



Minisymposium: Biological Rhythms and Oscillations November 22, 2017

Place	University of Oulu, Medical campus: Lecture Hall F101 (Aapistie 7A)
Organizer	Health and Biosciences Doctoral Programme (HBS-DP), University of Oulu
Credits	0.7 ECTS for the whole programme (including all lectures, post-lecture discussion session and suggested readings - registration required for discussion groups). The readings will be distributed about one week before the symposium. (Participation in lectures equals to 6 seminar hours – have your own bookkeeping, if you wish to have credits and if you do not complete the whole 0.7 ECTS programme!)
Registration	Pre-registration is recommended by November 16, 2017, using this link: https://www.webpolsurveys.com/S/4624E6269A3AE0A3.par
Information	HBS-DP coordinator Ritva Saastamoinen, ritva.saastamoinen(at)oulu.fi, tel. +358 294 48 6102

The 2017 Nobel Prize in Physiology or Medicine was awarded for discoveries of molecular mechanisms controlling the circadian rhythm.

Rhythmic phenomena can be observed at all levels of life, with periods ranging from a fraction of a second to years. This 1-day event is dedicated to repetitive, oscillatory behavior which is present in all biological systems. Talks include different levels of physiological regulation, from neural & cardiac rhythms, biochemical and metabolic oscillations, to daily, monthly, annual and even several-year rhythms in ecology and epidemiology. What if the internal clock is not ticking as it should, or if there is mismatch between internal timer and environmental cues?

>>> **Everyone is welcome to the lectures!** <<<

PROGRAMME

<i>Session I</i>	<i>Chaired by: Peppi Karppinen</i>
9:00-9:05	Opening words
09:05-10:00	<i>KEYNOTE; Relationship between circadian rhythms and oxygen</i> Benjamin Ladeux , Weizmann Institute of Science, Israel
10:00-10:45	<i>The electrocardiogram - background mechanisms for the normal rhythm and arrhythmias</i> Kjell Nikus , Tampere University Hospital Heart Hospital, Finland
10:45-11:15	Coffee break
<i>Session II</i>	<i>Chaired by: Tanja Pyhäjärvi</i>
11:15-12:00	<i>Circadian rhythms in health and disease of the musculoskeletal system</i> Qing-Jun Meng , University of Manchester, UK
12:00-12:45	<i>The circadian clock coordinates daily and seasonal variation in growth of forest trees</i> Maria E. Eriksson , Umeå Plant Science Centre, Sweden
12:45-13:45	Lunch break
<i>Session III</i>	<i>Chaired by: Erika Jääskeläinen</i>
13:45-14:30	<i>From ultradian to seasonal rhythms in mood disorders</i> Timo Partonen , National Institute of Health and Welfare, Helsinki, Finland
14:30-15:15	<i>Infra-slow rhythmicity in scale-free brain dynamics and behavior</i> Matias Palva , University of Helsinki, Finland
15:15-15:30	Concluding remarks
15:45-17:00	Refreshments and post-lecture discussion session with the speakers, for pre-registered participants – priority to doctoral students (Place: TBA)