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Sommario/riassunto	As the amount of biological and its diversity accumulates massively there is a critical need to facilitate the integration of this data to allow new and unexpected conclusions to be drawn from it. The Semantic Web is a new wave of web-based technologies that allows the linking of data between diverse data sets via standardised data formats ("big data"). Semantic Biology is the application of semantic web technology in the biological domain (including medical and health informatics). The Special Topic welcomes papers in this very broad area, including not only ontologies (development and applications), but also text mining, data integration and data analysis making use of the technologies of the Semantic Web. Ontologies are a critical requirement for such integration as they allow conclusions drawn about biological experiments, or descriptions of biological entities, to be understandable and integratable despite being contained in different databases and analysed by different software systems. Ontologies are the standard structures used in biology, and more broadly in computer science, to hold standardized terminologies for particular domains of knowledge. Ontologies consist of sets of standard terms, which are defined and may have synonyms for ease of searching and to

accommodate different usages by different communities. These terms are linked by standard relationships, such as “is a” (an eye “is a” sense organ) or “part of” (an eye is “part of” a head). By linking terms in this way, more detailed, or granular, terms can be linked to broader terms, allowing computation to be carried out that takes these relationships into account.

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