UNIVERSITY OF PENNSYLVANIA - PERELMAN SCHOOL OF MEDICINE <u>Curriculum Vitae</u>

Date: 05/01/2023

Taras Grosh, BS, MD

Address: Hospital of the University of Pennsylvania

Department of Anesthesiology and Critical Care

3400 Spruce Street

Philadelphia, PA 19104 United States

Education:

2007 BS Moravian College, Bethlehem, PA (Biology)

2011 MD St. George's University School of Medicine, Grenada West

Indies

Postgraduate Training and Fellowship Appointments:

2011-2012 Intern in Internal Medicine, Morristown Medical Center

2012-2015 Resident in Anesthesiology, Tufts University 2015-2016 Fellow in Pain Management, Tufts University

Faculty Appointments:

2016-2017 Instructor, Anesthesiology and Critical Care, University of

Pennsylvania Perelman School of Medicine

2017-present Assistant Professor of Clinical Anesthesiology and Critical

Care, University of Pennsylvania School of Medicine

Hospital and/or Administrative Appointments:

2016-present Attending Anesthesiologist, Hospital of the University of

Pennsylvania

2016-present Coordinator, Perioperative Recycling, Penn Presbyterian

Medical Center

2017-present Liaison for Podiatric Medicine Residents in the Regional

Acute Pain Service, Hospital of the University of Pennsylvania

2017-present Assistant Coordinator, NPO Policy Modification, Penn

Presbyterian Medical Center

2017-present Coordinator, Enhanced Recovery Pathway for Thoracic

Surgery, Penn Presbyterian Medical Center and Hospital of the

University of Pennsylvania

2018-present Social Media Coordinator Penn Anesthesia, Department of

Anesthesiology and Critical Care, University of Pennsylvania

Perelman School of Medicine

2018-present Operating Room Coordinator, Penn Presbyterian Medical

Center

2018-present Coordinator, Rib Fracture ERAS, Penn Presbyterian Medical

Center

2019-present Liaison Regional Anesthesia for Cardiac Surgery, Hospital of

| | the University of Pennsylvania and Penn Presbyterian Medical Center |
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| 2019-present | Liaison for Regional Anesthesia in Trauma (Rib and Sternum Fractures), Hospital of the University of Pennsylvania and Penn Presbyterian Medical Center |
| 2019-present | Liasom Airway Rotation for EM Residents, Penn Presbyterian Medical Center |
| 2019-present | Lamont Regional Section Chief, Hospital of the University of Pennsylvania |
| 2020-present | POCUS Butterfly Integration Team, Penn Medicine (HUP, PPMC, Pavilion) |
| 2021-present | Exparel Protocol, Penn Medicine: HUP, PPMC, PMUC, Pavilion |
| 2021-present | ASRA Connect Amabassador, American Society of Regional Anesthesia website moderator |
| 2021-present | ASRA Social Media Committee Member, American Society of Regional Anesthesia Social Media Committee member |
| 2021-present | Assistant Professor, Penn Medicine Nerve Center Faculty |
| 2021-present | Liasom Airway Rotation for Pulmonary Fellows PPMC, PPMC - Penn Presbyterian Medical Center |

Other Appointments:

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| 2020 | QI: Family Connect, Penn Medicine University City: working with Duke Univ to monitor patient outcomes after shoulder surgery via an iPhone app. |
| 2020-present | Wellness Special Interest Group - Founding Member, American Society of Regional Anesthesiology |
| 2020-2022 | Instagram Anesthesia Question of the Day, Hospital of the University of Pennsylvania / Instagram + Twitter - International |
| 2021-present | Afghan Refugee Medical Intake Officer, Philadelphia Medical Reserve Corps (MRC) |
| 2022-present | Coordinator of Translating POCUS and Regional Anesthesia Instructional Videos to Ukrainian, Independent |
| 2022 | Blocktober22 Question creator, Twitter / International collaboration with Duke University - Regional Anesthesia Acute Pain Service |

Specialty Certification:

2018 American Board of Anesthesiology
 2017 Advanced Cardiovascular Life Support

Licensure:

2017-Present Pennsylvania

Awards, Honors and Membership in Honorary Societies:

| 2007-2011 | Speaker IEA Honor Society, St. George's University School of |
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| | Medicine |

2011-2012 Resident Teacher of the Year, Morristown Medical Center

Memberships in Professional and Scientific Societies and Other Professional Activities:

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| National | • |
| National | ٠. |

2015-Present American Medical Association

2016-Present American Society of Regional Anesthesiologists (Social Media Committee Member

2018-present)

Editorial Positions:

| 2017-Present | Editor: Ane | sthesiology | Communicat | ions Open Access |
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2017-Present Peer Reviewer: Anesthesiology Clinics

2020-Present Peer Reviewer: Regional Anesthesia Acute Pain Medicine

Peer Reviewer: Anesthesia + Analgesia 2020-Present

2020-Present Peer Reviewer: Anesthesiology

Academic and Institutional Committees:

| ibtitutional Com | mittees: |
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| 2016-2017 | Residency Interviewer, Department of Anesthesiology and Critical |
| | Care, University of Pennsylvania Perelman School of Medicine |

2017-2018 Point-person OSA Risk Reduction Initiative, Penn Presbyterian

Medical Center, University of Pennsylvania

Medical Student Interviewer, University of Pennsylvania Perelman 2017-Present

School of Medicine

2019-Present Member, Work-Life Committee, Department of Anesthesiology and

Critical Care, University of Pennsylvania

Ombudsperson - Penn Presbyterian Medical Center, University of 2021-Present

Pennsylvania

Chair - Operating Room Clinical Effectiveness Committee, 2021-Present

University of Pennsylvania

Major Academic and Clinical Teaching Responsibilities:

| 2012 | "A Guide to Anesthetic Management in ECT" Department of |
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| | Anesthesiology, Baystate Medical Center |
| 2014 | "Residual Neuromuscular Blockade: Recognize and React" |
| | Presentation for PACU Nurses CME, Department of |
| | Anesthesiology, Baystate Medical Center |
| 2014 | "So You Think You Can BOSC?" - Educational guide to regional |
| | anesthesia at Baystate Orthopedic Surgical Center, Department of |
| | Anesthesiology, Baystate Medical Center |
| 2014 | "Perioperative Seizures" Grand Rounds, Department of |
| | Anesthesiology, Baystate Medical Center |
| 2015 | "Policy Potpourri-Anesthesiology Guidelines Review 2015" Grand |
| | Rounds, Department of Anesthesiology, Baystate Medical Center |

| 2015 | "Local Anesthetic Toxicity" Presentation for PACU Nurses CME; |
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| 2016-Present | Department of Anesthesiology, Baystate Medical Center "Buprenorphine", Lecture, Department of Anesthesiology/Pain Medicine, HUP, University of Pennsylvania |
| 2016-Present | "Neuropathic Pain", Lecture, Department of Anesthesiology/Pain Medicine, HUP, University of Pennsylvania |
| 2016-Present | "Opioid Agonist-Antagonists", Lecture, Department of Anesthesiology, HUP, University of Pennsylvania |
| 2017-Present | "Monitoring Ventilation: Spirometry, Flow-Volume Loops, Gas Concentrations", Lecture, Department of Anesthesiology, HUP, |
| 2017-Present | University of Pennsylvania "Respiratory Physiology: Ventilation-Perfusion", Lecture, Department of Anesthesiology, HUP, University of Pennsylvania |
| 2017-Present | "Management of Patient with Respiratory Disease", Lecture, Department of Anesthesiology, HUP, University of Pennsylvania |
| 2017-Present | "Local anesthetic pharmacology and treatment of LA toxicity", Lecture, Department of Anesthesiology/Pain Medicine, HUP, University of Pennsylvania |
| 2017-Present | "Topical Analgesics", Lecture, Department of Anesthesiology/Pain Medicine, HUP, University of Pennsylvania |
| 2017-Present | "Introduction to Anesthesiology", Case Discussion, Perelman School of Medicine, University of Pennsylvania |
| 2017-Present | "CRPS", Lecture, Department of Anesthesiology/Pain Medicine, HUP, University of Pennsylvania |
| 2017 | "7th Annual Cadaver and Ultrasound Workshop Regional Anesthesia and Point of Care Ultrasound (POCUS)", Instructor, |
| 2017 | Department of Anesthesiology, HUP, University of Pennsylvania Elizabeth Blackwell Society's School of Medicine Mentorship |
| 2017 | Program: Alexis Holmes, University of Pennsylvania "Ultrasound Guided Peripheral Nerve Block Session", Course |
| 2018 | Instructor Perelman School of Medicine, University of Pennsylvania "8th Annual Cadaver and Ultrasound Workshop Regional Anesthesia and Point of Care Ultrasound (POCUS)", Instructor, |
| 2018 | Department of Anesthesiology, HUP, University of Pennsylvania "Ultrasound Basics: Lecture" Resident Lecture, HUP, University of Pennsylvania |
| 2019 | "9th Annual Cadaver and Ultrasound Workshop Regional Anesthesia and Point of Care Ultrasound (POCUS)" - Instructor, |
| 2019-Present | Department of Anesthesiology, HUP, University of Pennsylvania "Updates in Regional Anesthesia 2019" (to PPMC CRNA + Faculty), University of Pennsylvania |
| 2019-Present | "Anesthetic Management of Blunt Chest Trauma" (Trauma Symposium Lecture), University of Pennsylvania |
| 2019 | "Marijuana and Cannabinoids: The role and implication in anesthesiology" Resident Lecture, HUP, University of Pennsylvania |

| 2019-Present | "Anesthetic Implications of Marijuana and Vaping" Lecture for residents + CRNA + RN, University of Pennsylvania |
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| 2019-2020 | Lecture to School of Medicine: Intro to Pain, University of |
| | Pennsylvania |
| 2020-Present | "Regional Anesthesia: Lecture for ICU Fellows," University of |
| | Pennsylvania |
| 2020-Present | "Pain Management in the Trauma Patient" Trauma Surgery Lecture, |
| | University of Pennsylvania |
| 2020-Present | Lecture to School of Medicine: Transcending Pain, PSOM, |
| | University of Pennsylvania |
| 2020-Present | Regional Anesthesia Workshop for Residents - Biannual, University |
| | of Pennsylvania |
| 2022-Present | Anesthesia for Vascular Surgery @ HUP, University of |
| | Pennsylvania |
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Lectures by Invitation (Last 5 years):

| "Anticoagulation Updates in regional anesthesia," ASA Annual |
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| Meeting, Chicago IL |
| Ultrasound Teaching Course, ASA Annual Meeting, Orlando FL |
| ASA Poster Presentation Moderator (Regional Anesthesia), ASA |
| Annual Meeting, Orlando FL |
| "Safety of HTX-011 in Patients ≥65 Years Old as Part of a |
| Postoperative Multimodal Analgesia Regimen", ASRA, ASRA |
| Spring 2021 Meeting Orlando, FL |
| "eRAAPS- Shark Tank Video Submission", ASRA, ASRA Spring |
| 2021 Meeting, Orlando, FL |
| "Ambulatory Surgery", Alexandria Society of Anesthesiologists and |
| Intensive Care 2021, Alexandria, Egypt |
| "CSE-Combined Spinal and Epidural" Stanford University |
| Department of Anesthesiology and Critical Care, Palo Alto, CA |
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Organizing Roles in Scientific Meetings: Jul 2021 Ombude

| Jul, 2021 | Ombudsperson |
|-----------|--|
| | PPMC |
| Sep, 2021 | Co-Chair - Clinical Effectiveness Team (CET) |
| _ | Penn Presbyterian Medical Center |

Bibliography:

Research Publications, peer reviewed (print or other media):

- 1. Taras Grosh, MD: Analgesic efficacy of adding the IPACK block to a multimodal analgesia protocol for primary total knee arthroplasty. Reg Anesth Pain Med 45(10): 799-804, October 2020 Notes: doi: 10.1136/rapm-2020-101558. Epub 2020 Aug 31.
- 2. Jason Ochroch 1, Asad Usman 1, Jesse Kiefer 1, Danielle Pulton 1, Ro Shah 1, Taras Grosh 1, Saumil Patel 1, William Vernick 1, Jacob T Gutsche 1, Jesse Raiten 2:

"Reducing Opioid Use in Patients Undergoing Cardiac Surgery - Preoperative, Intraoperative, and Critical Care Strategies <u>J Cardiothorac Vasc Anesth</u> 35(7), 2155-2165 2021 Notes: doi: 10.1053/j.jvca.2020.09.103. Epub 2020 Sep 15.

Research Publications, peer-reviewed reviews:

1. Grosh T, Kim J, Graff V, Elkassabany, Mariano: Is there a correlation between Altmetric Attention Scores and citation count in Regional Anesthesia and Pain Medicine journal articles? Reg Anesth Pain Med 47(10): 649-650, October 2022 Notes: doi: 10.1136/rapm-2022-103554. Epub 2022 May 17.

Abstracts (Last 3 years):

Agnes Z. Dardas, MD1 âTM Viviana M. Serra Lopez, MD1 âTM Lauren M. Boden, MD1 âTM Daniel J. Gittings, MD1 âTM Kevin Heym, BS2 âTM Emily Koerber, MS2 âTM Taras Grosh, MD3 âTM Jaimo Ahn, M: Simple Surgical Mask Modification for Increased Respiratory Protection during SARS-CoV-2: A Prospective Cross-Sectional Cohort Study. BMJ 17(8): e0272834, August 2022 Notes: doi: 10.1371/journal.pone.0272834. eCollection 2022. Poster Presentation.

Editorials, Reviews, Chapters, including participation in committee reports (print or other media):

- 1. Grosh T: Review of Pain Management <u>Anesthesiology Clinics</u>. Fine PG, Ashburn M (eds.). Elsevier, 34(2): 255-438, June 2016 Notes: Consulting Editor: Fleisher, L.
- 2. Grosh T, Ashburn MA: Chronic Opioid Use. <u>Complications in Anesthesia</u>. Fleisher L, Rosenbaum S (eds.). Elsevier, 3e: 17-21, October 2016 Notes: Chapter 5.
- 3. Grosh T, Liu J, Elkassabany NM, Glaser D: Bring out your Beach Chairs. <u>ASRA Newsletter</u> Page: 32-34, May 2017.
- 4. Grosh T, Ayubcha D: Valproate. <u>Essence of Anesthesia Practice</u>. Fleisher L, Roizen M, and Roizen J (eds.). Elsevier, 4e: 507-508, June 2017.
- 5. Grosh T, Ayubcha D: Myoclonic Epilepsy With Ragged Red Fibers. Essence of Anesthesia Practice. Fleisher L, Roizen M, and Roizen J (eds.). Elsevier, 4E: 288, June 2017.
- 6. Grosh T, Elkassabany NM: Pain Management, An Issue of Anesthesiology Clinics. Anesthesia and Analgesia 125(3): 1072, Sept 2017 Notes: Book Review.
- 7. Grosh T, Elkassabany NM: Enhanced Recovery for Shoulder Arthroplasty. Anesthesiology Clinics. Elsevier, 36(3): 417-430, September 2018.
- 8. Graff V, Grosh T: Multimodal Analgesia and Alternatives to Opioids for Postoperative Analgesia. <u>Anesthesia Patient Safety Foundation</u> 33(2), October 2018 Notes: https://www.apsf.org/article/multimodal-analgesia-and-alternatives-to-opioids-for-postoperative-analgesia/

- 9. Davies G. Agyekum and Taras Grosh: Regional Anesthesia and Acute Pain Medicine -A Problem Based Learning Approach - Chapter 13. Video-Assisted Thoracoscopy and Thoracotomy. <u>Oxford University Press</u>. Magdalena Anitescu, Eman Nada, Nabil Elkassabany (eds.). Oxford University Press, April 2023 Notes: ISBN: 9780197518519.
- 10. Maryam Nilforoshan, Veena Graff, Taras Grosh: Regional Anesthesia and Acute Pain Medicine: A Problem-Based Learning ApproachChapter 43: Epidural Placement and Anticoagulation. <u>Oxford University Press</u>. Magdalena Anitescu, Eman Nada, Nabil Elkassabany (eds.). April 2023.
- 11. Olga "Kiki" Nin and Taras Grosh: Regional Anesthesia and Acute Pain Medicine: A Problem Based Learning Approach Chapter 23: Shoulder Arthroplasty Analgesic Strategies. Oxford University Press. Magdalena Anitescu, Eman Nada, Nabil Elkassabany (eds.). April 2023.
- 12. Osemeke Edobor, Veena Graff, and Taras Grosh: Regional Anesthesia Acute Pain Service: A Problem Based Learning Approach = Chapter 6. Local Anesthetic Systemic Toxicity. Oxford University Press. Magdalena Anitescu, Eman Nada, Nabil Elkassabany (eds.). April 2023.