

# Shahnaz Rahman Lone

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## Lab webpage:

<http://shahnazlonelab.weebly.com>

## Education profile:

### PhD

Jawaharlal Nehru Centre for Advanced Scientific  
Research (JNCASR) Bangalore, India.

## Postdoctoral experiences:

(Johns Hopkins University, Baltimore USA and  
University of Fribourg, Fribourg Switzerland)

## Awards and Fellowship:

1. Ramanujan Fellowship-2016.
2. Gold medal for best Ph.D. thesis from JNCASR Bangalore (2011).

## List of Publications:

1. Social experience is sufficient to modulate sleep need of *Drosophila* without increasing wakefulness. **Lone SR**, Sheetal Potdar, Manishi Srivastava, Vijay Kumar Sharma. (PloS One 2016;11(3):e0150596).
2. *Or47b*-neurons promote male-mating success in *Drosophila*. **Lone SR**, Archana Venkataraman, Manishi Srivastava, Sheetal Potdar, Vijay Kumar Sharma. Biology letters 2015; 11(5).
3. Sleep Interacts with Ab to Modulate Intrinsic Neuronal Excitability. Tabuchi M, **Lone SR**, Liu S, Liu Q, Zhang J, Spira AP, Wu MN. Current Biology 2015; 25:1-11.  
**Commentary on paper by Alex C. Keene and William J. Joiner  
Neurodegeneration: Paying It Off with Sleep**
4. *Or47b* receptor neurons mediate socio-sexual interactions in fruit flies *Drosophila melanogaster*. **Lone SR**, Sharma VK. Journal of Biological Rhythms 2012; 2:107-116.
5. Circadian consequence of socio-sexual interactions in fruit flies *Drosophila melanogaster*. **Lone SR**, Sharma VK. PloS One 2011; 12:e28336.



6. Timekeeping through social contacts: social synchronization of circadian locomotor activity rhythm in the carpenter ant *Camponotus paria*. **Lone SR**, Sharma VK. Chronobiology International 2011; 10:862-872.
7. Social synchronization of circadian locomotor activity in the fruit fly *Drosophila melanogaster*. **Lone SR**, Sharma VK Journal of Experimental Biology 2011; 214:3742-3750.
8. Cyclic presence and absence of conspecifics alters clock phase but does not entrain the locomotor rhythm of the fruit fly *Drosophila melanogaster*. **Lone SR**, Sadanandappa MK, Sharma VK. Chronobiology International 2011; 6:497-508.
9. Short and long day responses in the pre-adult developmental durations of two species of *Camponotus* ants. **Lone SR**, Ilangovan V, Murugan M, Sharma VK. Chronobiology International 2011; 2:163-169.
10. Sex and age related changes in the locomotor activity and phototactic behaviors of two closely related species of *Camponotus* ants. **Lone SR**, Chakravarthi A, Sharma VK. Journal of Insect Physiology 2012; 1:75-82.
11. Circadian resonance in the development of two sympatric species of *Camponotus* ants. **Lone SR**, Ilangovan V, Murugan M, Sharma VK. Journal of Insect Physiology 2010; 56:1611-6.
12. Exposure to light enhances pre-adult fitness in two dark-dwelling sympatric species of ants. **Lone SR** and Sharma VK. BMC Developmental Biology 2008; 8:113.
13. Possible evidence for shift work schedules in the media workers of the ant species *Camponotus compressus*. Sharma VK, **Lone SR**, Mathew D, Goel A, Chandrashekar MK. Chronobiology International 2004; 21:297-308.
14. Circadian consequences of social organization in the ant species *Camponotus compressus*. Sharma VK, **Lone SR**, Goel A, Chandrashekar MK. Naturwissenschaften. 2004; 91:386-390.
15. Clock for sex: loss of circadian rhythms in ants after mating? Sharma VK, **Lone SR**, Goel A. Naturwissenschaften. 2004; 91:334-7.

### Talks:

1. Role of social interactions in circadian synchrony. (Department of Neurology, Johns Hopkins University Baltimore- August 2011).
2. Role of *Or47b* neurons in nocturnal sex driver in *Drosophila melanogaster* (Howard Hughes Medical institute Janelia Farms Ashburn May 2012).
3. Socio-sexual interactions in *Drosophila melanogaster*. Indian Institute of Science Education and Research (IISER) Mohali- June- 2013.

### Conferences and retreats:

1. System biology of brain-University of Fribourg 24-25 August 2015
2. Neuroscience retreat. Johns Hopkins University department of neuroscience (9-11 Sep. 2011).
3. Clock meeting (U-Penn School of medicine) 18<sup>th</sup> Nov. 2011

### Workshops:

1. Benefri Neuroscience Workshop (3-5 February 2016), Experimental neuroscience in humans and animal models, Fribourg Switzerland.

2. Acted as mentor in SERC School of chronobiology June 2013.
3. Acted as mentor in SERC School of chronobiology Jan 2010.

### Poster presentations:

1. Functional dissection of memory circuit for gustatory memory. **Lone SR** (23 Dec. 2015-ETH Zurich Switzerland) in collaboration with Alex Keene's group.
2. Socio-sexual interactions in fruit fly *Drosophila melanogaster*. **Lone SR** and Sharma VK (Nov.2010-JNCASR Bangalore)
3. Social entrainment: way of knowing outside environment in *Camponotus paria*. **Lone SR** and Sharma VK (Nov.2008-JNCASR Bangalore)
4. Circadian resonance in *Camponotus* ants. **Lone SR** and Sharma VK (Nov.2007-JNCASR Bangalore)
5. Exposure to light improves pre-adult fitness of ants. **Lone SR** and Sharma VK (Nov.2006-JNCASR Bangalore).

**In house symposium:** Participated in in-house symposia of JNCASR held in Nov. 2006, 2007, 2008, 2009, 2010.

**Brian nights talk series:** Attended Brain night talk series held in Johns Hopkins School of Medicine, 2011-2012.