

Hailey D. Robertson

[LinkedIn](#) | +1 (785) 431-8635

haileydrobertson@gmail.com | hailey.robertson@georgetown.edu

EDUCATION

University of Southern California

May 2021

B.S., Global Health, USC Keck School of Medicine

Minor in Human Security & Geospatial Intelligence

Cumulative GPA: 3.87/4.00 (Magna Cum Laude)

Relevant Coursework: Epidemiology; Calculus; Statistics; Data Analytics; Computer Programming; Geospatial Analysis; Biology; Chemistry

PROFESSIONAL EXPERIENCE

Georgetown University

Washington, D.C. (Remote)

Data Research Analyst

August 2022 - Present

- Lead data analysis projects across the lifecycle, from project scoping and qualitative interviews, to data acquisition and evaluation, to analysis in visualization in Python (Matplotlib), to delivery and communication of findings to stakeholders as presentations, white papers, and manuscripts
- Design and build databases in Neo4j and PostgreSQL for automated reasoning through the creation of representational ontologies and semi-automated data collation across multiple interacting systems, such as host-pathogen compatibility and human behavioral characteristics
- Collaborate with software engineers and user experience designers to maintain 8 websites within the International Disease and Events Analysis (IDEA) platform by regularly testing, updating, and debugging the application code and databases
- Author literature reviews, grant proposals, academic manuscripts, and policy briefs in support of Center projects related to pandemic preparedness, global health security financing, graph-based modeling of virus spillover, epidemic intelligence, and mental health

Talus Analytics

Boulder, CO (Remote)

Research Associate

June 2021 - August 2022

- Performed statistical analysis of epidemiological and policy data in Python to inform a state governor's COVID-19 emergency response efforts targeting vaccine distribution and economic reopening
- Used SQL and Python to maintain backend data architecture and application code for the Global Health Security (GHS) Tracking and Health Security Net databases and derive data-driven insights and visualizations which have contributed to briefings and reports used by the Global Fund, the Pandemic Action Network Pandemic Preparedness Working Group, and the G20 High Level Independent Panel
- Drafted policy briefs related to public health and global health, including COVID-19 policy interventions, school infection control, and vaccine distribution

Data Analytics & Research Intern

May 2020 - June 2021

- Developed a text-based matching algorithm in Python to query financial transactions during public health emergencies of international concern with >90% accuracy in a database of 3M+ rows
- Validated thresholds for hospital capacity by performing sensitivity analysis with Python (pandas), using results to improve early warning detection for hospital surges and critical supply chain alerts
- Defined parameters for SEIR models that account for the effects of testing, non-pharmaceutical interventions, and vaccination on the transmission of COVID-19 and influenza-like illnesses to inform high-level decision-making for state and local leadership

The Marlborough School*Assistant Debate Coach*

Los Angeles, CA

Aug 2018 - May 2021

- Researched 250+ hours annually to develop nuanced policy positions spanning topics such as health-care, education, and national security
- Taught middle and high school students rhetoric and communication strategies, resulting in a 200% increase in national tournament bids over three years

Project Consent*Managing Director*

Topeka, KS (Remote)

Jun 2016 - May 2019

- Oversaw public awareness campaigns, including “Consent is Simple” which received a Webby Award for “Best Video Campaign” in 2017 and amassed over 15,000,000 combined viewers on social media
- Trained 6 new interns in sexual assault advocacy, social media campaign strategy, and team policy
- Managed collaboration requests for fundraisers and campaigns from diverse outside sponsors such as It’s On Us, HBO’s The Tale, Break the Cycle, The Tata Top, and Juniper Park-TBWA

RESEARCH EXPERIENCE

USC Security & Political Economy Lab*Team Lead & Research Assistant - Resource Curse Team*

Los Angeles, CA

Aug 2019 - May 2021

- Conducted in-depth case studies to advance qualitative replication and extension of an influential study evaluating the causal mechanisms that link natural resource wealth and civil conflict onset, duration, and intensity
- Supervised 6 peer researchers, cleaned data using automated methods in R, and edited codebooks and manuscripts for publication

USC Institute on Inequalities in Global Health*Student Advisory Council Co-Chair & Founding Member*

Los Angeles, CA

Jan 2018 - May 2021

- Lead a multidisciplinary group of 10 students to improve engagement with the Institute and advance research addressing inequities in global health, with focus on the 2030 Sustainable Development Goals.
- Organized a training on GIS applications to epidemiology which was attended by 30+ individuals.

William & Mary Global Research Institute*Research Fellow - International Justice Lab*

Williamsburg, VA

Jan 2018 - May 2021

- Collaborated with a team of researchers led by Dr. Kelebogile Zvobgo to create a quantitative dataset on the political impact of 74 truth commissions with over 6,000 policy recommendations.
- Collected data and reviewed 8 other researchers’ coding to ensure inter-coder reliability.

USC Global Health & Human Rights Institute*Research Assistant*

Los Angeles, CA

Jan 2018 - May 2019

- Used STATA to analyze \$384 million in HIV, TB, and malaria grants in Kenya to determine the impact of policy and discrimination on the rate of care utilization among key populations, as part of the Global Fund’s Breaking Down Barriers Initiative

TEACHING EXPERIENCE

University of Southern California – Teaching Assistant*IR 422: Ecological Security and Global Politics*

- Principles of causal inference applied to the politics of environmental change, management, and conservation, with emphasis on research design and data collection and management.

PUBLICATIONS

Peer-reviewed articles

1. Carlin EP, Graeden E, **Robertson H**, Katz R. (2022). Informing pandemic preparedness through a digital global health security library. *Health Security*. DOI: [10.1089/hs.2021.0141](https://doi.org/10.1089/hs.2021.0141)

Preprints

1. Katz R, Toole K, **Robertson H**, Case A, Kerr, J, Robinson-Marshall S, Schermerhorn J, Zimmerman R, Stevens T, COVID AMP Coding Team, Phelan A, Carlson C, Graeden E. (2023). COVID AMP: An Open Access Database of COVID-19 Response Policies. *medRxiv*.

Technical reports

1. Graeden E, **Robertson H**, Abramowitz S. **COVID-19 and Behavioral Health in the District of Columbia**. Report prepared for the Office of the D.C. Auditor. April 20, 2023.

Public scholarship

1. Dasaraju S, Menon S, Nair-Desai S, and **Robertson H**. “Winning Hearts & Minds: Through a Shot in the Arm.” *USC Center for Public Diplomacy*. 21 Apr. 2021.
2. Far N, **Robertson H**, and Zvobgo K. “The International Criminal Court just elected a new chief prosecutor. Here’s what you need to know.” *The Washington Post [Monkey Cage]*. 17 Feb. 2021.

Works in progress

1. **Robertson H**, Graeden E, Castellanos A, Rosado D, Das P, and Han B. Understanding Ecological Systems Using Knowledge Graphs. *Invited paper, Ecology Letters: Methods*
2. Moore M, **Robertson H**, Graeden E, Carlson C, and Katz R. The practice of public health: a global analysis of the structure, sequence, and stakeholders of outbreak response activities.
3. Far N, **Robertson H**, Zvobgo K. Confronting Truth: A Theory of Transitional Justice in Established Democracies.

DATA AND SOFTWARE

Preprint datasets

1. Katz R, Toole K, **Robertson H**, Case A, Kerr, J, Robinson-Marshall S, Schermerhorn J, Zimmerman R, Stevens T, COVID AMP Coding Team, Phelan A, Carlson C, Graeden E. (2023). Preprint version of COVID Analysis and Mapping of Policies. *Zenodo*. DOI: [10.5281/zenodo.7829169](https://doi.org/10.5281/zenodo.7829169)

PRESENTATIONS AND TALKS

Panels and workshops

- 2022 Strengthening Health System Resilience and Security: a curated collection of surge capacity tools.” Invited panel, USAID Local Health System Sustainability Project. 29 Sept. 2022. [Recording]
- 2018 “A Changing Film Industry with Project Consent.” Invited workshop, California State University, Long Beach, Women in Film Association. 29 Nov. 2018.

Poster talks

- 2019 Robertson H. “Water System Vulnerability and Public Health in *Colonias* Along the U.S-Mexico Border.” University of Southern California Undergraduate Research Symposium. 18 Dec. 2019.

SELECTED HONORS & AWARDS

2020 USC Provost's Undergraduate Research Fellowship (\$3,000)

- Prestigious fellowship awarded to support undergraduate research during the academic year

USC Summer Undergraduate Research Fellowship (\$3,000)

- Awarded to a limited number of USC Dornsife undergraduate students to pursue academic research in the Natural or Social Sciences

Second Place, USC Undergraduate Writer's Conference

- Awarded for essay, "Leveraging Freedom Against Motherhood: A Case Study of *U.S. v. Summer Thyme Creel* and Sterilization as a Sentencing Mitigation Factor"

Legislative Member of the Year

- Nominated and chosen by the Executive Branch of Undergraduate Student Government for leadership on digital mental health support, guiding the University endowment toward climate conscious investments, and relocation of the Title IX Office to support students with disabilities

2019 Advocacy Director of the Year

- Nominated and chosen by the Executive Branch of Undergraduate Student Government for leadership on projects such as creating an adaptive clothing line at the University student store and organizing a wheelchair basketball tournament in collaboration with the non-profit, Swim With Mike

2017 Leadership Scholar

- Prestigious scholarship conferred on 30 incoming undergraduates across the university for leadership and community service

Webby for Good, Best Video Campaign

- Received Best Video Campaign for Project Consent's "Consent is Simple" series, awarded in recognition of projects built to change the world

PROFESSIONAL CERTIFICATIONS AND ASSOCIATIONS

Certifications and training

- 2023 Neo4j: Fundamentals
- 2022 CITI Program: Group 2. Social and behavioral research investigators and key personnel
CITI Program: Social and Behavioral Responsible Conduct of Research
CITI Program: GCP Social and Behavioral Research Best Practices for Clinical Research
- 2020 Episkills: Learn to Code in Python for Epidemiology – Caitlin Rivers

Professional affiliations

- Gamma Theta Upsilon Honor Society, member
- Phi Alpha Delta, member

SKILLS

Languages spoken	English (fluent), Spanish (limited working proficiency)
Programming and Query Languages	Python, SQL, Cypher, STATA, SPSS
Databases	Neo4j, PostgreSQL
Tools & Software	Visual Studio Code, GitHub, ArcGIS L ^A T _E X, Airtable, Qualtrics, AWS Microsoft Office, Adobe Creative Suite

REFERENCES

Available upon request.