
Center for Chronobiology

CCB

Annual Review of the Organized Research Unit
Fiscal Year 2012



The University of California, San Diego
Center for Chronobiology



868

NARRATIVE

Director's Statement

Director's Statement

During our third year as an ORU, the Center for Chronobiology continued its mission to increase the visibility of CCB on campus and around the world as a premier center for chronobiology research and to facilitate interactions among members. We met these goals by: hosting local activities and outfitting facilities to engage our members and encourage interaction; expanding the content on an attractive and informative website; and hosting our 3rd annual symposium with top chronobiologist speakers from within CCB and around the world.

Staffing section - We have merged the External Advisory Committee and Executive Committee members into the Advisory Committee section since this report does not have a field for Executive Committee Members. All people included in the staffing section participate and contribute to the Center for Chronobiology.

The Facilities section lists 12,568 square feet for CCB. Most of this space belongs to the Division of Biological Sciences and is assigned as laboratory space occupied by CCB-member labs. The actual space allocation for CCB is 551 square feet. This includes two administrative offices and one small conference room.



Goals Met:

- Expanded the membership of the Center for Chronobiology ORU to 33 UCSD faculty members as of June 30, 2012
- Hosted subgroups of members for research collaboration meetings
- Held monthly meetings of the CCB Executive Committee
- Recruited additional outstanding external academic and business professionals to serve as members of the CCB External Advisory Committee which meets on an annual basis. The next meeting is scheduled on February 13, 2013.
- Hosted CCB symposia, workshops, and networking events to provide training of the fundamentals of Chronobiology to the science community.
- Coordinated "Clockwatchers" Journal Club to make CCB participants aware of current papers in the area of chronobiology. Clockwatchers meets twice per month, alternating between mammalian and non-mammalian papers.
- Expanded the content of our educational website <http://ccb.ucsd.edu/> with links for students and researchers in the Chronobiology communities that highlight classes, papers, events, organizations, and opportunities for fellowships, training, and grants.
- Recruited a new postdoc liaison to the CCB Executive Committee to integrate needs and ideas from CCB postdocs and graduate students.
- Established new collaborations among CCB members, including Kay (UCSD) – LiWang (UC Merced affiliate member)
- Submitted new grants and made new personnel appointments through CCB

Major Activities

CCB Symposium: From Cells to Clinic

(<http://ccb.ucsd.edu/ae-pastevents-Symp2012.shtml>)

The Center for Chronobiology (CCB) hosted its 3rd annual chronobiology symposium held on **February 15-17, 2012**. The theme for the symposium is "From Cells to Clinic."

We invited a select, stellar group of chronobiologists from around the country and beyond, and a few local colleagues, to speak at this 3rd annual UCSD Chronobiology Symposium. There was strong participation from our 33 PIs here in the CCB and their research personnel, as well as registrants from other institutions. Students from High Tech High attended the Friday afternoon session. We received \$18,500 in sponsorships from Eli Lilly, Janssen, ATTO and Stanford Photonics.

The aims of the conference were to:

1. Provide the 154 registered participants with a comprehensive view of modern Chronobiology.
2. Exchange a broad spectrum of ideas and techniques in Chronobiology.
3. Promote interactions among the faculty and lab personnel of the UCSD Chronobiology Center, the invited speakers, and other participants.
4. Further acquaint the speakers, their groups, and other registrants with the depth and breadth of Chronobiology research conducted at UCSD.





Invited Speakers:

Alex Webb

University Cambridge, UK

Andrew Huberman

UC San Diego

Andy LiWang

UC Merced

Gene Block

UCLA

Hiroki Ueda

RIKEN Center for Developmental
Biology, Japan

Ron Anafi

University of Pennsylvania

Joseph Takahashi

University of Texas
Southwestern Medical Center

Karl Obrietan

The Ohio State University

Katja Lamia

The Scripps Research Institute

Mark Rosekind

National Transportation
Safety Board

Mary Carskadon

Brown University

Mary Harrington

Smith College

Michael Gorman

UC San Diego

Michael Young

The Rockefeller University

Roger Tsien

UC San Diego

Sara Mednick

UC San Diego

Steven Brown

University of Zurich

Yi Liu

University of Texas
Southwestern Medical Center

CCB Fall Workshop on Biological Timing

(<http://ccb.ucsd.edu/ae-workshopFA2011.shtml>)

The Center for Chronobiology hosted a Fall Workshop on Biological Timing held on November 9, 2011, at UCSD Liechtag Biomedical Bldg. Rm 107 – School of medicine Campus. This workshop featured research presentations by faculty, postdoc, and graduate student members of CCB.

This workshop is tailored for our Postdocs and Grad Students, to give them a platform to talk about their research, hone their public speaking skills, and have the opportunity for faculty and audience members, to freely participate in a questions and answers sessions. One postdoc speaker from the 2011 workshop was chosen for a career-boosting invited speaker position in the February 2013 international symposium.

The Center for Chronobiology
Presents a Fall Workshop on
Biological Timing

8:30 am - 5:00 pm, Wednesday, November 9, 2011
Leichtag Biomedical Bldg, Rm 107, UCSD School of Medicine Campus

UCSD FACULTY, POSTDOCTORAL, and STUDENT SPEAKERS
Barrett Denis • Colleen Doherty • Claudia Lainscek
Jeanne Maglione • Michael McCarthy • Ben McKenna
Ariel Neikrug • Caroline Nievergelt • Elaine Tobin

UCSD Organizers:
Susan Golden, David Vetter, Stu Brody, Sonia Ancoli-Israel,
Michael Gorman, Michael McCarthy, Satish Panda

Center for Chronobiology website: <http://ccb.ucsd.edu/>

Speakers:

Barrett Deris, Graduate Student in Hwa Lab, UCSD
Ariel Neikrug, Graduate Student in Ancoli-Israel Lab, UCSD
Michael McCarthy, Assistant Professor of Psychiatry, UCSD
Claudia Lainscek, Staff Researcher in Sejnowski Lab, Salk Institute
Jeanne Maglione, Postdoc in Ancoli-Israel Lab, UCSD
Caroline Nievergelt, Assistant Professor of Psychiatry, UCSD
Colleen Doherty, Postdoc in Kay Lab, UCSD
Ben McKenna, Postdoc in Lisa Eyler Lab, UCSD
Elaine Tobin, Professor of Molecular, Cell and Developmental Biology, UCLA

Panel Discussions with:

Sonia Ancoli-Israel, Professor, UCSD
Stuart Brody, Professor Emeritus, UCSD
Susan Golden, Distinguished Professor, UCSD
Steve Kay, Dean/Professor, UCSD

There were 78 attendees.

Grants, Fellowships, & Gifts

Submission of Grant and Fellowship Applications

The Center for Chronobiology faculty members submitted a successful renewal proposal to the UCSD Chancellor's Collaboratories Program for Interdisciplinary Scholarships for graduate students. The project is entitled, "Emergent circadian waveforms from multiple component oscillators: computational, biosynthetic, microbial and vertebrate models." Combining microbial, mammalian, biosynthetic and computation approaches, this Collaboratory will undertake a novel examination of how plasticity in the daily shape (i.e., waveform) of circadian clocks derives from the interaction of their constituent parts. Knowledge of such interactions will advance basic science in engineering, ecology and cell biology and benefit society through implications ranging from scheduling of school days to mitigation of cancer risks for shift-workers. Each of the five graduate students was awarded approximately \$15,000.

The Center for Chronobiology submitted DARPA, NIH, BSF, and NSF proposals as well as several postdoctoral fellowship applications during 2011-2012.

Grants

- Awards
 - NIH R01 proposal, \$1,238,750, 4/1/11 – 3/31/15
 - NIH R01 proposal, \$1,554,377, 8/1/12 – 7/31/16
 - DOE Consortium with SD-CAB, \$463,500, 1/1/11 – 12/31/13
 - Life Tech, \$143,717, 11/1/11 – 10/31/13
 - California Energy Commission CILMSF contract, \$100,000, 8/2/11 – 6/30/14
 - President's Postdoctoral Fellowship awarded to Susan Cohen, \$49,900, 9/30/11– 8/31/12
 - NIH Postdoctoral Fellowship awarded to Ryan Shultzaberger, \$52,190, 4/1/12 – 3/31/13
- Pending Proposals
 - DARPA and NIH R01 proposals
 - 5 NIH and ACS postdoc fellowship proposals
- Chancellor's Office Interdisciplinary Collaboratories Project
 - 2010 – 2012
 - Supported 5 CCB graduate students: Gena Glickman (Psychology), Azim Khan (Psychology), Joyce Luke (Bioengineering), Brooks Taylor (Bioengineering), and Ben Sheredos (Philosophy)
- Industrial & gift support for symposia and CCB
 - \$18,500 in symposium sponsorships from Eli Lilly, Janssen, ATTO and Stanford Photonics

Committees & Meetings

Clockwatchers Journal Club

(<http://ccb.ucsd.edu/activitiesevents.shtml>)

"Clockwatchers" Journal Club



The “Clockwatchers” Journal Club was founded and organized by David Welsh, and is now coordinated through the CCB. The Clockwatchers group has met monthly since 2001, focusing on papers of interest in mammalian circadian rhythms. With the establishment of CCB, Clockwatchers was expanded in fall 2009 to meet twice per month, alternating between mammalian and non-mammalian papers to meet the needs of the full spectrum of the CCB members. The Clockwatchers group meets every 1st and 3rd Thursday during the academic year.

Executive Committee Members

Executive Committee Members



Michael Gorman (Psychology), Michael McCarthy (Psychiatry), Stuart Brody (Biological Sciences), David Welsh (Psychiatry), Susan Golden (Biological Sciences), Sonia Ancoli-Israel (Psychiatry), and Satchin Panda (Salk)

Dates of Executive Committee Meetings

July 15, 2011, August 26, 2011, September 23, 2011, October 21, 2011, November 18, 2011, January 20, 2012, March 16, 2012, April 20, 2012, May 25, 2012, June 15, 2012

External Advisory Committee



Joseph F. Amaral

Vice President of Corporate Office of Science & Technology Division of Johnson & Johnson Services, Inc., and Professor of Surgery at Brown University and Director of the Division of Minimally Invasive Surgery

Gene Block

Chancellor of UCLA and Professor of Psychiatry and Biobehavioral Sciences in the David Geffen School of Medicine and in Physiological Science in the College of Letters and Science, UCLA

Alexander Hoffmann

Professor of Chemistry and Biochemistry and Co-director of the Bioinformatics and Systems Biology Graduate Program, UC San Diego

Joseph Takahashi

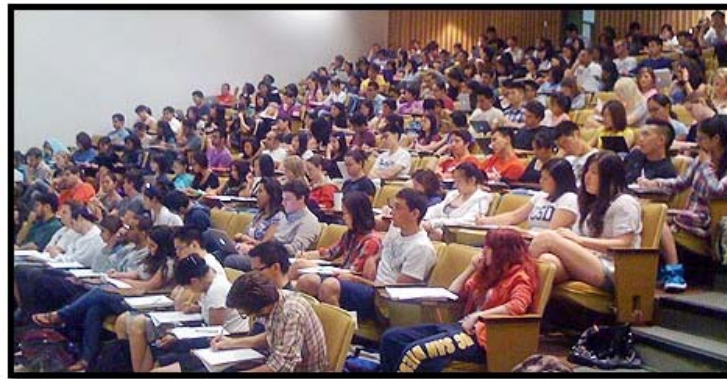
Loyd B. Sands Distinguished Chair in Neuroscience, University of Texas Southwestern Medical Center

Michael Young

Vice President for Academic Affairs and Richard and Jeanne Fisher Professor in the Laboratory of Genetics, The Rockefeller University

Phyllis Zee

Associate Director, Center for Sleep and Circadian Biology and Professor, Northwestern University Institute for Neuroscience

Courses**Circadian Rhythms – Biological Clocks Course BIMM116-PSYC133**

- Upper-level 4 credit-hour undergraduate course
- Taught jointly between the Division of Biological Sciences (BIMM 116) and the Department of Psychology (PSYC 133)
- Explores the fundamental properties and mechanisms of the daily biological clock in humans, other animals, plants, and microbes

- Graduate TAs from CCB labs in Biological Sciences, Philosophy, Psychology, and Psychiatry
- Fall course of 2011 had an enrollment of 300 students

Future Goals**CCB Goals for coming year:**

- Facilitate submissions to federal agencies and nonprofit foundations for collaborative research (such as program project, multi-investigator research, and training grants)
- Expand development efforts
- Develop chronobiology on-line tutorial courses and workshops
- Plan public lecture series and invite media
- Host 4th annual international symposium. Provide CME credit for physicians. Invite local high school students and UCSD alumni to attend Friday afternoon session.
- Plan workshop featuring a high-profile speaker in the Chronobiology field, as well as UCSD postdoc and graduate student speakers, who can share their research and hone their speaking skills
- Hold our 2nd annual CCB External Advisory Board meeting on February 13, 2013 with 2 new board members

The **Center for Chronobiology** (CCB) is an alliance of scientists, spanning basic researchers to clinicians, who investigate the internal timing mechanisms and rhythmic processes in living organisms. This ORU recognizes the extraordinary depth and breadth of research in biological timing at UCSD, and its establishment quickly brought attention to the CCB as an international center of excellence in the circadian rhythms field. The CCB fosters interaction among researchers in diverse fields to help them incorporate the study of daily rhythmicity into their biological studies, particularly as it relates to behavior, physiology, and medicine. The CCB advances innovative research that reveals the mechanisms, general principles, and applications of biological rhythms in diverse organisms and the implications of these rhythms on organismal health and fitness. Through our research in chronobiology we emphasize the training of future researchers. We mentor undergraduate, graduate, and post-doctoral students in cross-disciplinary research approaches. Outside the lab, opportunities for training include a bi-weekly, cross-disciplinary journal club, Clockwatchers, and a yearly workshop to highlight the research of junior researchers. Our annual CCB symposium, *From Cells to Clinic*, has become a premier meeting for the circadian field and attracts researchers from around the world to UCSD. Because of the importance of biological rhythms to human health we provide and disseminate materials for education and scientific advocacy on chronobiology, a topic of interest and broad societal relevance.

Awards, Honors, Committee Service

Please see the Director's Statement.

STAFFING

ADVISORY COMMITTEE

(13)

First Name	Last Name	Home Department	Appt. Date	End Date
Joseph	Amaral	Corporate Office of Science & Technology, Johnson & Johnson	05/01/2011	
Sonia	Ancoli-Israel	PSYCHIATRY	07/01/2009	
Gene	Block	UCLA, Psychiatry and Biobehavioral Sciences	05/01/2011	
Stuart	Brody	DIV BIOLOGICAL	07/01/2009	
Susan	Golden	DIV BIOLOGICAL	07/01/2009	
Michael	Gorman	PSYCHOLOGY	07/01/2009	
Alexander	Hoffmann	CHEMISTRY	05/01/2011	
Michael	McCarthy	Department of Psychiatry	05/01/2011	
Satchidananda	Panda	DIV BIOLOGICAL	07/01/2009	
Joseph	Takahashi	Univ. Texas Southwestern, Neurosciences	05/01/2011	
David	Welsh	PSYCHIATRY	07/01/2009	
Michael	Young	Rockefeller University, Academic Affairs and Genetics	05/01/2011	
Phyllis	Zee	Northwestern Univ., Neurobiology	05/01/2011	

DIRECTORS

(2)

First Name	Last Name	Home Department	Appt. Date	Appt. End
Susan	Golden	Biological Sciences	07/01/2009	6/30/2014
David	Welsh	Psychiatry	7/1/2010	6/30/2014

AFFILIATED FACULTY

(38)

First Name	Last Name	Home Department	Affiliation Date	End Date
Joseph	Amaral	Corporate Office of Science & Technology, Johnson & Johnson	05/01/2011	

Sonia	Ancoli-Israel	PSYCHIATRY	07/01/2009
William	Bechtel	PHILOSOPHY	07/01/2009
Gene	Block	UCLA, Physiological Science	05/01/2011
Stuart	Brody	DIV BIOLOGICAL	07/01/2009
Joanne	Chory	DIV BIOLOGICAL	07/01/2009
Sean	Drummond	PSYCHIATRY	07/01/2009
Jeffrey	Elliott	PSYCHIATRY	07/01/2009
Ronald	Evans	DIV BIOLOGICAL	07/01/2009
Susan	Golden	DIV BIOLOGICAL	07/01/2009
Michael	Gorman	PSYCHOLOGY	07/01/2009
Ralph	Greenspan	KAVLI INST BRAI	07/01/2009
Jeff	Hasty	DIV BIOLOGICAL	07/01/2009
Alexander	Hoffmann	CHEMISTRY	05/01/2011
Andrew	Huberman	NEUROBIOLOGY	01/01/2011
Terence	Hwa	PHYSICS	07/01/2009
William	Joiner	PHARMACOLOGY	07/01/2009
Alexander	Kauffman	REPRO MED	07/01/2009
Steve	Kay	DIV BIOLOGICAL	07/01/2009
Daniel	Kripke	PSYCHIATRY	07/01/2009
Katja	Lamia	TSRI, Chemical Physiology and Molecular Medicine	09/01/2010
Andy	LiWang	UC Merced, Quantitative and Systems Biology	09/01/2010
Michael	McCarthy	Department of Psychiatry	05/01/2011
Sara	Mednick	PSYCHIATRY	07/01/2009
Pamela	Mellon	REPRO MED	07/01/2009
Marc	Montminy	DIV BIOLOGICAL	07/01/2009
Caroline	Nievergelt	PSYCHIATRY	05/01/2011
Satchidananda	Panda	DIV BIOLOGICAL	07/01/2009
Barbara	Parry	PSYCHIATRY	07/01/2009
Jose	Pruneda-Paz	DIV BIOLOGICAL	07/01/2009
Timothy	Rickard	PSYCHOLOGY	07/01/2009
Nikolai	Rulkov	BioCircuits Institute	11/01/2010
Terry	Sejnowski	DIV BIOLOGICAL	09/01/2010
Joseph	Takahashi	Univ. Texas Southwestern, Neurosciences	05/01/2011
Lev	Tsimring	BioCircuits Institute	07/01/2010
David	Welsh	PSYCHIATRY	07/01/2009
Michael	Young	Rockefeller University, Academic Affairs and Genetics	05/01/2011
Phyllis	Zee	Northwestern Univ., Neurobiology	05/01/2011

RESEARCHERS

(24)

First Name	Last Name	Payroll Title	Appt. Date	End Date
Adele	Abrahamsen	Project Scientist (Non-Business/Engineering)	07/01/2009	
Chaix	Amandine	Associate Research Scientist (Non-Business/Engineering)	09/20/2011	
Manuel	Campos	Assistant Research Scientist (Non-Business/Engineering)	04/27/2011	
Anne-Laure	Huber	Associate Research Scientist (Non-Business/Engineering)	01/06/2012	

Darae	Jun	Assistant Project Scientist (Non-Business/Engineering)	04/26/2011
Earl	Kang	Associate Research Scientist (Non-Business/Engineering)	07/05/2011
Takeo	Katsuki	Assistant Project Scientist (Non-Business/Engineering)	07/01/2009
Sheena	Keding	Research Scientist (Non-Business/Engineering)	07/01/2009
Claudia	Lainscsek	Assistant Project Scientist (Non-Business/Engineering)	09/29/2011
Susan	Lawton	Project Scientist (Non-Business/Engineering)	02/19/2010
Hiep	Le	Assistant Research Scientist (Non-Business/Engineering)	07/01/2009
Lee	Lichter	Assistant Research Scientist (Non-Business/Engineering)	01/06/2012
Lianqi	Liu	Associate Project Scientist (Non-Business/Engineering)	07/01/2009
Jeanne	Maglione	Assistant Specialist	07/01/2009
Elizabeth	McDevitt	Research Scientist (Non-Business/Engineering)	04/27/2011
Charles	Meliska	Associate Project Scientist (Non-Business/Engineering)	07/01/2009
Loki	Natarajan	Associate Specialist	07/01/2009
Takako	Noguchi	Assistant Project Scientist (Non-Business/Engineering)	07/01/2009
Mark	Paddock	Project Scientist (Non-Business/Engineering)	11/11/2011
Stephanie	Papp	Research Scientist (Non-Business/Engineering)	09/01/2010
Stephanie	Ravelo	Associate Research Scientist (Non-Business/Engineering)	07/05/2011
Jenee	Wagner	Research Scientist (Non-Business/Engineering)	07/01/2009
Lexie	Wang	Assistant Research Scientist (Non-Business/Engineering)	09/28/2011
Susanna	Wang	Assistant Specialist	07/01/2009

POST DOCS

(47)

First Name	Last Name	Payroll Title	Appt. Date	End Date
Dawn	Adin	Postdoctoral Scholar-Employee	07/01/2009	09/01/2011
Rozi	Andretic	Postdoctoral Scholar-Employee	03/12/2012	
Kenyon	Applebee	Postdoctoral Scholar-Fellow	06/30/2011	
Bridget	Baumgartner	Postdoctoral Scholar-Employee	07/01/2009	
Stephen	Beesley	Postdoctoral Scholar-Employee	04/12/2011	
Katia	Bonaldi	Postdoctoral Scholar-Employee	07/05/2011	
Juliana	Bordowitz	Postdoctoral Scholar-Fellow	07/01/2009	
Joseph	Boyd	Postdoctoral Scholar-Employee	10/11/2011	
Melissa	Brayman	Postdoctoral Scholar-Employee	06/30/2011	
John	Buchner	Postdoctoral Scholar-Employee	07/01/2009	09/01/2011
Marcela	Carvallo-Pinto	Postdoctoral Scholar-Employee	07/01/2009	
Brenda	Chow	Postdoctoral Scholar-Employee	04/27/2011	
Susan	Cohen	Postdoctoral Scholar-Fellow	07/01/2009	
Barrett	Deris	Postdoctoral Scholar-Employee	07/01/2009	
Andriy	Didovyk	Postdoctoral Scholar-Employee	12/13/2011	
Stacie	Dilks	Postdoctoral Scholar-Employee	12/28/2011	

Luciano	DiTacchio	Postdoctoral Scholar-Employee	07/01/2009
Colleen	Doherty	Postdoctoral Scholar-Employee	07/01/2009
Erin	Dunn	Postdoctoral Scholar-Employee	06/29/2011
Joshua	Gendron	Postdoctoral Scholar-Employee	07/01/2009
Christine	Glidewell-Kenney	Postdoctoral Scholar-Employee	06/30/2011
Megumi	Hatori	Postdoctoral Scholar-Employee	07/01/2009
Anne	Helfer	Postdoctoral Scholar-Employee	07/01/2009
Tsuyoshi	Hirota	Postdoctoral Scholar-Employee	07/01/2009
Hanne	Hoffmann	Postdoctoral Scholar-Employee	06/30/2011
Sabine	Jordan	Postdoctoral Scholar-Employee	06/29/2011
Minsu	Kim	Postdoctoral Scholar-Employee	07/01/2009
Yong Ick	Kim	Postdoctoral Scholar-Fellow	07/01/2009
Elsebeth	Kolmos	Postdoctoral Scholar-Employee	07/01/2009
Dominic	Landgraf	Postdoctoral Scholar-Employee	01/06/2012
William	Mather	Postdoctoral Scholar-Employee	07/01/2009
Faruck	Morcos	Postdoctoral Scholar-Employee	07/01/2010
Ludovic	Mure	Postdoctoral Scholar-Employee	03/29/2011
Dawn	Nagel	Postdoctoral Scholar-Employee	07/01/2009
Marian	Nohales Zafra	Postdoctoral Scholar-Employee	05/11/2012
Dmitri A	Nusinow	Postdoctoral Scholar-Employee	07/01/2009
Henry	Orff	Postdoctoral Scholar-Fellow	07/01/2009
Mariko	Sawa	Postdoctoral Scholar-Employee	07/01/2009
Glen	Seidner	Postdoctoral Scholar-Employee	02/09/2011
Sheila	Semaan	Postdoctoral Scholar-Employee	07/01/2009
Ryan	Shultzaberger	Postdoctoral Scholar-Employee	07/01/2009
Ryan	Simkovsky	Postdoctoral Scholar-Employee	04/26/2011
Tim	Sonntag	Postdoctoral Scholar-Employee	07/05/2011
Arnaud	Taton	Postdoctoral Scholar-Employee	04/26/2011
Meilin	Wu	Postdoctoral Scholar-Employee	07/01/2009
Huimin	Xie	Postdoctoral Scholar-Employee	06/30/2011
Amir	Zarrinpar	Postdoctoral Scholar-Employee	04/27/2011

STAFF

(17)

First Name	Last Name	Payroll Title	Start Date	End Date
Anna	Bree	Staff Research Assoc II	07/01/2009	09/01/2011
Sangeeta	Dhamija	Staff Research Assoc II	07/01/2009	
Tanja	Diemer	Staff Research Assoc II	07/27/2011	
Elizabeth	Hamilton	Staff Research Assoc II	07/01/2009	
Joshua	Kim	Staff Research Assoc II	06/30/2011	
Jonathan	Lam	Assistant III	04/26/2011	
Sunamita	Leming	Staff Research Assoc II	06/30/2011	
Ana M.	Lopez	Staff Research Assoc II	07/01/2009	
Patricia	Magallanez	Admin. Specialist	01/20/2010	99/99/9999
Luis Fernando	Martinez	Staff Research Assoc II	07/01/2009	
Jason	Meadows	Staff Research Assoc II	06/30/2011	
Natalia	Navarro Moreno	Staff Research Assoc II	07/05/2011	
Terry	Peters	Management Services Officer II	09/02/2009	99/99/9999

Lily	Quiroz	Staff Research Assoc I	07/01/2009
Diane	Sorenson	Staff Research Assoc I	07/01/2009
Blake	Trial	Staff Research Assoc I	07/01/2009
Heather (Hongbing)	Wei	Staff Research Assoc II	01/07/2012

STUDENTS

(46)

First Name	Last Name	Home Department	Status	Begin Date	End Date
Ann	Atwood	Div Biological Sciences	Graduate Student Volunteer	07/01/2009	
Julie	Avanzino	Department of Psychiatry	Undergraduate	01/07/2012	
Daniel	Burnston	Philosophy	Graduate Student Volunteer	07/29/2011	
Jason	Chen	Div Biological Sciences	Undergraduate	06/29/2011	
Natalie	Cookson	BioCircuits Institute	Graduate Student Volunteer	07/01/2009	
Anthony	Daulo	Div Biological Sciences	Undergraduate	07/01/2009	
Keval	Desai	Div Biological Sciences	Undergraduate	04/26/2011	
Spencer	Diamond	Div Biological Sciences	Graduate Student Volunteer	04/26/2011	
Malcom	Fernandes	Psychiatry	Undergraduate	06/29/2011	
Mike	Ferry	BioCircuits Institute	Graduate Student Volunteer	07/01/2009	
Shubhroz	Gill	Salk Institute	Graduate Student Volunteer	07/01/2009	
Gena	Glickman	Psychology	Graduate Student Volunteer	07/01/2009	
Andrew	Gross	Bioinformatics Department	Undergraduate	01/07/2012	
Elizabeth	Harrison	Psychology	Graduate Student Volunteer	07/01/2009	
Michelle	Hoang	Div Biological Sciences	Undergraduate	04/26/2011	
Polly	Huang	Reproductive Medicine	Graduate Student Volunteer	06/30/2011	
Jeremy	Johnson	Department of Psychology	Undergraduate	02/07/2012	
Darae	Jun	Div Biological Sciences	Undergraduate	04/26/2011	
Shannon	Kang	Div Biological Sciences	Undergraduate	06/29/2011	
Azim	Khan	Psychology & Reproductive Medicine	Graduate Student Volunteer	07/01/2009	
David	Kochman	Pharmacology	Graduate Student Volunteer	06/29/2011	
Martin	Kolnik	Bioengineering	Graduate Student Volunteer	07/01/2009	
Stephen	Leung	Div Biological Sciences	Undergraduate	04/26/2011	
Joyce	Luke	Bioengineering	Graduate Student Volunteer	07/01/2009	
Zachary	Marnoy	Department of Psychiatry	Undergraduate	01/24/2012	
Ben	McKenna	Psychiatry	Graduate Student Volunteer	07/01/2009	
Octavio	Mondragon	Bioengineering	Graduate Student Volunteer	07/01/2009	

Ariel	Neikrug	Psychiatry	Graduate Student Volunteer	07/01/2009
Jeff	Nelson	Div Biological Sciences	Graduate Student Volunteer	07/01/2009
Matthew	Poling	Reproductive Medicine	Graduate Student Volunteer	07/01/2009
Pagkapol	Pongsawakul	Div Biological Sciences	Graduate Student Volunteer	07/01/2009
Qays	Poonawala	Department of Psychology	Undergraduate	11/22/2011
Arthur	Prindle	Bioengineering	Graduate Student Volunteer	07/01/2009
Evan	Raiewski	Psychology	Graduate Student Volunteer	07/01/2009
Ivan	Razinkov	Bioengineering	Graduate Student Volunteer	07/01/2009
Jim	Robinson	Pharmacology	Graduate Student Volunteer	06/29/2011
Jangir	Selimkhanov	Bioengineering	Undergraduate	07/01/2009
Benjamin	Sheredos	Philosophy	Graduate Student Volunteer	07/01/2009
Susan	Sinning	Psychology	Graduate Student Volunteer	07/01/2009
Jonathan	Sun	Department of Psychology	Undergraduate	01/07/2012
Karen	Tang	Div Biological Sciences	Undergraduate	06/29/2011
Brooks	Taylor	Bioengineering	Graduate Student Volunteer	07/01/2009
Andrewston	Ting	Div Biological Sciences	Undergraduate	06/29/2011
Minh	Tong	Kavli Inst for Brain & Mind	Undergraduate	07/01/2009
Shabnam	Vahidpour	Department of Pharmacology	Graduate Student Volunteer	01/07/2012
Simone	Yassear	Div Biological Sciences	Undergraduate	06/29/2011

VISITORS

(4)

First Name	Last Name	Home Institution	Begin Date	End Date
Maria Jose	Iglesias Sanchez	Centro Universitario De Plasencia, Spain	06/18/2012	09/30/2012
Martin	Mulligan	Memorial University of Newfoundland, Canada	03/01/2012	03/20/2012
Suzette	Ruiz	Volunteer with Dept of Psychiatry, UCSD	06/29/2011	
Jun	Zhang	Xiamen University, China	01/24/2012	02/24/2013

PPS Head Count

	2012
Career Staff	2
Graduate Students	2
Other - In Residence	0
Other Academics	0
Postdoc Fellow/Postdoc Grad Res	7
Regular Faculty	0

Researchers	0
TA/Reader/Tutor	0
Temp Faculty	0
Temporary Staff	3
Total	14

FACILITIES

	2012
Academic Office	755
Administrative Office	281
Conference Room	270
Research Lab / Studio Service	454
Research Laboratory / Studio	7,657
Research Office	2,170
Research Office Service	195
Study Room	786
Totals (assignable sq. ft.)	12,568

INCOME

Balance Forward

	2012	Total
418833	370,042	370,042
— <i>Oru-Center For Chronobiology</i>		
Total	370,042	\$370,042

Permanent Budget

	2012	Total
418833	172,700	172,700
— <i>Oru-Center For Chronobiology</i>		
Total	172,700	\$172,700

Transfers

	2012	Total
418833	53,000	53,000
Total	53,000	\$53,000

Contract and Grant Allocations - Unit Code: 432

Sponsor Category Totals - Unit Code: 432

	Transactions	Direct	Indirect	Total
Federal	1	200,000	109,750	309,750
Interest Group	0	0	0	0
Higher Education	0	0	0	0
UC Campus	0	0	0	0
Foundation	0	0	0	0
Other Government	0	0	0	0
Business	0	0	0	0
Other Charitable	0	0	0	0
State	0	0	0	0
DOE Labs	0	0	0	0
Totals	1	200,000	109,750	\$ 309,750

User Reported Income

	418833	Total
CEC contract-fund 18797A	50,000	50,000
DOE grant-fund 28475A	154,750	154,750
Fellowships	102,090	102,090
Gifts	17,390	17,390
Life Technologies contract-fund 87925A	143,717	143,717
Registration fees	3,733	3,733
Service Agreements	0	0
Totals	471,680	\$ 471,680

EXPENSE

Expense Summary

	418833	Total
Academic Salaries	307,295	307,295
Benefits	107,122	107,122
Equipment	0	0
General Assistance	9,714	9,714
Indirect Costs	233,680	233,680
Recharge Income	0	0
Staff Salaries	102,636	102,636
Supplies	103,126	103,126
Transfers In	1,113	1,113
Travel	26,776	26,776
Totals	891,461	\$ 891,461

Expense By Program

	2012	Total
Core Account Research	889,237	889,237
General Instruction	1,263	1,263
Totals	890,500	\$890,500

EVENTS

SEMINARS (14)

Title: A blind circadian clock in cavefish reveals that opsins mediate peripheral clock photoreception

Date: 2011-10-05

Presenter(s): David Welsh

Location: AP&M, 2840

Title: Flexibility of the C-terminal, or CII, ring of KaiC governs the rhythm of the circadian clock of cyanobacteria

Date: 2011-10-19

Presenter(s): Yong-Ick Kim

Location: AP&M, 2840

Title: Development, maturation, and necessity of transcription factors in the mouse suprachiasmatic nucleus

Date: 2011-11-02

Presenter(s): Dan Clark

Location: AP&M, 2840

Title: Evolutionary principles of design in the cyanobacterial clock

Date: 2011-11-16

Presenter(s): Rama Ranhanathan

Location: AP&M, 2840

Title: The period of the circadian oscillator is primarily determined by the balance between casein kinase 1 and protein phosphatase 1

Date: 2011-12-07

Presenter(s): Stephen Beesley

Location: AP&M, 2840

Title: Tuning the mammalian circadian clock: robust synergy of two loops

Date: 2012-01-04

Presenter(s): Bill Bechtel

Location: AP&M, 2840

Title: Timing of plant immune responses by a central circadian regulator

Date: 2012-01-18

Presenter(s): Anne Helfer

Location: AP&M, 2840

Title: A molecular mechanism for circadian clock negative feedback

Date: 2012-02-01

Presenter(s): Yhew Pongsawakul

Location: AP&M, 2840

Title: NaV1.1 channels are critical for intercellular communication in the suprachiasmatic nucleus and for normal circadian rhythms

Date: 2012-03-07

Presenter(s): Takako Noguchi

Location: AP&M, 2840

Title: Arabidopsis circadian clock protein, TOC1, is a DNA-binding transcription factor

Date: 2012-03-21

Presenter(s): Joshua Gendron

Location: AP&M, 2840

Title: Circadian transcriptional regulation by the posttranslational oscillator without de novo clock gene expression in *Synechococcus*

Date: 2012-04-19

Presenter(s): Susan Cohen

Location: AP&M, 2840

Title: Two papers will be presented: A molecular switch for photoperiod responsiveness in mammals AND Acute induction of *Eya3* by late-night light stimulation triggers TSHbeta expression in photoperiodism

Date: 2012-05-03

Presenter(s): Dan Kripke

Location: AP&M, 2840

Title: Phase-dependent generation and transmission of time information by the KaiABC circadian clock oscillator through SasA-KaiC interaction in cyanobacteria

Date: 2012-05-17

Presenter(s): Julie Bordowitz

Location: AP&M, 2840

Title: Nature paper about evolutionary conservation of peroxiredoxin rhythms

Date: 2012-06-07

Presenter(s): Tanja Diemer

Location: AP&M, 2840

LECTURES (0)

CONFERENCES (2)

Title: CCB Fall Workshop on Biological Timing

Date: 2011-11-09

Presenter(s): B.Deris, A.Neikrug, M.McCarthy, C.Lainscsek, J.Maglione, C.Nievergelt, C.Doherty, B.McKenna, E.Tobin, S.Ancoli-Israel, S.Golden, S.Brody, S.Kay

Location: Leichtag Biomedical Bldg. Rm 107 - School of Medicine Campus, UCSD

Title: CCB Symposium: From Cells to Clinic Feb 15-17, 2012

Date: 2012-02-15

Presenter(s): A.Webb, A.Huberman, A.LiWang, G.Block, H.Ueda, R.Anafi, J.Takahashi, K.Obrietan, K.Lamia, M.Rosekind, M.Carskadon, M.Harrington, M.Gorman, M.Young, R.Tsien, S.Mednick, S.Brown, Y.Liu

Location: Institute of Americas, UCSD

OTHER (0)

PUBLICATIONS

JOURNALS (146)

A computational model for the modulation of the prepulse inhibition of the acoustic startle reflex. Ramirez-Moreno, D.F., and T.J. Sejnowski. *Biological Cybernetics*. (106):169-176.(2012)

A Drosophila Model of Williams Syndrome. Greenspan, R.J., and J. Wagner. *Annals of Neurology*. (70):S45-S45.(2011)

A Longitudinal Analysis of the Relations Among Stress, Depressive Symptoms, Leisure Satisfaction, and Endothelial Function in Caregivers. Mausbach, B.T., E. Chattillion, S.K. Roepke, M.G. Ziegler, M. Milic, R. von Kanel, J.E. Dimsdale, P.J. Mills, T.L. Patterson, M.A. Allison, S. Ancoli-Israel, and I. Grant. *Health Psychology*. (31):433-440.(2012)

A sensing array of radically coupled genetic 'biopixels'. Prindle, A., P. Samayoa, I. Razinkov, T. Danino, L.S. Tsimring, and J. Hasty. *Nature*. (481):39-44.(2012)

A Survey of Genomic Studies Supports Association of Circadian Clock Genes with Bipolar Disorder Spectrum Illnesses and Lithium Response. McCarthy, M.J., C.M. Nievergelt, J.R. Kelsoe, and D.K. Welsh. *Plos One*. (7).(2012)

An opportunistic theory of cellular and systems consolidation. Mednick, S.C., D.J. Cai, T. Shuman, S. Anagnostaras, and J.T. Wixted. *Trends in Neurosciences*. (34):504-514.(2011)

Analysis of 94 Candidate Genes and 12 Endophenotypes for Schizophrenia From the Consortium on the Genetics of Schizophrenia. Greenwood, T.A., L.C. Lazzeroni, S.S. Murray, K.S. Cadenhead, M.E. Calkins, D.J. Dobie, M.F. Green, R.E. Gur, R.C. Gur, G. Hardiman, J.R. Kelsoe, S. Leonard, G.A. Light, K.H. Nuechterlein, A. Olincy, A.D. Radant, N.J. Schork, L.J. Seidman, L.J. Siever, J.M. Silverman, W.S. Stone, N.R. Swerdlow, D.W. Tsuang, M.T. Tsuang, B.I. Turetsky, R. Freedman, and D.L. Braff. *American Journal of Psychiatry*. (168):930-946.(2011)

Androgen Receptor Repression of GnRH Gene Transcription. Brayman, M.J., P.A. Pepa, S.E. Berdy, and P.L. Mellon. *Molecular Endocrinology*. (26):2-13.(2012)

Antagonistic gene transcripts regulate adaptation to new growth environments. Baumgartner, B.L., M.R. Bennett, M. Ferry, T.L. Johnson, L.S. Tsimring, and J. Hasty. *Proceedings of the National Academy of Sciences of the United States of America*. (108):21087-21092.(2011)

Arabidopsis circadian clock protein, TOC1, is a DNA-binding transcription factor. Gendron, J.M., J.L. Pruneda-Paz, C.J. Doherty, A.M. Gross, S.E. Kang, and S.A. Kay. *Proceedings of the National Academy of Sciences of the United States of America*. (109):3167-3172.(2012)

Assessment of Epigenetic Contributions to Sexually-Dimorphic Kiss1 Expression in the Anteroventral Periventricular Nucleus of Mice. Semaan, S.J., S. Dhamija, J. Kim, E.C. Ku, and A.S. Kauffman. *Endocrinology*. (153):1875-1886.(2012)

Association Between Insomnia Symptoms and Weight Change in Older Women: Caregiver-Study of Osteoporotic Fractures Study. Ross, C., S. Ancoli-Israel, S. Redline, K. Stone, and L. Fredman. *Journal of the American Geriatrics Society*. (59):1697-1704.(2011)

Association of Incident Cardiovascular Disease With Periodic Limb Movements During Sleep in Older Men Outcomes of Sleep Disorders in Older Men (MrOS) Study. Koo, B.B., T. Blackwell, S. Ancoli-Israel, K.L. Stone, M.L. Stefanick, S. Redline, and O.S. Osteoporotic Fractures Men Mr. *Circulation*. (124):1223-1231.(2011)

Association of Sleep Characteristics and Cognition in Older Community-Dwelling Men: the MrOS Sleep Study. Blackwell, T., K. Yaffe, S. Ancoli-Israel, S. Redline, K.E. Ensrud, M.L. Stefanick, A. Laffan, K.L. Stone, and O.S.S. Osteoporotic Fractures Men Mr. *Sleep*. (34):1347-1356.(2011)

Associations Between Sleep Architecture and Sleep-Disordered Breathing and Cognition in Older Community-Dwelling Men: The Osteoporotic Fractures in Men Sleep Study. Blackwell, T., K. Yaffe, S. Ancoli-Israel, S. Redline, K.E. Ensrud, M.L. Stefanick, A. Laffan, K.L. Stone, and S. Osteoporotic Fractures Men. *Journal of the American Geriatrics Society*. (59):2217-2225.(2011)

Autonomic and Hemodynamic Origins of Pre-Hypertension Central Role of Heredity. Davis, J.T., F.W. Rao, D. Naqshbandi, M.M. Fung, K.X. Zhang, A.J. Schork, C.M. Nievergelt, M.G. Ziegler, and D.T. O'Connor. *Journal of the American College of Cardiology*. (59):2206-2216.(2012)

- Autonomic and Hemodynamic Origins of Prehypertension: Central Role of Heredity. Davis, J.T., F.W. Rao, D. Naqshbandi, M.M. Fung, K.X. Zhang, A.J. Schork, C.M. Nievergelt, M.G. Ziegler, and D.T. O'Connor. *American Journal of Kidney Diseases*. (59):A30-A30.(2012)
- Bacterial growth laws and their applications. Scott, M., and T. Hwa. *Current Opinion in Biotechnology*. (22):559-565.(2011)
- Behavioral and neurochemical consequences of cortical oxidative stress on parvalbumin-interneuron maturation in rodent models of schizophrenia. Powell, S.B., T.J. Sejnowski, and M.M. Behrens. *Neuropharmacology*. (62):1322-1331.(2012)
- Biomarkers of PTSD: Neuropeptides and immune signaling. Baker, D.G., C.M. Nievergelt, and D.T. O'Connor. *Neuropharmacology*. (62):663-673.(2012)
- Biophysical Neural Spiking, Bursting, and Excitability Dynamics in Reconfigurable Analog VLSI. Yu, T., T.J. Sejnowski, and G. Cauwenberghs. *Ieee Transactions on Biomedical Circuits and Systems*. (5):420-429.(2011)
- Brassinosteroids modulate the efficiency of plant immune responses to microbe-associated molecular patterns. Belkhadir, Y., Y. Jaillais, P. Epple, E. Balsemao-Pires, J.L. Dangl, and J. Chory. *Proceedings of the National Academy of Sciences of the United States of America*. (109):297-302.(2012)
- Brief morning light treatment for sleep/wake disturbances in older memory-impaired individuals and their caregivers. Friedman, L., A.P. Spira, B. Hernandez, C. Mather, J. Sheikh, S. Ancoli-Israel, J.A. Yesavage, and J.M. Zeitzer. *Sleep Medicine*. (13):546-549.(2012)
- Bright Light Therapy Protects Women from Circadian Rhythm Desynchronization During Chemotherapy for Breast Cancer. Neikrug, A.B., M. Rissling, V. Trofimenko, L.Q. Liu, L. Natarajan, S. Lawton, B.A. Parker, and S. Ancoli-Israel. *Behavioral Sleep Medicine*. (10):202-216.(2012)
- Cadherin-6 Mediates Axon-Target Matching in a Non-Image-Forming Visual Circuit. Osterhout, J.A., N. Josten, J. Yamada, F. Pan, S.W. Wu, P.L. Nguyen, G. Panagiotakos, Y.U. Inoue, S.F. Egusa, B. Volgyi, T. Inoue, S.A. Bloomfield, B.A. Barres, D.M. Berson, D.A. Feldheim, and A.D. Huberman. *Neuron*. (71):632-639.(2011)
- Cardiometabolic Effects in Caregivers of Nursing Home Placement and Death of Their Spouse with Alzheimer's Disease. von Kanel, R., B.T. Mausbach, J.E. Dimsdale, P.J. Mills, T.L. Patterson, S. Ancoli-Israel, M.G. Ziegler, S.K. Roepke, E.A. Chattillion, M. Allison, and I. Grant. *Journal of the American Geriatrics Society*. (59):2037-2044.(2011)
- Cell-autonomous circadian clock of hepatocytes drives rhythms in transcription and polyamine synthesis. Atwood, A., R. DeConde, S.S. Wang, T.C. Mockler, J.S.M. Sabir, T. Ideker, and S.A. Kay. *Proceedings of the National Academy of Sciences of the United States of America*. (108):18560-18565.(2011)
- Cell-autonomous hepatic circadian clock regulates polyamine synthesis. Atwood, A., and S.A. Kay. *Cell Cycle*. (11):422-423.(2012)
- Circadian activity rhythms and risk of incident dementia and mild cognitive impairment in older women. Tranah, G.J., T. Blackwell, K.L. Stone, S. Ancoli-Israel, M.L. Paudel, K.E. Ensrud, J.A. Cauley, S. Redline, T.A. Hillier, S.R. Cummings, K. Yaffe, and S.O.F.R. Grp. *Annals of Neurology*. (70):722-732.(2011)
- Clinical correlates of periodic limb movements in sleep in Parkinson's disease. Covassin, N., A.B. Neikrug, L.Q. Liu, J. Corey-Bloom, J.S. Lored, B.W. Palmer, J. Maglione, and S. Ancoli-Israel. *Journal of the Neurological Sciences*. (316):131-136.(2012)
- Controlling a lamprey-based robot with an electronic nervous system. Westphal, A., N.F. Rulkov, J. Ayers, D. Brady, and M. Hunt. *Smart Structures and Systems*. (8):39-52.(2011)
- Conversion of tryptophan to indole-3-acetic acid by TRYPTOPHAN AMINOTRANSFERASES OF ARABIDOPSIS and YUCCAs in Arabidopsis. Won, C., X.L. Shen, K. Mashiguchi, Z.Y. Zheng, X.H. Dai, Y.F. Cheng, H. Kasahara, Y. Kamiya, J. Chory, and Y.D. Zhao. *Proceedings of the National Academy of Sciences of the United States of America*. (108):18518-18523.(2011)
- Corepressive interaction and clustering of degrade-and-fire oscillators. Fernandez, B., and L.S. Tsimring. *Physical Review E*. (84).(2011)
- CREB involvement in the regulation of striatal prodynorphin by nicotine. McCarthy, M.J., A.M. Duchemin, N.H. Neff, and M. Hadjiconstantinou. *Psychopharmacology*. (221):143-153.(2012)

- CREB Is Activated by Muscle Injury and Promotes Muscle Regeneration. Stewart, R., L. Flechner, M. Montminy, and R. Berdeaux. *Plos One*. (6).(2011)
- Crosstalk in Cellular Signaling: Background Noise or the Real Thing?. Vert, G., and J. Chory. *Developmental Cell*. (21):985-991.(2011)
- Cryptochrome 1 and phytochrome B control shade-avoidance responses in Arabidopsis via partially independent hormonal cascades. Keller, M.M., Y. Jaillais, U.V. Pedmale, J.E. Moreno, J. Chory, and C.L. Ballare. *Plant Journal*. (67):195-207.(2011)
- Cryptochromes mediate rhythmic repression of the glucocorticoid receptor. Lamia, K.A., S.J. Papp, R.T. Yu, G.D. Barish, N.H. Uhlentaut, J.W. Jonker, M. Downes, and R.M. Evans. *Nature*. (480):552-U183.(2011)
- Decreased Slow Wave Sleep Increases Risk of Developing Hypertension in Elderly Men. Fung, M.M., K. Peters, S. Redline, M.G. Ziegler, S. Ancoli-Israel, E. Barrett-Connor, K.L. Stone, and G. Osteoporotic Fractures Men Res. *Hypertension*. (58):596-U159.(2011)
- Delayed sleep phase syndrome is related to seasonal affective disorder. Lee, H.J., K.M. Rex, C.M. Nievergelt, J.R. Kelsoe, and D.F. Kripke. *Journal of Affective Disorders*. (133):573-579.(2011)
- Depressive Symptoms and Subjective and Objective Sleep in Community-Dwelling Older Women. Maglione, J.E., S. Ancoli-Israel, K.W. Peters, M.L. Paudel, K. Yaffe, K.E. Ensrud, and K.L. Stone. *Journal of the American Geriatrics Society*. (60):635-643.(2012)
- Desensitization of delta-opioid receptors in nucleus accumbens during nicotine withdrawal. McCarthy, M.J., H.L. Zhang, N.H. Neff, and M. Hadjiconstantinou. *Psychopharmacology*. (213):735-744.(2011)
- Development, Sex Steroid Regulation, and Phenotypic Characterization of RFamide-Related Peptide (Rfrp) Gene Expression and RFamide Receptors in the Mouse Hypothalamus. Poling, M.C., J. Kim, S. Dhamija, and A.S. Kauffman. *Endocrinology*. (153):1827-1840.(2012)
- Direct-coupling analysis of residue coevolution captures native contacts across many protein families. Morcos, F., A. Pagnani, B. Lunt, A. Bertolino, D.S. Marks, C. Sander, R. Zecchina, J.N. Onuchic, T. Hwa, and M. Weigt. *Proceedings of the National Academy of Sciences of the United States of America*. (108):E1293-E1301.(2011)
- Do No Harm: Not Even to Some Degree. Kripke, D.F., R.D. Langer, and L.E. Kline. *Journal of Clinical Sleep Medicine*. (8):353-354.(2012)
- Downregulation of Parvalbumin at Cortical GABA Synapses Reduces Network Gamma Oscillatory Activity. Volman, V., M.M. Behrens, and T.J. Sejnowski. *Journal of Neuroscience*. (31):18137-18148.(2011)
- Drosophila QVR/SSS Modulates the Activation and C-Type Inactivation Kinetics of Shaker K⁺ Channels. Dean, T., R. Xu, W. Joiner, A. Sehgal, and T. Hoshi. *Journal of Neuroscience*. (31):11387-11395.(2011)
- Effect of Alzheimer Caregiving on Circulating Levels of C-Reactive Protein and Other Biomarkers Relevant to Cardiovascular Disease Risk: A Longitudinal Study. von Kanel, R., P.J. Mills, B.T. Mausbach, J.E. Dimsdale, T.L. Patterson, M.G. Ziegler, S. Ancoli-Israel, M. Allison, E.A. Chattillion, and I. Grant. *Gerontology*. (58):354-365.(2012)
- Effect of Chronic Dementia Caregiving and Major Transitions in the Caregiving Situation on Kidney Function: A Longitudinal Study. von Kanel, R., B.T. Mausbach, J.E. Dimsdale, P.J. Mills, T.L. Patterson, S. Ancoli-Israel, M.G. Ziegler, S.K. Roepke, E.A. Chattillion, M. Allison, and I. Grant. *Psychosomatic Medicine*. (74):214-220.(2012)
- Effect of three weeks of continuous positive airway pressure treatment on mood in patients with obstructive sleep apnoea: A randomized placebo-controlled study. Lee, I.S., W. Bardwell, S. Ancoli-Israel, J.S. Loreda, and J.E. Dimsdale. *Sleep Medicine*. (13):161-166.(2012)
- Enhanced Y1H assays for Arabidopsis. Gaudinier, A., L.F. Zhang, J.S. Reece-Hoyes, M. Taylor-Teeples, L. Pu, Z.J. Liu, G. Breton, J.L. Pruneda-Paz, D. Kim, S.A. Kay, A.J.M. Walhout, D. Ware, and S.M. Brady. *Nature Methods*. (8):1053-+.(2011)
- Entrainment of a Population of Synthetic Genetic Oscillators. Mondragon-Palomino, O., T. Danino, J. Selimkhanov, L. Tsimring, and J. Hasty. *Science*. (333):1315-1319.(2011)

- Expanding Poststroke Depression Research: Movement Toward a Dyadic Perspective. McCarthy, M.J., K.S. Lyons, and L.E. Powers. *Topics in Stroke Rehabilitation*. (18):450-460.(2011)
- Explaining pathological changes in axonal excitability through dynamical analysis of conductance-based models. Coggan, J.S., G.K. Ocker, T.J. Sejnowski, and S.A. Prescott. *Journal of Neural Engineering*. (8).(2011)
- Fast stochastic algorithm for simulating evolutionary population dynamics. Mather, W.H., J. Hasty, and L.S. Tsimring. *Bioinformatics*. (28):1230-1238.(2012)
- Fatigue and sleep quality are associated with changes in inflammatory markers in breast cancer patients undergoing chemotherapy. Liu, L.Q., P.J. Mills, M. Rissling, L. Fiorentino, L. Natarajan, J.E. Dimsdale, G.R. Sadler, B.A. Parker, and S. Ancoli-Israel. *Brain Behavior and Immunity*. (26):706-713.(2012)
- Fatigue in sleep apnea: The role of depressive symptoms and self-reported sleep quality. Stepnowsky, C.J., J.J. Palau, T. Zamora, S. Ancoli-Israel, and J.S. Lored. *Sleep Medicine*. (12):832-837.(2011)
- Fibroblast Circadian Rhythms of PER2 Expression Depend on Membrane Potential and Intracellular Calcium. Noguchi, T., C.W. Wang, H.Y. Pan, and D.K. Welsh. *Chronobiology International*. (29):653-664.(2012)
- Finding the Event Structure of Neuronal Spike Trains. Toups, J.V., J.M. Fellous, P.J. Thomas, T.J. Sejnowski, and P.H. Tiesinga. *Neural Computation*. (23):2169-2208.(2011)
- Flexibility of the C-terminal, or CII, ring of KaiC governs the rhythm of the circadian clock of cyanobacteria. Chang, Y.G., N.W. Kuo, R. Tseng, and A. LiWang. *Proceedings of the National Academy of Sciences of the United States of America*. (108):14431-14436.(2011)
- FOXL2 Is Involved in the Synergy between Activin and Progestins on the Follicle-Stimulating Hormone beta-Subunit Promoter. Ghochani, Y., J.K. Saini, P.L. Mellon, and V.G. Thackray. *Endocrinology*. (153):2023-2033.(2012)
- Functional genetic variation in the Rev-Erbalpha pathway and lithium response in the treatment of bipolar disorder. McCarthy, M.J., C.M. Nievergelt, T. Shekhtman, D.F. Kripke, D.K. Welsh, and J.R. Kelsoe. *Genes Brain Behav*. (10):852-861.(2011)
- Further evidence for linkage of bipolar disorder to chromosomes 6 and 17 in a new independent pedigree series. Greenwood, T.A., C.M. Nievergelt, A.D. Sadovnick, R.A. Remick, P.E. Keck, S.L. McElroy, T. Shekhtman, R. McKinney, and J.R. Kelsoe. *Bipolar Disorders*. (14):71-79.(2012)
- Gene length may contribute to graded transcriptional responses in the *Drosophila* embryo. McHale, P., C.M. Mizutani, D. Kosman, D.L. MacKay, M. Belu, A. Hermann, W. McGinnis, E. Bier, and T. Hwa. *Developmental Biology*. (360):230-240.(2011)
- Gene Transfer in *Leptolyngbya* sp Strain BL0902, a Cyanobacterium Suitable for Production of Biomass and Bioproducts. Taton, A., E. Lis, D.M. Adin, G. Dong, S. Cookson, S.A. Kay, S.S. Golden, and J.W. Golden. *Plos One*. (7).(2012)
- Generalization and Multirate Models of Motor Adaptation. Tanaka, H., J.W. Krakauer, and T.J. Sejnowski. *Neural Computation*. (24):939-966.(2012)
- Genes Involved in Sex Pheromone Discrimination in *Drosophila melanogaster* and Their Background-Dependent Effect. Houot, B., S. Fraichard, R.J. Greenspan, and J.F. Ferveur. *Plos One*. (7).(2012)
- Genomics-aided structure prediction. Sulkowska, J.I., F. Morcos, M. Weigt, T. Hwa, and J.N. Onuchic. *Proceedings of the National Academy of Sciences of the United States of America*. (109):10340-10345.(2012)
- GIGANTEA directly activates Flowering Locus T in *Arabidopsis thaliana*. Sawa, M., and S.A. Kay. *Proceedings of the National Academy of Sciences of the United States of America*. (108):11698-11703.(2011)
- Hip pain while using lower extremity joints and sleep disturbances in elderly white women: Results from a cross-sectional analysis. Parimi, N., T. Blackwell, K.L. Stone, L.Y. Lui, S. Ancoli-Israel, G.J. Tranah, T.A. Hillier, M.E. Nevitt, N.E. Lane, and S. Study Osteoporotic Fractures. *Arthritis Care & Research*. (64):1070-1078.(2012)

Histone Lysine Demethylase JARID1a Activates CLOCK-BMAL1 and Influences the Circadian Clock. DiTacchio, L., H.D. Le, C. Vollmers, M. Hatori, M. Witcher, J. Secombe, and S. Panda. *Science*. (333):1881-1885.(2011)

Inositol-1,4,5-trisphosphate receptor regulates hepatic gluconeogenesis in fasting and diabetes. Wang, Y.G., G. Li, J. Goode, J.C. Paz, K.F. Ouyang, R. Screaton, W.H. Fischer, J. Chen, I. Tabas, and M. Montminy. *Nature*. (485):128-U166.(2012)

Interactions between Core and Matrix Thalamocortical Projections in Human Sleep Spindle Synchronization. Bonjean, M., T. Baker, M. Bazhenov, S. Cash, E. Halgren, and T. Sejnowski. *Journal of Neuroscience*. (32):5250-5263.(2012)

Interplay between spontaneous and induced brain activity during human non-rapid eye movement sleep. Dang-Vu, T.T., M. Bonjean, M. Schabus, M. Boly, A. Darsaud, M. Desseilles, C. Degueldre, E. Balteau, C. Phillips, A. Luxen, T.J. Sejnowski, and P. Maquet. *Proceedings of the National Academy of Sciences of the United States of America*. (108):15438-15443.(2011)

Isothermal titration calorimetry and surface plasmon resonance allow quantifying substrate binding to different binding sites of *Bacillus subtilis* xylanase. Cuyvers, S., E. Dornez, M. Abou Hachem, B. Svensson, M. Hothorn, J. Chory, J.A. Delcour, and C.M. Courtin. *Analytical Biochemistry*. (420):90-92.(2012)

Large-scale genome-wide association analysis of bipolar disorder identifies a new susceptibility locus near ODZ4. Sklar, P., S. Ripke, L.J. Scott, O.A. Andreassen, S. Cichon, N. Craddock, H.J. Edenberg, J.I. Nurnberger, M. Rietschel, D. Blackwood, A. Corvin, M. Flickinger, W.H. Guan, M. Mattingsdal, A. McQuillin, P. Kwan, T.F. Wienker, M. Daly, F. Dudbridge, P.A. Holmans, D.Y. Lin, M. Burmeister, T.A. Greenwood, M.L. Hamshere, P. Muglia, E.N. Smith, P.P. Zandi, C.M. Nievergelt, R. McKinney, P.D. Shilling, N.J. Schork, C.S. Bloss, T. Foroud, D.L. Koller, E.S. Gershon, C.Y. Liu, J.A. Badner, W.A. Scheftner, W.B. Lawson, E.A. Nwulia, M. Hipolito, W. Coryell, J. Rice, W. Byerley, F.J. McMahon, T.G. Schulze, W. Berrettini, F.W. Lohoff, J.B. Potash, P.B. Mahon, M.G. McInnis, S. Zollner, P. Zhang, D.W. Craig, S. Szlinger, T.B. Barrett, R. Breuer, S. Meier, J. Strohmaier, S.H. Witt, F. Tozzi, A. Farmer, P. McGuffin, J. Strauss, W. Xu, J.L. Kennedy, J.B. Vincent, K. Matthews, R. Day, M.A. Ferreira, C. O'Dushlaine, R. Perlis, S. Raychaudhuri, D. Ruderfer, P.L. Hyoun, J.W. Smoller, J. Li, D. Absher, R.C. Thompson, F.G. Meng, A.F. Schatzberg, W.E. Bunney, J.D. Barchas, E.G. Jones, S.J. Watson, R.M. Myers, H. Akil, M. Boehnke, K. Chambert, J. Moran, E. Scolnick, S. Djurovic, I. Melle, G. Morken, M. Gill, D. Morris, E. Quinn, T.W. Muhleisen, F.A. Degenhardt, M. Mattheisen, et al. *Nature Genetics*. (43):977-U162.(2011)

Leisure activities, caregiving demands and catecholamine levels in dementia caregivers. Chattillion, E.A., B.T. Mausbach, S.K. Roepke, R. von Kanel, P.J. Mills, J.E. Dimsdale, M. Allison, M.G. Ziegler, T.L. Patterson, S. Ancoli-Israel, and I. Grant. *Psychology & Health*. (27):1134-1149.(2012)

Lethal mitochondrial cardiomyopathy in a hypomorphic Med30 mouse mutant is ameliorated by ketogenic diet. Krebs, P., W.W. Fan, Y.H. Chen, K. Tobita, M.R. Downes, M.R. Wood, L. Sun, X.H. Li, Y. Xia, N. Ding, J.M. Spaeth, E.M.Y. Moresco, T.G. Boyer, C.W.Y. Lo, J. Yen, R.M. Evans, and B. Beutler. *Proceedings of the National Academy of Sciences of the United States of America*. (108):19678-19682.(2011)

Light treatment prevents fatigue in women undergoing chemotherapy for breast cancer. Ancoli-Israel, S., M. Rissling, A. Neikrug, V. Trofimenko, L. Natarajan, B.A. Parker, S. Lawton, P. Desan, and L.Q. Liu. *Supportive Care in Cancer*. (20):1211-1219.(2012)

Linking photoreceptor excitation to changes in plant architecture. Li, L., K. Ljung, G. Breton, R.J. Schmitz, J. Pruneda-Paz, C. Cowing-Zitron, B.J. Cole, L.J. Ivans, U.V. Pedmale, H.S. Jung, J.R. Ecker, S.A. Kay, and J. Chory. *Genes & Development*. (26):785-790.(2012)

Mechanism and Biological Explanation. Bechtel, W. *Philosophy of Science*. (78):533-557.(2011)

Molecular Organization of *Drosophila* Neuroendocrine Cells by Dimmed. Park, D., T. Hadzic, P. Yin, J. Rusch, K. Abruzzi, M. Rosbash, J.B. Skeath, S. Panda, J.V. Sweedler, and P.H. Taghert. *Current Biology*. (21):1515-1524.(2011)

mTOR links incretin signaling to HIF induction in pancreatic beta cells. Van de Velde, S., M.F. Hogan, and M. Montminy. *Proceedings of the National Academy of Sciences of the United States of America*. (108):16876-16882.(2011)

Mutational analysis of the *needin* gene in patients with congenital isolated hypogonadotropic hypogonadism. Beneduzzi, D., A.K. Iyer, E.B. Trarbach, A.P. Silveira-Neto, L.G. Silveira, C. Tusset, K. Yip, B.B. Mendonca, P.L. Mellon, and A.C. Latronico. *European Journal of Endocrinology*. (165):145-150.(2011)

NCoR1 Is a Conserved Physiological Modulator of Muscle Mass and Oxidative Function. Yamamoto, H., E.G. Williams, L. Mouchiroud, C. Canto, W.W. Fan, M. Downes, C. Heligon, G.D. Barish, B. Desvergne, R.M. Evans, K. Schoonjans, and J. Auwerx. *Cell*. (147):827-839. (2011)

Network Structure and Sensitivity to the Geometry of Stimuli in Epilepsy and Cognition. Ohayon, E.L., A. Lam, and T.J. Sejnowski. *Annals of Neurology*. (70):S84-S84. (2011)

Overcoming Fluctuation and Leakage Problems in the Quantification of Intracellular 2-Oxoglutarate Levels in *Escherichia coli*. Yan, D.L., P. Lenz, and T. Hwa. *Applied and Environmental Microbiology*. (77):6763-6771. (2011)

Pathway-Specific Genetic Attenuation of Glutamate Release Alters Select Features of Competition-Based Visual Circuit Refinement. Koch, S.M., C.G. Dela Cruz, T.S. Hnasko, R.H. Edwards, A.D. Huberman, and E.M. Ullian. *Neuron*. (71):235-242. (2011)

Pattern of trauma determines the threshold for epileptic activity in a model of cortical deafferentation. Volman, V., M. Bazhenov, and T.J. Sejnowski. *Proceedings of the National Academy of Sciences of the United States of America*. (108):15402-15407. (2011)

Patterns of plant subcellular responses to successful oomycete infections reveal differences in host cell reprogramming and endocytic trafficking. Lu, Y.J., S. Schornack, T. Spallek, N. Geldner, J. Chory, S. Schellmann, K. Schumacher, S. Kamoun, and S. Robatzek. *Cellular Microbiology*. (14):682-697. (2012)

PEAR model and sleep outcomes in dementia caregivers: influence of activity restriction and pleasant events on sleep disturbances. Moore, R.C., A.L. Harmell, E. Chattillion, S. Ancoli-Israel, I. Grant, and B.T. Mausbach. *International Psychogeriatrics*. (23):1462-1469. (2011)

Persistent Cell-Autonomous Circadian Oscillations in Fibroblasts Revealed by Six-Week Single-Cell Imaging of PER2::LUC Bioluminescence. Leise, T.L., C.W. Wang, P.J. Gitis, and D.K. Welsh. *Plos One*. (7). (2012)

PharmGKB summary: carbamazepine pathway. Thorn, C.F., S.G. Leckband, J. Kelsoe, J.S. Leeder, D.J. Muller, T.E. Klein, and R.B. Altman. *Pharmacogenetics and Genomics*. (21):906-910. (2011)

Phytochrome signaling mechanisms and the control of plant development. Chen, M., and J. Chory. *Trends in Cell Biology*. (21):664-671. (2011)

Polymorphisms in melatonin synthesis pathways: possible influences on depression. Kripke, D.F., C.M. Nievergelt, G.J. Tranah, S.S. Murray, M.J. McCarthy, K.M. Rex, N. Parimi, and J.R. Kelsoe. *J Circadian Rhythms*. (9):8. (2011)

Predictors of Risk and Resilience for Posttraumatic Stress Disorder Among Ground Combat Marines: Methods of the Marine Resiliency Study. Baker, D.G., W.P. Nash, B.T. Litz, M.A. Geyer, V.B. Risbrough, C.M. Nievergelt, D.T. O'Connor, G.E. Larson, N.J. Schork, J.J. Vasterling, P.S. Hammer, J.A. Webb-Murphy, and M.R.S. Team. *Preventing Chronic Disease*. (9). (2012)

Preliminary Evidence for a Relationship Between Sleep Disturbance and Global Attributional Style in Depression. Haynes, P.L., S. Ancoli-Israel, C.M. Walter, and J.R. McQuaid. *Cognitive Therapy and Research*. (36):140-148. (2012)

Quantifying the sequence-function relation in gene silencing by bacterial small RNAs. Hao, Y., Z.J. Zhang, D.W. Erickson, M. Huang, Y.W. Huang, J.B. Li, T. Hwa, and H.L. Shi. *Proceedings of the National Academy of Sciences of the United States of America*. (108):12473-12478. (2011)

Queueing up for enzymatic processing: correlated signaling through coupled degradation. Cookson, N.A., W.H. Mather, T. Danino, O. Mondragon-Palomino, R.J. Williams, L.S. Tsimring, and J. Hasty. *Molecular Systems Biology*. (7). (2011)

Recent advances in single-cell studies of gene regulation. Selimkhanov, J., J. Hasty, and L.S. Tsimring. *Current Opinion in Biotechnology*. (23):34-40. (2012)

Receptor targets for antidepressant therapy in bipolar disorder: An overview. Fountoulakis, K.N., J.R. Kelsoe, and H. Akiskal. *Journal of Affective Disorders*. (138):222-238. (2012)

Regulation of circadian behaviour and metabolism by REV-ERB-alpha and REV-ERB-beta. Cho, H., X. Zhao, M. Hatori, R.T. Yu, G.D. Barish, M.T. Lam, L.W. Chong, L. DiTacchio, A.R. Atkins, C.K. Glass, C. Liddle, J. Auwerx, M. Downes, S. Panda, and R.M.

Evans.Nature. (485):123-127.(2012)

Relating Bayes to cognitive mechanisms. Herschbach, M., and W. Bechtel.Behavioral and Brain Sciences. (34).(2011)

Relationship between chronic stress and carotid intima-media thickness (IMT) in elderly Alzheimer's disease caregivers. Roepke, S.K., M. Allison, R. Von Konel, B.T. Mausbach, E.A. Chattillion, A.L. Harmell, T.L. Patterson, J.E. Dimsdale, P.J. Mills, M.G. Ziegler, S. Ancoli-Israel, and I. Grant.Stress-the International Journal on the Biology of Stress. (15):121-129.(2012)

Relationship of menopausal status and climacteric symptoms to sleep in women undergoing chemotherapy. Rissling, M.B., L.Q. Liu, L. Natarajan, F. He, and S. Ancoli-Israel.Supportive Care in Cancer. (19):1107-1115.(2011)

Relationship of morningness-eveningness questionnaire score to melatonin and sleep timing, body mass index and atypical depressive symptoms in peri- and post-menopausal women. Meliska, C.J., L.F. Martinez, A.M. Lopez, D.L. Sorenson, S. Nowakowski, and B.L. Parry.Psychiatry Research. (188):88-95.(2011)

Reliability and Validity of the Pittsburgh Sleep Quality Index and the Epworth Sleepiness Scale in Older Men. Spira, A.P., S.A. Beaudreau, K.L. Stone, E.J. Kezirian, L.Y. Lui, S. Redline, S. Ancoli-Israel, K. Ensrud, A. Stewart, and S. Osteoporotic Fractures Men.Journals of Gerontology Series a-Biological Sciences and Medical Sciences. (67):433-439.(2012)

Sequential Establishment of Stripe Patterns in an Expanding Cell Population. Liu, C.L., X.F. Fu, L.L. Liu, X.J. Ren, C.K.L. Chau, S.H. Li, L. Xiang, H.L. Zeng, G.H. Chen, L.H. Tang, P. Lenz, X.D. Cui, W. Huang, T. Hwa, and J.D. Huang.Science. (334):238-241.(2011)

Sexually Dimorphic Testosterone Secretion in Prenatal and Neonatal Mice Is Independent of Kisspeptin-Kiss1r and GnRH Signaling. Poling, M.C., and A.S. Kauffman.Endocrinology. (153):782-793.(2012)

Single Nucleotide Polymorphisms and Haplotypes in Native American Populations. Kidd, J.R., F. Friedlaender, A.J. Pakstis, M. Furtado, R.X. Fang, X.D. Wang, C.M. Nievergelt, and K.K. Kidd.American Journal of Physical Anthropology. (146):495-502.(2011)

Sleep Characteristics of Self-Reported Long Sleepers. Patel, S.R., T. Blackwell, S. Ancoli-Israel, K.L. Stone, and O.S. Osteoporotic Fractures Men Mr.Sleep. (35):641-648.(2012)

Sleep in Spousal Alzheimer Caregivers: A Longitudinal Study with a Focus on the Effects of Major Patient Transitions on Sleep. von Kanel, R., B.T. Mausbach, S. Ancoli-Israel, J.E. Dimsdale, P.J. Mills, T.L. Patterson, M.G. Ziegler, S.K. Roepke, E.A. Chattillion, M. Allison, and I. Grant.Sleep. (35):247-255.(2012)

Sleep-Disordered Breathing, Hypoxia, and Risk of Mild Cognitive Impairment and Dementia in Older Women. Yaffe, K., A.M. Laffan, S.L. Harrison, S. Redline, A.P. Spira, K.E. Ensrud, S. Ancoli-Israel, and K.L. Stone.Jama-Journal of the American Medical Association. (306):613-619.(2011)

Specificity of learning through memory retrieval practice: The case of addition and subtraction. Bajic, D., J. Kwak, and T.C. Rickard.Psychonomic Bulletin & Review. (18):1148-1155.(2011)

Speed, Sensitivity, and Bistability in Auto-activating Signaling Circuits. Hermsen, R., D.W. Erickson, and T. Hwa.Plos Computational Biology. (7).(2011)

Stripe Formation in Bacterial Systems with Density-Suppressed Motility. Fu, X.F., L.H. Tang, C.L. Liu, J.D. Huang, T. Hwa, and P. Lenz.Physical Review Letters. (108).(2012)

Structural basis for cytokinin recognition by Arabidopsis thaliana histidine kinase 4. Hothorn, M., T. Dabi, and J. Chory.Nature Chemical Biology. (7):766-768.(2011)

Temporal orchestration of circadian autophagy rhythm by C/EBP beta. Ma, D., S. Panda, and J.D.D. Lin.Embo Journal. (30):4642-4651. (2011)

Temporally Restricted Feeding Prevents Obesity and Other Metabolic Disorders Associated With High Fat Diet in Mice. Zarrinpar, A., C. Vollmers, and S. Panda.Gastroenterology. (142):S14-S14.(2012)

- Thalamic Burst Firing Propensity: A Comparison of the Dorsal Lateral Geniculate and Pulvinar Nuclei in the Tree Shrew. Wei, H.Y., M. Bonjean, H.M. Petry, T.J. Sejnowski, and M.E. Bickford. *Journal of Neuroscience*. (31):17287-17299.(2011)
- The Brain Activity Map Project and the Challenge of Functional Connectomics. Alivisatos, A.P., M.Y. Chun, G.M. Church, R.J. Greenspan, M.L. Roukes, and R. Yuste. *Neuron*. (74):970-974.(2012)
- The Consensus Sleep Diary: Standardizing Prospective Sleep Self-Monitoring. Carney, C.E., D.J. Buysse, S. Ancoli-Israel, J.D. Edinger, A.D. Krystal, K.L. Lichstein, and C.M. Morin. *Sleep*. (35):287-302.(2012)
- The effect of neural adaptation on population coding accuracy. Cortes, J.M., D. Marinazzo, P. Series, M.W. Oram, T.J. Sejnowski, and M.C.W. van Rossum. *Journal of Computational Neuroscience*. (32):387-402.(2012)
- The Effects of Two Types of Sleep Deprivation on Visual Working Memory Capacity and Filtering Efficiency. Drummond, S.P.A., D.E. Anderson, L.D. Straus, E.K. Vogel, and V.B. Perez. *Plos One*. (7).(2012)
- The ELF4-ELF3-LUX complex links the circadian clock to diurnal control of hypocotyl growth. Nusinow, D.A., A. Helfer, E.E. Hamilton, J.J. King, T. Imaizumi, T.F. Schultz, E.M. Farre, and S.A. Kay. *Nature*. (475):398-U161.(2011)
- The eyes are the window to the brain: reviewing oculomotor abnormalities in obsessive-compulsive disorder. McCarthy, M.J. *Acta Psychiatrica Scandinavica*. (124):85-86.(2011)
- The Longitudinal Relationship between Fatigue and Sleep in Breast Cancer Patients Undergoing Chemotherapy. Liu, L.Q., M. Rissling, L. Natarajan, L. Fiorentino, P.J. Mills, J.E. Dimsdale, G.R. Sadler, B.A. Parker, and S. Ancoli-Israel. *Sleep*. (35):237-245.(2012)
- The metabolome of induced pluripotent stem cells reveals metabolic changes occurring in somatic cell reprogramming. Panopoulos, A.D., O. Yanes, S. Ruiz, Y.S. Kida, D. Diep, R. Tautenhahn, A. Herrerias, E.M. Batchelder, N. Plongthongkum, M. Lutz, W.T. Berggren, K. Zhang, R.M. Evans, G. Siuzdak, and J.C.I. Belmonte. *Cell Research*. (22):168-177.(2012)
- The Road Not Taken: Creative Solutions Require Avoidance of High-Frequency Responses. Gupta, N., Y. Jang, S.C. Mednick, and D.E. Huber. *Psychological Science*. (23):288-294.(2012)
- Thyroid hormone receptor repression is linked to type I pneumocyte-associated respiratory distress syndrome. Pei, L.M., M. Leblanc, G. Barish, A. Atkins, R. Nofsinger, J. Whyte, D. Gold, M.X. He, K. Kawamura, H.R. Li, M. Downes, R.T. Yu, H.C. Powell, J.B. Lingrel, and R.M. Evans. *Nature Medicine*. (17):1466-U1172.(2011)
- Time-Restricted Feeding without Reducing Caloric Intake Prevents Metabolic Diseases in Mice Fed a High-Fat Diet. Hatori, M., C. Vollmers, A. Zarrinpar, L. DiTacchio, E.A. Bushong, S. Gill, M. Leblanc, A. Chaix, M. Joens, J.A.J. Fitzpatrick, M.H. Ellisman, and S. Panda. *Cell Metabolism*. (15):848-860.(2012)
- Topological basis of epileptogenesis in a model of severe cortical trauma. Volman, V., T.J. Sejnowski, and M. Bazhenov. *Journal of Neurophysiology*. (106):1933-1942.(2011)
- Toward a generalized theory of the shift to retrieval in cognitive skill learning. Bajic, D., and T.C. Rickard. *Memory & Cognition*. (39):1147-1161.(2011)
- Trans-resveratrol inhibits phosphorylation of Smad2/3 and represses FSH beta gene expression by a SirT1-independent pathway in L beta T2 gonadotrope cells. Lan, D.B., M. Lu, S. Sharma, P.L. Mellon, J.M. Olefsky, and N.J.G. Webster. *Reproductive Toxicology*. (32):85-92.(2011)
- Transcriptional code and disease map for adult retinal cell types. Siegert, S., E. Cabuy, B.G. Scherf, H. Kohler, S. Panda, Y.Z. Le, H.J. Fehling, D. Gaidatzis, M.B. Stadler, and B. Roska. *Nature Neuroscience*. (15):487-U191.(2012)
- Treating nightmares and insomnia in posttraumatic stress disorder: A review of current evidence. Nappi, C.M., S.P.A. Drummond, and J.M.H. Hall. *Neuropharmacology*. (62):576-585.(2012)
- Tumor suppressor protein (p)53, is a regulator of NF-kappa B repression by the glucocorticoid receptor. Murphy, S.H., K. Suzuki, M. Downes, G.L. Welch, P. De Jesus, L.J. Miraglia, A.P. Orth, S.K. Chanda, R.M. Evans, and I.M. Verma. *Proceedings of the National*

Academy of Sciences of the United States of America. (108):17117-17122.(2011)

Twice Daily Melatonin Peaks in Siberian but not Syrian Hamsters under 24 h Light:Dark:Light:Dark Cycles. Raiewski, E.E., J.A. Elliott, J.A. Evans, G.L. Glickman, and M.R. Gorman.Chronobiology International. (29):1206-1215.(2012)

Understanding the Human Brain. Brenner, S., and T.J. Sejnowski.Science. (334):567-567.(2011)

Validation of the Pittsburgh Sleep Quality Index and the Epworth Sleepiness Scale in older black and white women. Beaudreau, S.A., A.P. Spira, A. Stewart, E.J. Kezirian, L.Y. Lui, K. Ensrud, S. Redline, S. Ancoli-Israel, K.L. Stone, and F. Study Osteoporotic.Sleep Medicine. (13):36-42.(2012)

Visual Cognition: Rats Compare Shapes Among the Crowd. Cruz-Martin, A., and A.D. Huberman.Current Biology. (22):R18-R20.(2012)

Wavelet Measurement Suggests Cause of Period Instability in Mammalian Circadian Neurons. Meeker, K., R. Harang, A.B. Webb, D.K. Welsh, F.J. Doyle, G. Bonnet, E.D. Herzog, and L.R. Petzold.Journal of Biological Rhythms. (26):353-362.(2011)

What can mice tell us about how vision works?. Huberman, A.D., and C.M. Niell.Trends in Neurosciences. (34):464-473.(2011)

Wiring visual circuits, one eye at a time. El Danaf, R.N., and A.D. Huberman.Nature Neuroscience. (15):172-174.(2012)

Wylie Vale: Neuroendocrine master. Montminy, M., K.F. Lee, J.E. Rivier, C. Rivier, and S. Reichlin.Proceedings of the National Academy of Sciences of the United States of America. (109):3604-3605.(2012)

Yeast Dynamically Modify Their Environment to Achieve Better Mating Efficiency. Jin, M., B. Errede, M. Behar, W. Mather, S. Nayak, J. Hasty, H.G. Dohlman, and T.C. Elston.Science Signaling. (4).(2011)

CONFERENCE PAPERS (0)

WEB PUBLICATIONS (0)

BOOKS (0)

OTHER (0)
