# **Ensembl Genome Browser Workshop**





# **Ensembl Genome Browser Workshop**

University of Southampton Tuesday, 7<sup>th</sup> October 2025

Welcome to the *Living Document* for this Ensembl Browser workshop. Everyone who is registered for the course has access to edit this document. Please feel free to use this document to ask questions to the Ensembl team throughout the workshop. If you wish to ask questions privately, please do not hesitate to contact the <u>Ensembl Helpdesk</u>.

The *Living Document* is a great way of capturing the knowledge exchanged during the course and saving it for future use by yourselves and those who can't attend this course. Remember - you don't have to contribute, but any additions will be welcomed!

#### The course learning outcomes are:

- Access the main data types through the Ensembl web browser platform: genomes, genes, genetic variation, regulatory features and comparative genomics.
- View genomic regions and manipulate the view to add features.
- Explore information about genes and their sequences.
- Analyse genomic variants and associated phenotypes and your own variation data using the Variant Effect Predictor (VEP).





## **Course Overview**

## Agenda

Tuesday, 7th October 2025 (times shown in BST)	
13:00 – 14:00	Introduction to Ensembl
14:00 – 14:30	Region in detail view
14:30 – 15:00	Genes and transcripts
15:00 – 15:20	Break
15:20 – 16:00	Genes and transcripts cont'd
16:00 – 16:50	Ensembl Variation and VEP
16:50 – 17:00	Wrap-up and feedback

## Trainer

Louisse Paola Mirabueno

Demos, exercises and slides available to download <a href="https://training.ensembl.org/events/2025/2025-10-07-UniSouthampton\_browser">https://training.ensembl.org/events/2025/2025-10-07-UniSouthampton\_browser</a>





## **Questions**

If you have any questions/problems that you would like to share and apply to the whole class please add them below.

Write your **question** after the last one you can see in this document (you can add any screenshots if you think it might help. We will **answer** your question underneath.

- 1. Q: A: 2. Q: A:
- 3. Q:A:4. Q:
- A: 5. Q: A:
- 6. **Q**:
- 7. Q: A:
- 8. **Q**:





- 9. **Q**:
  - A:
- 10.Q:
  - A:
- 11. **Q**:
  - A:
- 12.Q:
  - A:
- 13.Q:
  - A:
- 14.Q:
  - A:
- 15. Q:
  - A:





#### Resources

This section of the *Living Document* provides additional resources that might be useful to you in developing skills and knowledge in the course topic area.

#### **Ensembl** sites

There are several Ensembl sites (largely divided into divisions). Depending on your species of interest, you may want to visit one of the following:

- Ensembl (vertebrate species)
- Ensembl Genomes (non-vertebrate species)
- Portals:
  - Ensembl GRCh37
  - o Ensembl COVID-19
- Ensembl Beta (new Ensembl website)
- Ensembl Projects (list of collaborations that Ensembl is involved in)

#### **Ensembl** training

For more in-depth Ensembl training, you can find links to online tutorials, walk-throughs and exercises below:

- Ensembl: Browser Webinar Series
- Ensembl: Browsing Genomes
- Ensembl Genomes (non-chordates): Quick Tour
- Visualising your own data in Ensemble
- Ensembl REST API
- Webinar: Introducing the New Ensembl Genome Browser
- <u>Ensembl Training</u> (walk-throughs and exercises)

### **EMBL-EBI** training

- EMBL's European Bioinformatics Institute (EMBL-EBI)
- EMBL-EBI databases and tools





• The <u>EMBL-EBI Training portal</u> provides courses related to genomics and bioinformatics, including free <u>on-demand online training</u>, data resource tutorials and recorded webinars (available on the <u>training portal</u> or <u>YouTube</u>).