

Poster presentation

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Text-mining, milk proteins and nutraceutical potential – the MilkER project

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from BioSysBio: Bioinformatics and Systems Biology Conference
Edinburgh, UK, 14–15 July 2005

Published: 21 September 2005

BMC Bioinformatics 2005, **6**(Suppl 3):P10

The vast amount of literature on milk proteins and genes, and bioactive milk-protein derived peptides cries out for a single informatics resource to focus development of research in the food, health and medical industries. The *milkER* (Milk Extraction Resource) project aims to provide this. The database contains milk protein and gene sequence information, ligand binding data, bioactive peptide data and protein-protein/disease interaction data for many mammalian species. In addition to a milk literature interface, we aim to include data on the effects of milk composition on growth and health, enzymatic properties of milk proteins, and also proteomic and microarray data.

As well as data collation, *milkER* also aims to perform text-mining on milk literature allowing discovery of novel functional relationships among milk proteins under physiological and processing conditions, leading to potential health and manufacturing benefits. This will be focused on the interactions of milk proteins physiologically with respect to positive *and* negative effects in mother, child and consumer. In comparison with labour-based research, conceptual research is more cost-effective and *milkER* will provide high throughput analysis of the milk literature. The *milkER* website is online at www.milkER.org.uk.