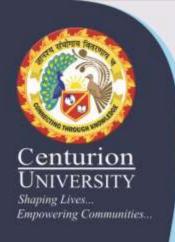


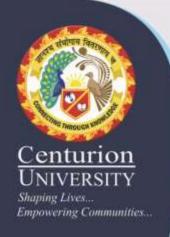
Ensembl Genomes





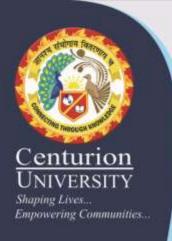
History:

- 1999: Start of Ensembl project for the human genome project.
- 2000: First release of data and web interface.
- 2009: First release of Ensembl Genomes.
- 2011: Ensemble v65 : 63 genomes.
- 2011: Ensembl genomes v12: 335 genomes.
- Ensembl: EBI and welcome trust Sanger Institute.
- Ensembl Genomes : EBI



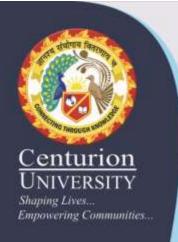
What is Ensembl Genomes?

- New portal offering integrated access to genome-scale data for non- vertebrate species, developed using the Ensembl genome annotation and visualization platform.
- Consist of five sub portals (for bacteria, protists, fungi, plants and invertebrate metazoa) designed to complement the availability of vertebrate genomes in Ensembl.



Types:

- Ensembl Genome consists of :
 - a) EnsemblFungi
 - b) EnsemblProtists
 - c) EnsemblePlants
 - d) EnsembleMetazoa
 - e) EnsemblBacteria
- Each site contain data for selected species from their domain, chosen for their scientific intrest.
- Information avilable about each species including the assembly version and annotation methods used, the overall composition of the genome.



Annotation:

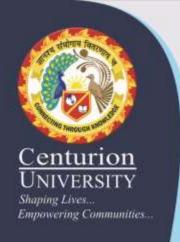
- Inclusion of species depends on various citeria (model Organisms? / community intrest / demand? Funding? Completeness / quality of genome assembly?)
- A broad taxonomic coverage is aimed for.

Ensembl:

Annotation in-house by the Ensembl team.

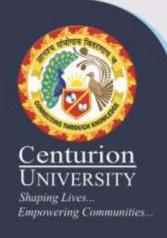
Ensembl Genomes:

 Annotation preferably by or in collaboration with the scientific community for the species in question.



Data:

- Genomic sequences.
- Gene/ transcript / protein models.
- External reference.
- Mapped cDNAs, proteins, microarray probes, BACs, markers etc.
- Comparative Data: orthologs and paralogs, protein families
- Variation Data: sequence variant, structuralvariant.
- Regulatory Data: "best guess" set of regulatory elements.



Thank You