

## Chapter XIX

# Untangling Bioontologies for Mining Biomedical Information

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### **ABSTRACT**

*Biomedical research generates a vast amount of information that is ultimately stored in scientific publications or in databases. The information in scientific texts is unstructured and thus hard to access, whereas the information in databases, although more accessible, often lacks in contextualization. The integration of information from these two kinds of sources is crucial for managing and extracting knowledge. By structuring and defining the concepts and relationships within a biomedical domain, BioOntologies have taken a key role in this integration. This chapter describes the role of BioOntologies in sharing, integrating and mining biological information, discusses some of the most relevant BioOntologies and illustrates how they are being used by automatic tools to improve our understanding of life.*