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# PMBIO Module 08

## **Immune.** Immunogenomics analysis

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Introduction to bioinformatics for DNA and RNA sequence analysis (IBDR01)

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Glasgow

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# Learning objectives of module 08: Immune

- **Key concepts**: Immunogenomics, adaptive immunity, immunotherapies, personalized cancer vaccines, MHC binding prediction, neoantigen identification and prioritization

- Use results from the previous sections (germline variants, somatic variants, gene/transcript expression estimates, variant allele fractions, clonality estimates, etc.) to design a personalized cancer vaccine for our hypothetical patient
- Become familiar with the pvactools software for neoantigen identification, prioritization, selection, and DNA vector design