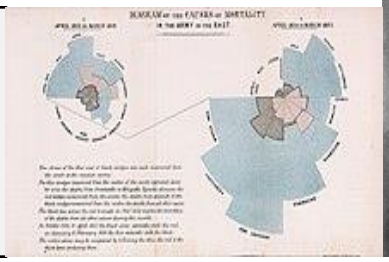
Keck School of Medicine of USC

Department of Population and Public Health Sciences

Division of Biostatistics

The "Happy Scientist" Seminar #19

Florence Nightingale (1820-1910) was an English statistician and nurse. She is known for creating the polar area diagram (the Nightingale rose) to show mortality trends during the Crimean War and is credited for saving thousands of lives by improving hospital hygiene.



Annotation Query (AnnoQ): An integrated and interactive platform for large-scale genetic variant annotation

The Annotation Query (AnnoQ) (http://annoq.org/) is designed to provide comprehensive and up-to-date functional annotations for human genetic variants. The system is supported by an annotation database with ~39 million human variants from the Haplotype Reference Consortium (HRC) pre-annotated with sequence feature annotations by WGSA and functional annotations to Gene Ontology (GO) and pathways in PANTHER. The database operates on an optimized Elasticsearch framework to support real-time complex searches. This implementation enables users to annotate data with the most up-to-date functional annotations via simple queries instead of setting up individual tools. A web interface allows users to interactively browse the annotations, annotate variants and search variant data. Its easy-to-use interface and search capabilities are well-suited for bench scientists and statisticians. AnnoQ also has an API for users to access and annotate the data programmatically. Packages for programming languages, such as the R package, are available for users to embed the annotation queries in their scripts. As an integrated annotation platform, AnnoQ serves researchers with a wide range of backgrounds and research interests.

Presenter: Huaiyu Mi, PhD, Associate Professor at USC

Thursday, March 9, 2023
12:00pm to 1:00pm
In-person: SSB Room 114
Zoom: https://usc.zoom.us/j/93886997766?pwd=S2crakJ0OWJLWEt6S0g1ZytnTXVXQT09
Meeting ID: 938 8699 7766
Passcode: 886908