

# Center for Circadian Biology Symposium - Poster Guidelines

**Deadline to Sign-up & Submit: February 1, 2024**

## Poster Size & Display:

Poster size – Maximum size **32 inches wide by 48 inches tall, printed in portrait orientation**. Space is very limited; each stand will accommodate two submission posters displayed side-by-side. Do not exceed the allowable size.

## Sign-up & Submission: (DEADLINE: 11:59 pm PST February 1, 2024)

Step-1 [Sign-up here!](#) You must use this sign-up link to initiate your plans to present a poster. Space is limited; once we reach capacity this sign-up page will close.

Step-2 Abstract submission in **.pdf files only [Lastname-Firstname-abstract.pdf]** to [ccb.mtgs@gmail.com](mailto:ccb.mtgs@gmail.com). You may submit your abstract now; however, poster presenters must be registered for the symposium by the submission deadline (above).

## Poster Abstract Guidelines: (see properly formatted sample below)

- Abstract size: one-page maximum; file type .pdf.
- Fonts and point size: 11 point or larger, any font that is easy to read.
- Abstract Title: Bold, centered on page.
- Abstract Authors: Centered, include all authors' full names, underline the presenting author.
- Authors' Affiliation: Include department and institution below Authors.
- Abstract body (Text only): Justified. Maximum of 500 words (not to exceed one-page submission).
- References: Optional (must not exceed the one-page submission).

## Presenters:

Priority for limited space will be given to students and postdocs. Four prizes will be awarded at \$75 each. Team submissions are welcome; should your team win, the presenting author will be called to accept on behalf of the group.

### PROPERLY FORMATTED ABSTRACT SAMPLE:

**Comparison of fertility and locomotor deficits in mice lacking *Bmal1* in AVP neurons, VIP neurons, or both populations**

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Circadian rhythms in mammals are governed by the suprachiasmatic nucleus (SCN). The SCN is often defined by peptide expression, with arginine vasopressin (AVP) containing neurons in the dorsal ("shell") region, and vasoactive intestinal peptide (VIP) in the ventral ("core") region. These regions have distinct functions related to photic input, SCN coupling and rhythmicity, and SCN output. Further, both populations are indicated in the circadian regulation of the preovulatory luteinizing hormone surge through independent pathways to neuroendocrine neurons. The peptides also offer a way to target discrete regions of the SCN in genetic studies. Using AVP-Cre and VIP-Cre mice, we targeted the core molecular circadian clock gene *Bmal1* using cre-lox technology and generated three conditional knockout mice: AVPcre-*Bmal1*<sup>-/-</sup>, VIPcre-*Bmal1*<sup>-/-</sup>, and the double knockout AVPcre-VIPcre-*Bmal1*<sup>-/-</sup>. Our goal was to disrupt the endogenous molecular clock in these regions and evaluate the effect of *Bmal1* in these populations on fertility, locomotor activity, and body temperature. While both the AVPcre-*Bmal1*<sup>-/-</sup> and VIPcre-*Bmal1*<sup>-/-</sup> mice have been generated by previous groups, we evaluated fertility for the first time in these animals. We also performed a concurrent analysis of all three mutants, including an 8-hour phase advance, 8-hour phase delay, and a bright light pulse at ZT16 in a small cohort of mice to establish preliminary observations. Overall, we hope to further define the role of *Bmal1* in AVP and VIP neurons, and the combined effects of knockout in both populations.