Associations of Anesthesiology and Periop Med (SAAAPM) 2020 – Present

American Society of Regional Anesthesia (ASRA) 2021 - Present

HONORS

Alternate Delegate, ASA House of Delegates Resident Component 2011

Foundation for Anesthesia Education and Research (FAER) Resident Scholar 2012

Delegate, ASA House of Delegates Resident Component 2013

Top 40 Physicians under 40 in Pennsylvania Award (Pennsylvania Medical Society) 2019

Alternate Delegate, Pennsylvania Medical Society House of Delegates	2019
UPMC Physician Excellence Award – Early-to Mid-Career Physician Excellence in Clinical Care	2021
Fellow, American Society of Anesthesiologists (FASA)	2021
Castle Connolly Top Doctor	2022-2024
American Academy of Pain Medicine/MIT Hacking Medicine Innovation Challenge Finalist	2022
ASRA-PM Member Spotlight, March 2023	2023
Department of Anesthesiology and Perioperative Medicine Residency Teaching Award	2024
Inducted in Academy of Distinguished Medical Educators, University of Pittsburgh School of Medicine	2024
American Academy of Pain Medicine (AAPM) Member Spotlight, September 2024	2024

PUBLICATIONS

1. ORIGINAL PEER REVIEWED ARTICLES

1. **Emerick T**, Metro D, Patel R, Sakai T. Scholarly Activity Points: A New Tool to Evaluate Resident Scholarly Productivity. *Br J Anaesth*. 2013 Sep;111(3):468-76. PMID: 23592693.
2. Schott N, **Emerick T**, Metro D, Sakai T. The Cost of Resident Scholarly Activity and its Effect on Resident Clinical Experience. *Anesth Analg*. 2013 Nov;117(5):1211-6. PMID: 24108257
3. Sakai T, **Emerick T**, Metro D, Patel R, Hirsch S, Winger D, Xu Y. Facilitation of Resident Scholarly Activity: Strategy and Outcome Analyses Using Historical Resident Cohorts and a Rank-to-Match Population. *Anesthesiology*. 2014 Jan;120(1):111-9. PMID: 24212198
4. Hundley H, Hudson M, Wasan A, **Emerick T**. Chronic pain clinic efficiency analysis: optimization through use of the Gantt diagram and visit diagnoses. *J Pain Res*. 2019; 12: 1–8. PMID: 30588074
5. Santa Barbara M, Cortazzo M, **Emerick T**, Furnier F, Duff J, Shapiro S, Zigler C, Badway A, Sowa G. Descriptive Analysis of an Interdisciplinary Musculoskeletal Program. *PM&R: The journal of injury, function and rehabilitation*. PMID: 31747134
6. Klosowski M, **Emerick T**. Innovative Interventional Approaches in the Management of Chronic Noncancer Abdominal Pain. *Pain Med*. 2020 Sep 1;21(9):2003-2005. doi: 10.1093/pm/pnaa174. PMID: 32529239.
7. **Emerick T**, Alter B, Jarquin S, Brancolini S, Bernstein C, Luong K, Morrissey S, Wasan A. Telemedicine for Chronic Pain in the COVID-19 Era and Beyond. *Pain Med*. 2020 Sep 1;21(9):1743-

1748. doi: 10.1093/pm/pnaa220. PMID: 32914858.
8. Shah N, Engle A, Raggi E, Alter B, **Emerick T**. Pulsed Radiofrequency Ablation: An Alternative Treatment Modality for Radiation Induced Brachial Plexopathy. *Pain Med*. 2020 Nov 8. doi: 10.1093/pm/pnaa382. PMID: 33164080
 9. Giugale L, Baranski L, Schott N, **Emerick T**, Meyn L, Moalli P. Preoperative Pelvic Floor Injections With Bupivacaine and Dexamethasone for Pain Control After Vaginal Prolapse Repair: A Randomized Controlled Trial. *Obstet Gynecol*. 2020 Dec 3. doi: 10.1097/AOG.000000000000420. PMID: 33278291
 10. Deshpande K, Gama W, **Emerick T**. An Alternative Role for the Pain Physician: Utilization of Stellate Block for Treatment Resistant Cardiac Arrhythmias. *Pain Med*. 2021 Feb 22;pnaa445. doi: 10.1093/pm/pnaa445. Online ahead of print. PMID: 33616170
 11. Wahezi S, Kohan L, Spektor B, Brancolini S, **Emerick T**, Fronterhouse J, Luedi M, Colon M, Kitei P, Anitescu M, Goeders N, Patil S, Siddaiah H, Cornett E, Urman R, Kaye A. Telemedicine and current clinical practice trends in the COVID-19 pandemic. *Best Pract Res Clin Anaesthesiol*. 2020 Nov 16. PMID: PMC7667401.
 12. Smith, M. D., **Emerick, T.**, Brancolini, S., & Alter, B. (2021). Clearing up the Confusion: What to Do with Ethanol and Ethanol Metabolites in Urine Drug Screens. *Pain Medicine* (Malden, Mass.), 22(10), 2401–2413. <https://doi.org/10.1093/pm/pnab068>. PMID: 33595647
 13. Shah N, **Emerick T**. Lean Six Sigma Methodology and the Future of Quality Improvement Education in Anesthesiology. *Anesth Analg*. 2021 Jun 17. doi: 10.1213. PMID: 34142980
 14. Kohan L, Potru S, Barreveld AM, Sprintz M, Lane O, Aryal A, **Emerick T**, Dopp A, Chhay S, Viscusi E. Buprenorphine management in the perioperative period: educational review and recommendations from a multisociety expert panel. *Reg Anesth Pain Med*. 2021 Aug 12;rapm-2021-103007. doi: 10.1136/rapm-2021-103007. PMID: 34385292.
 15. Cohen M, **Emerick T**. Understanding the Role of Pulsed Radiofrequency in the Early Management of Chronic Postsurgical Groin Pain, *Pain Medicine*, 2021; pnab324, <https://doi.org/10.1093/pm/pnab324>. PMID: 34791420.
 16. Vidri R, **Emerick T**, Alter B, Brancolini S. Managing vasovagal reactions in the outpatient pain clinic setting: a review for pain medicine physicians not trained in anesthesiology [published online ahead of print, 2021 Dec 23]. *Pain Med*. 2021;pnaab345. doi:10.1093/pm/pnab345. PMID: 34940879
 17. Holden, R., Chauhan, G., & **Emerick, T.** (2022). Intrathecal Administration of Ziconotide as a Potential Treatment for Chronic Migraines. *Cureus*, 14(3), e23714. <https://doi.org/10.7759/cureus.23714>. PMID: 35505713
 18. Frabitore S, Brea F, **Emerick T**, Sakai T, Lebovitz E, Adams PS. Creating anesthesiologist-innovators: An integrated innovation curriculum addressing barriers to physician-led innovation. *J Clin Anesth*. 2022 Nov;82:110947. doi: 10.1016/j.jclinane.2022.110947. Epub 2022 Aug 9. PMID: 35961225.

19. Wang S, Polsunas P, Zhang C, Farrell ME, Clary AM, Dressler A, Engle AM, Giedraitis A, McDermott S, Hickey S, Zheng D, Brancolini S, **Emerick T**. Employment Contract Financial Models for the Pain Physician: A Primer. *Pain Med.* 2023 Apr 3;24(4):365-368. doi: 10.1093/pm/pnac143. PMID: 36165705.
20. Richardson C, Burke H, Frabitore Z, Segall R, Moses-Hampton M, Kubendran R, Woeppel K, Wasan A, **Emerick T**. Medical Device Development and Start-up Company Formation for Healthcare Entrepreneurs. *Pain Med.* 2023 May 2;24(5):473-475. doi: 10.1093/pm/pnac152. PMID: 36227140.
21. **Emerick T**, Martin, T. J., & Ririe, D. G. (2023). Perioperative Considerations for Patients Exposed to Psychostimulants. *Anesthesia and Analgesia*, 137(3), 474–487. <https://doi.org/10.1213/ANE.0000000000006303>. PMID: 37590793
22. Wasan A, Edwards R, Kraemer K, Jeong J, Kenney M, Luong K, Cornelius MC, Mickles C, Dharmaraj B, Sharif E, Stoltenberg A, **Emerick T**, Karp JF, Bair MJ, George SZ, Hooten WM. Back Pain Consortium (BACPAC): Protocol and Pilot Study Results for a Randomized Comparative-Effectiveness Trial of Antidepressants, Fear Avoidance Rehabilitation, or the Combination for Chronic Low Back Pain and Comorbid High Negative Affect. *Pain Med.* 2023 Aug 4;24(Suppl 1):S105-S114. doi: 10.1093/pm/pnad006. PMID: 36715655; PMCID: PMC10403304.
23. **Emerick T**, Marshall T, Martin, T. J., & Ririe, D. G. (2024). Perioperative Considerations for Patients Exposed to Hallucinogens. *Regional Anesthesia and Pain Medicine*, in press.
24. Burke H, Eibel M, Wang, S, Tripp, R, & **Emerick, T.** (2023). A Transition to Practice Curriculum for Anesthesiology Fellows. *A&A Practice*, 17(12), e01736.
25. Snyder, S, Zheng, D, Brancolini, S, Oswald, J, & **Emerick, T.** (2023). The Role of Emergency Medicine-Trained Physicians in Multidisciplinary Pain Medicine. *Pain Medicine*, pna168.
26. Robinson C, D'Souza R, Yazdi C, Diejomaoh E, Schatman M, **Emerick T**, Orhurhu V. Reviewing the Potential Role of Artificial Intelligence in Delivering Personalized and Interactive Pain Medicine Education for Chronic Pain Patients. *Journal of Pain Research*. In Press 2024
27. Robinson, C, Fonseca, A., Diejomaoh, E, D'Souza, R, Schatman, M, Orhurhu, V, & **Emerick, T.** (2024). Scoping Review: The Role of Psychedelics in the Management of Chronic Pain. *Journal of Pain Research*, 965-973.
28. Wahezi S, Naeimi T, Caparo M, **Emerick T**, Choi H, Eshraghi Y, Anitescu M, Patel K, Przkora R, Wright T, Moeschler S, Barad M, Rand S, Oh-Park M, Seidel B, Yener U, Alerte J, Shaparin N, Kaye AD, Kohan L. Trainee Insight into Pain Fellowship Programs: A Critical Evaluation of the Current Educational System by the APPD. *Pain Physician*. 2024 Jul;27(5):E627-E636. PMID: 39087976.
29. Wahezi S, **Emerick T**, Caparó M, Choi H, Eshraghi Y, Naeimi T, Kohan L, Anitescu M, Wright T, Przkora R, Patel K, Lamer TJ, Moeschler S, Yener U, Alerte J, Grandhe R, Bautista A, Spektor B, Noon K, Reddy R, Osuagwu UC, Carpenter A, Gerges FJ, Horn DB, Murphy CA, Kim C, Pritzlaff SG, Marshall C, Kirchen G, Oryhan C, Swaran Singh TS, Sayed D, Lubenow TR, Sehgal N, Argoff CE, Gulati A, Day MR, Shaparin N, Sibai N, Dua A, Barad M. The current state of training in pain

- medicine fellowships: An Association of Pain Program Directors (APPD) survey of program directors. *Pain Pract.* 2024 Mar 30. doi: 10.1111/papr.13373. Epub ahead of print. PMID: 38553945.
30. Marshall T, Eibel M, Marshall B, Clary A, Hickey S, Polsunas P, Dressler A, Shah N, Zhang C, Zheng D, **Emerick T**. What's important in a contract beyond the salary? A primer for pain physicians and trainees. *Pain Pract.* 2024 Apr 16. doi: 10.1111/papr.13377. Epub ahead of print. PMID: 38624264.
 31. Chao R, Solanki P, Chelly JE, Wasan AD, **Emerick T**. Fostering Innovation in Medical Education: Addressing the Void of Entrepreneurship Education in Anesthesiology and Pain Medicine Through Incubator Clubs. *A A Pract.* 2024 Jul 22;18(7):e01817. doi: 10.1213/XAA.0000000000001817. PMID: 39037112.
 32. **Emerick T**, Durbhakula S, Eibel MR, Kohan L. Kratom: a primer for pain physicians. *Curr Opin Anaesthesiol.* 2024 Jul 9. doi: 10.1097/ACO.0000000000001413. Epub ahead of print. PMID: 39011659.
 33. Ufondu W, Robinson CL, Hussain N, D'Souza RS, Karri J, **Emerick T**, Orhurhu VJ. Intradiscal Autologous Biologics for the Treatment of Chronic Discogenic Low Back Pain. *Curr Pain Headache Rep.* 2024 Jul 17. doi: 10.1007/s11916-024-01294-8. Epub ahead of print. PMID: 39017984.
 34. Jevotovsky DS, Chopra H, Pak DJ, Durbhakula S, Shustorovich A, Juneja T, Broachwala MY, AlFarra T, Silver C, Kreitzer G, Oreoluwa P, Weissman BB, AlFarra A, Mayrsohn BG, Orhurhu V, **Emerick T**, Furnish T, Castellanos JP. Psilocybin and chronic neuropathic pain: a systematic review. *Reg Anesth Pain Med.* 2024 Aug 8:rapm-2024-105532. doi: 10.1136/rapm-2024-105532. Epub ahead of print. PMID: 39106989.
 35. Slitzky M, Yong RJ, Lo Bianco G, **Emerick T**, Schatman ME, Robinson CL. The Future of Pain Medicine: Emerging Technologies, Treatments, and Education. *J Pain Res.* 2024;17:2833-2836 <https://doi.org/10.2147/JPR.S490581>
 36. Glicksman M, Robinson C, Orhurhu V, Wang S, Yellapragada S, **Emerick T**. Artificial Intelligence and Pain Medicine Education: Benefits and Pitfalls for the Medical Trainee. *Pain Practice*, publication pending.

2. OTHER PEER REVIEWED PUBLICATIONS

Case Report

1. Staub B, Casini G, Monaco E, Sekula R, **Emerick T**. Near-resolution of persistent idiopathic facial pain with low-dose lumbar intrathecal ziconotide: a case report. *J Pain Res.* 2019; 12: 945–949. PMID: 30881103.
2. Carpenter A, Levinthal D, J, Binion D, G, **Emerick T**: Improvement of Cyclic Vomiting Syndrome with Outpatient Ketamine Infusions. *Case Rep Gastroenterol.* 2021 Jan 18;15(1):9-16. doi: 10.1159/000510933. eCollection 2021 Jan-Apr. PMID: 33613157

Letter to the Editor/Case Series

1. Tsai M, Hudson M, **Emerick T**, McFadden D. The True Relevance of First Case Start Delays. *The American Journal of Surgery*. Letter to the Editor. Published online Oct 9, 2014. PMID: 25457239
2. Ertem FU, Eubanks J, Saul M, Kang CR, **Emerick T**, Yadav D. Ketamine infusion for pain management in hospitalized patients with Chronic Pancreatitis: A case series. *Pancreatology*. 2023 Apr 15:S1424-3903(23)00097-2. doi: 10.1016/j.pan.2023.04.003. Epub ahead of print. PMID: 37085380.
3. Leimer L, Orhurhu V, Barreveld A, Kohan L, **Emerick T**. Low Dose Naltrexone in the Perioperative Period. *Regional Anesthesia and Pain Medicine*, In Press, 2024.

3. OTHER NON-PEER REVIEWED PUBLICATIONS

1. Kohan, L., Potru, S., Barreveld, A. M., Sprintz, M., Lane, O., Aryal, A., **Emerick, T.**, Dopp, A., Chhay, S., & Viscusi, E. (2022). Response to incorrect application of DSM-5 criteria. *Regional anesthesia and pain medicine*, 47(6), 384–385. <https://doi.org/10.1136/rapm-2021-103455>. PMID: 35101950
2. **Emerick T**. ASRA Pain Medicine’s growing role in the American Medical Association (AMA) and the RVS Update Committee (RUC). *ASRA Pain Medicine News* 2023;48. <https://doi.org/10.52211/asra050123.003>.
3. Vogt K, Chelly J, Khan A, Alter B, **Emerick T**, Ibinson J, Wasan A. Changes in pain, mood, and functional connectivity following cryo-auriculotherapy in adults with chronic refractory low back pain: An open-label preliminary study. *MedRxiv*. Published Jan, 2024.
4. **Emerick T**, Marshall T, Martin TJ, et al. Perioperative considerations for patients exposed to hallucinogens: an infographic. *Regional Anesthesia & Pain Medicine* Published Online First: 01 March 2024. doi: 10.1136/rapm-2024-105387.
5. Liu, K, Gormaley, A, Woeppel, K, **Emerick, T**, Cui, XT, & Kubendran, R (2023, October). Programmable Pulse Generator for Pain Relief Stimulation using Bioresorbable Electrodes. In *2023 IEEE Biomedical Circuits and Systems Conference (BioCAS)* (pp. 1-5). IEEE.
6. Seresht H, **Emerick T**, Chauhan C, & Chun Y. "A novel low-profile deployable and retrievable epidural lead array system", *Proc. SPIE 12948, Soft Mechatronics and Wearable Systems*, 129480L (9 May 2024); <https://doi.org/10.1117/12.3010471>.

4. BOOKS, BOOK CHAPTERS AND MONOGRAPHS

1. **Emerick T**, Cain J. Crystalloids. *The 5-Minute Anesthesia Consult* (edited by Nina Singh-Radcliff, Lippincott Williams and Wilkins, Copyright 2013, ISBN 1-4511-1894-5).
2. **Emerick T**, Orebaugh S. Epidemiology, Pain Psychology, and Multimodal Anesthesia (Textbook of Regional Anesthesia and Acute Pain Management, edited by Admir Hadzic, Chapter 74, pp 1213, published 2017).
3. **Emerick T**, Szigethy E. Chapter 18. Behavioural Approaches to Managing Substance-Related GI Problems. *Psychogastroenterology for Adults: A Handbook for Mental Health Professionals*. Routledge, 2019. ISBN 1000672778, 9781000672770.

4. *Textbook Senior/First Editor: The Pain Procedure Handbook: A Milestones Approach* 1st ed. 2023 Edition (**Emerick** et al). Springer. ISBN-10: 3031402057.
5. Segall R, Burke H, Frabitore Z, **Emerick T**. *Innovation in Anesthesiology. Technology, Development, and Commercialization Handbook*, edited by Adam Eltorai and Nancy Patterson. Chapter 14. Medical Device Development. ISBN: 978-0-12-818381-6.

5. PUBLISHED ABSTRACTS (in Scientific Journals)

1. **Emerick T**, Metro DG, Patel RM, Sakai T; Scholarly Activity Points: A New Tool for Evaluation of Resident Scholarly Activity. *J Educ Periop Med* Vol XIII:1, 2011.
2. **Emerick T**, Metro DG, Patel RM, Sakai T; Scholarly Activity Points: A New Tool for Evaluation of Resident Scholarly Activity. *Anesthesiology* 2011; A1325.
3. **Emerick T**, Metro DM, Sakai, T. From Idea to Innovation: Hurdles and Milestones in Developing a Scholarly Activity Points Website. *J Educ Periop Med* 2012.
4. **Emerick T**, Metro DG, Patel RM, Sakai T. Can Scholarly Activity Points during Residency Predict the Research Productivity of an Anesthesiologist? *J Educ Periop Med* 2012.
5. Sakai T, **Emerick T**, Patel RM. Ten Years of Experience of System-Based Practice Project for Anesthesiology Residents. *Anesth Analg* 2015; 120; S-148.
6. **Emerick T**, Jarquin S, Gillman A, Hoaglund N, Zhang D, Jeong J, Wasan A. Characteristics and Outcomes of Patients Referred for Spinal Cord Stimulator Implants. *Pain Medicine*, Volume 20, Issue 3, March 2019, Pages 583–660.
7. Szigethy E, Goldblum Y, Weaver E, Shrank W, Kogan J, **Emerick T**, Schwartz M, Proksell S, Wallace M, Malecky A, Marroquin O. Reduction of Use and Depression within an IBD Medical Home Care Model. *Gastroenterology*. May 2019. Volume 156, Issue 6, Supplement 1, Pages S-609–S-610. Su1782.

6. ABSTRACTS (not published in Scientific Journals)

1. **Emerick T**, Metro DG, Patel RM, Sakai T. Scholarly Activity Points: A New Tool for Evaluation of Scholarly Productivity by Residents. (Association of University Anesthesiologists 58th Annual Meeting, Philadelphia, PA, May 12-14, 2011; Society for Education in Anesthesia 26th Annual Meeting, San Antonio, Texas, June 3-5, 2011; 106th Annual Meeting of the American Society of Anesthesiologists, Chicago, IL, October 15-19, 2011)
2. Sakai T, Karausky PL, Valenti SL, Sandusky SL, Hirsch SC, **Emerick T**, Xu Y. Research Training for Residents as Lead Investigators in a Simulated Prospective Randomized Clinical Trial: Use of PBLD Format. (Society for Education in Anesthesia 26th Annual Meeting, San Antonio, Texas, June 3-5, 2011)

3. Xu Y, Karausky PL, Valenti SL, Sandusky SL, Hirsch SC, **Emerick T**, Sakai T. Research Training for Residents as Lead Investigators in a Simulated Prospective Randomized Clinical Trial: Use of PBLD Format. (106th Annual Meeting of the American Society of Anesthesiologists, Chicago, IL, October 15-19, 2011)
4. **Emerick T**, Metro DM, Sakai, T. From Idea to Innovation: Hurdles and Milestones in Developing a Scholarly Activity Points Website. (ASA Practice Management Conference, Orlando, FL, January 27-29, 2012, Second Place - Overall Posters; Society for Education in Anesthesia 27th Annual Meeting, Milwaukee, Wisconsin, June 1-3, 2012; 107th Annual Meeting of the American Society of Anesthesiologists, Washington, DC, October 13-17, 2012; Featured in ASA Newsletter, April 2012, Volume 76:4, p. 6)
5. **Emerick T**, Waters J. Cost Analysis of Blood Transfusions for Hip Replacement Across a Health System. (Practice Management Conference, Orlando, FL, January 27-29, 2012; Pennsylvania Anesthesiology Resident Research Conference/PARRC, May 2012; Featured in Anesthesiology News, Volume 38:6, June 2012, p. 30)
6. **Emerick T**, Metro DG, Patel RM, Sakai T. Can Scholarly Activity Points during Residency Predict the Research Productivity of an Anesthesiologist? (Association of University Anesthesiologists 59th Annual Meeting, Cleveland, OH, May 17-19, 2012; Society for Education in Anesthesia 27th Annual Meeting, Milwaukee, Wisconsin, June 1-3, 2012; 107th Annual Meeting of the American Society of Anesthesiologists, Washington, DC, October 13-17, 2012 - Oral Presentation)
7. Sakai T, Metro DG, **Emerick T**, Patel RM, Xu Y. Resident Scholarly Activity: A Comparison Study Using a Rank-to-Match Population. (Association of University Anesthesiologists 59th Annual Meeting, Cleveland, OH, May 17-19, 2012; Society for Education in Anesthesia 27th Annual Meeting, Milwaukee, Wisconsin, June 1-3, 2012; 107th Annual Meeting of the American Society of Anesthesiologists, Washington, DC, October 13-17, 2012)
8. Hudson M, **Emerick T**, Williams J. Redefining First Case Starts: The Impact of Changing from Wheels-In Time to Anesthesia Release Time as the First Case Start Definition on Surgical Services Performance at a Large Tertiary Care Hospital (ASA Practice Management Conference, Las Vegas, NV, January 2013)
9. **Emerick T**, Hudson M. Operating Room Performance Improvement Across A Large Multi-Hospital Health Care System (ASA Practice Management Conference, Dallas, TX, January 2014, Third Place – Overall Posters)
10. Hudson M, **Emerick T**. Use of Radar Graphs for Comparative Operating Room Performance Metrics in a Large Multi-Hospital Health Care System (ASA Practice Management Conference, Dallas, TX, January 2014).
11. **Emerick T**, Giedraitis A, Nelson D, Hudson M. Worked Hours per 100 Surgical Minutes as a Performance Improvement Metric Across a Large Multi-Hospital Health Care System (ASA Practice Management Conference, Atlanta, GA, January 2015, Second Place – Overall Posters).
12. **Emerick T**, Nelson D, Giedraitis A, Hudson M. Perceived Work Hours versus Actual Work Hours in a Large Multi-Specialty Hospital (ASA Practice Management Conference, San Diego, CA, January 2016, First Place – Overall Posters).

13. Nelson D, **Emerick T**, Giedraitis A, Sakai T, Hudson M. Does a Dedicated Charge Anesthesiologist Affect OR Performance Metrics in a Large Tertiary-Care Teaching Hospital? (ASA Practice Management Conference, San Diego, CA, January 2016)
14. Giedraitis A, **Emerick T**, Nelson D, Sakai T, Hudson M. Anesthesiologist Operating Room Performance Metrics Based on Pairing with Resident vs. CRNA in a Large, Multi-Specialty Health Care System (ASA Practice Management Conference, San Diego, CA, January 2016)
15. Giedraitis A, Flemming T, Hudson M, Nelson D, **Emerick T**. Reconsultation of Chronic Pain Patients at a Large, University-based Hospital (ASA Practice Management Conference, Grapevine, TX, January 2017)
16. Hundley H, Hudson M, **Emerick T**. Development of a Personalized Smart Schedule in an Outpatient Chronic Pain Clinic Through Use of a Gantt Diagram (ASA Practice Management Conference, Grapevine, TX, January 2017)
17. Hundley H, Hudson M, **Emerick T**. Outpatient Chronic Pain Clinic Scheduling Efficiency Analysis (ASA Practice Management Conference, Grapevine, TX, January 2017)
18. Nelson D, Boretsky R, **Emerick T**, Giedraitis A, Hudson M. Creating a System-wide Operating Room Running Cap in a Large Multi-Hospital System (ASA Practice Management Conference, Grapevine, TX, January 2017)
19. Giedraitis A, **Emerick T**, Nelson D, Hudson M. Anesthesia Labor Costs at Different Hospitals Within a Large, Multi-Hospital Health System (ASA Practice Management Conference, Grapevine, TX, January 2017)
20. Staub B, Flemming T, **Emerick T**. Understanding Revenue Streams: Prevalence of Substance Abuse in Inpatient Chronic Pain Patients at a Large, University-based Hospital (ASA Practice Management Conference, New Orleans, LA, January 2018)
21. Hundley H, **Emerick T**. Designing a “Totalcare” Clinic: An Anesthesiologist’s Utility in a Multidisciplinary Musculoskeletal Health Clinic at a Large Academic Medical Center (ASA Practice Management Conference, New Orleans, LA, January 2018)
22. Shah N, **Emerick T**. Using an Anesthesiology Trained Chronic Pain Physician for Perioperative Inpatient and Outpatient Pain Management as Part of the Perioperative Surgical Home (ASA Practice Management Conference, New Orleans, LA, January 2018)
23. Shah N, Jarquin S, Gillman A, Wasan A, **Emerick T**. Developing the Department of Anesthesiology as a Cost-Savings Leader through a Smoking Cessation Program in an Outpatient Chronic Pain Clinic. Poster Presentation. American Society of Anesthesiologists Conference on Practice Management. Las Vegas, NV. January 2019.
24. **Emerick T**, Jarquin S, Gillman A, Hoaglund N, Zhang D, Jeong J, Wasan A. Characteristics and Outcomes of Patients Referred for Spinal Cord Stimulator Implants. Poster Presentation. American Academy of Pain Medicine (AAPM). Denver, CO. March 2019.

25. Holden R, Flemming T, **Emerick T.** An Academic Chronic Pain Clinic's Phone Call and Email Communication Volume as a Demonstration of The Six Sigma Methodology Pareto Principle. American Society of Anesthesiologists Conference on Practice Management, Las Vegas, NV. January 2020.
26. Yin W, **Emerick T.** Analysis of Medical Cannabis Certification in a Chronic Pain Division of a Large Academic Medical Center. American Society of Anesthesiologists Conference on Practice Management, Las Vegas, NV. January 2020.
27. Bintrim D, Morrissey S, Law C, Johnson M, Hudson M, Wasan A, **Emerick T.** Outpatient Ketamine Infusion Program Cost Analysis in a Large Academic Medical Center Department of Anesthesiology. American Society of Anesthesiologists Conference on Practice Management, Las Vegas, NV. January 2020.
28. Shah N, **Emerick T.** Utilization of Lean Methodology and Six Sigma Methodology in an Academic Chronic Pain Practice. American Society of Anesthesiologists Conference on Practice Management, Las Vegas, NV. January 2020.
29. Burke H, **Emerick T.** Activity Systems Mapping in a Chronic Pain Division. American Society of Anesthesiologists Conference on Practice Management, Virtual format. January 2021.
30. Wang S, **Emerick T.** Value Added versus Non-Valued Added Activities in a Chronic Pain Division. American Society of Anesthesiologists Conference on Practice Management, Virtual format. January 2021.
31. Ligocki, M, **Emerick T.** Implantation Of A Peripheral Nerve Stimulator With Permanent Stimulator Left In Place - How To Trouble Shoot Acoustic Shadowing. American Society of Anesthesiologists Annual Meeting, New Orleans, LA, October 2022.
32. Fuller, Z, **Emerick T.** Medically Challenging Case: Havana Syndrome and Pain. American Society of Anesthesiologists Annual Meeting, San Diego, CA, October 2023.
33. Seresht V, **Emerick T,** Chauhan G, Chun Y. (2024) A Novel Low-Profile Deployable and Retrievable Epidural Lead Array System, 2024 SPIE Smart Structures & NDE, Long Beach, CA, March 24-28, 2024.
34. Chao R, DeSensi R, Wasan A, Chelly J, **Emerick T.** Buprenorphine-Naloxone Use as An Alternative to Full Agonist Opioids for Chronic Pain May Improve Patients' Physical Function. American Society of Anesthesiologists Annual Meeting, Philadelphia, PA, October 20-22, 2024.
35. Chao R, Solanki P, **Emerick T.** Fostering Innovation in Meical Education: Addressing the Void of Entrepreneurship Education in Anesthesiology and Pain Medicine Through Incubator Clubs. American Society of Anesthesiologists Annual Meeting, Philadelphia, PA, October 20-22, 2024.
36. Yellapragada S, Solanki P, Lynch B, Eibel M, Viscusi E, **Emerick T.** The Emergence of Xylazine as a Public Health Threat: What Does the Anesthesiologist Need to Know for Perioperative Care? American Society of Anesthesiologists Annual Meeting, Philadelphia, PA, October 20-22, 2024.

PROFESSIONAL ACTIVITIES

TEACHING

- 10/6/2017 Panel Member, Multi-Disciplinary Care Model Panel, approx. 100 University of Pittsburgh medical students
- 2017-Present Resident Chronic Pain Rotation Designated Mock Oral Board Examiner, approx. 18 residents per year
- 2017-Present Anesthesia Professional Practice (APP) Lecturer, APP Rotation, Panel Discussion: Is it worthwhile to take additional degrees? MPH vs. MBA vs. MHA vs. MSc, 18 residents, 1 session/year
- 2017-Present Anesthesia Professional Practice (APP) Lecturer, APP Rotation, Choosing a Fellowship, 18 residents, 1 session/year
- 2/22/18 Lecturer and Moderator, Resident PBLD Session, Chronic Pain Case Discussion, approx. 40 residents, 2 sessions/year
- 2/21/19 Lecturer and Moderator, Resident PBLD Session, Chronic Pain Case Discussion, approx. 40 residents, 2 sessions/year
- 2/28/19 Lecturer and Moderator, Resident PBLD Session, Chronic Pain Case Discussion, approx. 40 residents, 2 sessions/year

Fellow Teaching:

2016-Present Fellowship grand rounds lectures series each year for 9 fellows (and rotating residents):

1. Fellowship Orientation: Definitions and Introduction to Pain
2. Fellow Board Review Lecture Series: Anatomy and Physiology
3. Fellow Board Review Lecture Series: Pharmacology
4. Fellow Board Review Lecture Series: Syndromes and Special Populations
5. Fellow Board Review Lecture Series: Headache
6. Genomics of Pain Medicine
7. Stimulator Waveforms
8. Basic Radiology Interpretation for the Pain Physician
9. Advanced Interventional Techniques Part I and Part II (two hours)
10. Cancer Pain
11. Smoking Cessation and Chronic Pain
12. Zebras of Pain Medicine
13. Suboxone
14. Psychedelics for Chronic Pain

2016-Present Morbidity and Mortality Conference moderator (moderating 1 conference/year)

Faculty Development Teaching:

- 6/2012 Workshop Instructor, "How to Improve Resident Scholarly Activity in Your Department," Sakai T, Hopf HW, Metro DG, **Emerick T.** (Society for Education in Anesthesia 27th Annual Meeting, Milwaukee, Wisconsin), approx. 25 learners
- 6/2013 Workshop Instructor, "How to Improve Resident Scholarly Activity in Your Department," Sakai T, Hopf HW, Metro DG, **Emerick T.** (Society for Education in Anesthesia 28th Annual Meeting, Salt Lake City, Utah), approx. 25 learners
- 4/2023 Departmental Faculty Development Series Lecture, "Lean Six Sigma for Anesthesiologists", University of Pittsburgh Medical Center, Department of Anesthesiology and Perioperative Medicine
- 5/2023 Departmental Faculty Development Series Lecture, "Entrepreneurship for Anesthesiologists", University of Pittsburgh Medical Center, Department of Anesthesiology and Perioperative Medicine
- 3/2024 Departmental Faculty Development Series Lecture, "Lean Six Sigma for Anesthesiologists", University of Pittsburgh Medical Center, Department of Anesthesiology and Perioperative Medicine

Curriculum Development/Teaching Products/Media Products:

- 2014 UPMC Anesthesiology Board Review Series Audio Lectures, Lecture on Anticoagulation
- 2020-present Developer of novel *Common Fellowship Lecture Series* for all UPMC anesthesiology fellows across all specialties: topics on finance, diversity, equity, inclusion, how to interview for a job, contract negotiations, and wellness (peer-reviewed article in Pubmed)
- 2024 Regional Anesthesia and Pain Medicine (RAPM) Podcast with Editor-in-Chief Brian Sites, MD: "Episode 26: Perioperative Considerations for Patients Exposed to Hallucinogens," <https://rapmfocusbmj.podbean.com/e/episode-26-perioperative-considerations-for-patients-exposed-to-hallucinogens/>

Dedicated One-on-One Mentoring:

- 2016-2020 Hayden Hundley, UPMC anesthesiology resident/fellow, clinic efficiency manuscript, QI Committee approval
- 2016-2017 Anna Carpenter, UPMC anesthesiology resident, 1 month resident research rotation mentee, Pet Therapy in Chronic Pain Clinic, QI Committee approval
- 2017-2020 Maciej Klosowski, UPMC anesthesiology resident, TAP versus QL Project, QI Committee approval
- 2018-2020 Brandon Staub, UPMC anesthesiology resident, 1 month resident research rotation mentee, Hypertension in the Chronic Pain Clinic, QI Committee approval
- 2018-2021 Neal Shah, UPMC anesthesiology resident, practice management research

2019-2023 Michael Desciak, UPMC anesthesiology resident, practice management research

2019-2023 Ryan Holden, UPMC anesthesiology resident, practice management/pain research

2020-2023 Harry Burke, UPMC anesthesiology resident, practice management research

2021-Present Sheri Wang, UPMC anesthesiology resident, practice management research

2022-Present Samir Yellapragada, University of Pittsburgh medical student

2022-Present Brendan Lynch, UPMC anesthesiology resident, pain research

2022-Present Tetyana Marshall, UPMC anesthesiology resident, pain research

2023-Present Maria Eibel, University of Pittsburgh medical student/UPMC anesthesiology resident

2024-Present Joseph Belfiore, University of Pittsburgh medical student

2024-Present Richard Chao, University of Pittsburgh medical student

RESEARCH

Funded Research:

NIH Funded:

1. **Opioid-Sparing Non-Surgical, Bioresorbable Nerve Stimulator for Pain Relief**
 NIH/NINDS, Phase 1 STTR
 9/2023-8/2025 - \$693,910
 Co-Investigator (PI: Xinyan Cui, PhD)
 Award Number: 1R41NS132625-01A1 12.
 Unique Federal Award Identification Number (FAIN) R41NS132625

2. **Proof of Concept Study to Treat Negative Affect in Chronic Low Back Pain**
 Co-Investigator (PI: Ajay Wasan, MD, MSc)
 Award Number: 5UH3AR076568-05

Non-NIH Funded:

1. Vanish Bioresorbable Stimulator, \$50,000 Virginia Kaufman Pain Research Challenge Award, 5/2021
2. Vanish Bioresorbable Stimulator, \$35,000 LifeX Accelerator Second Prize, Pitch Competition, 5/2021
3. Vanish Bioresorbable Stimulator, University of Pittsburgh Chancellor's Gap Funding Award, \$75,000, 2021
4. Vanish Bioresorbable Stimulator, Pitt Innovation Challenge (PInCh) 2022 Grand Prize Winner, University of Pittsburgh Clinical and Translational Science Institute (CTSI), \$115,000 (PI)
5. Bionic Naloxone Transdermal Patch, Pitt Innovation Challenge (PInCh) 2022 Elevator Pitch Winner, University of Pittsburgh Clinical and Translational Science Institute (CTSI), \$35,000 (Co-I)

6. XProject (University of Pittsburgh) Winner 2023: Foldable and Deployable Electrode Array (Chun, Emerick, Chauhan)
7. Center for Medical Innovation (CMI) Grant Winner (University of Pittsburgh) 2023, \$20,000 - Foldable and Deployable Electrode Array (Chun, Emerick, Chauhan)
8. One Pass Epidural Needle (OPEN) Pitt Innovation Challenge (PInCh) 2023 Elevator Pitch Winner, University of Pittsburgh Clinical and Translational Science Institute (CTSI), \$30,000 (PI)
9. Psilocybin for Postsurgical Inpatients with Opioid Use Disorder (OUD) and a Trauma History for Acute Pain, Chronic Pain, and Mood – Beckwith Institute Winner, 2024, \$175,000 (PI)

Non-Funded Research:

On-Going:

1. “Development of first human biodegradable stimulator lead for treatment of chronic pain.” University of Pittsburgh School of Medicine, U.S. Provisional and PCT patent filed. (Co-PIs: **Emerick/Cui**), 2020-21. PCT filed 2/2022.
2. “Neural Correlates of Auriculotherapy.” University of Pittsburgh School of Medicine, IRB Approved (PI: Ibinson, Co-I: **Emerick**). 2020.

Completed:

1. “A prospective study of the impact of a smoking cessation program on chronic pain.” University of Pittsburgh School of Medicine IRB Full Board approval, #PRO16020281. (PI: **Emerick**). 2016.
2. “Integration of Fibromyalgia Survey Criteria as a Surrogate Measure of Pain ‘Centralization’ in Patients Undergoing Outpatient Hip Arthroscopy. A Prospective Cohort Study.” University of Pittsburgh School of Medicine IRB Full Board approval, #PRO16010177. (PI: **Emerick**). 2017.
3. “Liposomal bupivacaine for rotator cuff repair.” University of Pittsburgh School of Medicine IRB Full Board approval, #PRO17020089. (PI: Orebaugh, Co-I: **Emerick**). 2017-2019.
4. “Randomized Trial: Preoperative Levator Ani Muscle Injection and Pudendal Nerve Block for Vaginal Reconstructive Surgery.” University of Pittsburgh School of Medicine IRB Full Board approval, #PRO16110378. (PI: Giugale, Co-I: **Emerick**). 2017-2020.
5. “Perceived Utility of Web-Based Mobile Pain Applications for Chronic Pain Patients.” University of Pittsburgh School of Medicine IRB Exempt, IRB#PRO17080712. (PI: Pruskowski, Co-I: **Emerick**). 2017-2020.
6. “Perioperative Ketamine in Opioid-Tolerant Patients Undergoing Lumbar Spine Surgery.” University of Pittsburgh School of Medicine, IRB Full Board Approval, #STUDY19020144. (PI: Chelly, Co-I: **Emerick**). Initial approval 3/19/2019.
7. “The Use of Ketamine in Patients with Chronic Pancreatitis.” University of Pittsburgh School of Medicine IRB Exempt, IRB# STUDY20070194. (PI: Yadav, Co-I: **Emerick**). Initial IRB approval 9/24/2020.

Other research related activities:

- 2012 Patent - Filed May, 2012 - Scholarly Activity Points Formula and Evaluation System (Trent Emerick, MD, David Metro, MD, Tetsuro Sakai, MD, PhD), Application Number 61/643,554; Initial filing at www.scholarlyactivitypoints.com
- 2020 Completion of University of Pittsburgh Innovation Institute First Gear Program for Product Acceleration, Biodegradable Lead System Leads (Trent Emerick, MD, MBA, Tracy Cui, PhD)
- 2021 Provisional Patent and PCT Patent – Filed 2/15/21. Biodegradable Leads and Systems Including Biodegradable Leads (Trent Emerick, MD, MBA, Tracy Cui, PhD). US Provisional Patent Application No: 63/149,496. PCT filed 2/15/22.
- 2021 Completion of LifeX Accelerator for development of biodegradable stimulator, Pittsburgh, PA
- 2022 Provision Patent – Filed 1/17/22 – Sutureless fastener for spinal cord stimulators (Trent Emerick, MD, MBA, and Sergio Hickey, MD). U.S. Provisional Patent Application: 63/300,160. PCT filed 1/2023. PCT/US2023/010865
- 2023 Provisional Patent – Filed 5/12/23 - US Provisional Patent Application: 63/465,902 (Trent Emerick, MD, MBA, Gaurav Chauhan, MD). Needle for Delivery of Multiple Extending Elements into Tissue. PCT Filed 5/10/2024 (PCT/US2024/028796)
- 2024 Provisional Patent – Filed 2/23/24 – US Provisional Patent Application: No 63/557,002 (Trent Emerick, Gaurav Chauhan, Hassan Seresht, Youngjae Chun). Low-profile percutaneously deployable lead array system
- 2024 Provisional Patent – Filed 7/19/24 - US Provisional Patent Application: No 63/673,233 (Alexander Star, Trent Emerick). Wearable Systems For Lactate Detection And System For Drug Delivery Based Upon Lactate Detection

Reviewer for Scientific Journals:

- 2019-Present Ad hoc manuscript reviewer - *Pain Medicine*
- 2019-Present Ad hoc manuscript reviewer - *Journal of Education in Perioperative Medicine*
- 2020-Present Ad hoc manuscript reviewer – *Journal of Pain Research*
- 2022-Present Ad hoc manuscript reviewer – *Perioperative Care and Operating Room Management*

LIST of CURRENT RESEARCH INTERESTS

1. Operating room management, pain clinic management and efficiency
2. Operational efficiency and six-sigma lean methodology related to healthcare
3. Quality improvement in pain management clinics
4. Craniofacial pain, chronic abdominal pain using ultrasound-based regional anesthesia techniques, and cancer-related pain
5. Alternative clinical applications for intrathecal ziconotide (such as for facial pain)

6. Graduate medical education research projects
7. Innovation and inventions surrounding biodegradable stimulator leads
8. Six sigma/lean methodology applications to health care
9. Medical device design and development
10. Psychedelics and Hallucinogens for Pain and Perioperative Care

INVITED SEMINARS AND LECTURESHIPS

Local Presentations

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| 2/10/18 | Update on Quality Improvement, UPMC Pain Division Retreat, UPMC Hillman Cancer Center, Pittsburgh PA |
| 4/28/18 | The Future of Pain Medicine, UPMC Update in Anesthesia, Pain, and Intensive Care, Nemaocolin Resort, Farmington, PA |
| 2/9/19 | Improving Quality Improvement: Six-Sigma Lean Methodology, UPMC Pain Division Retreat, UPMC Hillman Cancer Center, Pittsburgh PA |
| 3/30/19 | Medical Cannabis for Inflammatory Bowel Disease, IBD UNITE Retreat, University of Pittsburgh Medical Center, Doubletree Hotel, Monroeville, PA |
| 4/26/19 | Medical Cannabis for Pain, UPMC Update in Anesthesia, Pain, and Intensive Care, Nemaocolin Resort, Farmington, PA |
| 8/28/20 | Trauma Surgery and Emergency Medicine Grand Rounds: Management of Rib Fracture Pain, UPMC Presbyterian Hospital, Pittsburgh, PA |
| 11/19/20 | University of Pittsburgh Medical Center Department of Anesthesiology & Perioperative Medicine Grand Rounds, Lean Six Sigma Methodologies in Healthcare, approximately 85 attendees, Pittsburgh, PA |
| 2/24/22 | University of Pittsburgh Medical Center Department of Anesthesiology & Perioperative Medicine Grand Rounds, Entrepreneurship for Anesthesiologists, approximately 100 attendees, Pittsburgh, PA |
| 4/14/23 | University of Pittsburgh Medical Center Chronic Pain Division Annual Retreat, Associate Chief Talk, Buprenorphine for Pain Providers, Pittsburgh, PA |

National and International Presentations

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|---------|---|
| 2/19/21 | Visiting Professorship, Yale School of Medicine Department of Anesthesiology Grand Rounds, Lean Six Sigma Methodologies for Anesthesiologists |
| 4/22/21 | Visiting Professorship, The Ohio State University Wexner Medical Center Department of Anesthesiology Grand Rounds, Lean Six Sigma Methodologies |
| 9/15/21 | Visiting Professorship, Temple University Department of Anesthesiology Grand Rounds, Lean Six Sigma Methodologies |

- 1/9/23 PLEX – Pain Learning Exchange International Lecture – Lean Six Sigma for Anesthesiologists
- 10/15/23 ASA Snap Talk Panelist: Managing Substance Use Disorders in the Perioperative Period: Alcohol, Opioids, and Stimulants, Oh My! Perioperative Management of Stimulant Use (San Francisco, CA; ASA Annual Meeting 2023)
- 11/23 ASRA Pain Medicine Fall Conference - Faculty
- 11/9/23 Moderator and Organizer of Medical Education Masters Conference (MEMC), ASRA/APPD Collaboration, ASRA Pain Medicine Annual Fall Conference, New Orleans, LA
- 11/9/23 Choosing the Right Fellow: Timeline, Match, and Ranking – Medical Education Masters Day sponsored by ASRA/APPD at ASRA Pain Medicine Annual Fall Conference, New Orleans, LA
- 11/10-11/23 Moderator, Oral Poster Podium Sessions (2), ASRA Pain Medicine Annual Fall Conference, New Orleans, LA
- 11/11/23 Speaker and Panelist. Ask the Experts Interactive Session: Remuneration and Lean Six Sigma, ASRA Pain Medicine Annual Fall Conference, New Orleans
- 12/9/23 Speaker and Panelist. Addiction Board Certification Without A Fellowship. ASRA Pain Medicine Perioperative and Outpatient Management of Patients with Substance Use Disorder Symposium, Virtual Conference
- 3/6-3/10/24 American Academy of Pain Medicine Annual Conference Faculty, Scottsdale, Arizona.
 Moderator - Panel session on “Chronic pain, VR-The Use of Artificial Intelligence (Chat GPT),” including faculty presenter on “Utilizing Large Language Models to Educate Patients about Procedures”
 Moderator – Panel session on “Ketamine and Psychedelics,” including faculty presenter on “Basic Overview of Hallucinogens”
 Faculty Presenter – “The Science of Addiction and the Road to Recovery: Practical Tips for co-Managing Pain and Illicit Drug and Alcohol Use” (Barreveld A, Emerick T)
 Moderator – Oral Poster Presentations, 2 sessions
- 10/1/2024 Invited UC Davis Department of Anesthesiology Grand Rounds Speaker – “Perioperative Exposure to Psychostimulants and Hallucinogens”
- 10/19/2024 Career Pathways in Anesthesia: Subspecialty Secrets Unveiled – Panelist, American Society of Anesthesiologists Annual Meeting, Philadelphia, PA
- 10/20/2024 Refresher Course Lecture, Perioperative Management of Patients Exposed to Hallucinogens and Psychedelics, American Society of Anesthesiologists Annual Meeting, Philadelphia, PA

10/21/2024 Pre-Operative Drug Testing Lecture: Cannabis, Xylazines, and More – Xylazine and Hallucinogens, American Society of Anesthesiologists Annual Meeting, Philadelphia, PA

SERVICE

University and Medical School Service

2015-Present Member, Clinical Competence Committee, UPMC Pain Medicine Fellowship (Chair of Committee: 2019-2020)
2018-Present Member, UPMC Health Insurance Plan Quality Improvement Committee (meets quarterly)
2022 Judge, Virginia Kaufman Pain Research Challenge (Clinical and Translational Science Institute at University of Pittsburgh)
2022 Judge, Anesthesiology Department Educational Seed Grant Fund Award
2023-present Chair, Neurology and Neurosurgery Value-Added Committee (VAC) for New and Existing Product Evaluation, University of Pittsburgh Medical Center

National Service

2020-Present National Committee Member, Joint ASRA/ASA/AAPM/ASAM Addiction Medicine and Pain Medicine Committee
2020-Present National Committee Member, AAPM Opioid Advisory Committee
2022 ASA-ASRA Technical Expert Panel Member (TEP). Quality Measure Review.
2022-Present ASRA Practice Management Committee Member
2022-Present ASRA Designated Advisor to the RUC - American Medical Association (AMA) Resource Based Relative Value Scale Update Committee (RUC) – 3 year term
2022-Present Association of Pain Program Directors (APPD) – Research Committee – 2 year term
2023 ASRA Pain Medicine Annual Fall Conference Planning Committee (New Orleans)
2023-Present American Academy of Pain Medicine (AAPM) Foundation Board Member
2023-Present Vice-Chair, Membership Committee, American Academy of Pain Medicine (AAPM)