

Newsletter



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In This Issue –

From the President	p. 1
Program Committee	p. 2
Research Spotlight	p. 3
Obituary	p. 5
Recently Funded Grants	p. 6

Mark Your Calendars!!! SRBR 2016 will be held in warm and sunny Tampa, FL, May 21-25, 2016

Dear SRBR members,

On behalf of the SRBR Board of Directors and Executive Committee, I am happy to announce that **the 2016 SRBR conference will be held at the Innisbrook Resort and Golf Club near Tampa, Florida**. Innisbrook is a new venue for the SRBR conference that has great accommodations, state-of-the-art conference facilities, and many on-site and nearby

activities to enjoy in the comfort of a lush tropical setting. Moreover, Innisbrook is very close to a major airport (Tampa International Airport), which should make travel to the meeting easier and perhaps even lower travel costs. As the meeting draws nearer we will provide more detailed information about the venue, travel, accommodations and activities. For now information about Innisbrook is available at: www.innisbrookgolfresort.com.

The meeting will take place May 21-25, 2016, so please save the date! The first day (Saturday, May 20) will offer activities for trainees (Trainee Professional Development Day) and junior faculty (Junior Faculty Workshops), followed in the evening by a welcome reception. The meeting will end the evening of Wednesday, May 25, with a banquet and awards presentation.

I want to thank the following people for their hard work in identifying possible locations for the conference and selecting what promises to be an excellent location: Program Chair Nicolas Cermakian, Michelle Chappell and Sarah Timm of Parthenon Management Group, and members of the SRBR Board of Directors and Executive Committee (Paul Hardin, Carla Green, Samer Hattar, John Hogenesch, Deb Bell-Pedersen, Achim Kramer, Takashi Yoshimura, Nico Cermakian, Bill Schwartz, Paul Taghert, Karen Gamble, Shelley Tischkau, Erik Herzog and Carl Johnson).

In addition to site selection for SRBR 2016, Nico Cermakian and the rest of the Program Committee has been hard at work

putting together an outstanding program of cutting-edge research for this meeting that spans the breadth of chronobiology. Last but not least, SRBR 2016 Fundraising Chair Erik Herzog has started work to raise funds to support important meeting activities and events. I hope to see you all at SRBR 2016!

Sincerely yours,

Paul Hardin

Update from the SRBR 2016 Program Committee

Dear SRBR Members,

As you now know, the next SRBR conference will take place in less than a year. To help me in the huge (but exciting) mandate to build the program for this conference, I have formed a strong Program Committee, in which chronobiology research with various topics, approaches and model organisms is represented. The members of this Program Committee are: Mary Carskadon, Patrick Emery, Nicholas Foulkes, Diego Golombek, Claude Gronfier, Stacey Harmer, Eun Young Kim, Takao Kondo, Francis Lévi, Colleen McClung, Valérie Mongrain, Félix Naef, Frank Scheer, and Eva Wolf. Thank you all for serving on this committee!

On behalf of the Program Committee, I also thank all of you who sent suggestions for symposium topics following our invitation to do so earlier this year. We will get back to you shortly about these proposals, which have been very useful in helping us shape a great program.

In addition to finalizing the symposia and working with Fundraising Chair Erik Herzog to raise money for the conference, later this

year I will work on other aspects of the conference program such as afternoon workshops and lunchtime table discussion. If you have ideas about topics that might be appropriate for discussion in one of these forums, don't hesitate to let me know.

Regards,

Nico

Nicolas Cermakian, Ph.D.
SRBR 2016 Program Chair



Research Spotlight

The Research spotlight in this issue highlights the work of two winners of SRBR Excellence awards in 2014.

Circadian Rhythms in Traumatic Brain Injury

Catherine Duclos is a PhD student working with Nadia Gosselin in Montreal, Canada.



SRBR: Where did you grow up? Tell me about your family.

CD: I grew up right outside of Montreal with my parents and younger brother. When I turned 12, my father received a job offer in the United States, so we moved to Cleveland, where I spent my teenage years. Although I enjoyed the experience, I always wished to go back to Montreal. A few weeks before my 18th birthday, I received my acceptance letter from McGill University (Montreal). Three months later I was settling back into the only city I had always called “home”.

SRBR: What are your hobbies?

CD: I love playing tennis, skiing, running, hiking. I also love music and foreign films. Traveling and learning languages are also passions of

mine. I’ve been lucky enough to travel a great deal already, and to live in a few different countries for months at a time. I also do a lot of volunteer work.

SRBR: Do you have any pets?

CD: I have two cats: Waldo and Toulouse. They’re brothers but are nothing alike: Waldo is fit, active, and very discreet, while Toulouse loves to eat and lay around, and he meows whenever we sneeze (he’s a strange one!).

SRBR: What is your favorite book?

CD: Invisible Man by Ralph Ellison. It’s a profoundly moving outlook on identity, ambition, and sociopolitical injustices.

SRBR: What kind of music do you like?

CD: My favorite artist is Regina Spektor, whom I find truly original. She’s a talented pianist and singer-songwriter, who uses her voice as an instrument and whose lyrics are eclectic and very “out-of-the-box”, often inspired by mythology, art and literature. But I love any music that can move me: classical, indie, electronic-pop, reggae, 70’s rock, folk, and the list goes on. I also love playing music (piano, guitar, drums), as well as composing. I even composed my wedding march for a string trio. Music is one of my biggest passions!

SRBR: How did you get interested in Chronobiology?

CD: When I was in high school I did a summer university seminar in psychology. We had to decide on a topic for an individual research project and I decided to do mine on sleep and dreaming. That’s when I first heard about circadian rhythms. Many years later, I was dating a nurse, who worked nights. I got to see firsthand the effects of circadian disturbances and became interested in understanding why, despite sleeping “well” in the daytime, everything else was thrown off (appetite,

mood, energy, vigilance, etc.). I began researching articles on chronobiology, shiftwork, and health, and found articles written by Marie Dumont, who is now my PhD co-supervisor. I got in touch with her to learn more about her research and it all went from there: she introduced me to the idea of pursuing graduate studies in chronobiology, and introduced me to my PhD supervisor. I am very grateful to her!

SRBR: Tell us about your current research

CD: I began working in Nadia Gosselin's lab in 2011 as part of my Master's project, which eventually turned into my PhD. My research aims to understand the origin and evolution of the sleep-wake disturbances that frequently arise following traumatic brain injuries. More specifically, I study the circadian rhythms (rest-activity cycle, temperature, melatonin, cortisol) of patients who have had a moderate or severe traumatic brain injury, while they are still hospitalized in intensive care. I hope to understand whether the brain injury triggers circadian disturbances, and if so, how these arise and how they influence recovery. I love being able to combine chronobiology with neurotrauma, and I enjoy working in a hospital setting, with patients and their families.



Researchers from the Center for Advanced Research in Sleep Medicine (Hôpital du Sacré-Cœur de Montréal) participated in a race to raise funds for sleep and chronobiology research at the institution.

miRNAs Shape Circadian Gene Expression

Ngoc-Hien Du is a graduate student working with David Gatfield at the University of Lausanne in Switzerland.



SRBR: Tell me about your family.

HD: I grew up in Hanoi, Vietnam. I moved to Tokyo, Japan at age 20 for Bachelor and Master study for 7 years. Japanese is a must if you want to go to university in Japan, but on the other hand it helps you get along well with local people and the culture. I have crazy Japanese friends who sent me rice from Japan to Switzerland because they heard that I miss it (of course the price of transportation was double the price of the rice!).

My parents are both chemists. They work for a governmental organization. They inspired me with curiosity about natural science and encouraged me to study abroad.

SRBR: What are your hobbies?

HD: I do Aikido, a type of Japanese martial art. I started in Japan and continue doing it here. It is funny to hear the instructions in French instead of in Japanese. I also like skiing, which is perfect for being in Switzerland!

SRBR: Do you have any pets?

HD: No, I do not have any pets now. I used to have a cat when I was small. She liked mice (of course!) and finished her meal several times in the kitchen. I (who was 5-6 years old at the time) had to clean it up because my mother was screaming outside. Maybe that is why I can do experiments with mice now.

SRBR: What is your favorite book?

HD: I prefer books in Vietnamese simply because reading in my mother tongue is more relaxing. One of my favorite books is about typical types of food in Hanoi. We Hanoian's love good food and if you visit Hanoi you will see that people are eating all the time. Unfortunately I am not aware of any English translation of this book.

SRBR: What kind of music do you like?

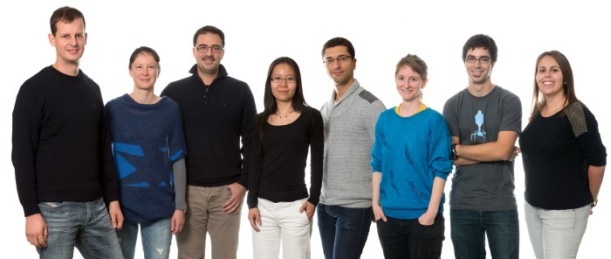
HD: I like jazz. My boyfriend is making high quality speakers and we can enjoy music like in a live show at home. Let me know if you are interested in buying one! Just be prepared because the price is not normal.

SRBR: How did you get interested in Chronobiology?

HD: During the 3rd year of my Bachelor study, I got to know Chronobiology through an experimental course that has rotations among different laboratories. One of the laboratories was the Fukada lab (University of Tokyo) that studies the molecular clocks. Then I decided to do my Bachelor thesis and then also Master thesis in this lab. Professor Fukada and my direct supervisor, a PhD student at that time in the lab, Dr. Yoshitane, were extremely enthusiastic supervisors. They spent time not only to teach me the beauty of chronobiology but also to encourage me continue doing science.

SRBR: Tell us about your current research.

HD: In the Gatfield lab, we are at the interface of two fields: RNA biology and circadian clocks. Personally I am focusing on how miRNAs integrate in shaping circadian gene expression. The importance of miRNA-mediated regulation of rhythmic gene expression has recently emerged owing to the observation that a large part of cyclic genes are actually generated by post-transcriptional mechanisms. We have used the *Dicer* knockout mice to address the role of miRNAs in circadian clocks and I welcome you to have a look at our publication in *eLife* 2014;3:e02510. For the next step, I am investigating the physiological functions of miRNAs in the core clock. I hope to present my new data in the next SRBR Meeting!



The Gatfield Group.

Obituary

A giant in the field of Chronobiology, Ron Konopka, passed away at his home in Pasadena, CA in February, 2015. His discovery of the period gene in *Drosophila* forever changed the field and provided direct evidence that a single gene can profoundly impact complex behaviors, a highly innovative and unexpected discovery at the time.

For more information, please see obituaries for Ron in the April issue of *JBR*, and the April 9 issue of *Cell*, as well as the Ron Konopka Tribute on Facebook at:

<https://www.facebook.com/pages/Ron-Konopka-Memorial/775670119184804>

Congratulations!!!! Recently Funded Grants

The information was gathered by searching publicly available databases (for the period from January 2015 to May 2015). Thanks to Samer Hattar, Mary Harrington, Marina Antoch, and Megan Hastings Hagenauer for putting this segment together.

NIH R01

PI: PORTER, WESTON W, TEXAS A&M AGRILIFE RESEARCH
Title: CIRCADIAN REGULATION OF PAH METABOLISM
Agency/PO: NIEHS/ REINLIB, LESLIE J.
Review Cmte: Special Emphasis Panel [ZRG1-DKUS-C (90)]

PI: BELL-PEDERSEN, DEBORAH, TEXAS A&M UNIVERSITY
Title: SYSTEMS BIOLOGY OF THE CIRCADIAN CLOCK OUTPUT NETWORK
Agency/PO: NIGMS/ SESMA, MICHAEL A.
Review Cmte: Special Emphasis Panel [ZRG1-GGG-R (02)]

PI: YOO, SEUNG-HEE, UNIVERSITY OF TEXAS HLTH SCI CTR HOUSTON
Title: REGULATION AND FUNCTION OF THE CIRCADIAN FACTOR PERIOD2
Agency/PO: NIGMS/ SESMA, MICHAEL A.
Review Cmte: Cellular Signaling and Regulatory Systems Study Section (CSRS)

PI: HATTAR, SAMER, JOHNS HOPKINS UNIVERSITY
Title: ROLE OF MAMMALIAN RETINAL PHOTORECEPTORS IN NON-IMAGE-FORMING VISUAL FUNCTIONS
Agency/PO: NIGMS/ SESMA, MICHAEL A.
Review Cmte: Neuroendocrinology, Neuroimmunology, Rhythms and Sleep Study Section (NNRS)

R21

PI: YIN, LEI/ UNIVERSITY OF MICHIGAN
Title: BMAL1: A NOVEL REGULATOR FOR INFLAMMATORY LIVER INJURY
Agency/PO: NIAAA/ JUNG, KATHY
Review Cmte: Health Services Research Review Subcommittee

PI: : COPENHAGEN, DAVID RICHARD/ UNIVERSITY OF CALIFORNIA, SAN FRANCISCO
Title: MELANOPSIN-MEDIATED LIGHT RESPONSES IN THE EMBRYONIC RETINA
Agency/PO: NEI / GREENWELL, THOMAS
Review Cmte: Neurotransmitters, Receptors, and Calcium Signaling Study Section (NTRC)

R15

PI: BELLIZZI, JOHN J/ UNIVERSITY OF TOLEDO
Title: STRUCTURE AND MECHANISM OF NOCTURNIN
Agency/PO: NIGMS/ SESMA, MICHAEL A.
Review Cmte: Macromolecular Structure and Function A Study Section (MSFA)

PI: REITZEL, ADAM MICHAEL/ UNIVERSITY OF NORTH CAROLINA CHARLOTTE
Title: BZIP PROTEIN FUNCTION IN AN ORGANISMAL MODEL FOR PERIPHERAL CIRCADIAN CLOCKS
Agency/PO: NIGMS/ SESMA, MICHAEL A.
Review Cmte: Special Emphasis Panel [ZRG1-MDCN-R (86)]

NSF

PI: Dmitri Nusinow, Donald Danforth Plant Science Center
Title: Uncovering the Molecular Mechanisms that Underlie Photoperiodic Control of Plant Growth
PO/Organization/Program: Kent Chapman, IOS, Physiolg Mechansms&Biomechancs, EXP PROG TO STIM COMP RES

PI: Albrecht von Arnim, University of Tennessee
Knoxville
Title: Diurnal and Circadian Regulation of Protein
Synthesis
PO/Organization/Program: Kent Chapman, IOS,
Physiolg Mechansms&Biomechancs

PIs: Wendy Smith, Rebeca Rosengaus, Northeastern
University
Title: REU Site: Biological Inquiry: From Molecules to
Organisms
PO/Organization/Program: Sally E. O'Connor, DBI, RSCH EXPER FOR UNDERGRAD SITES

PI: Joanna Chiu, University of California-Davis
Title: A comparative proteomic approach to understand
animal circadian clock
PO/Organization/Program: Edda (Floh) Thiels, IOS,
MODULATION

PI: Christine Merlin, Texas A&M University Main
Campus
Title: Circadian Clock Control of Seasonal Migration
PO/Organization/Program: Edda (Floh) Thiels, IOS,
MODULATION

Title: Deborah Gordon, Stanford University
Title: Meeting: It's about Time: Understanding
Temporal Variation in Animal Behavior, Anchorage,
Alaska, June 15, 2015
PO/Organization/Program: Tamra Mendelson, IOS,
ANIMAL BEHAVIOR