

Title: Two Post-Doctoral Positions in the Department of Communication at Cornell

Position 1: Computational Social Science and Health

Position 2: Health Communication

The Department of Communication at Cornell University is looking to fill two post-doctoral positions. The first position, in Computational Science and Health, will support a new and large National Institutes of Health (NIH)-funded grant focused on disparities in colorectal cancer screening between Black and white Americans. The grant will apply computational approaches (including natural language processing) to monitor the public communication environment about colorectal cancer screening and use crowdsourcing methods to select messages to test in a randomized, controlled trial. The second position, in Health Communication, will involve working collaboratively with a team of researchers investigating how to best design and deliver equitable health messages to hard-to-reach populations using innovative research methodologies. Both positions offer opportunities to collaborate with a fun, supportive, and innovative team of health communication scholars, including a growing community of postdoctoral associates.

Full details and application instructions for each position can be found below. We will begin reviewing applications for both positions on March 30, 2021 and will continue until the positions are filled. Special consideration will be given to applications received by March 30, 2021.

Computational Social Science and Health Position Summary

The Postdoctoral Associate will support a new and large National Institutes of Health (NIH)-funded grant, involving the Department of Communication at Cornell University, which will use computational approaches (including natural language processing) to monitor the public communication environment about colorectal cancer screening, crowdsourcing to engage in formative evaluation of possible message content, and a randomized, controlled trial to validate these computational and crowdsourcing approaches.

In light of both high rates of colorectal cancer and disproportionate disease burden among Black Americans, there is a critical need to understand the public information environment surrounding colorectal cancer screening (an evidence-based approach to reduce rates of death from colon cancer) and to identify messages that resonate among populations at-risk for the disease who may have concerns about screening tests and may face disparities in exposure to (mis)information from online sources. To this end, the Postdoctoral Associate will work with Dr. Drew Margolin and Dr. Jeff Niederdeppe, along with a team of students and faculty from other institutions, to develop, test and apply computational social scientific methods, including natural language processing (NLP) and network analysis, to assess and analyze the public information environment (including websites, news outlets, and social media) surrounding colon cancer screening. The postdoc will have the opportunity to publish relevant research findings and contribute to the project's larger goal of improving public health communication about colorectal cancer screening to address disparities among Black Americans at higher risk for colon cancer.

Essential Duties and Responsibilities

This is an interdisciplinary, multi-institution research project in which the Postdoctoral Associate will work with Dr. Margolin and Dr. Niederdeppe to employ computational social science methods, including but not limited to NLP and network analysis, to capture and analyze information relevant to colon cancer screening on websites, news sources, and social media. The Postdoctoral Associate will also provide mentorship of undergraduate and graduate students in the use of computational techniques for data collection and analysis. The Postdoctoral Associate is expected to perform the following duties (all in collaboration with team leadership and members):

- Collect publicly available text data (e.g., from Twitter, Reddit, or medical information websites) that relates to colorectal cancer (10%)
- Develop techniques for identifying social science theoretic variables in these data (25%)
- Analyze data to draw social scientific conclusions about the information environment they characterize (working with PIs) (25%)
- Communicate research methodology and results orally and in written format for scientific presentations and publications, as well as to non-scientific audiences (25%)
- Mentor other team members in analysis (10%)
- Assist in other projects when needed (5%)

In addition, the Postdoctoral Associate will be encouraged to develop a personal research program, publish research results in peer-reviewed publications, as well as take advantage of the multitude of internal and external mentoring opportunities Cornell affords to early career researchers.

This is a full-time, 12-month academic position. Reappointment for a second year is likely, contingent on successful performance, funding, and available work. The anticipated start date is July 1, 2021.

Requirements

- Ph.D. in a computational field, including but not limited to computational social science, information science, computational communication science, computer science, networks science, and computational linguistics
- Proficiency in natural language processing (deep learning, distributed semantic representation, text mining methods) for social scientific research aims
- Experience in acquiring and working with text data from social media and other online sources
- Experience with network analysis desirable but not required
- Demonstrated ability to carry out independent research
- Record of communicating research results via peer-reviewed publications and presentations
- Experience communicating about research with non-academic audiences
- Willingness to mentor and supervise undergraduate and graduate research assistants

Application

All components of the application must be submitted through Academic Jobs Online: <https://academicjobsonline.org/ajo/jobs/18214>. Interested applicants should submit: (1) a curriculum vitae, (2) a letter of interest, including a brief description of how this position relates to their career plans, (3) statement of contribution to diversity, equity, and inclusion, and (4) the names and contact information of three references.

We will begin reviewing applications on March 30, 2021 and will continue until the position is filled. Special consideration will be given to applications received by March 30, 2021.

Health Communication Position Summary

The postdoctoral associate experienced in the rigorous empirical study of health communication messages will join a vibrant community of scholars in the Department of Communication at Cornell University. We seek a scholar who can work with a team toward investigating how to best design and deliver equitable health messages to hard-to-reach populations using innovative research methodologies.

The Postdoctoral Associate will report to Dr. Sahara Byrne and have broader opportunities to connect to the Health Communication Research Initiative (directed by Dr. Jeff Niederdeppe) and work closely with a team of faculty, postdoctoral associates, and students to develop and test critical research questions around a range of topics such as nicotine and tobacco warnings, vaccine hesitancy, opioid use, mental health, and resilience. The postdoctoral associate will have the opportunity to publish relevant research findings and contribute to the team's larger goal of improving public health communication to address health disparities.

Essential Duties and Responsibilities

In this position, the successful candidate will take an active role in assisting and leading health communication research projects from concept to submission, provide guidance and mentorship to graduate and undergraduate students, help identify possible grant funding opportunities. It is critical that the successful candidate can show evidence of effectively writing up research findings and "crossing the finish line" to manuscript submission in top journals.

We are particularly interested in candidates who have fluency in computational social science methods, including but not limited to natural language processing and network analysis, in order to capture and analyze information relevant to health messaging via websites, news sources, and social media. The postdoctoral associate may also be trained (if not already skilled) in eye-tracking methodology for follow up visual communication experiments. The postdoctoral associate is expected to perform the following duties (all in collaboration with team leadership and members):

- Identify and collaborate on responses to federal funding Requests for Applications (10%)

- Design studies and file IRB protocols, collect data, and analyze data (50%)
- Communicate research methodology and results orally and in written format for scientific presentations and publications (20%)
- Mentor other team members in analysis (10%)
- Assist in other projects when needed (10%)

In addition, the postdoctoral associate will be encouraged to develop a personal research program, publish research results in peer-reviewed publications, as well as take advantage of the multitude of internal and external mentoring opportunities and center affiliations that Cornell affords to early career researchers.

This is a full-time, 12-month academic position. Reappointment for a second year is likely, contingent on successful performance, funding, and available work. The anticipated start date is July 1, 2021.

Requirements

- Ph.D. in communication, a related social science field, or a related computational science field
- Demonstrated ability to carry out independent research
- Record of communicating research results via peer-reviewed publications and presentations
- Willingness to mentor and supervise undergraduate and graduate research assistants
- Experience in acquiring and working with text and/or visual data from social media and other online sources desirable but not required
- Experience with eye-tracking data desirable but not required

All components of the application must be submitted through Academic Jobs

Online: <https://academicjobsonline.org/ajo/jobs/18213>. Interested applicants should submit: (1) a curriculum vitae, (2) a letter of interest, including a brief description of how this position relates to their career plans, (3) statement of contribution to diversity, equity, and inclusion, and (4) the names and contact information of three references.

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Diversity and Inclusion are a part of Cornell University's heritage. We are a recognized employer and educator valuing AA/EEO, Protected Veterans, and Individuals with Disabilities. We also recognize a lawful preference in employment practices for Native Americans living on or near Indian reservations.