



BIOINFORMATICS SEMINAR

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ARGOS: A REGULATORY-GRADE DATABASE FOR HYPOTHESIS-FREE INFECTIOUS DISEASE DETECTION WITH A BIOCOMPUTE FRAMEWORK

The wide availability of genome sequencing has driven a strong demand for analyses corresponding to a wide range of applications, such as the identification of bacteria and viruses in a sample, looking specifically for infectious diseases. However, such "hypothesis-free" tests require a database of known pathogens for sequence alignment, and the species represented in the database of sufficiently high quality to be used in clinical, agricultural, and other applications. A common species may have tens to hundreds of thousands of versions of its genome submitted to repositories or published, each of varying quality, making it a very large task to build such a database. Argos is an FDA funded project to build a database of regulatory-grade genomes as a resource for hypothesis-free testing. Multiple labs, including several subject matter experts, are convened regularly to propose candidate sequences which are subjected to rigorous quality control pipelines, all of which is reviewed by an FDA advisory committee. The entire project is built using BioCompute, a standard for computational methods reporting, which is used in publishing, FDA submissions, internal record keeping, and elsewhere.

BIOGRAPHY

See Dr. Keeney's bio in the following link:
<https://apps.smhs.gwu.edu/smhs/facultydirectory/profile.cfm?empName=Jonathon%20Keeney&FacID=2056964816>

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SEMINAR
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11:15AM-12:05PM

ZOOM:

<https://udel.zoom.us/j/415158629>

(Passcode: 823712)

bioinformatics.udel.edu

**THIS SEMINAR REPLACES THE
REGULARLY SCHEDULE SEMINAR FOR
MONDAY, APRIL 18TH**