HGNC Newsletter Winter 2010-2011

HGNC would like to wish you all the best for 2011

In this newsletter: we celebrate a symbol number milestone and introduce our new and improved Quick Gene Search tool.

An HGNC landmark

We are pleased to announce that we have now approved over 30,000 symbols! Over 19,000 of these symbols represent protein-coding genes; over 6500 represent pseudogenes and over 2500 represent non-protein-coding RNA genes. To view full details of the type of genes that we have named, visit our statistics and downloads page at www.genenames.org/stats.

Quick Gene Search: new and improved

We are pleased to announce that we have recently released an updated Quick Gene Search which has added functionality compared to the previous simple search. You can use this tool to search for multiple symbols, symbol aliases, keywords (such as parts of gene names) or database IDs. You can also choose to search for a result that contains (the default search), begins or equals your search term by selecting the appropriate radio button.

Quick Gene Search ranks your results in order of relevance. For example, a search for results that contain “AKAP1” returns the approved gene symbol AKAP1 at the top of the results list, genes that have approved symbols containing AKAP1 such as AKAP10 and AKAP11 are further down the list, genes with symbol aliases that contain this term such as AKAP110, a symbol alias for AKAP3, are further still down the results list. The results table has a “Best Match” column so you can see why each result has been returned. Results are now paginated and you can choose to display 50, 100, 500 or all results within one page. To view more information on a result, click on the approved symbol which will take you through to the HGNC Symbol Report for that particular gene.

Gene symbols in the news

Many of our approved symbols made it into the international media during recent months. A number of genes were reported as showing associations with various aspects of human behaviour: a mutation in the HTR2B gene has been linked to violent behaviour; individuals with the same variant of the DRD2 gene were reported as being likely to befriend one another while individuals with the same variant of the CYP2A6 gene are apparently more likely to avoid each other; variations in the SLCTA1 gene have been associated with obsessive compulsive disorder.

There have also been several reports on gene variants that predispose individuals towards different diseases: a variation in the CLCNKA gene expressed in the kidney has been linked to an increase risk of heart failure; people with a mutated MCC gene are predisposed to developing colorectal cancer but their tumours respond well to radiotherapy; a mutation of the AIP gene has been shown to cause gigantism. This solves the mystery of a famous 18th century "giant". Analysis of DNA from the skeleton of Charles Byrne, which is on display in the Hunterian museum, shows that he carried an AIP gene mutation causing a pituitary tumour which would have caused an increase in secretion of growth hormone.

Meeting News

Ruth attended the nomenclature session of the "Proteins with a BPI/LBP/Plunc-like domain: revisiting the old and characterizing the new" meeting on the 6th January in Nottingham, UK. Many ideas were discussed for the nomenclature of genes within the "PLUNC" branch of this family. These ideas will be further discussed over the next few months.

Publications
