

**The Faculty of Medicine of Harvard University
Curriculum Vitae**

Date Prepared: June 22, 2026
Name: Chelsea J. Messinger, MD, PhD
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Education:

08/2012- 12/2014	BA with Distinction, <i>magna cum laude</i>	History of Science, Medicine and Public Health	Yale University
08/2016- 05/2024	MD		Harvard Medical School
08/2018- 12/2022	PhD	Population Health Sciences - Epidemiology	Harvard Graduate School of Arts and Sciences and the Harvard T.H. Chan School of Public Health

Postdoctoral Training:

08/23-	Post-Doctoral Research Collaborator	CAUSALab	Harvard T.H. Chan School of Public Health
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Appointments at Hospitals/Affiliated Institutions:

2024-	Resident Physician (PRIME Track)	Anesthesia, Critical Care, and Pain Medicine	Massachusetts General Hospital
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Other Professional Positions:

2016-	Medical Admissions Coach	Cambridge Coaching, LLC
2025-	Research Tutor	Cambridge Centre for International Research

Major Administrative Leadership Positions:

Local

2016-2017	Vice President of Operations, Class of 2020 Student Council	Harvard Medical School
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2017-2019	Student Leadership Team for LCME Accreditation	Harvard Medical School
2018-2020	Co-Chair, Fellowships Committee	Adams House, Harvard College
2019-2020	Senior Resident Tutor	Adams House, Harvard College
2020-2023	Co-Chair, Premedical Committee	Adams House, Harvard College
2025	Panel Facilitator, MD-PhD Residency Panel	Harvard/MIT MD-PhD Program

Professional Societies:

2018-	Society for Epidemiologic Research
2023-	American Society of Anesthesiologists
2025	International Anesthesia Research Society
2025-	Society of Cardiovascular Anesthesiologists

Editorial Activities:

Ad hoc Reviewer

American Journal of Epidemiology
Anesthesiology
Intensive Care Medicine
Journal of Cardiovascular and Thoracic Anesthesia
Critical Care Medicine
Anaesthesia Critical Care & Pain Medicine

Other Editorial Roles

2026-	Editorial Fellow	British Journal of Anaesthesia
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Honors and Prizes:

2013	Class of 1972 Women's Scholarship	Yale College
2015	Distinction in the Major, Program in History of Science and Medicine	Yale College
2015	Phi Beta Kappa	Yale College
2015-2016	Fulbright U.S. Student Research Award in Public Health	U.S. Department of State
2016-2024	Medical Scientist Training Program (MSTP)	Harvard/MIT MD-PhD Program

2017	Education Day Student Research Award	Harvard Medical School	
2020	Distinguished Performance on Qualifying Exam	Department of Epidemiology, Harvard T.H. Chan School of Public Health	
2020	Gohar & Valad Valadian Fellowship	Harvard T.H. Chan School of Public Health	
2021	Certificate of Distinction	Department of Epidemiology, Harvard T.H. Chan School of Public Health	
2026	"Best of Meeting" Oral Abstract	Society of Cardiovascular Anesthesiologists (SCA)	Effect of an Operating Room Extubation Protocol on Length of Stay After Elective Cardiac Surgery: A Quasi-Experimental Analysis
2026	Early Career Investigator Award	Society of Cardiovascular Anesthesiologists (SCA)	

Report of Funded and Unfunded Projects

Past

2013-2013	Alan S. Tetelman Fellowship for International Research in the Sciences (\$7,000) Yale University Investigator (PI: Peter Rabinowitz, MD, MPH) Pilot study of Seroprevalence of Bartonella species, Coxiella burnetii and Toxoplasma gondii among patients with hematological malignancies in Romania
2013-2013	Richter Fellowship (\$500) Jonathan Edwards College at Yale University Investigator (PI: Peter Rabinowitz, MD, MPH) Pilot study of Seroprevalence of Bartonella species, Coxiella burnetii and Toxoplasma gondii among patients with hematological malignancies in Romania
2014-2014	Richter Fellowship (\$1,000) Jonathan Edwards College at Yale University Investigator (PI: Sabina F. Rashid, PhD) Qualitative analysis of utilization of mobile phones for accessing abortion services among low-income women in Bangladesh
2014-2014	Wendy E. Blanning Memorial Summer Fellowship (\$4,000) Yale University Investigator (PI: Sabina F. Rashid, PhD) Qualitative analysis of utilization of mobile phones for accessing abortion services among low-income women in Bangladesh

2015-2016 Fulbright U.S. Student Research Award
 U.S. Department of State
 Investigator (PI: Jamiyah Hassan, MBBS)
 Knowledge, attitudes and practices (KAP) survey of Malaysian antenatal healthcare workers regarding influenza during pregnancy

Current

2026- A Bayesian Framework to Improve Trial Efficiency for Extubation After Cardiac Surgery
 Start date Society of Cardiovascular Anesthesiologists
 12/1/2026 PI (\$15,000)
 Use of Bayesian methods to construct informative prior distributions for treatment effects using observational data on operating room extubation after elective cardiac surgery.

Report of Local Teaching and Training

Teaching of Students in Courses:

2019-2019, 2020-2020	EPI 201: Introduction to Epidemiology: Methods I PhD and MPH students	Harvard T.H. Chan School of Public Health 10 hours / week Teaching Fellow
2020-2020	EPI 289: Epidemiologic Methods III: Methods for Causal Inference PhD students	Teaching Fellow 15 hours / week Teaching Fellow
2020-2020, 2021-2021	EPI 208: Introduction to Clinical Epidemiology Program in Clinical Effectiveness students (MDs, NPs, PAs, faculty)	Harvard T.H. Chan School of Public Health 15 hours / week Teaching Fellow
2020-2020, 2020-2020	EPI 202: Epidemiologic Methods II: Elements of Epidemiologic Research PhD and MPH students	Harvard T.H. Chan School of Public Health 10 hours / week Teaching Fellow
2021-2021	EPI 289: Epidemiologic Methods III: Methods for Causal Inference PhD students	Harvard T.H. Chan School of Public Health 15 hours / week Teaching Fellow
2021-2021	EPI 236: Advanced Epidemiology Methods Program in Clinical Effectiveness students (MDs, NPs, PAs, faculty)	Harvard T.H. Chan School of Public Health 15 hours / week Teaching Fellow

Formally Mentored Harvard Students (Medical, Dental, Graduate, and Undergraduate):

2017-2020 Graduate Student Mentor, Harvard College Women in STEM
 Mentored undergraduate women interested in careers in science, technology, engineering and mathematics (STEM); nominated for the Mentor of the Year Award twice.

- 2018-2023 Resident Tutor, Adams House, Harvard College
Mentored undergraduate students as live-in advisor, including annually 20-30 students in House entryway, formal advising of 5-6 sophomores, and specialty advising for students applying to fellowships and medical school. Formal roles: Co-Chair of the Fellowships advising committee (2018-2019, advised students applying for international fellowships); Senior Resident Tutor (2019-2020, selected to oversee 30 resident tutors & housewide advising operations); Co-Chair of the Premedical Committee (2020-2023, oversaw advising and committee letter writing for all pre-medical students in House). Nominated for Starr Family Prize for Excellence in Advising.
- 2023- Non-Resident Tutor in Medicine, Adams House, Harvard College
Pre-medical advisor and committee letter writer for 1-2 undergraduate students in Adams House applying to medical school annually.
- 2024-2025 MD-PhD Residency Panel, Harvard/MIT MD-PhD Program
Invited alumna panel speaker (2024) and facilitator (2025) for residency selection and application for current MD/PhD students.

Local Invited Presentations:

☒ *No presentations below were sponsored by 3rd parties/outside entities*

- 2024 Lethal Events: Hyperkalemia / Educational Lecture
Department of Anesthesia, Critical Care, and Pain Medicine, Massachusetts General Hospital, Boston, MA
- 2025 Grand Rounds Mini Talks: Euglycemic Diabetic Ketoacidosis / Grand Rounds
Department of Anesthesia, Critical Care, and Pain Medicine, Massachusetts General Hospital, Boston, MA
- 2025 Suzetrigine, a Nonopioid Na_v1.8 Inhibitor for Treatment of Moderate-to-severe Acute Pain: Two Phase 3 Randomized Clinical Trials / Grand Rounds
Department of Anesthesiology, Massachusetts General Hospital, Mass General Brigham, Boston, MA

Report of Regional, National and International Invited Teaching and Presentations

☒ *No presentations below were sponsored by 3rd parties/outside entities*

National

- 2018 Surveillance of microcephaly and neurotropic infections with healthcare databases /
Selected Oral Abstract
Teratology Society 58th Annual Meeting, Clearwater, FL
- 2021 Collider stratification bias in the surveillance of outcomes related to infections in pregnancy: an example from cytomegalovirus and lessons for COVID-19 / Selected Oral Abstract
Society for Epidemiologic Research (SER), San Diego, CA

- 2022 Test selection bias due to selective testing for exposures in pregnancy: an example from SARS-Cov-2 and preeclampsia / Advanced Methods Workshop Co-Leader
Society for Pediatric and Perinatal Epidemiologic Research (SPER)
- 2023 Dexmedetomidine improves pulmonary outcomes in thoracic surgery under one-lung ventilation: A meta-analysis / Selected Oral Abstract
American Society of Anesthesiologists (ASA) Annual Meeting, San Francisco, CA
- 2026 Effect of an Operating Room Extubation Protocol on Length of Stay After Elective Cardiac Surgery: A Quasi-Experimental Analysis (Accepted) / Selected Oral Abstract
Society of Cardiovascular Anesthesiologists (SCA) Annual Meeting, Nashville, TN
"Best of Meeting" Oral Presentation
- 2026 Unraveling the GLP-1 agonist controversy: how a critical analysis of study design can reconcile apparent contradictions (Accepted) / Invited Panel Speaker
American Society of Anesthesiologists (ASA) Annual Meeting, San Diego, CA

International

- 2016 Knowledge, attitudes and practices (KAP) of Malaysian antenatal healthcare workers regarding influenza during pregnancy / Selected Oral Abstract
Fulbright US Student Researcher and Scholar Enrichment Conference, Jakarta, Indonesia
- 2019 Spatial and geographic variation in preeclampsia phenotype / Selected Oral Abstract
Global Pregnancy Collaboration (CoLab) Membership Conference, Oxford, United Kingdom

Report of Clinical Activities and Innovations

Past and Current Licensure and Certification:

- 2024-2028 Limited Physician License, Board of Registration in Medicine, Commonwealth of Massachusetts

Report of Education of Patients and Service to the Community

☒ *No presentations below were sponsored by 3rd parties/outside entities*

Activities

- 2015-2017 Ideas Academy, Kuala Lumpur, Malaysia, Volunteer Health Education Instructor
Health educator at a school for refugee children in Malaysia
- 2016-2022 Crimson Care Collaborative, Boston, MA, Volunteer Student Clinician
Student clinician at Harvard student-faculty collaborative clinic sites
- 2017-2020 Boston Healthcare for the Homeless Night Clinic, Boston, MA, Volunteer Student Clinician; Senior Director (2018-2019)
Student clinician at a shelter-based clinic for patients experiencing homelessness

2020-2024 Home Base Program; Harvard Polo and Equestrian, South Hamilton, MA, Volunteer
Volunteer for equine therapy program for veterans and active service members in mental
health treatment programs through the Home Base Program.

Report of Scholarship

ORCID: 0000-0002-0992-2111

Peer-Reviewed Scholarship in print or other media:

Research Investigations

1. Rabinowitz P, Fowler H, Odofin LO, **Messinger C**, Sparer J, Vegso S. Swine worker awareness and behavior regarding prevention of zoonotic influenza transmission. *J Agromedicine*. 2013;18(4):304-311. PMID: 24125045
2. **Messinger CJ**, Hafler J, Khan AM, Long T. Recent Trends in Primary Care Interest and Career Choices Among Medical Students at an Academic Medical Institution. *Teach Learn Med*. 2017;29(1):42-51. PMID: 27467094. Epub 2016 Jul 28
3. **Messinger CJ**, Mahmud I, Kanan S, Jahangir YT, Sarker M, Rashid SF. Utilization of mobile phones for accessing menstrual regulation services among low-income women in Bangladesh: a qualitative analysis. *Reprod Health*. 2017 Jan 14;14(1):7. PMID: 28088232. Epub 2017 Jan 14
4. **Messinger CJ**, Gurzau ES, Breitschwerdt EB, Tomuleasa CI, Trufan SJ, Flonta MM, Maggi RG, Berindan-Neagoe I, Rabinowitz PM. Seroprevalence of Bartonella species, Coxiella burnetii and Toxoplasma gondii among patients with hematological malignancies: A pilot study in Romania. *Zoonoses Public Health*. 2017 Sep;64(6):485-490. PMID: 28328183. Epub 2017 Mar 22
5. **Messinger CJ**, Lipsitch M, Bateman BT, He M, Huybrechts KF, MacDonald S, Mogun H, Mott K, Hernández-Díaz S. Association Between Congenital Cytomegalovirus and the Prevalence at Birth of Microcephaly in the United States. *JAMA Pediatr*. 2020 Dec 1;174(12):1159-1167. PMID: 32926077
6. **Messinger CJ**, Madenci AL, Wanis KN. Addressing the longitudinal components of surgical treatments. *Eur J Epidemiol*. 2023 Oct;38(10):1019-1023. PMID: 37667140. Epub 2023 Sep 4
7. Laane CLE, Dijkmans AL, **Messinger CJ**, Wijffels MME, Bhashyam AR, Chen NC. Cause of Extensor Pollicis Longus Ruptures After Distal Radius Fracture Fixation Using a Volar Plate. *Hand (N Y)*. 2024 Feb 29;15589447241233763. PMID: 38420781. Epub 2024 Feb 29
8. Zorrilla-Vaca A, Grant MC, Law M, **Messinger CJ**, Pelosi P, Varelmann D. Dexmedetomidine improves pulmonary outcomes in thoracic surgery under one-lung ventilation: A meta-analysis. *J Clin Anesth*. 2024 May;93:111345. PMID: 37988813. Epub 2023 Nov 20
9. **Messinger CJ**, Bateman BT, Wanis KN. Emulating Target Trials to Study Perioperative and Critical Care Interventions with Observational Data: Promise and Limitations. *Anesthesiology*. 2025 Apr 1;142(4):611-627. PMID: 40067038. Epub 2025 Mar 11

10. **Messinger CJ**, Hernández-Díaz S, Hofman A, Sadlak N, Einarsson J, McElrath T. Effect of transabdominal versus transvaginal cerclage on preterm birth and neonatal outcomes among patients with history of cervical insufficiency. *Am J Obstet Gynecol*. 2025 Jul 1;S0002-9378(25)00427. PMID: 40645472. Epub 2025 Jul 1
11. **Messinger CJ**, Hall E, Smith MR, Mueller A, Hou M, Bloom J, Mehaffey C, Gibson L. Operating Room Extubation After Cardiac Surgery: A Promising Practice or a Product of Selection Bias? *J Cardiothorac Vasc Anesth*. In Press.

Other peer-reviewed scholarship

1. **Messinger CJ**, Hernández-Díaz S, McElrath T. Further Observations on Pregnancy Complications and COVID-19 Infection. *JAMA Pediatr*. 2021 Nov 1;175(11):1184-1185. PMID: 34398227
2. **Messinger CJ**, Hall E, Smith MR, Mueller A, Hou M, Bloom J, Mehaffey C, Gibson L. Operating Room Extubation After Cardiac Surgery: A Promising Practice or a Product of Selection Bias? *medRxiv* 2025.09.22.25336347; doi:<https://doi.org/10.1101/2025.09.22.25336347>.
3. **Messinger CJ** and Kelleher E. From association to action: why causal estimands matter in perioperative studies of GLP-1 receptor agonist outcomes. *Br J Anaesth*. 2025 Oct 28. <https://doi.org/10.1016/j.bja.2025.10.007>.
4. Gibson L, **Messinger CJ**, Bloom J, Mehaffey C. Reconsideration of operating room extubation after cardiac surgery: Evidence from protocol implementation. *J Thorac Cardiovasc Surg*. 2025 Nov 1:S0022-5223(25)00866-9.doi: 10.1016/j.jtcvs.2025.10.002

Non-peer reviewed scholarship in print or other media:

Thesis:

1. Messinger, CJ. *Surgical Epidemiology: Prediction and Causation in Clinical Datasets*. Doctoral Dissertation. Harvard University; 2023.

Abstracts, Poster Presentations, and Exhibits Presented at Professional Meetings:

1. Mui P, Chen L, **Messinger C**, Joshi M, Phillips R, Sullivan E, Ogur B. October 24, 2017. Poster: Factors influencing primary care career choices of Harvard Medical School graduates. Harvard Medical School Medical Education Day, Boston, MA.
2. **Messinger CJ**, Greene J, Kooi K, Cross R, Hofman A, Chen N. January 17, 2023. Poster: Risk of reoperation for ulnar neuropathy among distal humerus fractures treated with open reduction and internal fixation (ORIF) with anterior ulnar nerve transposition. American Association for Hand Surgery (AAHS) Annual Meeting, Miami, FL.
3. **Messinger CJ**, Miyamura S, Hoftiezer Y, Lans J, Hofman A, Chen N. January 17, 2023. Poster: Preoperative bone density measurements from computed tomography (CT) scans predict 3-month healing of surgically treated scaphoid nonunions: A multicenter cohort study. American Association for Hand Surgery Annual Meeting (AAHS), Miami, FL.

4. **Messinger CJ**, Miyamura S, Hoftiezer Y, Lans J, Cross R, Hofman A, Chen N. March 9, 2023. Poster: Preoperative bone density measurements from computed tomography (CT) scans predict 3-month healing of surgically treated scaphoid nonunions: A multicenter cohort study. American Academy of Orthopaedic Surgeons (AAOS) Annual Meeting, Las Vegas, NV.
5. **Messinger CJ**, Engmann T, Tawa N, Eeuwen J, Dowlatshahi S. June 12, 2023. Full-thickness abdominal wall reconstruction with free anterolateral thigh flap and pedicled, vascularized fascia lata: case report in a young patient with Dermatofibrosarcoma protuberans. The New England Society of Plastic and Reconstructive Surgeons (NESPRS) Annual Meeting, Groton, CT.
6. **Messinger CJ**, Hernández-Díaz S, Hofman A, Young J, McElrath T. June 12, 2023. Poster: Beyond MAVRIC: The effect of transabdominal versus transvaginal cerclage for the prevention of early preterm birth in a lower risk obstetric population. Society for Epidemiologic Research (SER), Portland, OR.
7. **Messinger CJ**, Wanis K, Madenci A. June 13, 2023. Poster: Addressing the longitudinal component of surgical interventions in randomized control trials. Society for Epidemiologic Research (SER), Portland, OR.
8. **Messinger CJ**, Hernández-Díaz S, Hofman A, Young J, McElrath T. June 15, 2023. Poster: Beyond MAVRIC: The effect of transabdominal versus transvaginal cerclage for the prevention of early preterm birth in a lower risk obstetric population. Society for Pediatric and Perinatal Epidemiologic Research (SPER), Portland, OR.
9. **Messinger CJ**, Greene J, Kooi K, Hofman A, Lans J, Chen N. October 5, 2023. Poster: Effect of Ulnar Nerve Transposition on the Risk of Reoperation for Ulnar Neuropathy Among Distal Humerus Fractures Treated With Plate Fixation. American Society for Surgery of the Hand (ASSH) Annual Meeting, Toronto, Canada.

* Co-author, ** Mentee