



## **2021 SRS Board of Directors Candidate**

### **Director-at-Large**

**Erin Flynn-Evans, PhD MPH**



As the director of the Fatigue Countermeasures Laboratory at NASA Ames Research Center, my research involves translating laboratory research to real-world settings. In this role at a government research laboratory, I have also had the opportunity to influence public policy surrounding sleep and circadian-related issues. I understand the importance of keeping up to date with new findings from the research community in order to provide accurate information about sleep and circadian rhythms to stakeholders. To this end, I am an active participant in SRS and American Academy of Sleep Medicine (AASM) endeavors. Although I've followed a non-traditional career trajectory, I believe that my experience building a sleep research laboratory, coupled with my active engagement in the SRS and AASM, provides me with unique and valuable perspective that will enhance the SRS board.

My experience establishing and growing a government sleep research laboratory provides me with the leadership, communication, and creative thinking skills to navigate challenges that may arise during my tenure as an SRS board member. As a trainee in sleep and circadian physiology at Brigham and Women's Hospital, Harvard Medical School, and the University of Surrey and in epidemiology at Harvard School of Public Health, I expected to follow a 'typical' academic career path. However, I was recruited to work at NASA soon after the completion of my training. I knew that taking the position would be a challenge—the laboratory was once well respected but had been vacant for seven years before I arrived. I was committed to re-establishing the reputation of the laboratory in the aviation community and maintaining a healthy stream of high-quality publications to sustain my connection with academia. Upon arriving at NASA, I began building connections with aviation and Federal Aviation Administration (FAA) personnel in order to establish research

partners. My work in this area has been very successful and my laboratory now has formal research partnerships with numerous national and international airlines. In addition to our research work, my laboratory also serves as a trusted liaison communicating best practices for managing sleep loss and circadian misalignment among the commercial airline pilots. This work has allowed me to develop strong connections with policy makers and personnel in industry. I am confident that my ability to ‘speak the language’ of those in industry will prove useful in SRS outreach and science communication.

It is not possible to have a great laboratory without a great team. However, it is quite challenging to build a solid research team outside of academia because of the lack of access to students and post-docs.

Despite these issues, I have been able to recruit colleagues to join the laboratory and have initiated collaborations with other academic and military groups. In addition, each summer I host a team of undergraduate interns who help staff our in-laboratory studies while learning about the basics of sleep and circadian rhythms. I believe that my experience recruiting and training students and staff, although unconventional, provides me with important insight into challenges facing students and trainees that will help ensure I consider their perspective in SRS decision making.

Although having a great team and committed research partners is important, it is difficult to collect high-quality data in the field, especially when the study population works in a complex operational environment. I recognized that in order to collect meaningful data in aviation and spaceflight, I would need tools to facilitate unsupervised data collection. As a result, my laboratory developed a web-based application (“app”) to guide participants through study procedures including the collection of baseline questionnaires, sleep diaries, and cognitive tests. This app has enabled us to collect larger sets of data than have ever been collected in these environments. For example, in one representative sample, airline pilots self-administered over 3,000 psychomotor vigilance tests so that we could evaluate their work schedules (Flynn-Evans et al. Sleep Health 2018). The app is now available free of charge in the Apple App Store and has been downloaded and used by thousands of researchers and operational personnel. I believe that my ability to identify a problem and develop a creative solution will enable me to bring innovative ideas to the SRS board.

I am committed to the Society and its mission and have participated in several important projects. In 2019, I participated in the joint SRS-AASM Shiftwork Length

Consensus Conference. This effort led to a consensus paper that is currently under review at SLEEP describing the considerations that must be evaluated when designing work schedules. I am also a member of the joint SRS-AASM Extrinsic Circadian Rhythm and Shiftwork Disorder committee. The product of this effort will be an update to guidance on the diagnosis and treatment of shiftwork and jet-lag disorder. I am also an active member of the AASM Public Safety Committee and have authored numerous responses to public policy decisions, such as a response the relaxation of work hour limits for truck drivers. Finally, I am proud to be an associate editor for the SRS journal Sleep Advances. This collection of experiences has provided me with a clear understanding of the effort that is required to maintain a successful organization. As a Director-at-Large, I expect to continue to work hard to sustain the reputation of the Society.

I am confident that I have the background and skills to serve the SRS and the broader community of sleep and circadian professionals. I hope that you will consider me for an SRS Director-at-Large position.