

Supplementary material

Meta-analysis of age-related gene expression profiles identifies common signatures of aging
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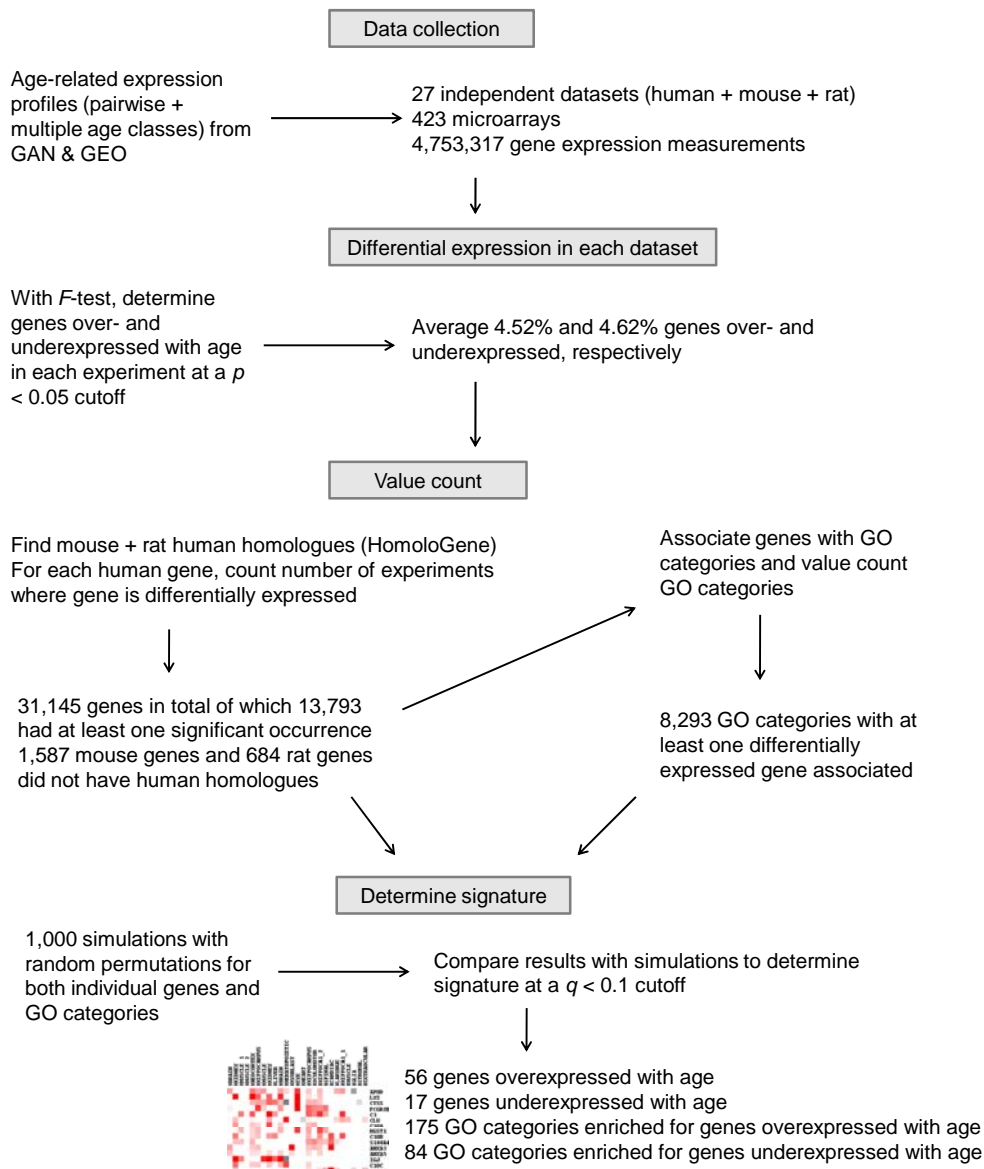
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Figure S1: Flow diagram of our meta-analysis method



Note: Please see Method section for additional details.

Table S1: List of aging microarray datasets used in this work

Tissue	Ages	GEO	Reference
Human (<i>Homo sapiens</i>) datasets			
Brain	26-106 yrs	GDS707	Lu, et al., 2004
Kidney	27-92 yrs	NA	Rodwell, et al., 2004
Skeletal muscle	20-75 yrs	GDS472, GDS473, GDS287, and GDS288	Welle, et al., 2004; Welle, et al., 2003
Skeletal muscle	22.5-73 yrs	GDS156	Welle, et al., 2002
Mouse (<i>Mus musculus</i>) datasets			
Skeletal muscle	5-25 mo	GDS2612 GDS355 and	Edwards, et al., 2007 NA
Kidney	5-30 mo	GDS356	
Brain	4.5-22 mo	GDS1311	Godbout, et al., 2005
Hippocampus	2-15 mo	GDS2082	Verbitsky, et al., 2004
Liver	6-22 mo	GDS2019	Papaconstantinou, et al., 2005
Heart	3-12 mo	GDS40	NA
Lung	2-26 mo	GDS2929	Misra, et al., 2007
Neocortex	5-30 mo	NA	Lee, et al., 2000
Eye	2-24 mo	GDS396 and GDS397	Ida, et al., 2003
Cochlea	4-15 mo	GDS2681	Someya, et al., 2007
Hematopoietic stem cells	2.5-23 mo	GDS1803	Rossi, et al., 2005
Myogenic progenitors	8-23.5 mo	GDS1079	Beggs, et al., 2004
Rat (<i>Rattus norvegicus</i>) datasets			
Hippocampus	5-25 mo	GDS2639	Rowe, et al., 2007
Stromal cells	3-15 mo	GDS2231	Akavia, et al., 2006
Spinal cord	6-30 mo	GDS1280	NA
Oculomotor nucleus	6-30 mo	GDS1280	NA
Skeletal muscle	6-30 mo	GDS1279	NA
Extraocular muscle	6-30 mo	GDS1279	NA
Laryngeal muscle	6-30 mo	GDS1278	McMullen and Andrade, 2006
Heart	3.5-21 mo	GDS399	Dobson, et al., 2003
CA1 hippocampi	3-24 mo	GDS2315	Burger, et al., 2007
CA1 hippocampi	4-24 mo	GDS520	Blalock, et al., 2003
Primary glia	3-24 mo	NA	NA

Notes: yrs = years; mo = months; NA = not available.

Table S2: Genes differentially expressed with age that have been validated by direct methods

Gene symbol	Up- or down-regulated	Organism	Method	Reference
<i>APOD</i>	up	Mouse	qRT-PCR	Ida, et al., 2003
<i>C3</i>	up	Human	single radial immunodiffusion	Yonemasu, et al., 1978
<i>CTSS</i>	up	Mouse	qRT-PCR	Ida, et al., 2003
<i>CLU</i>	up	Rat	Northern blot	Bettuzzi, et al., 1994
<i>C1QA</i>	up	Mouse	qRT-PCR	Sharman, et al., 2005
<i>GFAP</i>	up	Mouse	qRT-PCR	Lee, et al., 2000
<i>MGST1</i>	up	Human	qRT-PCR	Prall, et al., 2007
<i>C1QB</i>	up	Mouse	qRT-PCR	Verbitsky, et al., 2004
<i>C4A</i>	up	Mouse	qRT-PCR	Lee, et al., 2000
<i>COL3A1</i>	down	Mouse	qRT-PCR	Misra, et al., 2007
<i>COL1A1</i>	down	Mouse	qRT-PCR	Misra, et al., 2007
<i>ATP5G3</i>	down	Rat	Northern blot	Ishihata and Katano, 2006
<i>CALB1</i>	down	Rat	Northern blot	Iacopino and Christakos, 1990

Note: Organism refers to the organism in which the validation was carried out.

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