



## The research commercialisation office of the University of Oxford, previously called **Isis Innovation**, has been renamed **Oxford University Innovation**

All documents and other materials will be updated accordingly. In the meantime the remaining content of this Isis Innovation document is still valid.

URLs beginning <a href="www.isis-innovation.com/">www.isis-innovation.com/</a>... are automatically redirected to our new domain, <a href="www.innovation.ox.ac.uk/">www.innovation.ox.ac.uk/</a>...

Phone numbers and email addresses for individual members of staff are unchanged

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## Genetics software suite

A world-leading suite of software for the statistical analysis of genetic information: the Oxford Genome-Wide Analysis Software Suite (OGWASS)



A number of differences in peoples' genomes, termed single nucleotide polymorphisms or SNPs, have been associated with disease. For example, certain SNPs in the DNA repair gene BRCA1 are very highly associated with breast cancer. The majority of diseases for which there is a genetic component, however, are not associated with one particular genetic mutation, but alterations in a number of genes across the whole genome. Genome-wide association studies (GWAS) are beginning to elucidate these complex interactions, with at least 165 associations now known. This represents a huge range of new drug targets, validated in humans, with the promise of many more as more GWAS are performed.

A world-leading team in Oxford have developed a range of programs for statistical analysis of genome-wide data using novel algorithms. The programs allow the user to gain an understanding of the complex interrelationships between many genetic variants and diseases and the conditions with which they are associated. Reliable methods for analysing genome-wide data to understand these complexities have long been desired by geneticists in industry and academia alike. OGWASS has already elicited great interest from both academic groups and industry and commercial licenses to this leading suite, in whole or in part, are available.



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