ALINA ARSENIEV-KOEHLER

 \boxtimes aaashelm@purdue.edu

in linkedin.com/in/arseniev-koehler

Academic Positions

 Assistant Professor of Sociology
 2022-present (on leave for postdoctoral training 2022-2024)

 Purdue University
 National Library of Medicine T15 Postdoctoral Fellow
 2022-present

 University of California - San Diego, Division of Biomedical Informatics
 2022-present

Education

Ph.D. in Sociology, University of California - Los Angeles	June 2022
B.A. in Sociology with minor in Statistics, University of Washington	June 2014

Specializations

Cultural determinants of health $\, \bullet \,$ Cultural sociology $\, \bullet \,$ Social stigma $\, \bullet \,$ Natural language processing $\, \bullet \,$ Computational social science

Publications

Forthcoming	Hardie, Jessica Halliday, Alina Arseniev-Koehler , Judith A. Seltzer, and Jacob Gates Foster. "Talk of Family: How Institutional Overlap Drives Social Class Differences in Family-related Discourse." <i>Russell Sage Foundation Journal of the Social Sciences</i> .
2024	Arseniev-Koehler, Alina, Vickie Mays, Jacob Foster, Kai-Wei Chang, and Susan Cochran. "Gendered patterns in manifest and latent mental health indicators among suicide decedents, 2003-2020 National Violent Death Reporting System (NVDRS)." 114(S3):S268-S277. American Journal of Public Health. Link.
2024	Mays, Vickie M., Mikaela Gareeb, Xingruo Zhang, Vivian Nguyen, Joelle Rosenberg, Yuri Lin, Alina Arseniev-Koehler , Adam Eliav, Jacob Gates Foster, Mika Baumgardner, and Susan D. Cochran. "Identifying Witnessed Suicides in National Violent Death Reporting System Narratives." <i>Healthcare</i> . 12(2): 209. Link.
2023	 Best, Rachel and Alina Arseniev-Koehler. "The Stigma of Diseases: Unequal Burden, Uneven Decline." American Sociological Review 88(5): 938-969. Code and data. Link. Awarded the 2023 Best Publication Award from the American Sociological Association, Section on the Sociology of Mental Health.
2023	Arseniev-Koehler, Alina . "Theoretical foundations and limits of word embeddings: What types of cultural meaning can they capture?" <i>Sociological Methods & Research</i> . Online first.

2023	Boutyline, Andrei, Alina Arseniev-Koehler, and Devin Cornell. "School, Studying, and Smarts: Gender Stereotypes and Education Across 80 Years of American Print Media, 1930-2009." Social Forces 102(1): 263-286. Link.
2022	Arseniev-Koehler, Alina, Susan Cochran, Vickie Mays, Kai-Wei Chang, and Jacob Foster. "Integrating topic modeling and word embedding to characterize violent deaths." <i>Proceedings</i> of the National Academy of Sciences (PNAS). 119(10):e2108801119. Link. Code.
	Awarded the 2023 Matilda White Early-Stage Investigator Paper Award from the NIH Office of Behavioral and Social Science Research.
2022	Arseniev-Koehler, Alina and Jacob Foster. "Machine learning as a model for cultural learning: Teaching an algorithm what it means to be fat." Special issue on computational text analysis in <i>Sociological Methods & Research.</i> 51(4): 1484–1539. Link. Code and replication tutorial.
	Awarded the 2020 Outstanding Graduate Student Paper Award from the American Sociological Association, Section on Mathematical Sociology.
2022	Seamans, Marissa, Vickie Mays, Alina Arseniev-Koehler , and Susan Cochran. "Prevalence of prescription and illicit substances in the environment among suicides of non-poisoning means in the National Violent Death Reporting System 2003-2017." <i>The American Journal of Drug and Alcohol Abuse</i> . 48(4): 464-470. Link.
2021	Arseniev-Koehler, Alina , Jacob Foster, Vickie Mays, Kai-Wei Chang and Susan Cochran. "Aggression, escalation, and other latent themes in legal intervention deaths of non-Hispanic Black and White men: Results from the 2003-2017 NVDRS." <i>American Journal of Public Health.</i> 111: S107-S115. Link.
2021	Boutyline, Andrei, Devin Cornell, and Alina Arseniev-Koehler . "All Roads Lead to Polenta: Cultural Attractors at the Junction of Public and Personal Culture." Special issue on culture and cognition in <i>Sociological Forum</i> . 36 (S1): 1419-1445. Link.
2021	Moreno, Megan A, Molly Adrian, Megan A Wilt, Adrienne Ton, Alina Arseniev-Koehler , Elizabeth McCauley, and Ann Vander Stoep. "Displayed Depression Symptoms on Facebook at Two Time Points: Content Analysis." <i>JMIR Formative Research.</i> 5(5): e20179. Link.
2016	Arseniev-Koehler, Alina , Hedwig Lee, Tyler McCormick, and Megan Moreno. "#Pro-Ana: Pro-Eating Disorder Socialization on Twitter." <i>Journal of Adolescent Health.</i> 58(6):659-664. Link.
2016	Moreno, Megan, Alina Arseniev-Koehler, Dana Litt, and Dimitri Christakis. "Evaluating college students' displayed alcohol references on Facebook and Twitter." <i>Journal of Adolescent Health.</i> 58(5): 527:532. Link.
2016	Moreno, Megan, Alina Arseniev-Koehler , and Ellen Selkie. "Development and testing of a 3-item screening tool for Problematic Internet Use." <i>Journal of Pediatrics</i> . 176:167-172. Link.
2015	Pumper, Megan, Jay Mendoza, Alina Arseniev-Koehler , Matt Holm, Allan Waite, and Megan Moreno. "Using a Facebook Group as an Adjunct to a Pilot mHealth Physical Activity Intervention: A Mixed Methods Approach." <i>Studies of Health Technology Informatics.</i> 219:97-101. Link.

Work in Progress

Arseniev-Koehler, Alina, Ming Tai-Seale, Crystal Wiley Cené, Eduardo Grunvald and Amy Sitapati. "Leveraging Diagnosis and Biometric Data from the NIH All of Us Project to Uncover Disparities in Obesity Diagnosis." Under review.

Arseniev-Koehler, Alina and Rachel Best. "Disease Frames in News Media and their Consequences for Stigma, Advocacy, and Research Funds."

Andrei Boutyline and Arseniev-Koehler, Alina. "Word Embedding Methods in Sociology." Commissioned review article for Volume 51 of Annual Review of Sociology.

Book Chapters

- 2022 Arseniev-Koehler, Alina and Jacob Foster. "Sociolinguistic Properties of Word Embeddings." Pp 464-477 in *Handbook of Language Analysis in Psychology*, edited by Morteza Dehghani and Ryan L. Boyd. Guilford Press. Preprint.
- 2014 Arseniev-Koehler, Alina, Laura Hooper, and Hedwig Lee. "Online Pro-Eating Disorder (Pro-ED) Activity." Pp 553-563 in *AM:STARs: Adolescent Medicine: State of the Art Reviews.* Vol 25, Social Networking and New Technologies, edited by Victor Strasberger and Megan Moreno. American Academy of Pediatrics.

Peer-Reviewed Conference Proceedings

- 2021 Ankith Uppunda, Susan Cochran, Jacob Foster, Alina Arseniev-Koehler, Vickie Mays and Kai-Wei Chang. "Adapting Coreference Resolution for Processing Violent Death Narratives." Pp 4553-4559 in Proceedings of the 2021 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies. Link.
- 2021 Larimore, Savannah, Ian Kennedy, Breon Haskett and Alina Arseniev-Koehler. "Reconsidering Annotator Disagreement about Racist Language: Noise or Signal?" Pp 81-90 in *Proceedings* of the Ninth International Workshop on Natural Language Processing for Social Media. Link.
- 2018 Arseniev-Koehler, Alina, Sharon Mozgai, and Stefan Scherer. "What type of happiness are you looking for? A closer look at detecting depression." Pp 1-12 in *Proceedings of the Fifth Workshop on Computational Linguistics and Clinical Psychology.* Link.

Selected Awards & Fellowships

2023	Best Publication Award from the American Sociological Association, Section on the Sociology of Mental Health
2023	AnalytixIN Fellow – AnalytixIN.
2023	Matilda White Early-Stage Investigator Paper Award – NIH Office of Behavioral and Social Science Research.
2021-2022	Dissertation Year Fellowship – UCLA Graduate Division.
2021	Best Dissertation-in-Progress Award – American Sociological Association (ASA), Section on Mathematical Sociology
2021	Silton Undergraduate Research Mentorship Award

2020	Outstanding Graduate Student Paper Award – American Sociological Association (ASA), Section on Mathematical Sociology
2020	Graduate Summer Research Fellowship – UCLA Bedari Kindness Institute
2019	Travel Grant for Computational Social Science Summer School on Multimedia Data – GESIS Leibniz Institute for the Social Sciences
2018; 2019	Summer Institute Fellow – Diverse Intelligences Summer Institute
2017-2020	Graduate Research Fellowship – National Science Foundation
2017-2020	Computational Sociology Fellowship – UCLA Sociology
2017	Doctoral Travel Grant, UCLA Graduate Division
2016-2017	Graduate Research Mentorship Award – UCLA Graduate Division
2016; 2017	Graduate Summer Research Mentorship Award (declined in 2017) – UCLA Graduate Division
2014	Howard B. Woolston Award for Academic Excellence – University of Washington Dept. of Sociology
2014	Mary Gates Research Scholarship – Mary Gates Endowment

Selected Presentations

All presentations are oral unless otherwise noted. [†]Indicates invited.

Guest Talks

- Upcoming[†] "Contexts versus Concepts in Word Embedding and Language Modeling." Cognitive Science Program at Indiana University. Bloomington, IN.
- 2024[†] "Disease Frames in News Media and their Consequences for Stigma, Advocacy, and Research Funds." Northwestern Institute on Complex Systems at Northwestern University. Evanston, IL.
- 2024[†] "When does an Obese BMI become Diagnosed as Obesity, and for Whom? Discrepancies in Obesity Measures and Diagnoses in the NIH *All of Us* Dataset." Sociology of Culture Workshop at New York University. Virtual.
- 2023[†] "Measuring Social Stigma in Language with Computational Text Analysis." Summer Institute for Computational Social Science Los Angeles. Los Angeles, CA.
- 2023[†] "What is the NVDRS and what can we learn from the data?" Approaches to Improve the Measurement of Law Enforcement Suicide (public workshop organized by the Committee on National Statistics, National Academies of Sciences, Engineering, and Medicine). Virtual.
- 2023[†] "Variation in the Stigma of Disease across Conditions and over Time." UC San Diego Computational Social Science Colloquium Series. San Diego, CA.
- 2023[†] "Variation in the Stigma of Disease across Conditions and over Time." UC San Diego Department of Sociology Colloquium Series. San Diego, CA.
- 2023[†] "Stigma's Uneven Decline." School of Management MORS Seminar Series at Northwestern University. Evanston, IL.
- 2022[†] "The Stigma of Disease." UC San Diego Division of Biomedical Informatics Fall Retreat. San Diego, CA.

- 2022[†] "Applications and Research Gaps in Topic Modeling and Word Embedding." Guest lecture for UC San Diego MED 277 Graduate Course on Intro to Biomedical Natural Language Processing. San Diego, CA.
- ^{2022†} "Advancing Methods and Measures to Examine the Underlying Mechanisms of Violent Deaths in LGBTQ Populations." National Institute of Mental Health (NIMH) Office for Disparities Research and Workforce Diversity Webinar Series. (Joint presentation with Susan Cochran, Vickie Mays, Jacob Foster and Kai-Wei Chang). Virtual.
- 2022[†] "Integrating Topic Modeling and Word Embedding to Characterize Violent Deaths." Summer Institute in Computational Social Sciences (SICSS)-Aachen-Graz. Virtual.
- 2021[†] "Can a computer learn language? Assumptions and limitations of text mining." UCLA Conversation Analysis Working Group. Los Angeles, CA.
- 2021 "Aggression, Escalation, and other Latent Topics in Legal Intervention Deaths of non-Hispanic Black and White men." Computational Social Science Laboratory at University of Southern California. Los Angeles, CA.
- 2020[†] "Discourses of Death: Extracting the Semantic Structure of Lethal Violence with Machine Learning." UC Berkeley Computational Text Analysis Working Group. Berkeley, CA.
- 2019[†] "Extracting Gender, Morality, Social Class, and other Cultural Dimensions in Word Embeddings." UC Berkeley Computational Text Analysis Working Group. Berkeley, CA.
- 2019[†] "Gender equal or gender neutral? Gendered connotations in occupational nouns." University of Washington Gender Working Group. Seattle, WA.
- 2018 "Measuring Stigma in Language, with Word2Vec and Human-Rating Data." UCLA Computational Sociology Working Group. Los Angeles, CA.
- 2017 "The Language of Depression and the Challenges of Text Mining." UCLA Health Working Group. Los Angeles, CA.

Conference Presentations

- 2023 "When does an Elevated Body Mass Index become Diagnosed as Obesity, and for Whom? Discrepancies in Measures and Diagnoses of Obesity in the All of Us Dataset." Annual National Library of Medicine Informatics Training Conference. Stanford, CA
- 2023 "Professionalism, Efficiency, Explanation, and Discomfort: Summarizing Themes in Medication-Related Patient Comments at UC San Diego Health using a Novel Topic Modeling Technique."
 2023 UC San Diego Patient Safety, Quality and Innovations Symposium. San Diego, CA. Poster presentation.
- 2022[†] "Explore the Opportunities with All of Us Research HUB." (With Amy Sitapati and Colleen Leners). American Association of College on Nursing. Coronado, CA.
- 2021 "Aggression, escalation, and other latent themes in legal intervention/shooting deaths of non-Hispanic Black and White men: Results from the 2003-2017 NVDRS." American Sociological Association Meeting, Sociology of Law Roundtables. Virtual.
- 2021 "Theoretical foundations and limits for word embeddings: what types of cultural meaning can they capture?" American Sociological Association Meeting, Session on Culture: Culture and Computation in Practice. Virtual.

- 2020 "Discourses of Death: Introducing a new method to model topics in word embeddings." American Sociological Association Meeting, Session on Computational Sociology. Virtual.
- 2020 "School, Studying, and Smarts: Gender of Education Across 80 Years of American Print Media, 1930-2009." American Sociological Association Meeting, Session on Emerging Scholars in Mathematical Sociology. Virtual.
- 2019 "The Gendered Meanings of Gender-Fair Language." Text Analysis across Domains (TextXD) Conference at UC Berkeley. Berkeley, CA.
- 2019 "Gender equal or gender neutral? Gender connotations in occupational titles." International Conference on Computational Social Science (IC2S2). Amsterdam, Netherlands.
- 2018[†] "Gender, Morality, Social Class, and other Cultural Dimensions in Word Embeddings." Text Analysis across Domains (TextXD) Conference at UC Berkeley. Berkeley, CA. YouTube link.
- 2018 "What type of happiness are you looking for? A closer look at detecting depression." Workshop on Computational Linguistics and Clinical Psychology at the conference for the North American Chapter of the Association for Computational Linguistics (NAACL). New Orleans, LA.
- 2018 "What type of happiness are you looking for? A closer look at detecting depression." UCSD/UCLA Graduate Student Conference on Culture, Health, and Mind. UC San Diego, CA.
- 2017 "Quantifying Social Biases in Obesity Discourse 1980-2016." American Sociological Association Meeting, Session on Quantitative Sociology, Montreal, Canada.

Technical Workshops in R or Python

- 2019[†] "Introduction to Word Embeddings." Text Analysis Across Domains (TextXD) Conference at UC Berkeley. Berkeley, CA.
- 2019[†] "Using Word Embeddings to Unravel Meaning in Text Data." Workshop for the UCLA Digital Humanities Faculty. Los Angeles, CA.
- 2019 "Unsupervised Machine Learning." UCLA Computational Sociology Working Group. Los Angeles, CA.
- 2018[†] "Classification of Latent Constructs in Text Data." Scientific Bootcamp for the UCLA Center for Bridging Research Innovation, Training and Education for Minority Health Disparities Solutions. Lake Arrowhead, CA.
- 2018 "Word2Vec Language Modeling for Social Science Applications." UCLA Computational Sociology Working Group. Los Angeles, CA.
- 2018[†] "Text Analysis in Python from Scratch." (Jointly led with two peer graduate students). UCLA Library Winter Workshop Series. Los Angeles, CA.
- 2018 "Intro to Statistical Programming in R." (Jointly led with a peer graduate student). UCLA Computational Sociology Working Group. Los Angeles, CA.
- 2016 "What is word2vec and what can we do with it?" UCLA Computational Sociology Working Group. Los Angeles, CA.

Other Research and Teaching Positions

Instructor, SOC 382 Introduction to Statistics, Purdue University, Dept of Sociology. Fall Semester 2024

<i>Teaching Assistant</i> , MED 265 Graduate Course on Informatics in Clinical Settings, University of California, San Diego Dept. of Medicine.	Spring Quarter 2023
Research Associate I, University of Michigan Ann Arbor, Dept. of Sociology.	6/2019 - 6/2022
<i>Teaching Assistant</i> , SOC 208A Graduate Course on Social Network Analysis, University of California, Los Angeles, Dept. of Sociology.	Winter Quarter 2018
Organizer and Instructor, Summer Institute in Computational Social Science (SICSS) Los Angeles.	2019, 2020, 2021
Graduate Research Mentor, UCLA Undergraduate Research Center.	9/2017 - 6/2018
<i>Visiting Research Assistant</i> , University of Southern California - Institute for Creative Technologies.	9/2017 - 6/2018
Research Assistant, Social Media and Adolescent Health Research Team at the Seattle Children's Hospital Research Institute.	6/2013 - 8/2015

Service

- Student Representative for the Section on Methodology American Sociological Association (2020-2022)
- Graduate Mentor for UCLA Honors Students UCLA Undergraduate Honors Sociology Program (2016-2021)
- Coordinator UCLA Computational Sociology Working Group (2017-2020)
- Organizer and Instructor UCLA Computational Social Science Bootcamp (2018)
- Mentor for Incoming Sociology Graduate Students UCLA Sociology (annually in 2016, 2017, 2020, 2021)
- Occasional Reviewer Social Science and Medicine, Social Problems, Journal of Health and Social Behavior, BMC Psychiatry, Sociological Methods & Research, Socius, BMC Psychiatry, Poetics, Social Psychology Quarterly and American Sociological Review
- Invited Program Committee Member International Conference on Computational Social Science (IC2S2) 2022, 2023, 2024
- Postdoc Representative for Biomedical Informatics University of California, San Diego (2023-2024)

Professional Affiliations

- Advanced Methods at Purdue (AMAP)
- California Center for Population Research at UCLA
- Regenstrief Center for Healthcare Engineering at Purdue