

The SWAN Hypothesis Manager in the Biomedical Knowledge Ecosystem

June Kinoshita, Elizabeth Wu, Yong Gao, Marco Ocana, Gwen Wong, Colin Knep, Paolo Ciccarese and Tim Clark

Biomedical literature is part of a complex knowledge ecosystem consisting of scientists, science managers, publishers, educators, technicians, medical practitioners and others. Increasingly, the elements of this ecosystem exist in digital forms available on the web. These digital resources are richly interconnected by the social and intellectual practice of those who create and consume them, but the connections are far from explicit in a digital, semantically accessible sense. This is a considerable barrier to efficient operation of the ecosystem as a whole, and consequently to the development of human knowledge and improved biomedical practice, i.e. better treatments for disease.

The SWAN Hypothesis manager is a "Web 2.5" application, combining elements of both "Web 2.0" and Semantic Web technologies, in an effort to make semantically explicit representation of the context of digital resources in neuromedicine easily available to practitioners. It is being deployed on the Alzforum website, a scientific web community with over 3,000 registered users, including many of the leading practitioners and researchers in the Alzheimer Disease field.

We believe this approach can be widely adopted and will result in measurable increases in research productivity.