Supplementary Information and Supplementary Figure Legends

**The aging whole blood transcriptome reveals a potential role of FASLG in COVID-19**

Luiz Gustavo de Almeida Chuffa1#, Paula Paccielli Freire2, Jeferson dos Santos Souza1, Mariana Costa de Mello3, Mario de Oliveira Neto3, Robson Francisco Carvalho1#

1 Department of Structural and Functional Biology, UNESP - São Paulo State University, Institute of Biosciences, Botucatu, 18618-689, São Paulo, Brazil.

2 Department of Immunology, Institute of Biomedical Sciences, University of São Paulo, São Paulo, Brazil.

3 Department of Biophysics and Pharmacology, UNESP - São Paulo State University, Institute of Biosciences, Botucatu, 18618-689, São Paulo, Brazil.

# These authors contributed equally to this work

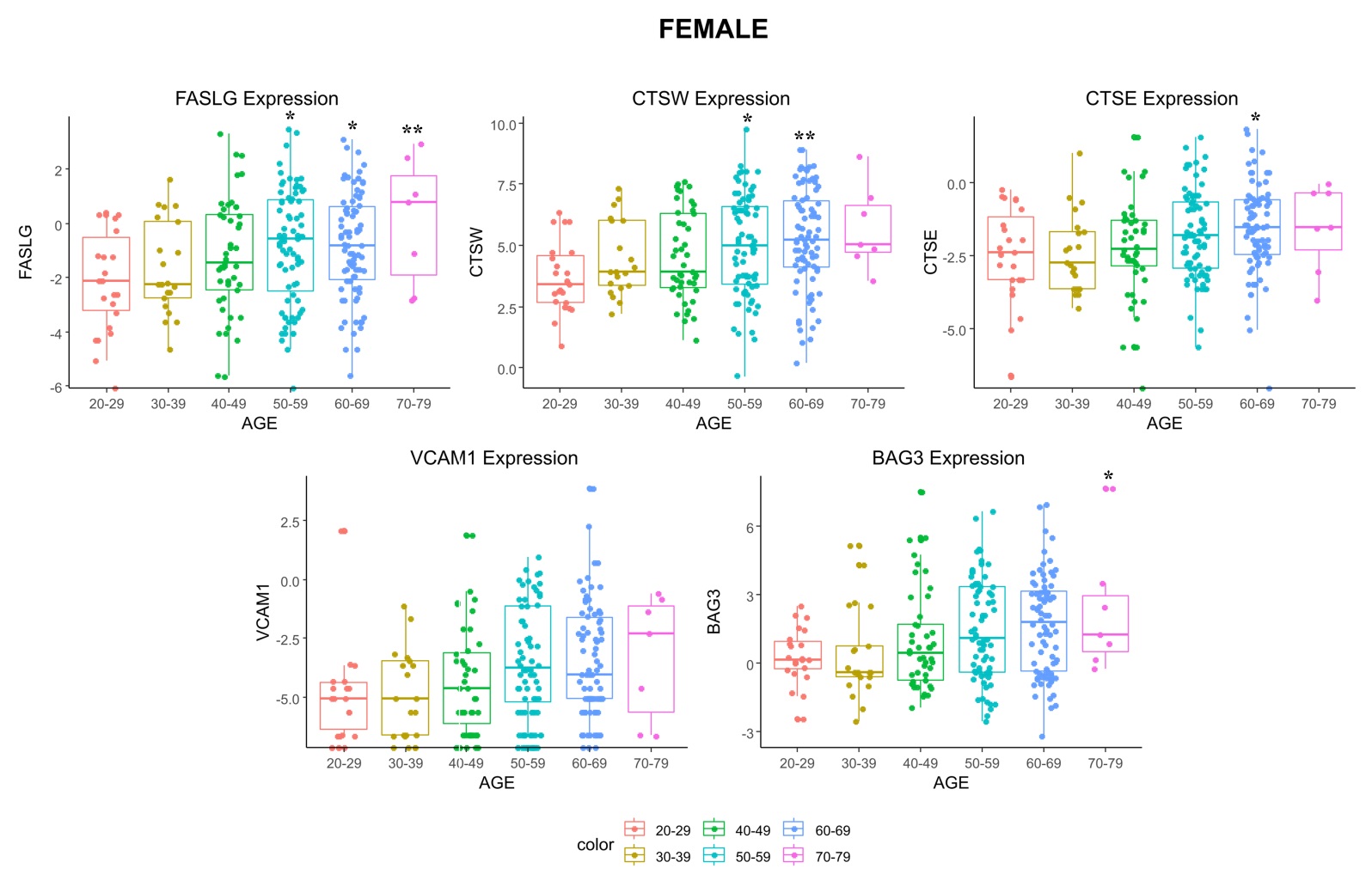
**Running-title:** SARS-CoV interaction in aged blood

**\*Corresponding author:**

Luiz Gustavo de Almeida Chuffa, Department of Structural and Functional Biology, Institute of Biosciences of Botucatu, UNESP - São Paulo State University, Botucatu, São Paulo, Brazil, Zip Code: 510; P.O Box: 18618-689, Rubião Júnior, s/n, Botucatu, SP – Brazil, Phone: +55 (14) 3880-0027, Fax: +55 (14) 3811-6361. Email: [luiz-gustavo.chuffa@unesp.br](mailto:luiz-gustavo.chuffa@unesp.br)

****

**Figure S1.** Heatmap of the whole blood samples distributed by age after PPI virus-host interaction prediction.Data showing the mean expression of differentially expressed genes, normalized by the trimmed mean of M-values (TMM) and visualized as Z-score. Two factors (A and B) were used for age clustering.



**Figure S2.** Gene expression levels (TMM) of common targets in female blood samples over aging. Data are represented in boxplot by mean ± SD. \* P < 0.05, \*\* P < 0.001, and \*\*\* P < 0.0001 vs. young adult individuals (20-29 years old). ANOVA complemented by Tukey's test. *FASLG*: tumor necrosis factor ligand superfamily member 6; *CTSE*: cathepsin E; *CTSW*: cathepsin W; *VCAM1*:vascular cell adhesion molecule 1; *BAG3*: BAG family molecular chaperone regulator 3.



**Figure S3.** Gene expression levels (TMM) of common targets in male blood samples over aging. Data are represented in boxplot by mean ± SD. \* P < 0.05, \*\* P < 0.001 vs. young adult individuals (20-29 years old). ANOVA complemented by Tukey's test. *FASLG*: tumor necrosis factor ligand superfamily member 6; *CTSE*: cathepsin E; *CTSW*: cathepsin W; *VCAM1*:vascular cell adhesion molecule 1; *BAG3*: BAG family molecular chaperone regulator 3.