

Emma Verstraete, PhD, RPA

Assistant Professor, Department of Biomedical Sciences, University of Minnesota Medical School- Duluth Campus
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EDUCATION

- 2022 PhD, Anthropology. University of Illinois at Urbana-Champaign.
Dissertation: Drugs and Dirt: The historical archaeology of 19th century medicines in Springfield, Illinois. <https://hdl.handle.net/2142/117634>.
Committee: Dr. Christopher Fennell (chair), Dr. Susan Frankenberg, Dr. Stan Ambrose, Dr. Kate Clancy
- 2018 M.A., Anthropology. University of Illinois at Urbana-Champaign
- 2016 B.A., Anthropology. *Cum Laude* with University Honors. Lindenwood University, St. Charles, Missouri.

APPOINTMENTS

- 2026 – present University of Minnesota Medical School, Duluth
Assistant Professor, Academic Track, Department of Biomedical Sciences
- 2022-2026 University of Minnesota Medical School, Duluth
Postdoctoral Researcher, Department of Biomedical Sciences
- 2016-2022 University of Illinois at Urbana-Champaign
Graduate Assistant and Instructor, Department of Anthropology

PEER REVIEWED PUBLICATIONS

- Roberts, Siona, **Emma L. Verstraete**, Natasha Adams, Sharon Kuo, Michael Knudson, Alexandra Zachwieja. 2026. “A synthetic flow network decision-making tool to identify potential downstream contamination risk in permafrost-bound Alaskan hazard sites.” *GIScience & Remote Sensing*. <https://doi.org/10.1080/15481603.2026.2713329>.
- Verstraete, Emma L.**, S. Kuo, N. Adams, and A. J. Zachwieja. 2025. “Embodying the Impact of Climate Change for Decision Makers Using Augmented Reality (AR): A Case Study of Climate-Threatened Cultural Heritage Sites in Western Alaska.” *Environmental Science & Policy* (171): 104178. <https://doi.org/10.1016/j.envsci.2025.104178>.
- Verstraete, Emma L.** and Alexandra Zachwieja. 2025. “Vernacular Infrastructure: a hidden cost in the economics of climate change and permafrost thaw in Alaska.” *Sustainable Futures* 9. <https://doi.org/10.1016/j.sftr.2025.100762>.
- Verstraete, Emma L.** 2025. “Contextualising Extractive Landscapes for Climate Forecasting.” *Environment and History* 31 (1): 3–9. <https://doi.org/10.3828/whpeh.63861480327335>.
- Verstraete, Emma L.** 2024. “Ancient Egyptian Curses and Bog Bodies: The Role of Pseudoarchaeology in Tumblr’s Subculture.” *Epoiesen: A Journal for Creative Engagement in History and Archaeology*, January. <https://doi.org/10.22215/epoiesen/2024.2>.

Verstraete, Emma. 2024. "Certificate Required: Drugstores and the Regulation of 'Female Drugs' in Late Nineteenth-Century Illinois." *History of Pharmacy and Pharmaceuticals* 65 (2): 220–41. <https://doi.org/10.3368/hopp.65.2.220>.

Holland-Lulewicz, Jacob, and **Emma L. Verstraete.** 2023. "From Cahokia to Capital: Historical Palimpsests and the Euro-American Afterlives of an Indigenous Place." *International Journal of Historical Archaeology* 27 (4): 1185–1209. <https://doi.org/10.1007/s10761-023-00706-6>.

Verstraete, Emma. 2022. "Soothing the Self: Medicine Advertisement and the Cult of Domesticity in Nineteenth-Century Springfield, Illinois." *International Journal of Historical Archaeology*, January. <https://doi.org/10.1007/s10761-021-00644-1>.

Verstraete, Emma L. 2022. "'For Sale by All Druggists': Patent Medicine and National Market Access in Springfield, Illinois." *Midcontinental Journal of Archaeology* 47 (1).

Verstraete, Emma L. 2016. "Little Flat Creek Valley: What Happens When Archaeology Contradicts Local Lore?" *Missouri Archaeological Society Quarterly* 32 (2): 21–24.

Articles Submitted

Verstraete, Emma L., Megan Faver Hartline, Alexandra Zachwieja. Revised and Resubmitted. "Unlearning Colonial Definitions of Infrastructure: A case study from western Alaska." *Arctic Science*.

Sharon Kuo, Siona Roberts, **Emma L. Verstraete,** Alexandra J. Zachwieja. In Revision. "A Machine Learning-Based Approach to Assess Thaw Pond Change in Permafrost Landscapes" *Journal of Water and Climate Change*.

Articles In-Prep

Lee, Katharine MN; **Emma L. Verstraete,** Kathryn BH Clancy. In Prep. "'I got gettysburged': feminist science goes viral on feminist social media." *Feminist Anthropology*.

Books In-Prep

Verstraete, Emma L. *Evocative Elixirs: How 19th Century Consumer Medicine Shaped Modern American Healthcare*. University of Alabama Press. In revision post peer review, Expected Late Winter 2027.

BOOK REVIEWS

Verstraete, Emma L. 2022. Review of Barton, Christopher P., ed. *Trowels in the Trenches: Archaeology as Social Activism*. H-Environment, H-Net Reviews. January, 2022. <https://www.h-net.org/reviews/showrev.php?id=57130>

Verstraete, Emma L. 2021. Book Review: Challenging the Idea of Abundance. *Anthro Book Forum*. <https://anthrobookforum.americananthro.org/?book-review=challenging-the-idea-of-abundance>

INVITED TALKS

- 2024 **Verstraete, Emma L.** "An Archaeological Perspective on the 19th Century Transformation of Medical Advertising" Lab Bench Talk Series, University of Minnesota Medical School, Duluth Campus. Duluth, Minnesota (October 28, 2024)
- Verstraete, Emma L.** "A delightful dilemma: Urban landscapes and consumer medical choices in 19th century Springfield, Illinois.", *Missouri Archaeological Society, Ozarks Chapter*. Springfield, MO. (September 18, 2024)
- Verstraete, Emma L.** "Urban Archaeology: The Best Gossip is Under Your Feet.", *Café Scientifique Twin Ports*. Duluth, MN. (August 1, 2024)
- Verstraete, Emma L.** and Zachwieja, A.J. (Author & Presenter) "Anthropological theory and methods increase the accuracy of projected cost and hazard estimates due to climate change in Alaska", *Tulane University Department of Anthropology Seminar Series*. New Orleans, LA. (February 16, 2024)
- Verstraete, Emma L.** "Consumer pharmaceutical use patterns reflect patient health, life history, and socioeconomic status: a material culture approach to understanding wellbeing in past and present." Lab Bench Talk Series, University of Minnesota Medical School, Duluth Campus. Duluth, Minnesota (January 29, 2024)
- 2023 **Verstraete, Emma L.** "Before there were Schedules: Narcotics and stimulants in 19th century American society." Professional and Clinical Seminar Series, University of Minnesota College of Pharmacy. Duluth, Minnesota. (September 16, 2023)

GRANTS AND FUNDING

- 2024 Coalition for Archaeological Synthesis and Amerind Museum Design Workshop on Urban Adaptation to Environmental Change. Funded weeklong meeting for a group of international scholars to produce recommendations from archaeology for the IPCC special report on cities. Dragoon, AZ.
- 2023 Studio in the Woods Scholarly Writing Retreat Residency to work on scholarly publications with Dr. Katharine Lee in New Orleans, LA.
- 2021 UIUC Graduate College Summer Block Grant Fellowship to support research to build a guide on syllabi decolonization. \$1,500
- 2021 UIUC Department of Anthropology Summer Research Grant to support research at the Abraham Lincoln Presidential Library and Museum in Springfield, Illinois. \$1,500
- 2021 Forest T Baker Award for American Archaeology. UIUC Department of Anthropology award for outstanding proposal. \$1,000
- 2019 Dimitri Shimkin Award. Department of Anthropology award for Outstanding graduate student research paper. \$1,000
- 2018 Department of Anthropology Summer Research Grant to support research on the genealogy of Portuguese immigrants in Springfield, Illinois. Research conducted at the Madeira Heritage Archive in Portugal. \$1,080

2014 Jesse Wrench Memorial Undergraduate Research Grant, Missouri Archaeological Society. \$1,000

HONORS AND AWARDS.

2021 UIUC List of Teachers Ranked As Excellent. Fall 2021. Received for teaching sections of ANTH 220: Introduction to Archaeology.

2020 UIUC Anthropology Department nominee for the Graduate Student Award for Excellence in Undergraduate Teaching.

2019 UIUC List Of Teachers Ranked As Excellent. Spring 2019. Received for teaching ANTH 374: Medical Anthropology.

TEACHING CERTIFICATIONS

2022 Certificate for Technology Enhanced Teaching, University of Illinois Center for Innovation in Teaching and Learning.

2021 Graduate Teacher Certificate, University of Illinois Center for Innovation in Teaching and Learning.

ARCHAEOLOGY AND ARCHIVES RESEARCH EXPERIENCE

November 2025-Present Senior Project Archaeologist. Scandia Cemetery Erosion Project. In partnership with St. Louis County Department of Public Works. Consulted on the design and Section 106 compliance, focusing efforts on archival research and basic pedestrian survey techniques. Served as archaeologist of record for official recommendations and senior author on written reports.

October 2022- August 2026 Postdoctoral Researcher, Department of Biomedical Sciences. University of Minnesota Medical School- Duluth. Research Grant: Defense Resiliency Platform Against Extreme Cold Weather. Employed multidisciplinary approaches to study past and present impacts of disease and climate change on communities in Alaska. Project components included archival research on past pandemics, satellite imagery analysis, and modeling the effects of ongoing climate change on community infrastructure with an emphasis on health using ArcGIS.

February- December 2022 Research Assistant for Dr. Elizabeth Comen for a popular science book on the history of women's healthcare. Assisted in primary resource research and compiling first-hand accounts of 19th and 20th century doctors and their female patients.

May 2020-January 2022 Research Assistant for Dr. Helaine Silverman's Mythic Mississippi Project. Duties include writing research essays for website,

	creating lesson plans, designing virtual location tours (Story Maps), and directing the project's social media outreach.
June 2019- May 2021	Research Assistant for VRchaeology virtual reality project.
January 2018- May 2018	Research Assistant for Dr. Jenny Davis' NAGPRA Project. Primary research task was creating a database of over 700 documents pertaining to UIUC Department of Anthropology's NAGPRA compliance.
August 2017- January 2020	Public Service Archaeology and Architecture Program. Artifact processing and field technician.
September 2016- May 2017	UIUC Historical Archaeology Lab. Artifact processing.
September 2015-May 2016	Lindenwood University Sibley Trash Dump Excavation. Student Manager.
May 2015- May 2016	Knowledge Management and Archaeological Curation Intern, United States Army Corps of Engineers, St. Louis, MO.
August 2014- May 2016	Archaeological Laboratory Technician, Lindenwood University Archaeological Research Program.
May 2015- August 2015	Missouri History Museum Archaeological Collections Intern.
August 2014- August 2015	Marbut Farmstead Excavation, funded by the Jesse Wrench Memorial Scholarship from the Missouri Archaeological Society
August 2014	Site Survey training with Missouri Archaeological Society, Arrow Rock State Historic Site.
June 2013	Site Survey training with Missouri Archaeological Society, Knob Noster State Park.
March 2013	Moore's Mill Battlefield Survey Research Assistant, Missouri Civil War Heritage Foundation.

TEACHING EXPERIENCE

Instructor of Record

Fall 2026	Facilitator for Problem Based Learning groups. University of Minnesota Medical School, Duluth Campus.
Summer 2022	Instructor and Course Designer for ANTH 209: Food, Culture, and Society (online). Department of Anthropology, University of Illinois at Urbana-Champaign.
Spring 2021	Instructor and Course Designer for ANTH 374: Anthropology of Science and Technology (online). Department of Anthropology, University of Illinois at Urbana-Champaign.

Spring 2019	Instructor and Course Designer for ANTH 379: Medical Anthropology. Department of Anthropology, University of Illinois at Urbana-Champaign.
January 2019-August 2019	Instructor and course administrator for “The Shipwreck Cipher”, Duke University Talent Identification Program (TIP). Online course for advanced students in grades 4-6.
July 2018	Primary Instructor and Course Designer for “Historical Epidemiology: Pathogens, Plagues, and Patient Zero” for Duke University Talent Identification Program (TIP) at Rice University.
June-July 2017	Primary Instructor and Course Designer for “Historical Epidemiology” for Duke University Talent Identification Program (TIP) at Rice University. Created learning content and lesson plans at the introductory college level for 108 instructional class hours for gifted and talented teens. Also supervised a teaching assistant.

Teaching Assistantships

ANTH 399: Virtual Reality Archaeology
 ANTH 243: Forensic Science (online)
 ANTH 220: Introduction to Archaeology
 ANTH 180: The Archaeology of Death
 ANTH 106: Historical Archaeology of the Americas
 ANTH 103: Anthropology in a Changing World (online)

CONFERENCE PRESENTATIONS

Zachwieja, A., **Verstraete, E.**, Adams, N., Wolforth, T., & Kuo, S. 2026. Timeline to mass decomposition: The public health risks of climate-induced cemetery subsidence in Alaska. Annual Meeting of the American Association for Biological Anthropology. Denver, CO.

Verstraete, E., VanDoren, T., Zachwieja, A. 2025. Examining a previously unrecognized epidemic in early 20th century Western Alaska. *International Congress for the History of Science and Technology*. Dunedin, New Zealand.

Verstraete, Emma L. 2024. Topical Pain Management in Late 19th Century: An archaeological perspective. *MOMS History of Medicine Conference*. Thunder Bay, ON.

Verstraete, E., Kuo, S, Adams, N, Zachwieja, A. 2024. Loss of winter community trails in Alaska remains an unaccounted for economic cost in climate adaptation models of transportation infrastructure. *2024 Arctic Congress*. Bodo, Norway.

Verstraete, E., Wolforth, T, Adams, N. Kuo, S. Zachwieja, A. 2024. Visualizing Traditional and Vernacular Infrastructure on the Seward Peninsula, Alaska. *Arctic Science Summit Week (ASSW) Symposium: Visualizing the Impact of Permafrost Thaw on Arctic Infrastructure*. Edinburgh, UK.

Zachwieja, A, **Verstraete, E.**, Wolforth, T, Adams, N. Kuo S. 2024. Remote Sensing and Ground Survey visualization contextualize biohazard safety models of Alaskan cemeteries. *Arctic*

Science Summit Week (ASSW) Symposium: Visualizing the Impact of Permafrost Thaw on Arctic Infrastructure. Edinburgh, UK.

Zachwieja, A, Wolforth, T, **Verstraete, E**, Adams, N. Kuhlke, O. Rowell, S. Kuo, S. 2024. A biosecurity perspective on permafrost thaw-induced cemetery subsidence in the Seward Peninsula and Norton Sound region, Alaska. *Symposium: Arctic Coastal Dynamics. American Geosciences Union Ocean Sciences Meeting.* New Orleans, LA.

Zachwieja, A, Wolforth, T, **Verstraete, E**, Adams, N. Kuhlke, O. Rowell, S. Kuo, S. 2024. A biosecurity perspective on permafrost thaw-induced cemetery subsidence in the Seward Peninsula and Norton Sound region, Alaska. *American Association of Geologists.* Honolulu, HI.

Verstraete, Emma L. and A. Zachwieja 2023. *Employing archival data from the 1918 flu pandemic to evaluate potential hazard areas due to climate change in coastal Alaska.* Poster presented at the American Association for the History of Medicine Annual Meeting, May 12. Ann Arbor, Michigan

Verstraete, Emma L. 2023. *It's More Than Lincoln: interpretation challenges at multi-component urban archaeological sites.* Paper presented at the 2023 Annual Meeting of the Society for Historical Archaeology, January 10. Lisbon, Portugal.

Verstraete, Emma L. 2022. *"Since That Time We Haven't Had a Cut-rate Drug Store in Town": The Impact of Merchant Cooperation on the Consumer's Freedom of Choice in Springfield, Illinois.* Paper to be presented at the 2022 Annual Meeting of the Society for Historical Archaeology. Withdrawn due to COVID-19 concerns.

Verstraete, Emma L. 2021. *Investigating Choices: The Changing Medicinal Assemblage of the Carpenter Street Site in Springfield, Illinois.* Paper presented at the 2021 Annual Meeting of the Society for Historical Archaeology, January 7. Virtual.

Verstraete, Emma L. 2020. *Contextualizing Consumption: Examining the Benefits of Multi-Site Discussion at the Lincoln Home National Historic Site.* Poster presented at the 2020 Annual Meeting of the Society for Historical Archaeology, January 11. Boston, MA.

Shackelford L, **Verstraete E**, Huang WD, Merrill C, Craig A. (2020). *Virtual Archaeology: Teaching archaeology using virtual reality and game-based learning.* Paper presented at the 2020 Annual Meeting of the Society for Historical Archaeology, January 13. Boston, MA.

Verstraete, Emma L. 2019. *Ancient Egyptian Curses and Bog Bodies: The Role of Pseudoarchaeology in Tumblr's Subculture.* Paper presented at the Annual Meeting of the Society for American Archaeology. April 12. Albuquerque, NM.

Verstraete, Emma L. 2019. *"Soothing the Self: Medicine Advertisement, Identity, and the Cult of Domesticity.* Paper presented at the Annual Meeting of the Society for Historical Archaeology. January 11, St. Charles, MO.

Verstraete, Emma L. 2018. *"For Sale By All Druggists": Healthcare and Consumption in Lincoln's Springfield.* Paper presented at the Annual Meeting of the Illinois Archaeological Society. September 15, Champaign, IL.

Verstraete, Emma L. 2018. *"For Sale By All Druggists": A Historical and Archaeological Look at Healthcare and Consumerism in Lincoln's Springfield.* Paper presented at the Annual Meeting of the Society for Historical Archaeology. January 4, New Orleans, LA.

- Verstraete, Emma L.** 2017. *The Creation of an In-House, Interactive, Bottle Identification Guide for Students* Poster presented at the Annual Meeting of the Society for Historical Archaeology. Fort Worth, TX.
- Verstraete, Emma L.** 2016. *Looking Through the Glass: Identification and Analysis of Glass Bottles Recovered at Lindenwood University*. Paper presented at Annual Meeting of the Missouri Archaeological Society, April 2016, Springfield, MO.
- Verstraete, Emma L.** 2016. *Looking Through the Glass: Identification and Analysis of Glass Bottles Recovered from a Campus Trash Dump*. Paper presented in the session titled: “Student, Orphans, and Criminals,” Annual Meeting of the Society for Historical Archaeology, January 7, Washington, DC.
- Verstraete, Emma L.** 2015. *Little Flat Creek Valley: When History and Archaeology Collide*. Paper presented at the 2015 Missouri Historical Society Spring Meeting. St. Louis, MO.
- Verstraete, Emma L.** 2015. *Daily Life in Little Flat Creek Valley*. Poster presented at the Annual Meeting of the Society for Historical Archaeology. Seattle, WA.
- Verstraete, Emma L.** 2014 . *Breaking Open the Black Box: The Evolution of Psychology and Archaeology in Regards to the Human Experience*. Paper presented in the session title “Non-empirical research”, 2014 Missouri Undergraduate Psychology Conference; St. Charles, MO.
- Verstraete, Emma L.** 2014. *Cultural Identity and Acculturation: An Anthropological Perspective on a Psychological Concept*. Paper presented at the 2014 Student Research Symposium at Lindenwood University, St. Charles, Missouri.
- Verstraete, Emma L.** 2013. *Differences on Delmar: Analyzing the Effect of Economic Inequality on Historical Building Preservation and Restoration*. Poster presented at the 2013 Society for Economic Anthropology Annual Meeting. St. Louis, MO.

SERVICE

July 2024-Present	Assistant Director, Café Scientifique Twin Ports.
2023- Present	American Association for the History of Medicine, Conference Planning Committee
Fall 2021-Summer 2022	Graduate mentor for the LEAD Scholars program produced by the UIUC Department of Anthropology Undergraduate Studies
August 2021	Verstraete, Emma L. “Decolonizing Your Syllabus.” In Smalls, Krystal, et al. 2021. <i>Decolonizing Classrooms</i> . Department of Anthropology, University of Illinois at Urbana Champaign.
August 2021	Invited guest blog post. “The Lincoln Family and Pennyroyal: Re-Evaluating Medicines in the Archive and Beyond”. <i>Points History</i> . https://pointshistory.com/2021/08/31/the-lincoln-family-and-pennyroyal/
August 2021	Co-author on “Building Inclusive Classrooms”, an internal guide for UIUC’s Anthropology Department. Contributed section on decolonizing anthropology syllabi and resources to use

August 2018- May 2022	Archaeology liaison for GASA
October 2018-May 2022	Graduate Anthropology Student Association (GASA), executive board member
August 2018- May 2022	President of the UIUC Archaeological Graduate Student Society
November 2016	Archaeology Day Coordinator, a UIUC public outreach event to promote participation in archaeology and anthropology classes.
May 2016- August 2016	Badge Instructor, Ozarks Trail Council, Boy Scouts of America. Taught students aged 11-18 a guided classroom and field curriculum on archaeology and its importance.

PROFESSIONAL MEMBERSHIPS

Register of Professional Archaeologists, Member # 18024

Illinois State Archaeology Survey

American Institute for the History of Pharmacy

Society for Historical Archaeology