



The One Health Center of Excellence at University of Florida and ISI Foundation, in Turin, Italy, are looking to fill a master's degree position in the area of Digital Epidemiology, focusing on the digital surveillance of public health-related issues and the communication around it. The work contributes to the ongoing efforts in disease tracking and public health-related monitoring using alternative sources of information, including participatory surveillance, social media, and other digital traces, as well as the tracking of potential misinformation. The appointed researcher will participate in the design and deployment of diverse activities, ranging from epidemiological studies to social media analytics tools, contributing to interdisciplinary work at the crossroads of epidemiology and Public Health, data science, and computational social science, under the supervision of Prof. Iliaria Capua (Director of the One Health Center of Excellence) and Dr. Daniela Paolotti (Research Leader at the Digital Epidemiology group, ISI Foundation).

The appointed researcher will engage in the design, implementation, deployment, and analytics of health-related data collection systems, including the following: (1) participatory/community-based surveillance systems relying on mobile technologies to enhance routine disease monitoring, emerging disease preparedness and behavioral change detection; (2) exploitation of digital traces as proxy for human mobility to enhance disease modeling capabilities; and (3) monitoring traditional and social media, in order to model the propagation of medical and public health misinformation, and estimation of its impact on the reached audience. The aim of this project, is to generate an ecosystem of novel and cost-efficient digital surveillance infrastructures in countries on a global scale for the effective surveillance, monitoring and control of circulating diseases and more in general public health issues, as well as capturing the accompanying propagation of medical misinformation and incorporating its impact into disease modeling. As such, the researcher will get extensive hands-on experience in health-related data collection, data management, and big data analytics, as well as design and implementation of epidemiological studies.

We welcome applicants with strong backgrounds in digital epidemiology, statistical physics, computer science, or computational social science. The candidate should be comfortable with data manipulation, statistical analytics, network science, mathematical modeling, working with a diverse array of data sources, and should have some epidemiological background.

The researcher is expected to produce high quality scientific and technical outputs including journal articles, conference papers and presentations and technical reports.

Required skills:

Master Degree in Computer Science, Physics, or related computing/quantitative field.

Experience in digital epidemiology, surveillance systems, social media analytics and web mining. Good programming skills in at least one of the following languages: Python or R, as well as proficiency with libraries for data manipulation and analysis, e.g. Pandas and scikit-learn.

Fluency in English, both spoken and written. Highly collaborative spirit and personal initiative. Excellent personal skills.

ISI and University of Florida offer:

The two institutions provide an unusually rich opportunity for collegial interaction in a highly competitive environment, with a range of collaborators:

- At One Health Center of Excellence: expertise on a systems thinking approach to the agro- food-health-environment system;
- At ISI: algorithmic data analytics, network neuroscience, mathematics and complex systems science.

The researcher will be appointed for 6-8 months, spending 3-4 months in Florida and 3-4 months in Italy.

To apply:

To apply, please send your cover letter, curriculum vitae and professional reference list to Dr. Daniela Paolotti (daniela.paolotti@isi.it). Application deadline has been extended to October 11th 2019, but applications will be accepted until the position is filled.

UF is an equal opportunity employer and does not discriminate on the basis of race, color, national origin, gender, sexual orientation, age, religion or disability.

Position details

Length: 6-8 months, full-time.

Location: one term (about three months) at One Health Center of Excellence, UF, one term (about three months) at ISI Foundation, Turin, Italy

Starting date: TBD

Applications are reviewed on a rolling basis until the position is filled. Evaluation begins immediately.