

OMICs analysis in DataSHIELD workshop

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Open to: everyone in various projects (see target audience in the information below)

Video link: <https://www.youtube.com/watch?v=X9cP2ztOurl>

Title	Omics analysis in DataSHIELD
Duration	2 hours
Target audience	Researchers interested in knowing how to analyse omic data in DataSHIELD
Brief description	This workshop will cover how to use perform state-of-the-art methods in omic data using non-disclosive approaches implemented in DataSHIELD including GWAS, gene expression and methylation data analysis
Topics covered	<ul style="list-style-type: none"> • GWAS using Bioconductor • GWAS using PLINK • Gene expression using limma, DESeq2 and edgeR • Methylation using limma
Pre-requisites	<ul style="list-style-type: none"> • Basic knowledge or R • 25th January 2021 DataSHIELD Beginners workshop on Youtube (link: https://www.youtube.com/watch?v=d-rqre00tIY) • Resources in DataSHIELD course given at ATHLETE or in a previous DataSHIELD event (see https://www.datashield.ac.uk/events/)
Before the workshop, you need to	<ul style="list-style-type: none"> • Download and Install R 4.0 or newer (https://www.r-project.org/) • Download and Install RStudio (https://rstudio.com/products/rstudio/download/#download) • Material and instructions: https://github.com/isglobal-brge/dsOmics-workshop