A Bioinformatics Computational Journal

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A Bioinformatics Computational Journal which brings powerful resources of bioinformatics computing to novice and expert users alike while fostering collaboration among diverse projects has been developed. The computational journal provides a variety of possible entries (i.e., bioinformatics computational workflow construction, database queries, annotations, graphic visualizations) in which the researcher defines, records and annotates the computational steps of his/her project. The computational journal accrues benefits including data provenance, experiment repeatability, and database searchability by providing users with a structured interface to the computational resources that implicitly records user actions and annotates data generated. Use of common data annotations and common computational descriptions not only permits searching across a wide range of projects, but also promote understanding of these search results. A prototype has been developed and implemented that shows the general outlines of the user interface model and major capabilities of the computational journal.