CONSIDER FOR TALK

2025 SEA Faculty Meeting Abstract

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PECAAN a Phage Evidence Collection And Annotation Network

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PECAAN is an online annotation tool that collects phage gene evidence from Starterator, GeneMark, Glimmer, Phagesdb BLAST, NCBI BLAST, HHPred, Conserved Domain Database (CDD), Aragorn, tRNA-Scan and the DeepTMHMM transmembrane prediction program. PECAAN makes this evidence available in an online database that allows annotators to work collaboratively. It allows them to locate gene start sites, select functions for the genes and mark supporting evidence from each database. Finally, it lets users decide if the gene should be included in the annotated genome. Comparative maps help identify potential uncalled genes and PECAAN facilitates the addition of genes not called by Glimmer and GeneMark. Likewise, tRNAs can be included or not included in the final annotation. PECAAN can export selected data for import into other programs, such as DNA Master and other analysis programs. It can also export an author list, in a .csv format, of users that have saved changes in the genome annotation. The PECAAN log-in page also has a link to support pages that provide online training videos.