

Submitter: Ben Bolen  
On Behalf Of: All PSU Neuroscience Club members  
Committee: Senate Committee On Rules  
Measure: SB1548

Dear Legislators,

I'm also a PhD candidate at Portland State University where I create robots that use artificial muscles to study neuromuscular control. I'm president of PSU's Neuroscience Club, which is the university's most active club. I'm also a volunteer with NW Noggin, FIRST robotics, and MESA. And very recently my first child was born.

I've always considered myself somewhat of a night owl even though I understand humans are diurnal creatures. I've never met anyone that enjoys switching between Daylight Savings Time and Standard Time. If you had asked me a few months ago, my instinctual reaction would have been to join the permanent DST bandwagon. However, seeing how my child's circadian rhythm develops, and noticing the changes in myself as I've adjusted to their schedule, I do see and feel the benefits of keeping Standard Time.

But more than this anecdote, the evidence is clear: DST has negative impacts on individual health and society, whereas maintaining permanent Standard Time will be better for us. For example:

Here is a succinct summary from Johnson and Malow in Current Sleep Medicine Reports (2022):

"DST may worsen academic performance, productivity, work and athletic safety and performance, salaries and wages, and risk of motor vehicle crashes (MVC) and crime." [1]

The American Academy of Sleep Medicine (AASM) is the accrediting body for sleep medicine facilities in the USA and is a society that focuses on both circadian and sleep disorders. It is the authoritative body for sleep medicine in the United States. They came out with a position paper in 2020, published in the Journal of Clinical Sleep Medicine, and it concludes by stating:

"Existing data support the elimination of seasonal time changes in favor of a fixed, year-round time. DST can cause misalignment between the biological clock and environmental clock, resulting in significant health and public safety-related consequences, especially in the days immediately following the annual change to DST. A change to permanent standard time is best aligned with human circadian biology and has the potential to produce beneficial effects for public health and

safety." [2]

The Society for Research on Biological Rhythms (SRBR) is the authority on biological rhythms.

Roenneberg, et al., wrote the 2019 SRBR position paper in the Journal of Biological Rhythms. I will leave you with the last paragraph:

"What should we do? What do scientists recommend?

The choice of DST is political and therefore can be changed. If we want to improve human health, we should not fight against our body clock, and therefore, we should abandon DST and return to Standard Time (which is when the sun clock time most closely matches the social clock time) throughout the year. This solution would fix both the acute and the chronic problems of DST. We therefore strongly support removing DST changes or removing permanent DST and having governing organizations choose permanent Standard Time for the health and safety of their citizens." [3]

Senators, I urge you to vote yes on SB 1548. There's no time to waste!

Sincerely,

Ben Bolen

PhD Candidate, Agile and Adaptive Robotics Laboratory, Portland State University  
President, The Neuroscience Club at Portland State University  
Volunteer with NW Noggin, MESA, and FIRST Robotics

References:

[1] <https://link.springer.com/article/10.1007/s40675-022-00229-2>

[2] <https://jcsn.aasm.org/doi/10.5664/jcsn.8780>

[3] <https://journals.sagepub.com/doi/full/10.1177/0748730419854197>