

GENOMA: a multilevel platform for marine biology

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Next-generation sequencing (NGS) technologies are greatly facilitating the sequencing of whole genomes leading to the production of different gene annotations, released often from both reference resources (such as NCBI or Ensembl) and specific consortia. All these annotations are in general very heterogeneous and not cross-linked, providing ambiguous knowledge to the users. In order to give a quick view of what is available, and trying to centralize all the genomic information of reference marine species, we set up GENOMA (GENOMes for MARine biology).

GENOMA is a multilevel platform that includes all the available genome assemblies and gene annotations about 12 species (*Acanthaster planci*, *Branchiostoma floridae*, *Ciona robusta*, *Ciona savignyi*, *Gasterosteus aculeatus*, *Octopus bimaculoides*, *Patiria miniata*, *Phaeodactylum tricornutum*, *Ptychodera flava* and *Saccoglossus kowalevskii*). Each species has a dedicated JBrowse and web page, where is summarized the comparison between the different genome versions and gene annotations available, together with the possibility to directly download all the information. Moreover, an interactive table including the union of different gene annotations is also consultable on-line. Finally, a query page system that allows to search specific features in one or more annotations simultaneously, is embedded in the platform. GENOMA is publicly available at <http://bioinfo.szn.it/genoma/>.