## Spaceflight influences gene expression, photoreceptor integrity, and oxidative stress-related damage in the murine retina.

Eliah G. Overbey<sup>1</sup> (\*), Willian Abraham da Silveira<sup>2</sup>, Seta Stanbouly<sup>3</sup>, Nina C. Nishiyama<sup>3</sup>, Gina RoqueTorres<sup>4</sup>, Michael J. Pecaut<sup>3</sup>, David Zawieja<sup>5</sup>, Charles Wang<sup>6</sup>, Jeffrey Willey<sup>7</sup>, Michael Delp<sup>8</sup>, Gary Hardiman<sup>2</sup>, Xiao Wen Mao<sup>3</sup>

1 - University of Washington, Department of Genome Sciences, Seattle, WA, USA

2 - Queen's University Belfast, Faculty of Medicine, Health and Life Sciences, School of Biological Sciences, Institute for Global Food Security (IGFS),19 Chlorine Gardens, Belfast. Northern Ireland. BT9 5DL.

3 - Department of Basic Sciences, Division of Biomedical Engineering Sciences (BMES), Loma Linda University, Loma Linda, CA, 92350, U.S.A.

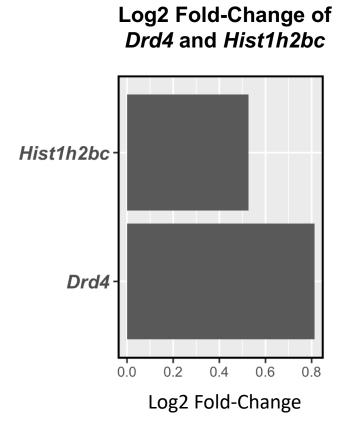
4 - Center of Dental Research, Loma Linda University, CA, 92354, U.S.A.

5 - Department of Medical Physiology, Texas A&M University, College Station, Texas, U.S.A

6 - Center for Genomics, Department of Basic Sciences, Loma Linda University, Loma Linda, CA, 92350, U.S.A

7 - Department of Radiation Oncology, Wake Forest School of Medicine. Bowman Gray Center, Winston-Salem, NC 27101, USA.

8 - Department of Nutrition, Food and Exercise Sciences, Florida State University, Tallahassee, FL, 32306, USA.



**Supplementary Figure 1. Log2 fold-change of** *Drd4* **and** *Hist1h2bc. Drd4* **has an FDR of 4.31E-51 and is related to circadian rhythms.** *Hist1h2bc* **has an FDR of 1.66E-09 and is related to the aging retina.**