

**ORU Annual Report**  
Final Template for FY16/17

**Center for Circadian Biology (formerly Center for Chronobiology)**  
**Year of Establishment: 2009**  
**Location: UC San Diego**  
**Report Period: FY 2016/17**

**ORU's Major Activities**

**Progress towards previous goals:**

1. Increasing diversity in CCB activities, both through invitations to future events that better represent different groups, and targeted outreach. Increased diversity of invited speakers.
2. Submitting group grant proposals. Submitted MRPI, Keck Foundation.
3. Hosting successful workshops and symposia. Hosted fall trainee/faculty workshop, winter symposium, public outreach workshop, all well-attended and well-received.
4. Increasing corporate sponsorships to fund activities. Successful fundraising to enable planning of subsequent year's events; planned sponsored workshop for Philips Respironics.
5. Continuing to encourage members to participate more and to submit grants through CCB.
6. Increasing communication with members; added new members, improved website.
7. Supporting media connections for interviews and articles, connecting media and journalists to the best circadian specialists for their need. Added "Clocks in the News" section to website.
8. Extended outreach by sponsoring trainee seminars at local California universities.
9. Initiated international collaboration after trip to Australia organized by UCSD Office of Research Affairs in December 2016.

**Highlights:**

**Summer July-Aug 2016**

- Planning for 4th annual CCB "Workshop on Sleep, Health and Work Schedules" (Formerly called "Workshop on Circadian Rhythms and Shiftwork"), held Feb 2017 in concert with the "From Cells to Clinic" symposium (continued no registration fee policy).
- Vigorous fundraising (Sonia Ancoli-Israel, Susan Golden, David Welsh, Terry Peters, Pattie Magallanez).
- 3 new members added, one member left UCSD.
- Gorman and Golden deploy online tutorials for 250-student clocks class. Materials were created by S. Golden HHMI Professor grant project "The BioClock Studio"
- Panda's lighting app (Myclocks) upgraded with funding from the Frontiers grant.

### **September 2016**

- CCB trainee Bartłomiej Borek gave a seminar at Sonoma State as part of a training and outreach plan for the center launch program

### **November 2016**

- CCB Fall Workshop with guest speaker Mitch Lazar (U Penn), guest trainees Tracey Hermanstynne (Wash U; URM), and Andrew Patton (Cambridge), plus 6 CCB trainees and 1 faculty speaker, and a professional development session
- CCB members Evans, Golden, Lamia, Panda appointed to organizing committee for 2018 Salk/Ipsen/Science Symposium on Biological Complexity: Biology of Time

### **December 2016**

- UC Multicampus Research Programs and Initiatives proposal declined
- Dorothy Sears invited to Executive Committee (accepted)
- McCarthy joined Office of Research Affairs trip to Australia to explore collaboration possibilities (University of Sydney)

### **January 2017**

- Golden - Keck Foundation concept paper with JCVI (J. Craig Venter Institute) was selected from across campus and with Keck deliberation for a full proposal, submitted through CCB (later notified not selected for funding)

### **February 2017**

- Annual meeting of the External Advisory Board in conjunction with the CCB Symposium
- 8th annual CCB Symposium *"From Cells to Clinic"*. This event is an annual highlight of CCB, known throughout the international community as an exceptional meeting. Featured 18 speakers (six women, one Latin American, one African American), 160 attendees, from over 39 institutions and companies. Undergraduate students from the BioClock Studio participated as mic runners, interviewers, registration assistants, and poster presenters
- CCB "Workshop on Sleep, Health and Work Schedules" targeted for shiftworkers in the community. The workshop was held in concert with the symposium to leverage outside speakers. Featured 4 speakers, attracted 65 attendees, which included US Navy, firefighters, dentist, CEO, Nursing Instructor, UCSD medical students, and faculty from UCSD and other Institutions
- Trainees A. Kriebs and D. Duglan (Lamia lab) and member Brody initiate "Clocks in the News" contributions for CCB website, contributing 12 articles in 2017
- Indo-US program conference in India as part of the Indo-US Science and Technology Forum (Gorman/Panda)

### **March 2017**

- CCB members of Salk/Ipsen/Science meeting organizing committee help to finalize program for January 2018 conference. Successfully negotiated for top trainee speaker from CCB fall workshop 2017 to have a speaking slot at the conference
- Initiated discussions with D. White to present workshop for Philips employees and collaborators on clinical topics relevant to circadian rhythms and health/disease

### **May 2017**

- CCB offers support letters for grant submissions to CCB members (ten letters requested)
- Chronobiology Collaboration between Pharmacy and CCB initiated through meeting of Brody with Pharmacy Dean. Talks continued through summer with Brody and Sears meeting with

small group of PIs, followed by larger group. Profile of CCB member expertise in preparation for sharing with potential collaborators

- Science writer Leslie Kaufman contacted CCB members for a feature in *Popular Science* regarding circadian biology.

### June 2017

- Journalist Mark Kaufman of *Popular Science*, *Scientific American*, *Inverse*, reached out to CCB to help with his story about Sleep and Climate Change (distinct from L. Kaufman article)

## ORU's Committees

### Executive Committee and Advisory Committee Meetings

Executive Committee Meeting Dates: Jul 26, 2016; Aug 16, 2016; Sep 20, 2016; Oct 18, 2016; Dec 6, 2016; Jan 24, 2017; Feb 21, 2017; Mar 21, 2017; Apr 18, 2017; May 16, 2017; Jun 20, 2017.

External Advisory Board Committee Meeting held on February 15, 2017. In attendance: Steve Kay (USC); Margaret Moline (Eisai pharmaceutical Co.); Joseph Takahashi (University of Texas Southwestern Medical Center); Michael Young (The Rockefeller University); Phyllis Zee (Northwestern); Susan Golden (UCSD); Sonia Ancoli-Israel (UCSD); Stu Brody (UCSD); Michael Gorman (UCSD); Katja Lamia (TSRI); Michael McCarthy (UCSD); Satchin Panda (SALK/UCSD); Dorothy Sears (UCSD); David Welsh (UCSD); and Erica Schoeller (UCSD)

### Executive Committee and Advisory Committee Recommendations

Our external Advisory Board continues to praise our work. For example, at the 2017 meeting our acting Chair Dr. Joe Takahashi recognized that “CCB is a premier national circadian center”.

Specific recommendations of the Advisory Board included:

- For shiftwork workshops, seek sponsorship from sports teams, city, county, SANDAG, CalTrans, local utilities, or the Keck community outreach program.
- For a future workshop focusing on pharma topics, seek sponsorship from companies such as Reset Therapeutics.
- Look for NIH RFAs related to lighting.
- Consider adding non-scientific advisory board members as potential donors.

### Executive Committee and Advisory Committee Documentation

Copies of CCB executive committee and external advisory board minutes are attached as a separate document.

## Diversity Efforts

Individual members of CCB participate in various diversity efforts that are reported through their home departments. In an effort to make specific contributions as an ORU, CCB is incorporating practices to improve diversity and inclusion in all of our activities.

- The speaker invitation list for the 2017 symposium (18 total) included six women, one Latin American, one African American, and a postdoctoral trainee (winner of the speaking slot as top speaker at the fall workshop). Trainees from the CCB were tasked to think deeply and consider diversity in preparing their list of preferred speakers, and recommended women and URM speakers as top picks. A URM trainee from another institution was an invited speaker at the 2017 fall workshop.

## **CCB members' contributions to diversity, presentations, and activities, July 2016 – June 2017:**

### **Susan Golden**

- Seminar, Washington University, St. Louis, MO
- Speaker, Microbiology Society (EU) Annual Conference, Edinburgh, Scotland
- Speaker, Cyanobacterial Circadian Workshop, Nagoya, Japan
- Plenary Speaker and session convener, American Society for Microbiology Microbe meeting

#### Diversity:

- Presentation to NSF START program students (provides summer research experience for incoming transfer students from underrepresented groups)
- Diversity committee, Division of Biological Sciences
- Lab tours for incoming transfer students
- Lab tour for undergrads from Cal State Dominguez Hills
- Lab tours for "overnight student" program to recruit diverse students
- Supervised summer student through HHMI EXROP program to provide research experiences to disadvantaged students
- Faculty leader for SACNAS mock grad school interview training
- CCB Postdoc Roger Tseng was a finalist for Howard Hughes Medical Institute (HHMI) Hanna H. Gray Fellows Program to promote diversity in science; he also Served as a judge for the Biophysical Society award at the greater San Diego Science and Engineering Fair, 2017
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### **David Welsh:**

- Society for Neuroscience, Washington, DC, November, 2017

### **Dorothy Sears:**

- Mayo Clinic (Scottsdale, AZ; telecast to Rochester, MN site) "Novel Diet & Behavioral Interventions for Reducing Cardiometabolic Disease & Cancer Risk" (2017)
- C3 Scientific Retreat – Sanford Burnham Prebys Medical Discovery Institute "Mechanisms Linking Prolonged Nightly Fasting with Cancer Risk" (2017)
- Oncology Nutrition Dietetic Practice Group - Spotlight Session for the centennial Food & Nutrition Conference and Expo. (Chicago, IL) (2017) "The Evidence: Intermittent Fasting Effects on Cardiometabolic Disease and Cancer"

#### Diversity & Mentoring:

- Scientista, UCSD Chapter – Faculty Advisor (2016-present)
- UCSD Women in Health Sciences Committee (2014-present)
  - Co-Chair, Spring Event Committee (2016-present)
  - Chair-Elect (2017-present)
- Washington State University College of Medicine – Faculty & Trainee Workshop
  - (with Cindy Simpson, Association for Women in Science) "Strategies for Addressing Biases and Barriers in Advancing to Positions of Leadership"
- Washington State University College of Medicine – Faculty & Trainee Workshop
  - (with Cindy Simpson, Association for Women in Science) "Importance of Mentoring Relationships for Sustained Career Success"
- Course - Transdisciplinary Research in Energetics & Cancer Training Course; NIH/NCI R25 CA203650 (2016-present)

- Week-long summer workshop and year-long mentorship of 2 trainees per year

#### Clinical Fellows:

- Ellen Lee, M.D. (2017-present) (Research co-advisor)

#### Postdoctoral Fellows/Visiting Scholars:

- Yessica Diaz Roman, D.P.H. (2013-2017) (Research advisor)
- Adriana Villaseñor, Ph.D. (2013-present) (Research co-advisor)
- Marta Jankowska, Ph.D. (2013-2017) (Research co-advisor)
- Morgana Mongraw-Chaffin, Ph.D. (2013-2016) (Research co-advisor)
- Lorena Martin, Ph.D. (2013-2016) (Research co-advisor)
- Michelle Takemoto, PhD (2017-present) (Research co-advisor)

#### Junior Faculty:

- Sheri Hartman, Ph.D. (2013-present) (NIH/NCI K07 Award Research Mentor) – Currently Assistant Professor of Family Medicine and Public Health, UC San Diego

#### Medical Students:

- Christine Sugimoto (2015-present) - Independent Study Project (ISP) Committee Chair. Currently MS4.
- Torrey Czech (2016-present) - Independent Study Project (ISP) Committee Chair. Currently MS3.

#### Graduate Students:

- Rachel Marty (2015-present) – Rotation project & thesis research advisor. Currently a PhD student in the Bioinformatics & Systems Biology Graduate Program of the UCSD Jacobs School of Engineering.
- Lorena Pacheco (2016-present) - PhD thesis research co-advisor and committee member. UCSD/SDSU Joint Doctoral Program.
- Kristina Mardinian (2017) - M.P.H., lab research advisor. UCSD/SDSU Joint Program
- Benjamin Sarno (2018-present) - PhD thesis research co-advisor and Senate Exam Co-Chair; UCSD Nanobiology Graduate Program.
- Tiffany Gandolfo (2017-present) - PhD Thesis Committee Member; University of South Florida

#### Undergraduate and high school research students:

- Basma Abdellaoui Adams (2016-present) (Research advisor) – UC San Diego undergraduate
- Sabrina Aden (2016-present) (Research advisor) – SDSU undergraduate. NIH U54 UCSD/SDSU Partnership Program to reduce disparities in cancer research.
- Kaitlin Bessinger (2017-present) (Research advisor) - UC San Diego BS/MS program.
- Max Fang (2017-present) (Research advisor) – SDSU undergraduate. NIH U54 UCSD/SDSU Partnership Program to reduce disparities in cancer research.
- John Finkelman (Summer 2017) – Lab research advisor.

**Sonia Ancoli-Israel**

- Past President, Congregation Beth El, La Jolla, California M. Larry Lawrence Jewish Community Center Advisory Board (2016)
- Ken Budd, AARP's Staying Sharp, Interviewed Jan 3, 2017

**Lisa Baik**

- 15 min research talk on "Circadian Modulation of UV Light Avoidance Behavior in *Drosophila*." At 2017 Cold Spring Harbor Laboratory's Neurobiology of *Drosophila* Meeting, Cold Spring Harbor, NY, U.S.A
- 5 minute research talk on "Can You Feel the Light Tonight?" at the UC-Irvine NSF GRFP "Training for Tomorrow" Symposium, Irvine, CA, U.S.A.

**Bartlomiej Borek:**

- Circadian graduate seminar at Cal State Sonoma (Sep 2016)
- "Engineering spatiotemporal patterns in biological systems", Cal State Sonoma (Sep 2016)

**Gena Glickman**

- Building the evidence on light and human health, Portland, Oregon, Solid- State Lighting Technology R&D Workshop, (Nov 2017)
- Novel lighting strategies for optimizing sleep and circadian rhythms for shiftwork applications, Washington D.C., Department of Energy, Solid State Lighting Division Roundtable Discussion (Aug 2017)
- Modulating photosensitivity for physiological response to light, Washington D.C., Department of Energy, Solid State Lighting Division Roundtable Discussion (Jul 2016)
- DOE GRANT: 2017-2019 Department of Energy, Solid State Lighting Advanced Technology Research and Development, "Novel lighting strategies for circadian and sleep health in shiftwork applications" \$843,125
- Subjective report of light in the sleep environment: a cost-efficient enhancement of the sleep diary, SLEEP 2017, the 31<sup>st</sup> Annual Meeting of the Associated Professional Sleep Societies, Boston, Massachusetts (Jun 2017)
- Sleep and neuroendocrine profiles in 3- and 9-month old infants with a family history of autism, SLEEP 2017, the 31<sup>st</sup> Annual Meeting of the Associated Professional Sleep Societies, Boston, Massachusetts (Jun 2017)
- "Visiting Scientist" at a local elementary school (kindergarten-fifth graders) for their annual science fair, where I basically cheer on the kids, talk to them about science and give them a certificate.

**Liz Harrison**

- Sleep Education & Outreach, Healthy Kids Day, Peninsula YMCA (Apr 2017)

**William Joiner**

- Invited speaker, NIH National Center on Sleep Disorders Research Satellite meeting of the Society for Neuroscience (2016)
- Invited speaker, Wiring and Functional Principles of Neural Circuits Satellite meeting of the Society for Neuroscience (2016)
- Invited speaker, Center for Functional Connectomics, KIST, Seoul, South Korea (2016)
- Invited speaker, Gordon Research Conference: Biology and Mechanisms of RNA and DNA Modification (2017)
- Invited speaker, Janssen Research and Development (2017)

Diversity:

- Steering Committee member, UCSD IRACDA program (2016)
- Mock interviews with UCSD IRACDA trainees for faculty positions (2016)
- Panel discussion with UCSD IRACDA trainees on research ethics (2017)
- Admissions Committee member, UCSD IRACDA Program (2017)
- Mock interviews with UCSD IRACDA trainees for faculty positions (2017)

**Katja Lamia:**

- American Diabetes Association Annual Meeting, San Diego, CA, session chair (Jun 2017)
- University of California, Los Angeles, Jonsson Comprehensive Cancer Center (Apr 2017)
- The Bishops School, La Jolla, CA (Oct 2016)
- Radiation Research Society, Big Island, HI (Oct 2016)
- Lund University Diabetes Center, Malmo, Sweden (Sep 2016)
- Novo Nordisk, Copenhagen, Denmark (Sep 2016)
- Max Planck Research Institute, Munich, Germany (Sep 2016)
- 4<sup>th</sup> annual Helmholtz-Nature Medicine Conference on Diabetes, Munich, Germany (Sep 2016)
- Salk Meeting on Post-Translational Regulation of Cell Signaling (Aug 2016)
- SoCRA (Society of Clinical Research Associates) (Jul 2016)

Diversity:

- Hosted an undergraduate student in my lab this summer (2017) as part of Scripps Summer Undergraduate Research Fellowship program (SURF), which focuses on enhancing training and participation of underrepresented groups.
- I gave a talk to undergraduates visiting Scripps from the women's college Scripps College.

**Andy LiWang**

- Talk @ AFOSR Life Sciences Review Meeting (Nov 2016):  
<https://community.apan.org/wg/afosr/w/researchareas/18096/2016-afosr-life-sciences-review/>
- Talk @ Chronobiology Gordon Research Conference (Jul 2017):  
<https://www.grc.org/chronobiology-conference/2017/>
- Seminar @ UC Berkeley (Oct 2017):  
[http://events.berkeley.edu/index.php/calendar/sn/chem.html?event\\_ID=112303&date=2017-10-30](http://events.berkeley.edu/index.php/calendar/sn/chem.html?event_ID=112303&date=2017-10-30)

Diversity:

- American Chemical Society's Summer Experience for the Economically Disabled (ACS SEED)  
I coordinate the eight-week summer program at UC Merced for 7-9 high school students from families at or below the poverty line, and personally mentor 1-2 of these students every summer.
- I always mentor 1-4 undergrads doing research in my lab, at least one of whom is Hispanic. These students are encouraged to participate in numerous undergrad scientific conferences in California. I use my grants to pay for the cost of participating in these conferences.
- Annual *Dinner with a Scientist* hosted by the Merced County Office of Education. Local middle school students have dinner with me and other scientists to understand why scientists love their jobs, with the hope of inspiring these students

**Michael McCarthy:**

- Navy Balboa Medical Center Grand Rounds (2017)
- Annual Meeting Society for Biological Psychiatry, San Diego, CA (May 2017)
- Annual Meeting Molecular Psychiatry Association, Maui, HI (Oct 2016)

## Diversity &amp; Mentoring:

## UCSD Post-Doctoral Research Fellows

- 2017-Present: Himanshu Mishra, Ph.D. –post-doctoral research fellow, primary supervisor
- 2017-Present: Valerie Benner M.D. –post-doctoral research fellow, primary supervisor

## UCSD Psychiatry Residents

- 2016-2017 Natassia Gaznick- weekly supervision in outpatient psychiatry clinic

## UCSD Medical Students &amp; MSTP Research Trainees

- 2017 Emily Ho B.S. - Medical Scientist Training Program research rotation

## UCSD Undergraduate Research Trainees

- 2017-present Noelle Ying - supervise undergraduate/masters research project
- 2017-present Angelica Rose Luis - supervise undergraduate/masters research project
- 2016-present Victoria Nudell- supervise undergraduate/masters research project

**Pamela Mellon:**

- Speaker and Lead Organizer, NICHD Steroids, Metabolism and Female Fertility Focus Group meeting for the National Centers for Research on Reproduction and Infertility, La Jolla
- Symposium Speaker, The Endocrine Society Annual Meeting, Orlando, Florida
- Speaker, Career Development Workshop, The Mentor-Mentee Relationship, The Endocrine Society Annual Meeting, Orlando
- Speaker, NICHD Translational Research In Reproduction National Meeting, Bethesda
- Mentoring Award Recipient, Society for Neuroscience, Washington, D.C.

## Diversity &amp; Mentoring:

- My URM students/postdocs in 2016-17:

## Postdoc:

- Daquina Nicholas, Ph.D. 2017-present (Co-Mentor, Primary Mentor: Mark Lawson)
  - Ph.D. from Loma Linda University, California.
  - University of California President's Postdoctoral Fellowship, 2017-2019

## PhD students:

- Erica C. Pandolfi, 2014-present, Biomedical Sciences Program
  - [Initiative for Maximizing Student Diversity](#) (IMSD) Training Program, 2013-2014
  - NICHD Supplement for Diversity, 2014-2016
  - National Institutes of Health NRSA Predoctoral Fellowship, 2017-2018, F31 HD089652
  - "Homeodomain Proteins Six3 and Six6 in GnRH Neuron Development in Mice"
  - The Future Leaders Advancing Research in Endocrinology (FLARE) program Awardee, The Endocrine Society
- Shanna M. Newton, 2015-present, Biomedical Sciences Program
  - Superfund P42 Training Program, 2015-2017
  - Trainee of NIH Training Program in Genetics, 2016-2018

- The Future Leaders Advancing Research in Endocrinology (FLARE) program Awardee, The Endocrine Society

Undergraduates:

- Rhea-Comfort Addo, Summer 2016
  - California State University at Long Beach
  - Summer Training Academy for Research Success (STARS) Program
- Sabrina Barreto, Summer 2017
  - Imperial Valley College
  - Summer Training Academy for Research Success (STARS) Program

**Satchin Panda**

- Salk Shiftwork Workshop (October 2016)
- University of San Diego (January 2017)
- Near Future Summit La Jolla, CA (March 2017)

**Carrie Partch**

- UC Davis, NIH Cell Biology Training Program Student Invitee
- University of Chicago, Dept. of Molecular Genetics and Cell Biology
- West Coast Protein Crystallography Workshop (Asilomar, CA)
- UC San Diego Center for Circadian Biology Symposium
- University of Pennsylvania, Dept. of Systems Pharmacology and Translational Therapeutics
- Johns Hopkins University, Dept. of Biology
- University of Massachusetts, Amherst, Dept. of Chemistry
- Colorado State University, Dept. of Cell and Molecular Biology
- Center for Chronobiology Inaugural Symposium, Cincinnati Children's Hospital Medical Center (Cincinnati, OH)
- Google SciFoo Conference Lightning Talk (Mountain View, CA)

Diversity & Mentoring:

- "Workshop on the NSF Graduate Research Fellowship Program", UC Santa Cruz Division of Physical and Biological Sciences (attended by 80+ graduate students and undergraduates from each department in the division, including a significant population of URMs – I could quantify the number of URM attendees if you need)
- "Mentoring—how to give it and how to get it" Session Co-Chair, UC Presidential Postdoctoral Fellowship Annual Meeting, Oakland, CA
- "Circadian rhythms: when biological clocks for bad", Presentation to lay public for the UCSC Office of Development event "Cancer in the Crosshairs"
- Presentation on "Tenure and the Hierarchy of Academic Science" for the NIH IMSD (Initiative for Maximizing Student Development) Summer Research Internship Social Seminar Series
- Presentation on "How to find the right funding agency for your grant" for the UCSC STEM Postdoctoral Association "Grant Workshop"
- Faculty Panelist, UCSC STEM Scholars Transfer Day
- Protein Crystallography Workshop for the NIH-funded MARC (Maximizing Access to Research Careers) Summer Research Institute; this was a week-long lecture and hands-on lab focused on x-ray crystallography for underrepresented STEM undergraduates at UCSC (I have some beautiful pictures of crystals that the students made and a photo of one of my students looping the crystal at a microscope if you need good visuals!)

## **Barbara Parry**

- Speaking Truth to Power. Illustrations from CS Lewis, The Silver Chair. Women Together. St. Paul's Episcopal Cathedral. San Diego, CA. (May 2017)
- Early vs. Late Wake Therapy Improves Mood in Antepartum vs. Postpartum Depression by Differentially Altering Melatonin and Sleep Timing. Sleep Research Society. Boston, MA. (Jun 2017)

### **Diversity & Mentoring:**

- Supervision post-doctoral psychology fellow, Melissa Tarasenko, PhD: 20% effort on clinical assessment of women with mood disorders related to the reproductive cycle. January 1, 2016- July 23, 2016
- Supervision psychology graduate student Angela Buffington, M.A. July 2015-present in diagnostic and mood assessments of women's mood disorders. She plans a postdoctoral fellowship in women's mental health
- Supervision and mentor of undergraduate student Emily Judd, October 2015-present: recipient of a \$5,000 research scholarship from the Doris A. Howell Foundation Women's Health Research for her summer research proposal on subjective vs. objective sleep measures in women with perinatal depression vs. healthy controls. An abstract was submitted, and accepted for presentation at the Sleep Research Society in Denver, CO, June 2016. Poster presentation, Public Health Research Day, Treating Women's Mood Changes with Sleep Alteration and Light Therapy. April 5, 2017. NAMI Walk/Run sponsorship April 29, 2017
- Minor proposition committee member: Sharon Huang, second year PhD student in the UCSD Neuroscience Program, on, "Synaptic, Functional and Circadian Changes in Lateral Habenula Neurons in the Progesterone Withdrawal Animal Model for Premenstrual Dysphoric Disorder." March 7, 2017
- Supervision: undergraduate summer research laboratory rotation: Crystal Martinez. June 13- August 23, 2016 in premenstrual and peripartum depressions
- Supervision: undergraduate research laboratory rotation: Taylor Brown. Co-author, poster presentation, Public Health Research Day, Treating Women's Mood Changes with Sleep Alterations and Light Therapy. June 2016-present

## **Tokako Noguchi**

- Association for Women in Science (AWIS), co-chair of a group to help women scientists to find jobs (Academia to Industry Coffee Club). Organizing monthly meetings and company tours.
- Science Fair Judge of The Greater San Diego Science and Engineering Fair (2013-present)

### **ORU Goals for the coming year**

- Evaluate, prioritize, and implement recommendations from the external advisory board
- Continue to increase diversity in CCB activities
- Improve media coverage of CCB events
- Continue to host successful workshops and symposia
- Work with the campus development office to increase corporate and private fundraising
- Submit additional group grants, seeking center-level funding

### **Other Income**

Refer to CCB Campus Data Report 2017

## Comments on the Campus Data Report

*The Campus Data report incorrectly reflects the space assigned to the Center for Circadian Biology. CCB is assigned two administrative offices and a conference room. The total is 558 square feet.*

## STAFF & PARTICIPANTS

TYPE	NAME	TITLE	START DATE	END DATE	HOME DEPARTMENT or INSTITUTION
Director	Golden, Susan	Professor	7/1/09		Biological Sciences, Molecular
Associate Director	Welsh, David	Associate Professor	7/1/09		Psychiatry
External Advisory Board	Block, Gene	Chancellor- Professor	5/1/11		UCLA Chancellor's Office
External Advisory Board	Kay, Steve	Dean-Professor	7/1/12		University of Southern California
External Advisory Board	Moline, Margaret	PhD, Director	9/1/12		Eisai, Inc.
External Advisory Board	Takahashi, Joseph	Professor	5/1/11		UT Southwestern
External Advisory Board	White, David P.	Professor	3/15/16		Harvard Medical School
External Advisory Board	Young, Michael	Professor	5/1/11		The Rockefeller University
External Advisory Board	Zee, Phyllis	Professor	5/1/11		Northwestern University
Executive Committee	Ancoli-Israel , Sonia	Professor Emeritus	7/1/09		Psychiatry

Executive Committee	Brody, Stu	Professor Emeritus	7/1/09	Biological Sciences, Molecular
Executive Committee	Gorman, Michael	Professor	7/1/09	Psychology
Executive Committee	McCarthy, Michael	Assistant Professor	5/1/11	Psychiatry
Executive Committee	Panda, Satchin	Asst. Adjunct Professor	7/1/09	Salk, Biological Sciences
CCB Lab Member	Walbeek, Thijs	Graduate Student	9/17/14	Psychology
Faculty Member	Bechtel, William	Professor	7/1/09	Philosophy
Faculty Member	Chory, Joanne	Professor	7/1/09	Salk, Biological Sciences
Faculty Member	Desplats, Paula	Asst Professor	7/31/14	Neurosciences
Faculty Member	Dorrestein, Pieter	Professor	5/24/17	Pharmacology
Faculty Member	Dulcis, Davide	Assoc Res Sci	8/1/15	Psychiatry
Faculty Member	Elliott, Jeff	Project Scientist Emeritus	7/1/09	Psychiatry
Faculty Member	Ellisman, Mark	Professor	7/5/11	Neurosciences
Faculty Member	Evans, Ronald	Professor	7/1/09	Salk, Biological Sciences
Faculty Member	Greenspan, Ralph	Research Scientist	7/1/09	Kavli Institute for Brain & Mind
Faculty Member	Hasty, Jeff	Professor	7/1/09	Biological Sciences, Bioengineering
Faculty Member	Holmes, Todd	Professor	1/24/11	UC Irvine

Faculty Member	Hwa, Terence (Terry)	Professor	7/1/09	Physics
Faculty Member	Joiner, William	Assistant Professor	7/1/09	Pharmacology
Faculty Member	Kauffman, Alexander (Sasha)	Assistant Professor	7/1/09	Reproductive Medicine
Faculty Member	Kelsoe, John	Professor	9/21/11	Psychiatry
Faculty Member	Kripke, Daniel	Professor Emeritus	7/1/09	Psychiatry
Faculty Member	Lamia, Katja	Assistant Professor	9/1/10	The Scripps Research Institute
Faculty Member	LiWang, Andy	Associate Professor	9/1/10	UC Merced
Faculty Member	MacLeod, Don	Professor	3/12/15	Psychology
Faculty Member	Malhotra, Atul	Professor, MD	8/30/13	Medicine - Sleep, Pulmonary and Critical Care
Faculty Member	Mednick, Sara	Assistant Adjunct Professor	7/1/09	Psychology
Faculty Member	Mellon, Pamela	Professor	7/1/09	Reproductive Medicine
Faculty Member	Montminy, Marc	Adjunct Professor	7/1/09	Salk, Biological Sciences
Faculty Member	Nievergelt, Caroline	Assistant Adjunct Professor	5/1/11	Psychiatry
Faculty Member	Owens, Robert	Assistant Professor	9/22/15	Medicine

Faculty Member	Parry, Barbara	Professor	7/1/09	Psychiatry
Faculty Member	Partch, Carrie	Assistant Professor	9/28/11	UC Santa Cruz
Faculty Member	Pruneda-Paz, Jose	Assistant Professor	7/10/09	Biological Sciences, Cell & Developmental
Faculty Member	Rickard, Timothy	Professor	7/1/09	Psychology
Faculty Member	Rulkov, Nikolai	Research Scientist	11/1/10	BioCircuits Institute (BCI)
Faculty Member	Sears, Dorothy)	Associate Professor	1/13/15	Medicine
Faculty Member	Sejnowski, Terry	Professor	9/1/10	Salk, Computer Science and Engineering
Faculty Member	Spitzer, Nicholas	Professor	7/10/09	Neurobiology
Faculty Member	Tsimring, Lev	Research Scientist	7/1/10	BioCircuits Institute (BCI)
CCB Lab Member	Abrahamsen, Adele	Research Scientist	7/10/09	Center for Research in Language
CCB Lab Member	Aimon, Sophie	Postdoc	9/27/12	Kavli Institute for Brain & Mind
CCB Lab Member	Asimgil, Hande	Postdoc	3/14/16	UC Santa Cruz
CCB Lab Member	Avanzino, Julie	Undergraduate	1/7/12	Psychiatry
CCB Lab Member	Barrell, Erika	Undergraduate	7/1/16	Pharmacology
CCB Lab Member	Barrows, Chelsea	Undergraduate	6/16/17	Psychiatry
CCB Lab Member	Bittihn, Philip	Postdoc	12/13/11	BioCircuits Institute (BCI)

CCB Lab Member	Bordowitz, Juliana	Postdoc	7/10/09	Kavli Institute for Brain & Mind
CCB Lab Member	Borek, Bart	Postdoc	10/3/12	BioCircuits Institute
CCB Lab Member	Boyd, Joseph	Postdoc	10/11/11	Center for Circadian Biology (CCB)
CCB Lab Member	Breuer, Joseph	Masters Student	4/19/17	Reproductive Medicine
CCB Lab Member	Brusman, Lisa	Undergraduate	4/19/17	Reproductive Medicine
CCB Lab Member	Buffington, Angela	Clin Soc Wrk	9/12/15	Psychiatry
CCB Lab Member	Burko, Yogev	Postdoc	1/27/16	Salk, Biological Sciences
CCB Lab Member	Chaix, Amandine	Postdoc Fellow	9/20/11	Salk, Biological Sciences
CCB Lab Member	Chang, Yonggang (Tyler)	Postdoc	4/27/11	UC Merced - School of Natural Sciences
CCB Lab Member	Chavan, Archana	Postdoc	8/13/14	UC Merced - School of Natural Sciences
CCB Lab Member	Chin, Austin Y.	Undergraduate	4/19/17	Reproductive Medicine
CCB Lab Member	Cui, Laura	Undergraduate	4/19/17	Reproductive Medicine
CCB Lab Member	Cohen, Susan	Asst Proj Scientist	7/10/09	Center for Circadian Biology (CCB)
CCB Lab Member	Cookson, Scott	Postdoc	3/10/14	BioCircuits Institute (BCI)
CCB Lab Member	DeYoung, Pamela	RPSGT Technical Sleep Director	9/22/15	Medicine

CCB Lab Member	Didovyk, Andriy	Postdoc	12/13/11	BioCircuits Institute (BCI)
CCB Lab Member	Diemer, Tanja	Staff Research Associate II	7/27/11	Psychiatry
CCB Lab Member	Duglan, Drew	Postdoc	6/10/16	The Scripps Research Institute
CCB Lab Member	Farrow, Victoria	Psychologist	9/12/15	Psychiatry
CCB Lab Member	Franks, Kyle	Undergraduate	3/14/16	UC Santa Cruz
CCB Lab Member	Glickman, Gena	Postdoc	7/10/09	Psychology
CCB Lab Member	Goularte, Nicolette	Junior Specialist	3/14/16	UC Santa Cruz
CCB Lab Member	Grover, Dhruv	Assistant Project Scientist	1/27/16	Kavli Institute for Brain & Mind
CCB Lab Member	Gustafson, Chelsea	Graduate Student	3/14/16	UC Santa Cruz
CCB Lab Member	Harrison, Elizabeth (Liz)	Postdoc	7/10/09	Psychology
CCB Lab Member	Hoffmann, Hanne	Postdoc	6/30/11	Reproductive Medicine
CCB Lab Member	Hu, Rachael	Undergraduate	4/19/17	Reproductive Medicine
CCB Lab Member	Huber, Anne-Laure	Research Associate	1/7/12	The Scripps Research Institute
CCB Lab Member	Huynh, Yvonne	Undergraduate	7/1/16	Center for Circadian Biology (CCB)
CCB Lab Member	Jaiswal, Stuti	Physician, MD	9/22/15	Medicine
CCB Lab Member	Jin, Meng	Postdoc	9/28/12	BioCircuits Institute (BCI)

CCB Lab Member	Johnson, Sarah	Lab Manager	1/27/16	Kavli Institute for Brain & Mind
CCB Lab Member	Kanjanakantorn, Pichaporn	Lab Manager	5/1/17	Center for Circadian Biology (CCB)
CCB Lab Member	Katsuki, Takeo	Assistant Project Scientist	7/10/09	Kavli Institute for Brain & Mind
CCB Lab Member	Kim, Jared	Lab Asst 3	6/30/16	Center for Circadian Biology (CCB)
CCB Lab Member	Kim, Jessica	Undergraduate	9/21/15	Neuroscience
CCB Lab Member	Kim, Minsu	Postdoc	9/8/11	Physics
CCB Lab Member	Lam, Diana	Research Associate	3/14/16	Kavli Institute for Brain & Mind
CCB Lab Member	Lainscsek, Claudia	Assistant Project Scientist	9/29/11	Biological Science, Neurosciences
CCB Lab Member	Le, Hiep	Research Assistant	7/10/09	Salk, Biological Sciences
CCB Lab Member	Lee, Jessica Sora	Masters Student	4/19/17	Reproductive Medicine
CCB Lab Member	Linges, Mary	Sr Survey wkr	9/12/15	Psychiatry
CCB Lab Member	Liu, Clifford	Masters Student	7/1/16	Pharmacology
CCB Lab Member	Liu, Lianqi	Associate Project Scientist	7/10/09	Psychiatry
CCB Lab Member	Long, Jaimie	Undergraduate Student	4/23/14	Psychiatry
CCB Lab Member	López, Ana M.	Staff Research Associate II	7/10/09	Psychiatry
CCB Lab Member	Loredo, Jose	Director	2/8/12	Psychiatry

CCB Lab Member	Lowe, Laura	Undergraduate student	9/21/15	Biological Science, Microbiology
CCB Lab Member	Luu, Jansen	Undergraduate Student	3/14/16	UC Santa Cruz
CCB Lab Member	Maglione, Jeanne	Resident physician	7/10/09	Psychiatry
CCB Lab Member	Manoogian, Emily	Postdoc Fellow	3/14/16	Salk, Biological Sciences
CCB Lab Member	Martínez, Luis Fernando	Staff Research Associate II	7/10/09	Psychiatry
CCB Lab Member	McDevitt, Elizabeth (Lizzie)	Researcher	4/27/11	Psychology
CCB Lab Member	McKenna, Ben	Clinical Psychologist	7/10/09	Psychiatry, VA
CCB Lab Member	McKnight, Briana	Undergraduate Student	6/23/15	Center for Circadian Biology (CCB)
CCB Lab Member	McPherson, Adam	Postdoc	1/27/16	Psychiatry
CCB Lab Member	Meliska, Charles J.	Associate Project Scientist	7/10/09	Psychiatry
CCB Lab Member	Mendez, Francisco	Junior Specialist	3/14/16	UC Santa Cruz
CCB Lab Member	Mishra, Himanshu	Postdoc	1/20/17	Psychiatry
CCB Lab Member	Mure, Ludovic	Postdoc	3/29/11	Salk, Biological Sciences
CCB Lab Member	Nachnani, Rahul	Undergrad Student	1/15/14	Psychiatry
CCB Lab Member	Natarajan, Loki	Associate Adjunct Prof.	7/10/09	Psychiatry
CCB Lab Member	Nguyen, Leslee	Undergraduate Research	3/14/16	UC Santa Cruz

CCB Lab Member	Orr, Jeremy	Associate Physician, MD	9/22/15	Medicine
CCB Lab Member	Paddock, Mark	Project Scientist	11/11/11	Physics
CCB Lab Member	Papp, Stephanie	Research Tech	9/10/15	The Scripps Research Institute
CCB Lab Member	Pariollaud, Marie	Postdoc Fellow	4/5/17	The Scripps Research Institute
CCB Lab Member	Porcu, Alessandra	Postdoc	11/3/16	Psychiatry
CCB Lab Member	Prindle, Arthur	Postdoc	6/1/14	Biological Sciences, Microbiology
CCB Lab Member	Riddle, Malini	Lab Assistant	6/29/17	Psychiatry
CCB Lab Member	Rios, Luis	Lab Technician	3/14/16	Salk, Biological Sciences
CCB Lab Member	Romoli, Ben	Postdoc	1/27/16	Psychiatry
CCB Lab Member	Sancar, Cigdem	Postdoc	5/18/15	Center for Circadian Biology (CCB)
CCB Lab Member	Seidner, Glen	Postdoc	2/9/11	Pharmacology
CCB Lab Member	Seluzicki, Adam	Postdoc	6/4/14	Salk, Biological Sciences
CCB Lab Member	Sheredos, Benjamin	Postdoc	7/10/09	HHMI-Center for Circadian Biology (CCB)
CCB Lab Member	Schoeller, Erica	Postdoc Fellow	8/30/13	Reproductive Medicine
CCB Lab Member	Shultzaberger, Ryan	Postdoc	4/1/12	Kavli Institute for Brain & Mind
CCB Lab Member	Sinkovich, McKenna	Undergraduate	4/19/17	Reproductive Medicine

CCB Lab Member	Smales, Erik	RPSGT Staff research associate	9/22/15	Medicine
CCB Lab Member	Sonntag, Tim	Postdoc	7/5/11	Salk Biological Studies
CCB Lab Member	Sorenson, Diane	Staff SRA III Supervisor	7/10/09	Psychiatry
CCB Lab Member	Stephens, Shannon	Postdoc Fellow	4/12/16	Reproductive Medicine
CCB Lab Member	Sulli, Gabriele	Postdoc	11/30/12	Salk, Biological Sciences
CCB Lab Member	Tseng, Roger	Postdoc	4/27/11	Center for Circadian Biology (CCB)
CCB Lab Member	Uribe, Francisco	Postdoc	11/30/12	Biological Science, Cell Development
CCB Lab Member	Wabnik, Krzysztof	Postdoc	12/13/11	BioCircuits Institute (BCI)
CCB Lab Member	Wei, Heather (Hongbing)	Staff Research Associate II	1/7/12	Psychiatry, Neuroscience
CCB Lab Member	Welkie, David	Postdoc	8/17/15	Center for Circadian Biology (CCB)
CCB Lab Member	Wiswell, Roxana	BS/MS Student	9/21/15	Department of neuroscience
CCB Lab Member	Wu, Meilin	Postdoc	7/10/09	Pharmacology
CCB Lab Member	Yang, Yiling	Postdoc	5/13/16	Center for Circadian Biology (CCB)
CCB Lab Member	Zarrinpar, Amir	Postdoc	4/27/11	Salk, Biological Sciences
CCB Lab Member	Zhou, Lili	Postdoc-	1/8/16	The Scripps Research Institute

CCB Lab Member      Zhao, Xuan      Postdoc      7/11/13      Salk, Biological Sciences

ACADEMIC AFFILIATES

NAME	TITLE	DEPARTMENT	INSTITUTION
Bentley, George	Assistant Professor	Integrative Biology	UC Berkeley
Bunney, Blynn	Specialist	Psychiatry & Human Behavior	UC Irvine
Bunney, William	Distinguished Professor	Psychiatry & Human Behavior	UC Irvine
Colwell, Chris	Professor	Psychiatry and Biobehavioral Sciences	UCLA
Doyle, Frank	Professor	Chemical Engineering	UC Santa Barbara
Fu, Ying-Hui	Professor	Department of Neurology	UC San Francisco
Harmer, Stacey	Professor	Department of Plant Biology	UC Davis
Harmon, Frank	Adjunct Associate Professor	Plant and Microbial Biology	UC Berkeley
Hoffmann, Alexander	Professor	Chemistry & Biochemistry	UCLA
Kriegsfeld, Lance	Professor	Psychology and Neuroscience	UC Berkeley
Petzold, Linda	Professor	Mechanical & Environmental Engineering	UC Santa Barbara
Plikus, Maksim	Assistant Professor	Developmental & Cell Biology	UC Irvine
Ptáček, Louis	Professor	Department of Neurology	UC San Francisco
Sassone-Corsi, Paolo	Professor	Department of Pharmacology	UC Irvine
Zhao, Qun-Yong	Professor	Department of Pharmacology	UC Irvine



Liu, Yu Hsin	Panda	3/14/16		Salk, Biological Science
Lovelett, Jarrett	Richard	9/22/15		Psychology
Luke, Chung Sze Joyce	Hasty	7/10/09	6/17/17	Bioengineering
Marinac, Catherine	Sears	12/2/15		Medicine
Michael, Alicia	Partch	3/11/16		UC Santa Cruz
Mott, Jennifer	Desplats	9/21/15		Department of neuroscience
Nave, Ceazar	Holmes	3/14/16		UC Irvine
O'Laughlin, Ricky	Hasty	7/29/13		Bioengineering
Pan, Steven	Rickard	9/22/15		Psychology
Pandolfi, Erica	Parry	4/12/16		Psychiatry
Roberts, Logan	Holmes	3/14/16		UC Irvine
Sandate, Colby	Lamia	9/10/15		The Scripps Research Institute
Scott, Spencer	Hasty	9/1/15		Bioengineering
Soler, Robert	Gorman	1/26/16		Psychology
Satterfield, Kendall	Joiner	3/14/16		Pharmacology
Stasiowski, Elizabeth	Hasty	1/1/15		Bioengineering
Sun, Ruichen	Greenspan	9/27/12		Kavli Institute for Brain & Mind
Thouvenin, Greg	Hasty	7/27/16		Bioengineering
Vaughan, Megan	Lamia	3/14/16		The Scripps Research Institute
Xiong, Liyang	Tsimring	9/1/14		Physics

## VISITORS/VOLUNTEERS

NAME	START DATE	END DATE	HOME INSTITUTION	SOURCE OF SUPPORT
Changeux, Jean-Pierre	3/11/16		Kavli Inst.	Home Institution
Chao, (Roy) Yi-Yun	9/21/15		UC Riverside	
Farkas, Andrew	6/10/16	6/9/17	UCSB	
Jen, Rachel	9/22/15		Canada	Home Institution
Shin, Wonchul	9/22/15		Korea	Home Institution
Yoon, Hokyong	9/16/16		Korea	Home Institution

**University-Industry and University-Government Activities**

- Drs. Satchin Panda and Michael Gorman – Joint Center for Biological Timing from the Indo-US Science & Technology Forum.
- Drs. Susan Golden and Rakefet Schwarz of Bar-Ilan – NSF- US-Israel Binational Foundation (BSF) Intercellular Communication Underlying Biofilm Development in Cyanobacteria.
- Drs. David Welsh and Michael McCarthy work at the Veterans Affairs San Diego Healthcare System.
- Drs. Gena Glickman and Michael Gorman – DOE - Office of Energy Efficiency and Renewable Energy (EERE)
- Drs. Michael McCarthy and Michael Gorman – Australia Partnership
- Center for Circadian Biology – organized private workshop for Philips Respiroics

**Seminars, Lectures, Symposia and Conference programs****Title: CCB Fall Workshop on Biological Timing****Date:** November 10, 2016**Location:** The Great Hall, UCSD**Presenter(s):**

Yong-Gang Chang - Postdoc in LiWang Lab, UC Merced

Eric Halgren - Professor of Radiology, UCSD

Tracey Hermanstynne - Postdoc in Herzog &amp; Nerbonne Labs, Washington University, St. Louis

Anna Kriebs - Graduate Student in Lamia Lab, The Scripps Research Institute

Mitchell Lazar - Professor in Diabetes and Metabolic Diseases, University of Pennsylvania

Cindy Liu - Graduate Student in Panda Lab, Salk

Alicia Michael - Graduate Student in Partch Lab, UC Santa Cruz

Andrew Patton - Postdoc in Hastings Lab, Cambridge UK

David Welkie - Postdoc in Golden Lab, UCSD

Xuan Zhao - Postdoc in Evans Lab, Salk

**Title: 8<sup>th</sup> Annual CCB Symposium “From Cells to Clinic”****Date:** February 15-17, 2017**Location:** Sanford Consortium Auditorium, UCSD**Presenter(s):**

George Brainard - Thomas Jefferson University

Todd Coleman - UC San Diego  
Charles Czeisler - Harvard Medical School  
Davide Dulcis - UC San Diego  
Ronald Evans - Salk Institute for Biological Studies  
Ying-Hui Fu - UC San Francisco  
Lance Kriegsfeld - UC Berkeley  
Johanna Meijer - Leiden University, Netherlands  
Jerome Menet - Texas A&M University  
Christine Merlin - Texas A&M University  
Alicia Michael - UC Santa Cruz  
Carrie Partch - UC Santa Cruz  
William Schwartz - University of Texas at Austin, Dell Medical School  
Dorothy Sears - UC San Diego  
David Welsh - UC San Diego  
Kenneth Wright - University of Colorado Boulder  
Marcelo Yanovsky - Institute Leloir Buenos Aires, Argentina  
Amir Zarrinpar - UC San Diego

**Title: CCB Workshop on Sleep, Health and Work Schedules**

**Date:** Wednesday, February 15, 2017

**Location:** Sanford Consortium Auditorium, UCSD

**Presenter(s):**

Michael Gorman - Professor of Psychology, UC San Diego  
Kenneth Wright - Professor of Integrative Physiology, University of Colorado Boulder  
Sonia Ancoli-Israel - Professor Emeritus of Psychiatry and Medicine, UC San Diego  
Phyllis Zee - Director of the Center for Sleep and Circadian Medicine, Northwestern University Feinberg School of Medicine

**Title: CCB Special Seminar – “Circadian matters in health, safety and performance: The Alertness CRC and beyond on Sleep, Health and Work Schedules”**

**Date:** Tuesday, March 21, 2017

**Location:** Center for Neural Circuits and Behavior (CNCB), Large Conference Room, UCSD

**Presenter:**

Professor Shantha M. Wilson Rajaratnam  
Director, Research Translation (Industry Engagement)  
Deputy Head, Monash School of Psychological Sciences

## ORU Publications

### The 3 Most Cited Publications of the ORU

To be provided at next 5-year review.

### Publications

#### **CCB Publications – 7-1-2016 to 6-30-2017**

##### **Sonia Ancoli-Israel**

Association of Sleep Disordered Breathing with Erectile Dysfunction in Community Dwelling Older Men. Bozorgmehri S, Fink HA, Parimi N, Canales B, Ensrud KE, Ancoli-Israel S, Canales M; MrOS Study. *J Urol.* 2017 Mar;197(3 Pt 1):776-782. doi: 10.1016/j.juro.2016.09.089. Epub 2016 Sep 30. PMID: 27697577

The LITE study: Rationale and protocol for a randomized controlled trial of light therapy for cancer-related fatigue in cancer survivors.

Johnson JA, Garland SN, Carlson LE, Savard J, Simpson JS, Ancoli-Israel S, Campbell TS. *Contemp Clin Trials*. 2016 Jul;49:166-73. doi: 10.1016/j.cct.2016.07.004. Epub 2016 Jul 6. PMID: 27394380

### **William Bechtel**

Explicating Top-Down Causation Using Networks and Dynamics.

Bechtel W.

*Philosophy of Science*. 2017 Apr 1. 84:2:253-274.

Top-Down 12 Causation in Biology and Neuroscience.

Bechtel W.

*Philosophical and Scientific Perspectives on Downward Causation*. 2017 Feb 17.

Network analyses in systems biology: new strategies for dealing with biological complexity.

Green S, Serban M, Scholl R, Jones N, Brigandt I, Bechtel W.

*Synthese*. 2017 Jan 19. 1-27. doi: <https://doi.org/10.1007/s11229-016-1307-6>

Systems Biology: Negotiating Between Holism and Reductionism.

Bechtel, W

*Philosophy of Systems Biology*. 2016 Dec 16:25-36. doi: [https://doi.org/10.1007/978-3-319-47000-9\\_2](https://doi.org/10.1007/978-3-319-47000-9_2)

Diagrammatic Reasoning.

Bechtel, W

*Springer Handbook of Model-Based Science*. 2017: 605-618. doi: [https://doi.org/10.1007/978-3-319-30526-4\\_27](https://doi.org/10.1007/978-3-319-30526-4_27)

Mechanists Must be Holists Too! Perspectives from Circadian Biology.

Bechtel, W

*Journal of the History of Biology*. 2016 Dec 1 49:4:705-731. doi: <https://doi.org/10.1007/s10739-016-9439-6>

### **Joanne Chory**

Dancing in the dark: darkness as a signal in plants.

Seluzicki A, Burko Y, Chory J.

*Plant Cell Environ*. 2017 Jan 3. doi: 10.1111/pce.12900. [Epub ahead of print] Review.

PMID: 28044340

Nascent RNA sequencing reveals distinct features in plant transcription.

Hetzel J, Duttke SH, Benner C, Chory J.

*Proc Natl Acad Sci U S A*. 2016 Oct 25;113(43):12316-12321. Epub 2016 Oct 11.

PMID: 27729530

An histidine covalent receptor and butenolide complex mediates strigolactone perception.

de Saint Germain A, Clavé G, Badet-Denisot MA, Pillot JP, Cornu D, Le Caer JP, et al.

*Nat Chem Biol*. 2016 Oct;12(10):787-794. doi: 10.1038/nchembio.2147. Epub 2016 Aug 1.

PMID: 27479744

Corrigendum: The epidermis coordinates auxin-induced stem growth in response to shade.

Procko C, Burko Y, Jaillais Y, Ljung K, Long JA, Chory J.

*Genes Dev*. 2016 Sep 1;30(17):2018. doi: 10.1101/gad.290544.116. No abstract available.

PMID: 27664239

Brassinosteroid's multi-modular interaction with the general stress network customizes stimulus-specific responses in Arabidopsis.

Bjornson M, Dandekar AM, Chory J, Dehesh K.

*Plant Sci.* 2016 Sep;250:165-177. doi: 10.1016/j.plantsci.2016.06.007. Epub 2016 Jun 16.

PMID: 27457993

Mapping transcription factor interactome networks using HaloTag protein arrays.

Yazaki J, Galli M, Kim AY, Nito K, Aleman F, Chang KN, et al.

*Proc Natl Acad Sci U S A.* 2016 Jul 19;113(29):E4238-47. doi: 10.1073/pnas.1603229113. Epub 2016 Jun 29.

PMID: 27357687

The epidermis coordinates auxin-induced stem growth in response to shade.

Procko C, Burko Y, Jaillais Y, Ljung K, Long JA, Chory J.

*Genes Dev.* 2016 Jul 1;30(13):1529-41. doi: 10.1101/gad.283234.116. Erratum in: *Genes Dev.* 2016 Sep 1;30(17):2018. PMID: 27401556

### **Christopher Colwell**

Titanium biomaterials with complex surfaces induced aberrant peripheral circadian rhythms in bone marrow mesenchymal stromal cells.

Hassan N, McCarville K, Morinaga K, Mengatto CM, Langfelder P, Hokugo A, Tahara Y, Colwell CS, Nishimura I.

*PLoS One.* 2017 Aug 17;12(8):e0183359. doi: 10.1371/journal.pone.0183359. eCollection 2017.

PMID: 28817668

Development of diabetes does not alter behavioral and molecular circadian rhythms in a transgenic rat model of type 2 diabetes mellitus.

Qian J, Thomas AP, Schroeder AM, Rakshit K, Colwell CS, Matveyenko AV.

*Am J Physiol Endocrinol Metab.* 2017 Aug 1;313(2):E213-E221. doi: 10.1152/ajpendo.00406.2016.

Epub 2017 May 2. PMID: 28465284

Neurocardiovascular deficits in the Q175 mouse model of Huntington's disease.

Cutler TS, Park S, Loh DH, Jordan MC, Yokota T, Roos KP, Ghiani CA, Colwell CS.

*Physiol Rep.* 2017 Jun;5(11). pii: e13289. doi: 10.14814/phy2.13289.

PMID: 28576852

Membrane Currents, Gene Expression, and Circadian Clocks.

Allen CN, Nitabach MN, Colwell CS.

*Cold Spring Harb Perspect Biol.* 2017 May 1;9(5). pii: a027714. doi: 10.1101/cshperspect.a027714. Review.

PMID: 28246182

Circadian Rhythms: Does Burning the Midnight Oil Leave You Weak?

Colwell CS.

*Curr Biol.* 2016 Jul 25;26(14):R669-71. doi: 10.1016/j.cub.2016.06.027. PMID: 27458911

### **Paula Desplats**

Circadian alterations during early stages of Alzheimer's disease are associated with aberrant cycles of DNA methylation in BMAL1.

Cronin P, McCarthy MJ, Lim ASP, ... DA, Desplats P.

*Alzheimers Dement.* 2017 Jun;13(6):689-700. doi: 10.1016/j.jalz.2016.10.003. Epub 2016 Nov 22.  
PMID: 27883893

Combination of alpha-synuclein immunotherapy with anti-inflammatory treatment in a transgenic mouse model of multiple system atrophy.

Valera E, Spencer B, Fields JA, Trinh I, Adame A, Mante M, et al.

*Acta Neuropathol Commun.* 2017 Jan 5;5(1):2. doi: 10.1186/s40478-016-0409-1.

PMID: 28057080

A de novo compound targeting  $\alpha$ -synuclein improves deficits in models of Parkinson's disease.

Wrasidlo W, Tsigelny IF, Price DL, Dutta G, Rockenstein E, Schwarz TC, et al.

*Brain.* 2016 Dec;139(Pt 12):3217-3236. Epub 2016 Sep 27.

PMID: 27679481

Neuropeptide Treatment with Cerebrolysin Enhances the Survival of Grafted Neural Stem Cell in an  $\alpha$ -Synuclein Transgenic Model of Parkinson's Disease.

Rockenstein E, Desplats P, Ubhi K, ..., Masliah E.

*J Exp Neurosci.* 2016 Jul 7;9(Suppl 2):131-40. doi: 10.4137/JEN.S25521. eCollection 2015.

PMID: 27429559

### **Pieter Dorrestein**

Multi-omics Analysis of Periodontal Pocket Microbial Communities Pre- and Posttreatment.

Califf KJ, Schwarzberg-Lipson K, Garg N, Gibbons SM, Caporaso JG, Slots J, Cohen C, Dorrestein PC, Kelley ST.

*mSystems.* 2017 Jun 20;2(3). pii: e00016-17. doi: 10.1128/mSystems.00016-17. eCollection 2017 May-Jun. PMID: 28744486

A Maldisotopic Approach to Discover Natural Products: Cryptomaldamide, a Hybrid Tripeptide from the Marine Cyanobacterium *Moorea producens*.

Kinnel RB, Esquenazi E, Leao T, Moss N, Mevers E, Pereira AR, Monroe EA, Korobeynikov A, Murray TF, Sherman D, Gerwick L, Dorrestein PC, Gerwick WH.

*J Nat Prod.* 2017 May 26;80(5):1514-1521. doi: 10.1021/acs.jnatprod.7b00019. Epub 2017 Apr 27.

PMID: 28448144

Expanding the Chemical Repertoire of the Endophyte *Streptomyces albospinus* RLe7 Reveals Amphotericin B as an Inducer of a Fungal Phenotype.

Chagas FO, Caraballo-Rodríguez AM, Dorrestein PC, Pupo MT.

*J Nat Prod.* 2017 May 26;80(5):1302-1309. doi: 10.1021/acs.jnatprod.6b00870. Epub 2017 Apr 4.

PMID: 28375005

Digitizing mass spectrometry data to explore the chemical diversity and distribution of marine cyanobacteria and algae.

Luzzatto-Knaan T, Garg N, Wang M, Glukhov E, Peng Y, Ackermann G, Amir A, Duggan BM, Ryazanov S, Gerwick L, Knight R, Alexandrov T, Bandeira N, Gerwick WH, Dorrestein PC.

*Elife.* 2017 May 11;6. pii: e24214. doi: 10.7554/eLife.24214. PMID: 28492366

An *Elegan(t)* Screen for Drug-Microbe Interactions.

Vrbanac A, Debelius JW, Jiang L, Morton JT, Dorrestein P, Knight R.

*Cell Host Microbe.* 2017 May 10;21(5):555-556. doi: 10.1016/j.chom.2017.04.014.

PMID: 28494234

The WinCF Model - An Inexpensive and Tractable Microcosm of a Mucus Plugged Bronchiole to Study the Microbiology of Lung Infections.

Comstock WJ, Huh E, Weekes R, Watson C, Xu T, Dorrestein PC, Quinn RA.  
*J Vis Exp.* 2017 May 8;(123). doi: 10.3791/55532. PMID: 28518116

Mass Spectrometry Based Molecular 3D-Cartography of Plant Metabolites.

Floros DJ, Petras D, Kaponi CA, Melnik AV, Ling TJ, Knight R, Dorrestein PC.  
*Front Plant Sci.* 2017 Mar 29;8:429. doi: 10.3389/fpls.2017.00429. eCollection 2017.  
PMID: 28405197

Prioritizing Natural Product Diversity in a Collection of 146 Bacterial Strains Based on Growth and Extraction Protocols.

Crüsemann M, O'Neill EC, Larson CB, Melnik AV, Floros DJ, da Silva RR, Jensen PR, Dorrestein PC, Moore BS.

*J Nat Prod.* 2017 Mar 24;80(3):588-597. doi: 10.1021/acs.jnatprod.6b00722. Epub 2016 Nov 11.  
PMID: 28335604

Integrating Molecular Networking and Biological Assays To Target the Isolation of a Cytotoxic Cyclic Octapeptide, Samoamide A, from an American Samoan Marine Cyanobacterium.

Naman CB, Rattan R, Nikoulina SE, Lee J, Miller BW, Moss NA, Armstrong L, Boudreau PD, Debonsi HM, Valeriote FA, Dorrestein PC, Gerwick WH.

*J Nat Prod.* 2017 Mar 24;80(3):625-633. doi: 10.1021/acs.jnatprod.6b00907. Epub 2017 Jan 5.  
PMID: 28055219

Antimicrobials from human skin commensal bacteria protect against *Staphylococcus aureus* and are deficient in atopic dermatitis.

Nakatsuji T, Chen TH, Narala S, Chun KA, Two AM, Yun T, Shafiq F, Kotol PF, Bouslimani A, Melnik AV, Latif H, Kim JN, Lockhart A, Artis K, David G, Taylor P, Streib J, Dorrestein PC, et al.

*Sci Transl Med.* 2017 Feb 22;9(378). pii: eaah4680. doi: 10.1126/scitranslmed.aah4680.  
PMID: 28228596

From single cells to our planet-recent advances in using mass spectrometry for spatially resolved metabolomics.

Petras D, Jarmusch AK, Dorrestein PC.

*Curr Opin Chem Biol.* 2017 Feb;36:24-31. doi: 10.1016/j.cbpa.2016.12.018. Epub 2017 Jan 10.  
Review. PMID: 28086192

Natural products as mediators of disease.

Garg N, Luzzatto-Knaan T, Melnik AV, Caraballo-Rodríguez AM, Floros DJ, Petras D, Gregor R, Dorrestein PC, Phelan VV.

*Nat Prod Rep.* 2017 Feb 1;34(2):194-219. doi: 10.1039/c6np00063k. Epub 2016 Nov 22. Review.  
PMID: 27874907

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### **Susan Golden**

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### **Katja Lamia**

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### **Michael McCarthy**

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### **Sara Mednick**

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### **Pamela Mellon**

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