Personalizing and Sharing Classifications of Life Science and Health Care Information with Semantic Tagging

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Abstract. Health Care and Life Sciences (HCLS) research benefits from readily available, cross disciplinary, negotiated and agreed on semantic information about papers, experiments, and data banks, such as gene banks. In addition to the negotiated and agreed on ontologies, researchers also need simple tools to use at the beginning of the innovative research and learning process. At this stage the terms may not yet exist, they are vague and have not yet been largely agreed on may very much depend on individual researchers' or groups' views of the world. Even when the terms become agreed on by standardizing groups there is still a huge process to get them deployed and understood by the communities.

In this paper semantic tags are used to help researchers in early stages of research to organize and categorize published material, create new concepts or concept hierarchies, make connections to existing concepts, and share the material with other researchers or research groups by publishing the semantics. Anything with a URI can be classified including genes in the gene banks, Web documents, images, experimental information, even the published tagging files containing the tagging information.

The semantic tag information can be created with different tools. Currently we are experimenting with a browser plugin that let's users explore the Web and use the already familiar bookmarking concepts with no special Semantic Web knowledge. With help of XSLT the created tagging files can be presented as HTML in a normal browser. The Semantic Web technologies provide flexibility, extendibility, and easy reuse of the tagging data in other contexts..

Unlike with many currently popular tagging services users of the tagging framework are not limited to use one tagging service, or a file. They can subscribe several local or global semantic tagging data stores

References
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