***Supplementary Materials***

***Expression of -1,4-galactosyltransferases during aging in* Caenorhabditis elegans**

# Overview

Supplementary Materials and Methods

Supplementary Table S1

Supplementary Table S2

Supplementary Table S3

Supplementary References

# Supplementary Materials and Methods

## Published high-throughput studies on C. elegans lifespan-regulation

For compilation of Supplementary Table S1, published gene lists (see supplementary references) were searched for *bre-4* (WBGene00000269), *sqv-3* (WBGene00005021) and *W02B12.11* (WBGene00012206). Only studies conducted in L4 or adult worms were considered. If published gene lists contained identifiers other than WormBase IDs, these identifiers were converted to WormBase IDs using WormMine (<http://intermine.wormbase.org/tools/wormmine/begin.do>). Studies selected for this analysis cover the two longevity-models of interest in our work (*daf-2* [1, 2] and *glp-1* [3]), plus long-lived mitochondrial mutants [2, 4] and *eat-2*, a genetic model for dietary restriction [5], two timecourse studies [6, 7], and studies that identified targets of selected lifespan-regulatory transcription factors (ATFS-1 [4], DAF-12 [8], DAF-16 [9-14], HIF-1 [4, 15, 16], HSF-1 [17, 18], SKN-1 [3, 19], , UNC-62 [20] and XBP-1 [21]).

## Transcription factor binding to C. elegans B4GALT genes

The full list of worm transcription factor binding sites published by the modERN-consortium (Supplementary Ref. [22], Table S6B) was analysed for the presence of sites in *B4GALT*-genes in young adulthood and/or L4 using custom R-scripts. CHIP-seq peaks (binding sites) were assigned to a transcript if they overlapped with the region between 500 bp upstream and 300 bp downstream of the transcriptional start site [23]. A gene was considered a target of a given transcription factor if at least one of its transcripts was associated with at least one peak. Information on chromosomal locations of transcriptional start sites was extracted from the Wormbase version WS271 canonical gene set gtf-file (ftp://ftp.wormbase.org/pub/wormbase/releases/WS271/species/c\_elegans/PRJNA13758/). See supplementary reference [24] for a recent review covering the transcription factors considered in our analyses.

## Primers for qPCR

qPCR-primers used in this study are listed in Supplementary Table S1. Primers for reference genes *cdc-42*, *tba-1* and *Y45F10D.4* were published previously [25].

# Supplementary References

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