

Keynote: Supporting evidence-based medicine using text mining

Sophia Ananiadou

School of Computer Science, University of Manchester, UK

sophia.ananiadou@manchester.ac.uk

Evidence-based medicine uses systematic reviews to identify relevant studies to answer specific research questions. An underlying principle of the approach is the importance of specifying a priori the research question to drive the review process. Such reviews have a central role in health technology assessments, development of clinical guidelines and public health guidance, and evidence-informed policy and practice. However, public health questions are complex and often need to be described using abstract, fuzzy terminology. Understanding the scope of evidence often emerges during a review and cannot be defined a priori. Can text mining support a dynamic and multidimensional definition of relevance using interactive, exploratory searching under uncertainty? Can text mining help reviewers to explore evidence of interconnections between different factors, diseases and human behaviour?