



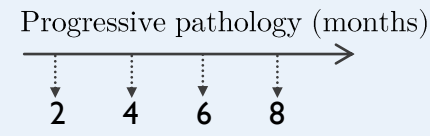
Samples

cDNA Sequencing

Sequencing Approach

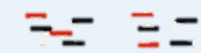
Tau model
(rTg4510)

WT TG
(Chapter 3,4,5)

Human post-mortem
brain

Control AD
(Chapter 6)



Short reads
(RNA-Seq Illumina)

Long reads
(PacBio Iso-Seq, ONT cDNA)



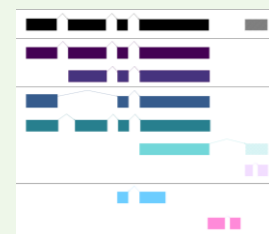
Whole Transcriptome
(Global Transcriptomic assessment)
(Chapter 3,4)

Targeted Transcriptome
(Enrichment of 20-AD associated genes)
(Chapter 5,6)

Comprehensive annotation of mouse transcriptome

(Chapter 3)

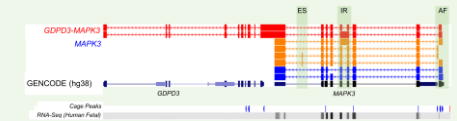
Isoform Diversity



Alternative Splicing
Events



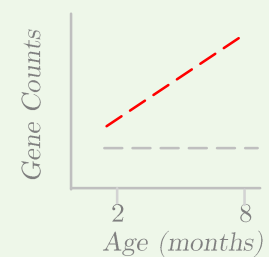
Fusion Genes,
Novel Genes



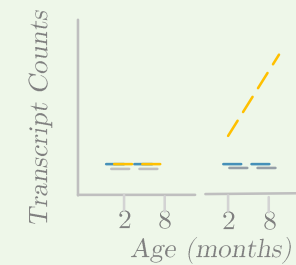
Transcriptomic changes associated AD pathology

Global (Chapter 4) & Targeted (Chapter 5,6)

Differential Gene
Expression



Differential Isoform
Expression



Differential Isoform
Usage

