The VectorBase Newsletter Issue 3 – April 2008



New data

• Ixodes scapularis

The genome of the blacklegged tick, a vector of Lyme disease, has been sequenced by the Broad Institute and the J.Craig Venter Institute (JCVI), and assembled by the latter into ~570,600 contigs and ~369,500 supercontigs. The assembly has an estimated 3.8X coverage of the genome and a total length of 1.8 Gb (including gaps). The contigs and supercontigs have been deposited in GenBank [project ABJB010000000], and are accessible at VectorBase¹.

A first annotation of the assembly is being undertaken by JCVI and VectorBase, and a preview of preliminary gene models, together with a genome browser for the assembly, will be available shortly at VectorBase.

Interested members of the community are invited to sign-up for the <u>Ixodes mailing list</u>² and help us produce the first gene set for any chelicerate.

• Anopheles gambiae

M & S forms. Two new molecular forms of *Anopheles gambiae*, M and S, have been sequenced by the JCVI and the Washington University Genome Sequencing Center. Both assemblies and are accessible in GenBank [projects ABKP0000000 (M) and ABKQ00000000 (S)] and will soon be available at VectorBase.

Manual annotation. Three chromosome arms, 2L, 2R and X, are now fully manually annotated. The annotation for 2L is visible as a DAS track in ContigView and the 2R and X will be visible soon. This manual annotation will be incorporated in the next revisions of the *An.gambiae* gene set.



VectorBase top tip

Did you know how useful BioMart is? Perhaps you don't even know what BioMart is. Don't worry, we'll explain everything right here.

First, do you need BioMart? Well, if you need information about more than a handful of genes or if you need to filter a large number of genes using some specific criterion, then the answer is yes. In fact, BioMart is exactly these two things (listing and filtering) and nothing else.

VectorBase BioMart has just been updated for *An.gambiae* and *Ae.aegypti* so that you can list and filter most of the information shown in the genome browsers, such as genomic location, InterPro domains, signal peptides, Gene Ontology, microarray reporter IDs, orthologs etc.

Come and try our <u>BioMart</u>³ – we've even written some <u>examples</u>⁴ of queries for you to try!

The VectorBase Editors.

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 $^{{}^{3}\}overline{\text{http://biomart.vectorbase.org/biomart/martview}}$

⁴ http://www.vectorbase.org/Help/Help:What can BioMart do for me