

Curriculum Vitae
ELIZABETH A. HOLDSWORTH

Department of Anthropology
Washington State University
Pullman, WA 99164

+1 (509) 335-2332
e.holdsworth@wsu.edu
ORCID: [0000-0001-6095-2378](https://orcid.org/0000-0001-6095-2378)

EDUCATION

- | | |
|------|--|
| 2021 | Ph.D. Anthropology, University at Albany
Dissertation: Intergenerational Embodiment of Stress: How the broader sociocultural environment can shape child growth and development.
Committee: Drs. Lawrence Schell (Chair), Elise Andaya, Allison Appleton |
| 2013 | M.A. Anthropology, University at Albany
Thesis: Infant Growth and Maternal Involvement |
| 2010 | B.A. Anthropology, minor French, <i>summa cum laude</i> , SUNY College at Geneseo |

POSITIONS

- | | |
|-----------|--|
| 2021- | Postdoctoral Research Associate, Department of Anthropology with Dr. Courtney Meehan, Washington State University |
| 2020-2021 | Research Assistant, Department of Epidemiology & Biostatistics with Dr. Allison Appleton and Dr. Betty Lin, University at Albany |
| 2014-2021 | Instructor, Department of Anthropology, University at Albany |
| 2019-2020 | Community Liaison, Center for the Elimination of Minority Health Disparities, University at Albany |
| 2015-2019 | Research Assistant, Department of Epidemiology & Biostatistics with Dr. Allison Appleton, University at Albany |
| 2018 | Research Intern, Office of Program Evaluation and Research, AIDS Institute, New York State Department of Health |
| 2013-2018 | Teaching Assistant, Department of Anthropology, University at Albany |
| 2017 | Instructor, Department of Biology & Health Sciences, The Sage Colleges |
| 2013-2016 | Research Assistant, Department of Anthropology with Dr. Julia Jennings and Dr. Lawrence Schell, University at Albany |

PUBLICATIONS

Peer-reviewed Journals

- In review **Holdsworth, E.A.**, Schell, L.M., Appleton, A.A. Maternal-infant interaction quality is associated with child NR3C1 CpG site methylation at 7 years of age. *American Journal of Human Biology*.
- In review Appleton, A.A., Lin, B., Kennedy, E.M., **Holdsworth, E.A.** Maternal depression and adverse neighborhood conditions during pregnancy are associated with gestational epigenetic age deceleration. *Epigenetics*.
- In review Leo, A.S., Wilcox, K.C., **Holdsworth, E.A.**, Tobin, J.K., Mola Avila, J.A., Khan, M.I. Gendered impacts of the COVID-19 pandemic: a mixed-method study of teacher stress and work-life balance. *Community, Work & Family*.
- 2021 Appleton, A.A., Kiley, K.C., Schell, L.M., **Holdsworth, E.A.**, Akinsanya, A., Beecher, C. Prenatal lead and depression exposures jointly influence birth outcomes and NR3C1 DNA methylation. *International Journal of Environmental Research and Public Health*, 18(22), 12169. <https://doi.org/10.3390/ijerph182212169>
- 2021 Ocobock, C., Owens, C., **Holdsworth, E.**, Gildner, T., Lynn, C. #Hackademics: Hacks toward success in academia. *American Journal of Human Biology*, e23653. <http://doi.org/10.1002/ajhb.23653>
- 2021 Appleton, A.A., Lin, B., **Holdsworth, E.A.**, Feingold, B.J., Schell, L.M. Prenatal exposure to favorable social and environmental neighborhood conditions is associated with healthy pregnancy and infant outcomes. *International Journal of Environmental Research and Public Health*, 18(11), 6161. <https://doi.org/10.3390/ijerph18116161>
- 2020 **Holdsworth, E. A.**, & Appleton, A.A. Adverse childhood experiences and reproductive strategies in a contemporary U.S. population. *American Journal of Physical Anthropology*, 171(1), 37-49. <https://doi.org/10.1002/ajpa.23967>
- 2019 Appleton, A.A., Kiley, K., **Holdsworth, E.A.**, & Schell, L.M. Social Support During Pregnancy Modifies the Association Between Maternal Adverse Childhood Experiences and Infant Birth Size. *Maternal and Child Health Journal*, 23, 408-415. <https://doi.org/10.1007/s10995-018-02706-z>
- 2017 **Holdsworth, E.A.** & Schell, L.M. Maternal-infant interaction as an influence on infant adiposity. *American Journal of Human Biology*, 29(5), e23023. <https://doi.org/10.1002/ajhb.23023>

- 2017 Appleton, A. A., **Holdsworth, E. A.**, Ryan, M., & Tracy, M. Measuring childhood adversity in life course cardiovascular research: A systematic review. *Psychosomatic Medicine*, 79(4), 434-440.
<https://doi.org/10.1097/PSY.0000000000000430>
- 2016 Appleton, A. A., **Holdsworth, E. A.**, & Kubzansky, L. D. A Systematic Review of the Interplay Between Social Determinants and Environmental Exposures for Early-Life Outcomes. *Current Environmental Health Reports*, 1–15. <https://doi.org/10.1007/s40572-016-0099-7>

Other Publications

- 2021 The Albany Minority Health Task Force, Schell, L. M., Golden, A., Pieterse, A., Krishnan, A., Yamamoto, M., **Holdsworth, E.A.**, Khurana, P., Mata, O., Williams, A., Lwin, H.W. Capital Region collaborative community survey project to document disparate impacts of COVID-19. *Understanding and eliminating minority health disparities in a 21st-century pandemic: a white paper collection*. University at Albany, SUNY: Scholars Archive.
https://scholarsarchive.library.albany.edu/covid_mhd_nys_white_papers/9
- 2018 **Holdsworth, E. A.**, & Schell, L. M. Stunting. In *The International Encyclopedia of Biological Anthropology*. Wiley-Blackwell.
<https://doi.org/10.1002/9781118584538.ieba0223>
- 2017 **Holdsworth E.** #Review: Gender and Genetics: Sociology of the Prenatal [Internet]. Allegra. Available from:
<http://allegralaboratory.net/review-gender-and-genetics-sociology-of-the-prenatal/>
- 2016 Appleton, A. A., **Holdsworth, E. A.**, & Ingle, M. Epigenetic alterations to NR3C1 and HSD11B2 and the developmental origins of mental disease risk. In D. Spengler & E. Binder (Eds.), *Epigenetics and Neuroendocrinology – Clinical Focus on Psychiatry* (Vol. 2, pp. 121–140). Springer International Publishing.

GRANTS AND FELLOWSHIPS

Externally-funded Grants

- 2017-2020 National Science Foundation Doctoral Dissertation Research Improvement Grant, Cultural Anthropology. ([Award ID: 1729258](#))

Internally-Funded Grants and Fellowships

2021	WSU Alcohol and Drug Abuse Research Program, Postdoctoral Research Grant (\$14,976)
2020	UAlbany Graduate Student Association Research Development Award
2020	UAlbany Graduate Student Association Professional Development Award
2019	UAlbany Benevolent Association Research Grant
2019	UAlbany Graduate Student Association Research Development Award
2019	UAlbany Graduate Student Association Research Development Award
2019	UAlbany Graduate Student Association Research Development Award
2019	United University Professions Individual Development Award
2018	UAlbany Graduate Student Association Research Development Award
2018	UAlbany Graduate Student Association Professional Development Award
2018	UAlbany Graduate Student Association Professional Development Award
2018	GSEU Professional Development Award
2017	UAlbany Graduate Student Association Professional Development Award
2017	UAlbany Graduate Student Association Professional Development Award
2016	GSEU Professional Development Award
2015	University at Albany Graduate Student Association Travel Grant

AWARDS AND HONORS

2021	University at Albany Distinguished Doctoral Dissertation Award
2019-2020	University at Albany Dissertation Research Fellowship Award
2017	US DOHaD Society Registration Award
2015	Human Biology Association Student Member Travel Award
2015	Karen R. Hitchcock New Frontiers Fund Award through Initiatives for Women

RESEARCH PROJECTS

2021-	Breastfeeding and Cannabis Study. PI Dr. Courtney Meehan, Department of Anthropology, Washington State University. Co-Investigator: Study design, grant applications, recruitment, data collection, data analysis, manuscript preparation. PI for follow-up study: Study design, funding, recruitment, data collection, supervision of research assistants
2021-	Mother-Infant Microbiomes, Behavior, and Ecology Study. PI Dr. Courtney Meehan, Department of Anthropology, Washington State University. Research Associate: Data analysis, manuscript preparation

- 2015-2021 **The Albany Infant and Mother Study.** PI Dr. Allison Appleton, Department of Epidemiology & Biostatistics, University at Albany.
Research Assistant: Recruitment, data collection, literature reviews, preparation and organization of data, data analysis, manuscript preparation.
- 2020-2021 **Disparities in COVID-19 Exposure and Outcomes in Albany.** PI Dr. Annis Golden, Center for the Elimination of Minority Health Disparities, University at Albany.
Investigator: Study design and development.
- 2017-2020 **Immigrant Mothers and Infants in Upstate New York.** PI Lawrence Schell, Department of Anthropology, University at Albany.
Co-Principal Investigator: Study design and development, study management and organization, participant recruitment, data collection, collaboration with local community task force, dataset acquisition, report writing, data analysis, manuscript preparation.
- 2015-2016 **Orkney Demography Study.** PI Dr. Julia Jennings, Department of Anthropology, University at Albany.
Research Assistant: data linking across historical Censuses
- 2013-2014 Research Assistant, Center for the Elimination of Minority Health Disparities
PI: Dr. Lawrence Schell, University at Albany

PRESENTATIONS AND TALKS

Invited talks

- 2022 *Secondary Data Analysis Part 1: Non-anthropological datasets.* Digital Anthropological Methods Lecture Series, Washington State University. April 13.

Conference Presentations

- 2022 *Infant and maternal environmental influences on the human milk microbiome.* **Elizabeth A. Holdsworth** and Courtney L. Meehan. Social and Environmental Exposures and the Developmental Origins of Health Disparities, Portland OR. April 21-22.
- 2022 *Breastfeeding frequency is associated with differential abundance of bacteria in human milk.* **Elizabeth A. Holdsworth**, Janet E. Williams, Ryan M. Pace, Edward H. Hagen, Avery A. Lane, Maria Gartstein, Mark A. McGuire, Michelle K. McGuire and Courtney L. Meehan. Annual Meeting of the American Association of Biological Anthropologists, Denver CO. March 24-26.
- 2021 *Frequency of breastfeeding and its relationship to microbial diversity in human milk.* **Elizabeth A. Holdsworth**, Edward H. Hagen, Janet E. Williams, Avery A. Lane, Maria Gartstein, Mark A. McGuire, Michelle K.

- McGuire, Courtney L. Meehan. 7th Annual Northwest Evolution, Ecology, and Human Behavior Symposium (NWEHBB), virtual. October 15.
- 2021 *Disparate Impacts of COVID-19 in New York's Capital Region: A View from the Local Community on the Socioemotional Experience of the Pandemic*. Annis Golden, Lawrence Schell, Archana Krishnan, Masahiro Yamamoto, Alex Pieterse, Olivia Mata, **Elizabeth Holdsworth**, Hnin Wai Lwin Myo, Pallavi Khurana, Amy Williams. Summer Symposium of the University at Albany Minority Health Disparities Initiative, Albany, NY. June 21-28.
- 2021 *Documenting Disparities in Technology Access, Information-Seeking and Vaccine Hesitancy during the COVID-19 Pandemic in New York's Capital Region*. Archana Krishnan, Lawrence M. Schell, Annis Golden, Masahiro Yamamoto, Olivia Mata, **Elizabeth Holdsworth**. 5th Annual conference of the Center for Health and Social Media (CHASM), virtual. May 13-14.
*Winner of Best Poster Award.
- 2021 *NR3C1 methylation changes are associated with early childhood height growth trajectories*. **EA Holdsworth**. American Association of Physical Anthropologists Annual Meeting, virtual. April 7.
- 2021 *A biocultural approach to predictors of hair cortisol concentration among immigrant women in rural New York*. **EA Holdsworth**. Human Biology Association Annual Meeting, virtual. March 30.
- 2020 *Maternal postnatal stress and childhood growth trajectories*. **EA Holdsworth** and LM Schell. Human Biology Association Annual Meeting, Los Angeles, CA (canceled due to Covid-19).
- 2018 *Local challenges and sources of resilience among migrant mothers in a semi-rural region in New York State*. In the SUNTA Panel Session "Intersections of care and wellbeing with resilience and adaptation in the migrant experience." **Elizabeth A. Holdsworth**. American Anthropological Association Annual Meetings, San Jose, CA. November 18.
- 2018 *Gestational HPA-related DNA methylation is associated with maternal adverse childhood experiences, depression during pregnancy, and child growth and neurobehavior at 24 months*. Allison A. Appleton and **Elizabeth A. Holdsworth**. U.S. Society for the Developmental Origins of Health and Disease Conference, Chapel Hill, NC. October 1-2
- 2018 *Effects of early life stress on physiological responses to chronic and acute stress in midlife in the United States*. **E. A. Holdsworth**. Human Biology Association Annual Meeting, Austin, TX. April 12-13.
- 2018 *Adverse childhood experiences predict faster reproductive strategies and development*. **Elizabeth A. Holdsworth** and Allison A. Appleton. American

- Association of Physical Anthropologists Annual Meeting, Austin, TX. April 13-16
- 2017 *Maternal experiences of childhood adversity are associated with age at menarche and offspring asymmetric fetal growth.* **Elizabeth A. Holdsworth**, Lawrence M. Schell, and Allison A. Appleton. U.S. Society for the Developmental Origins of Health and Disease Conference, Detroit, MI. September 25-27.
- 2017 *Maternal Early Life Adverse Experiences and Birth Outcomes* **E.A. Holdsworth** and A.A. Appleton. Annual Meetings of the Human Biology Association, New Orleans, LA. April 19-20.
- 2015 *Acculturation and Depression Among Hispanic and Asian Americans.* **E.A. Holdsworth**. Annual Meetings of the Human Biology Association, St. Louis, MO. March 25-26.
- 2015 *Transgenerational Effects of Inequality on Health: Mothers and Infants.* **E.A. Holdsworth**. Anthropology Graduate Student Organization Symposium, Albany, NY. April 24.
- 2014 *Infant Fatness and Mother's Engagement.* **E.A. Holdsworth** and L.M. Schell. Annual Meetings of the Human Biology Association, Calgary, CA. April 9-10.
- 2014 *Maternal Engagement and Infant Cognitive-Emotional Growth Among Albany Women of Low Socioeconomic Status.* **Elizabeth Holdsworth** and Lawrence Schell. Anthropology Graduate Student Organization Symposium, Albany, NY. April 5.
- 2013 *Poverty of Environment, Poverty of Development: Intergenerational Pathways of Poor Health in Disadvantaged US Children.* L.M. Schell, J. Ravenscroft, **E. Holdsworth**. In the symposium, Can the future escape the past: Biosocial factors in the reproduction of poverty. Annual Meeting of the American Anthropological Association, Chicago, IL, November 20-24.

TEACHING

Instructor at University at Albany, SUNY (2013-2021)

ANT 319: Physical Growth and Development (*Summer 2015, Summer 2016, Summer 2017, Spring 2018, Summer 2018, Fall 2018, Spring 2019, Summer 2019*)

ANT 416: Topics in Human Biology: Migration and Human Biology (*Fall 2018, Spring 2019, Summer 2020, Spring 2021*)

ANT 316 & 318: Human Anatomy and Physiology I and II Lab Sections (*Fall 2014, Spring 2015, Fall 2015, Spring 2016*)

ANT 314: Forensic Anthropology (*Summer 2014*)

E. A. Holdsworth

ANT 110: Introduction to Human Evolution Lab Sections (*Spring 2017*)

WSS 101: Women's Studies: Introduction to Feminisms, with the Women's Studies Teaching Collective (*Spring 2013*)

Instructor at The Sage Colleges, Department of Health Sciences (2017)

HSC 306: Culture & Health (*Fall 2017*)

Teaching Assistant at University at Albany, SUNY (2013-2018)

ANT 319: Physical Growth and Development (*Fall 2013, Fall 2017*)

ANT 211: Human Population Biology (*Fall 2016*)

ANT 233: Aztecs, Incas, Mayas (*Spring 2014*)

STUDENT MENTORING

Independent Research Supervision – Washington State University

2022 Jenna Schmidt, Human Biology undergraduate. *Determinants of COVID-19 related worries among female healthcare workers.*

2022 Maryam Edrisi, Anthropology doctoral student, co-advising with Dr. Aaron Blackwell. *Household ecology determinants of infant fecal microbiome composition.*

PROFESSIONAL SERVICE

Service to Department and University

2022	Secretary, Postdoctoral and Research Professional Association, WSU
2021	Campus Organizer, Graduate Student Employees Union
2013-2020	Grants Reviewer, University at Albany Graduate Student Association
2015-2016	President, UAlbany Anthropology Graduate Student Organization <i>*Awarded Recognized Graduate Student Organization of the Year</i>
2014-2015	Webmaster, UAlbany Anthropology Graduate Student Organization
2013-2014	Secretary, UAlbany Anthropology Graduate Student Organization

Editorial Activities and Ad Hoc Peer Reviews

2021-	<i>American Journal of Biological Anthropology</i> (1)
2021-	<i>SSM- Population Health</i> (1)
2021-	<i>Frontiers in Public Health</i> (1)
2021-	<i>American Journal of Obstetrics and Gynecology</i> (1)
2020-	<i>BMC Public Health</i> (1)
2018-2019	Book Review Editor, <i>Student Anthropologist</i>

Service to Discipline and Research

- 2021 Co-Organizer of the Northwest Evolution, Ecology, and Human Behavior Symposium
- 2019-2021 Junior Service Fellow, Human Biology Association
- 2018-2019 E-Journal Committee Member, National Association of Student Anthropologists
- 2018 Ocobock, Cara and Christopher Lynn, hosts. "SoS7: Of Goldilocks & Baby Fat in Birth Weight: Chat with Liz Holdsworth & Larry Schell." Sausage of Science Podcast, Human Biology Association, 26 Feb. 2018.
- 2012-2013 NAGPRA Osteology Lab Volunteer, New York State Museum

Community Service

- 2016-2020 Amsterdam Minority Health Task Force, Member
- 2019 Holdsworth, E. *Maternal and infant stress among immigrant women in Upstate NYS*. SUNY UFS Graduate & Research Committee Presentation to Legislative Aides. Healthcare disparities affecting NY residents: Evidence-based graduate student research, Albany, NY.

PROFESSIONAL DEVELOPMENT AND SKILLS

French: Proficient in reading, writing, and conversation

Spanish: Proficient in reading, writing, and conversation

Statistics programs: R, SPSS, SAS

Geographic Information System programs: ArcGIS, QGIS, GeoDa

Web Design: HTML5

Future Faculty and Teaching Development Certificate from the Institute for Teaching, Learning, and Academic Leadership

PROFESSIONAL MEMBERSHIPS

International Society for Research in Human Milk and Lactation Trainee Member

Human Biology Association Postdoctoral Member

American Association of Biological Anthropologists Postdoctoral Member

American Anthropological Association Member

The U.S. Society for Developmental Origins of Health and Disease Trainee Member

Lambda Alpha Anthropology Honor Society

Pi Delta Phi French Honor Society

Phi Eta Sigma Honor Society