CURRICULUM VITAE

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NATIONALITY: U.S. Citizen by birth

EDUCATION:

1981-1983	Pharmacology Research Associate Training Program, National Institute of General Medical Sciences, Laboratory of Clinical Sciences and Laboratory of Cell Biology, National Institutes of Health, Bethesda, MD
1979-1981	Ph.D., Institute of Neuroscience, Department of Biology, University of Oregon, Eugene, Oregon, Dr. Michael Menaker, Advisor.
Summer 1977	Hopkins Marine Station, Stanford University, Pacific Grove, California
1975-1979	Department of Zoology, University of Texas, Austin, Texas
1970-1974	B.A. in Biology, Swarthmore College, Swarthmore, Pennsylvania

PROFESSIONAL EXPERIENCE:

2009-present	Professor and Chair, Department of Neuroscience, UT Southwestern Medical Center
2009-present	Loyd B. Sands Distinguished Chair in Neuroscience, UT Southwestern
2026-present	Visiting Professor, Institute of Development, Aging and Cancer, Tohoku University, Sendai, Japan
2023-present	Investigator Emeritus, Howard Hughes Medical Institute
2009-2023	Investigator, Howard Hughes Medical Institute, UT Southwestern
2009-present	Professor Emeritus of Neurobiology and Physiology, and Walter and Mary Elizabeth Glass Professor Emeritus in the Life Sciences, Northwestern University
2013-2021	Principal Investigator, Satellite, International Institute for Integrative Sleep Medicine, World Premier International Research Center Initiative, University of Tsukuba, Japan
2001-2009	Director, Center for Functional Genomics, Northwestern University
1997-2009	Investigator, Howard Hughes Medical Institute, Northwestern University
1997-2009	Professor of Neurology, Northwestern University Medical School
1996-2009	Walter and Mary Elizabeth Glass Professor in the Life Sciences, Department of Neurobiology and Physiology, Northwestern University
1991-1996	Professor and Associate Chair, Department of Neurobiology and Physiology, Northwestern University
1991-1992	Acting Chair, Department of Neurobiology and Physiology, Northwestern
1988-1995	Acting Associate Director, Institute for Neuroscience, Northwestern
1987-1991	Associate Professor and Associate Chair, Department of Neurobiology and Physiology, Northwestern
1983-1987	Assistant Professor, Department of Neurobiology and Physiology, Northwestern

AWARDS AND HONORS:

2026	Paul Doty Lecture, Molecular and Cellular Biology, Harvard University, Cambridge, MA
2026	Member (elected), Academy of Geroscience
2026	SRBR Director's Award in Research, Mentoring and Service, Society for Research on Biological Rhythms, Amelia Island, FL
2024	Thomas Hunt Morgan Distinguished Lecture, Department of Biology, University of Kentucky, Lexington, KY
2023	Aschoff's Rule Prize, Gordon Research Conference on Chronobiology, Lewiston, ME
2022	The M.R. Bauer Foundation Colloquium, Distinguished Lecturer, Brandeis University, Waltham, MA
2019	Gruber Neuroscience Prize, The Gruber Foundation, presented at the 2019 Society for Neuroscience Annual Meeting
2019	Thomas Willis Lecture, Nuffield Department of Clinical Neurosciences, University of Oxford
2019-2021	Thomson Reuters Highly Cited Researcher
2018	Transatlantic Medal, Society for Endocrinology, Bristol, England
2017	Special Lecture, Society for Neuroscience Annual Meeting, Washington, DC
2017	James L. Voogt Lecture in Neuroendocrinology, Institute for Reproductive Health and Regenerative Medicine, University of Kansas Medical Center
2016	Peter C. Farrell Prize in Sleep Medicine, Harvard Medical School, Division of Sleep Medicine
2014-present	Member, National Academy of Medicine, USA
2014	Thomson Reuters Highly Cited Researcher, Biology and Biochemistry
2014	John Grace Lecture, Center for Integrative Genomics, University of Lausanne, Switzerland
2014	Quastel Lectureship, Hebrew University of Jerusalem, Israel
2013	Maurice B. Visscher Distinguished Lectureship, Department of Integrative Biology and Physiology, University of Minnesota Medical School
2012	Plenary Lecturer, Pan-American Association for Biochemistry and Molecular Biology, SAIB, Mendoza, Argentina
2012	Outstanding Scientific Achievement Award, Sleep Research Society
2012	Pittendrigh/Aschoff Plenary Lecture, Society for Research on Biological Rhythms
2010	Special Lecture, Society for Neuroscience Annual Meeting, San Diego, CA
2009-present	Member, The Academy of Medicine, Engineering and Science of Texas
2007	Harvey Lecture, The Harvey Society, Rockefeller University, New York
2007	31st Carl F. Schmidt Honorary Lecture, University of Pennsylvania
2006	Vernon B. Mountcastle Lectureship in Neuroscience, Johns Hopkins School of Medicine
2004	14th Annual Einar Hille Memorial Lecture in Neuroscience, University of Washington
2003	Honorary Member, The Japanese Biochemical Society
2003-present	Member, National Academy of Sciences, USA
2003	Eduard Buchner Prize, German Society for Biochemistry and Molecular Biology (GBM)
2002	Flexner Lecture, University of Pennsylvania, Philadelphia, PA
2001	W. Alden Spencer Award in Neural Science, College of Physicians and Surgeons, Columbia University
2001-present	Fellow, American Association for the Advancement of Science
2001	Neil D. Graham Lecture, University of Toronto, Canada
2000-present	Fellow, American Academy of Arts and Sciences
2000	Holiday Lectures on Science, *Clockwork Genes: Discoveries in Biological Time* (with Michael Rosbash), Howard Hughes Medical Institute
2000	Gildea Lecture, Washington University, St. Louis, MO
2000	Nobel Forum Research Lecture, Stockholm, Sweden
1999	Ruth Sager Memorial Lecture in Genetics, Woods Hole, MA
1999	A.J. Carlson Memorial Lecture, University of Chicago, IL
1998	Presidential Lecture, Society for Neuroscience, Los Angeles, CA
1998	Cited in *Science* Breakthroughs of the Year 1998
1997	Cited in *Science* Breakthroughs of the Year 1997
1996-2009	Walter and Mary Elizabeth Glass Chair in the Life Sciences

1995	Ariëns Kappers Medal, Royal Netherlands Academy of Arts and Sciences
1995-1999	Bristol-Myers Squibb Unrestricted Grant for Neuroscience Research
1987-1997	MERIT Award, National Institute of Mental Health
1987	Faculty Honor Roll (Teaching), Associated Student Government
1986	Honma Prize in Biological Rhythms Research
1985-1990	NSF Presidential Young Investigator Award
1985-1988	Searle Scholars Award, The Chicago Community Trust
1983-1985	Alfred P. Sloan Research Fellowship in Neuroscience
1982	Finalist, Donald B. Lindsley Prize in Behavioral Neuroscience
1981-1983	Pharmacology Research Associate Program Fellowship, NIGMS
1979-1981	Public Health Service Predoctoral Training Grant Fellowship
1977-1979	Phi Kappa Phi Honor Society
1976-1979	National Science Foundation Graduate Fellowship
1975-1976	Public Health Service Predoctoral Training Grant Fellowship
Summer 1974	National Science Foundation Undergraduate Research Participant

PROFESSIONAL SOCIETIES:

1976-present	American Association for the Advancement of Science
1981-present	Society for Neuroscience
1983-1995	Association for Research in Vision and Ophthalmology
1986-present	Society for Research on Biological Rhythms
1987-1988	International Society for Neuroethology
1993-present	International Mammalian Genome Society
1999-present	Genetics Society of America
1999-present	American Society of Human Genetics
2000-present	American Academy of Arts and Sciences
2003-present	American College of Neuropsychopharmacology
2003-present	National Academy of Sciences
2009-present	The Academy of Medicine, Engineering and Science of Texas
2014-present	National Academy of Medicine

MAJOR FIELDS OF RESEARCH INTEREST:

Molecular Neurobiology and Genetics
Molecular Genetics of Mammalian Circadian Clocks
Mouse and Human Genetics and Genomics
Healthy Aging and Longevity

PROFESSIONAL ACTIVITIES:

Scientific Advisory Boards

2026-2029	National Advisory Council on Aging, National Institute on Aging, National Institutes of Health
2025-present	Scientific Advisory Board, Max Planck Institute for Biology of Ageing in Cologne
2024-2025	Freeman Hrabowski Scholars advisory panel, Howard Hughes Medical Institute
2022-2023	Freeman Hrabowski Scholars advisory panel, Howard Hughes Medical Institute
2022-present	External Advisory Board, University of Florida Claude D. Pepper Older Americans Independence Center
2019-2026	Founder and Scientific Advisory Board, *Synchronicity Pharma, Inc.*
2012-present	Selection Committee, Aschoff and Honma Prize in Biological Rhythm Research, The Aschoff and Honma Memorial Foundation
2012-2016	International Scientific Group of Circadian Rhythm Experts (INSPIRE) Board, Servier International
2012	Scientific Advisory Board, Eli Lilly Neuroscience Discovery Research and Clinical Investigation
2011-present	Center for Circadian Biology, UCSD, External Advisory Board

2008-2019	Founder and Scientific Advisory Board, *Reset Therapeutics, Inc.*
2008-2010	Developmental Mouse Brain Atlas Project Advisory Board, Allen Institute for Brain Sciences
2008-2013	Member, Memory and Cognition Disorders Award Committee, McKnight Endowment Fund for Neuroscience
2008-2009	University of Pittsburgh Sleep Medicine Institute, External Advisory Board
2008-2010	Stanford Center for Narcolepsy, Scientific Advisory Board
2007-2012	Scientific Advisory Board, Allen Institute for Brain Sciences, Seattle
2006-2008	Scientific Advisory Board, Boston Autism Consortium
2005-2013	Scientific Advisory Board, Max Planck Institute for Biophysical Chemistry
2004-2008	Scientific Advisory Board, Searle Scholars Program
2003-2004	SfN/AstraZeneca Young Investigator Award Selection Committee
2002-2008	Scientific Advisory Board, Brain Atlas Project, Allen Institute for Brain Sciences
2000-2002	Scientific Advisory Board, Genomics Institute of the Novartis Research Foundation
2000-2007	Founder and Scientific Advisory Board, *Hypnion, Inc.*, Worcester, MA.
2000-2002	Genomics Advisory Committee, Eli Lilly and Company
1999-present	The Klingenstein Fund, Neuroscience Advisory Committee
1999-2004	Mouse Phenome Project, Governance Committee
1998-2009	Scientific Advisory Board, Restless Legs Syndrome Foundation
1997-2000	National Advisory Mental Health Council, Member, NIMH, NIH
1995-1999	Bristol-Myers Squibb Neuroscience Award Selection Committee, Chair 1998-99

Editorial Boards

2023-present	Editorial Board, *Aging Cell*
2022-present	Editorial Board, *Life Medicine*
2020-present	Editorial Advisory Board, *The Scientist*
2015-2018	Board of Reviewing Editors, *eLife*
2015-present	Editorial Board, *Neurobiology of Sleep and Circadian Rhythms*
2008-present	Advisory Board, *Journal of Biological Rhythms*
2006-2012	Editorial Board, *PLoS Genetics*
2005-present	Editorial Board, *Proceedings of the National Academy of Sciences USA*
2003-2010	Editorial Board, *Current Opinion in Neurobiology*
2001-2024	Specialty Lead, Genomics & Genetics/Animal Genetics, H1 Connect, *Faculty Opinions*
2001-present	Editorial Board, *Genes, Brain and Behavior*
1999-2003	Editorial Board, *Physiological Genomics*
1995-1999	Associate Editor, *Neuron*
1984-1999	Advisory Board, *Journal of Biological Rhythms*

NIH Committees

2017-2018	Board of Scientific Counselors, Member, NIMH, NIH
2013-2016	External Scientific Advisory Committee, NIA program project on Sleep, Aging, and Circadian Rhythm Disorders, C.A. Czeisler, PhD, MD, Brigham & Women's Hospital, Harvard Medical School, Boston, MA
2011	Co-Chair, National Cancer Institute, Division of Cancer Biology, Circadian Clocks and Cancer Workshop, Rockville, MD
2011	Consultant, National Advisory Council for Human Genome Research, NIH/NHGRI
2007-2011	*Cre*-Driver Network Steering Committee, NIH, NIMH
2006	NIMH Special Emphasis Panel, Conte Centers for Depression and Anxiety
2006	Chair, NIMH Special Emphasis Panel, Development of Recombinase-Expressing Mouse Lines for Studying the Nervous System
2006	NHGRI Special Emphasis Panel, Mouse KOMP RFA Review
2001-2002	Member, Mouse Sequencing Liaison Group, NIH/NHGRI
2002	Road Map Meeting with NIH Director, Elias Zerhouni, NIH
2001	NIMH Workgroup on Epidemiology and Genetics of Mood Disorders
2000	Co-Chair with Geoffrey Duyk, Setting Priorities for Phenotyping the Mouse Nervous System and Behavior, Workshop, NIMH

2000	Second Follow-Up Workshop to Priority Setting for Mouse Genomics and Genetics Resources, NIH
1998	NIMH IRP Genetics Research Advisory Panel, Co-Chair with David Cox
1998	Priority Setting for Mouse Genomics and Genetics Resources, NIH, ENU Mutagenesis Subcommittee Co-Chair
1997	NIMH Genetics Workgroup, Member
1997-2000	National Advisory Mental Health Council, Member, NIMH, NIH
1993-1994	NIH/NIMH Behavioral Neuroscience Review Committee, Member
1990	NICHD Site Visit Committee (Review of Intramural Research)
1988-1992	NIMH Psychobiology and Behavior Review Committee, Member
1988	NIMH consultant on *Decade of the Brain* report to Congress
1987	NIH Biopsychology Study Section, Special Reviewer
1983	NIH Special Study Section, Committee Member

Other

2025-present	External Advisory Committee, NSF-CREST Center for Circadian Rhythmicity and Sleep Homeostasis, Morehouse School of Medicine, Atlanta, GA
2022-2024	Consultant, WoodNext Foundation
2022	Advisor, F1000Research Collection on Circadian Clocks in Health and Disease
2018-2023	National Sleep Foundation, Sleep Timing and Variability Consensus Panel
2018-2019	Pradel Research Award selection committee, NAS
2018-2019	IBRO 2019 Scientific Program Committee
2018-2024	Directors' Award Committee, Chair, Society for Research on Biological Rhythms
2017-2021	HHMI Investigator Council
2016-2017	Governmental Affairs Committee, Society for Research on Biological Rhythms
2015-2016	Nomination Committee, Society for Research on Biological Rhythms
2015	Co-organizer (with Carla Green, Michael Hastings, Hiroki Ueda, Han Wang), Cold Spring Harbor Asia Conference on Biological Rhythms, Suzhou, China.
2015	Co-organizer (with Russell Foster), Brain Conference on The Neurobiology of Sleep and Circadian Rhythm, Federation of European Neuroscience Societies (FENS), Copenhagen, Denmark
2015	Co-organizer (with Sydney Brenner, Scott Sternson, Amita Sehgal), Janelia Research Center Conference: Hypothalamic Circuits for Control of Survival Behaviors, HHMI
2013	Co-Organizer (with Garret FitzGerald), Keystone Symposium on Molecular Clockworks and the Regulation of Cardio-Metabolic Function
2012	Co-Organizer (with Erin O'Shea), Janelia Farm Conference: Circadian Clocks: Mechanisms, Coordination, and Physiology, HHMI
2012	Janelia Farm Group Leader Review Committee, HHMI
2010-2012	Executive Committee, Society for Research on Biological Rhythms
2010	Janelia Lab Head Recruiting Symposium, Review Committee, HHMI
2008-2009	Sleep Research Society, Presidential Task Force on Genetics and Sleep
2008-2010	President, Society for Research on Biological Rhythms
2007-2009	Chair, 2009 Gordon Research Conference on Chronobiology
2007	Co-Organizer (with Kevin Moses, Allan Bradley, Janet Rossant), Janelia Farm Conference on Expanding the Genetic Tool-Kit in Mouse, HHMI
2006-2008	Executive Committee, Society for Research on Biological Rhythms
2005-2007	Vice-Chair, 2007 Gordon Research Conference on Chronobiology
2005-2008	Society for Neuroscience, International Affairs Committee/US National Committee to IBRO
2005-2006	Janelia Farm Group Leader Review Committee, HHMI
2005-2006	Program Committee, Society for Research on Biological Rhythms
1997-2001	Education Committee, Society for Neuroscience, Chair 1998-2001
1996	Organizer, Short Course, Society for Neuroscience, *What's Wrong With My Mouse? New Interplays Between Mouse Genetics and Behavior*
1995-1998	Consultant, Neuroscience Institute, Morehouse School of Medicine
1994-2009	Northwestern University Center for Sleep and Circadian Biology, Associate Director

1994-1996	Executive Committee, Society for Research on Biological Rhythms
1992-1994	Task Force on Biological Rhythms and Psychopathology, Member, MacArthur Foundation Research Network on Depression
1991-2002	NSF Science and Technology Center for Biological Timing, Member and Advisory (Steering) Committee, University of Virginia, Northwestern University and Rockefeller University
1991-1996	Minority Neuroscience Fellowship Program Advisory Committee, Society for Neuroscience
1991-2009	Northwestern University Cancer Center, Full Member
1990-1992	MacArthur Foundation Mental Health Research Network I, Consultant
1988-2009	Northwestern University Institute for Neuroscience, Member
1988	NSF Presidential Young Investigator Award Review Panel
1987	Program Committee, Society for Research on Biological Rhythms
1986-1996	Advisory Committee, Society for Research on Biological Rhythms
1983-2009	Northwestern University Center for Reproductive Science, Member

Reviewer for: *Science, Nature, Cell, eLife, Neuron, Molecular Cell, Proceedings of the National Academy of Science USA, Nature Neuroscience, Nature Genetics, Nature Medicine, Nature Structural & Molecular Biology, Aging Cell, Current Biology, PLoS Biology, PLoS Genetics, Cell Metabolism, Genes and Development, Journal of Biological Chemistry, Genome Research, EMBO Journal, Genomics, Mammalian Genome, Human Genetics, Journal of Neuroscience, Journal of General Physiology, American Journal of Physiology, Endocrinology, Molecular and Cellular Biology, Journal of Neurochemistry, Journal of Comparative Physiology, Journal of Neurobiology, Life Science, Journal of Biological Rhythms, Physiology and Behavior, Bioscience, Neuroendocrinology, Journal of Endocrinology, European Journal of Neuroscience, Annals of Neurology, American Scientist, National Science Foundation, National Institutes of Health, National Institute of Mental Health, Medical Research Council of Canada, Natural Sciences and Engineering Research Council of Canada, NATO Scientific Committee, Air Force Office of Scientific Research, Dutch Cancer Society, Institute of Medicine, Hevolution, IRB Barcelona*

PUBLICATIONS:

1. Menaker, M., J.S. Takahashi and A. Eskin. 1978. The physiology of circadian pacemakers. *Annu Rev Physiol* **40**: 501-526. https://doi.org/10.1146/annurev.ph.40.030178.002441 PMID: 345954

2. Takahashi, J.S., C. Norris and M. Menaker. 1978. Circadian photoperiodic regulation of testis growth in the house sparrow: Is the pineal gland involved? In: *Comparative Endocrinology*, P.J. Gaillard and H.H. Boer (eds.), Elsevier/North-Holland Biomedical Press, Amsterdam, pp. 153-156.

3. Takahashi, J.S. and M. Menaker. 1979. Physiology of avian circadian pacemakers. *Fed Proc* **38**: 2583-2588.PMID: 499574

4. Takahashi, J.S. and M. Menaker. 1979. Brain mechanisms in avian circadian systems. In: *Biological Rhythms and Their Central Mechanism*, M. Suda, O. Hayaishi and H. Nakagawa (eds.), Elsevier/North-Holland Biomedical Press, pp. 95-109.

5. Takahashi, J.S. and M. Menaker. 1980. On the organization of avian circadian systems: The role of the pineal and suprachiasmatic nuclei. In: *Acta XVII Congressus Internationalis Ornithologici Vol. I,* R. Nohring (ed.), Deuschen Ornithologen-Gesellschaft, Berlin, pp. 425-434.

6. Takahashi, J.S., H. Hamm and M. Menaker. 1980. Circadian rhythms of melatonin release from individual superfused chicken pineal glands in vitro. *Proc Natl Acad Sci U S A* **77**: 2319-2322. https://doi.org/10.1073/pnas.77.4.2319 PMID: 6929552

7. Takahashi, J.S. and M. Menaker. 1980. Interaction of estradiol and progesterone: effects on circadian locomotor rhythm of female golden hamsters. *Am J Physiol* **239**: R497-504. https://doi.org/10.1152/ajpregu.1980.239.5.R497 PMID: 7192057

8. Menaker, M., D.J. Hudson and J.S. Takahashi. 1981. Neural and endocrine components of circadian clocks in birds. In: *Biological Clocks in Seasonal Reproductive Cycles*, B.K. Follett and D.E. Follett (eds.), John Wright and Sons Ltd., Bristol, pp. 171-183.

9. Takahashi, J.S. 1982. Neural mechanisms in avian circadian systems: Hypothalamic pacemaking systems. In: *Vertebrate Circadian Systems*, J. Aschoff, S. Daan and G. Groos (eds.), Springer-Verlag, Berlin, Heidelburg, pp. 112-119.

10. Takahashi, J.S. 1982. Circadian rhythms of the isolated chicken pineal *in vitro.* In: *Vertebrate Circadian Systems,* J. Aschoff, S. Daan and G. Groos (eds.), Springer-Verlag, Berlin, Heidelburg, pp. 158-163.

11. Takahashi, J.S. and M. Menaker. 1982. Entrainment of the circadian system of the house sparrow: A population of oscillators in pinealectomized birds. *Journal of Comparative Physiology* **146**:245-253.

12. Takahashi, J.S. and M. Menaker. 1982. Role of the suprachiasmatic nuclei in the circadian system of the house sparrow, Passer domesticus. *J Neurosci* **2**: 815-828. https://doi.org/10.1523/JNEUROSCI.02-06-00815.1982 PMID: 7086486

13. Takahashi, J.S. and M. Zatz. 1982. Regulation of circadian rhythmicity. *Science* **217**: 1104-1111. https://doi.org/10.1126/science.6287576 PMID: 6287576

14. Hamm, H.E., J.S. Takahashi and M. Menaker. 1983. Light-induced decrease of serotonin N-acetyltransferase activity and melatonin in the chicken pineal gland and retina. *Brain Res* **266**: 287-293. https://doi.org/10.1016/0006-8993(83)90660-1 PMID: 6871664

15. Eskin, A. and J.S. Takahashi. 1983. Adenylate cyclase activation shifts the phase of a circadian pacemaker. *Science* **220**: 82-84. https://doi.org/10.1126/science.6298939 PMID: 6298939

16. Takahashi, J.S. and M. Menaker. 1984. Circadian rhythmicity: Regulation in the time domain. In: *Biological Regulation and Development*, Vol. 3B, R.F. Goldberger and K.R. Yamamoto (eds.), Plenum Press, New York, pp. 285-303.

17. Takahashi, J.S. and M. Menaker. 1984. Multiple redundant circadian oscillators within the isolated avian pineal gland. *Journal of Comparative Physiology A* **154**:435-440.

18. Takahashi, J.S., P.J. DeCoursey, L. Bauman and M. Menaker. 1984. Spectral sensitivity of a novel photoreceptive system mediating entrainment of mammalian circadian rhythms. *Nature* **308**: 186-188. https://doi.org/10.1038/308186a0 PMID: 6700721

19. Reisine, T.D. and J.S. Takahashi. 1984. Somatostatin pretreatment desensitizes somatostatin receptors linked to adenylate cyclase and facilitates the stimulation of cyclic adenosine 3':5'-monophosphate accumulation in anterior pituitary tumor cells. *J Neurosci* **4**: 812-819. https://doi.org/10.1523/JNEUROSCI.04-03-00812.1984 PMID: 6142935

20. Eskin, A., J.S. Takahashi, M. Zatz and G.D. Block. 1984. Cyclic guanosine 3':5'-monophosphate mimics the effects of light on a circadian pacemaker in the eye of aplysia. *J Neurosci* **4**: 2466-2471. https://doi.org/10.1523/JNEUROSCI.04-10-02466.1984 PMID: 6092562

21. Dubocovich, M.L., R.C. Lucas and J.S. Takahashi. 1985. Light-dependent regulation of dopamine receptors in mammalian retina. *Brain Res* **335**: 321-325. https://doi.org/10.1016/0006-8993(85)90485-8 PMID: 2988696

22. Dubocovich, M.L., R.C. Lucas and J.S. Takahashi. 1986. Constant-light induced down-regulation of dopamine receptors in retina. In: *Dopaminergic Systems and Their Regulation*, G.N. Woodruff, J.A. Poat and P.J. Roberts (eds.), MacMillan Press, England, pp. 429-430.

23. Cassone, V.M., J.S. Takahashi, C.D. Blaha, R.F. Lane and M. Menaker. 1986. Dynamics of noradrenergic circadian input to the chicken pineal gland. *Brain Res* **384**: 334-341. https://doi.org/10.1016/0006-8993(86)91169-8 PMID: 3779384

24. Duncan, M.J., J.S. Takahashi and M.L. Dubocovich. 1986. Characterization of 2-[125I]iodomelatonin binding sites in hamster brain. *Eur J Pharmacol* **132**: 333-334. https://doi.org/10.1016/0014-2999(86)90627-8 PMID: 3816982

25. Keefe, D.L., D.J. Earnest, D. Nelson, J.S. Takahashi and F.W. Turek. 1987. A cholinergic antagonist, mecamylamine, blocks the phase-shifting effects of light on the circadian rhythm of locomotor activity in the golden hamster. *Brain Res* **403**: 308-312. https://doi.org/10.1016/0006-8993(87)90068-0 PMID: 3548889

26. Takahashi, J.S. and F.W. Turek. 1987. Anisomycin, an inhibitor of protein synthesis, perturbs the phase of a mammalian circadian pacemaker. *Brain Res* **405**: 199-203. https://doi.org/10.1016/0006-8993(87)91010-9 PMID: 3567595

27. Dubocovich, M.L. and J.S. Takahashi. 1987. Use of 2-[125I]iodomelatonin to characterize melatonin binding sites in chicken retina. *Proc Natl Acad Sci U S A* **84**: 3916-3920. https://doi.org/10.1073/pnas.84.11.3916 PMID: 3035559

28. Pratt, B.L. and J.S. Takahashi. 1987. Alpha-2 adrenergic regulation of melatonin release in chick pineal cell cultures. *J Neurosci* **7**: 3665-3674. https://doi.org/10.1523/JNEUROSCI.07-11-03665.1987 PMID: 2890722

29. Takahashi, J.S. 1987. Cellular basis of circadian rhythms in the avian pineal. In: *Comparative Aspects of Circadian Clocks*, T. Hiroshige and K. Honma (eds.), Hokkaido University Press, Sapporo, pp. 3-15.

30. Robertson, L.M. and J.S. Takahashi. 1988. Circadian clock in cell culture: I. Oscillation of melatonin release from dissociated chick pineal cells in flow-through microcarrier culture. *J Neurosci* **8**: 12-21. https://doi.org/10.1523/JNEUROSCI.08-01-00012.1988 PMID: 3276829

31. Robertson, L.M. and J.S. Takahashi. 1988. Circadian clock in cell culture: II. In vitro photic entrainment of melatonin oscillation from dissociated chick pineal cells. *J Neurosci* **8**: 22-30. https://doi.org/10.1523/JNEUROSCI.08-01-00022.1988 PMID: 3339410

32. Duncan, M.J., J.S. Takahashi and M.L. Dubocovich. 1988. 2-[125I]iodomelatonin binding sites in hamster brain membranes: pharmacological characteristics and regional distribution. *Endocrinology* **122**: 1825-1833. https://doi.org/10.1210/endo-122-5-1825 PMID: 2834175

33. Pratt, B.L. and J.S. Takahashi. 1988. A pertussis toxin-sensitive G-protein mediates the alpha 2-adrenergic receptor inhibition of melatonin release in photoreceptive chick pineal cell cultures. *Endocrinology* **123**: 277-283. https://doi.org/10.1210/endo-123-1-277 PMID: 2838256

34. Inouye, S.T., J.S. Takahashi, F. Wollnik and F.W. Turek. 1988. Inhibitor of protein synthesis phase shifts a circadian pacemaker in mammalian SCN. *Am J Physiol* **255**: R1055-1058. https://doi.org/10.1152/ajpregu.1988.255.6.R1055 PMID: 3202220

35. Takahashi, J.S., D.E. Nelson and A. Eskin. 1989. Immunocytochemical localization of serotonergic fibers innervating the ocular circadian system of Aplysia. *Neuroscience* **28**: 139-147. https://doi.org/10.1016/0306-4522(89)90238-8 PMID: 2761688

36. Pierce, M.E., D. Barker, J. Harrington and J.S. Takahashi. 1989. Cyclic AMP-dependent melatonin production in Y79 human retinoblastoma cells. *J Neurochem* **53**: 307-310. https://doi.org/10.1111/j.1471-4159.1989.tb07330.x PMID: 2470863

37. Hamm, H.E., D. Deretic, M.R. Mazzoni, C.A. Moore, J.S. Takahashi and M.M. Rasenick. 1989. A monoclonal antibody against the rod outer segment guanyl nucleotide-binding protein, transducin, blocks the stimulatory and inhibitory G-proteins of adenylate cyclase. *Journal of Biological Chemistry* **264**:1475-1482. https://www.jbc.org/article/S0021-9258(18)60488-0/pdf

38. Duncan, M.J., J.S. Takahashi and M.L. Dubocovich. 1989. Characteristics and autoradiographic localization of 2-[125I]iodomelatonin binding sites in Djungarian hamster brain. *Endocrinology* **125**: 1011-1018. https://doi.org/10.1210/endo-125-2-1011 PMID: 2752961

39. Wollnik, F., F.W. Turek, P. Majewski and J.S. Takahashi. 1989. Phase shifting the circadian clock with cycloheximide: response of hamsters with an intact or a split rhythm of locomotor activity. *Brain Res* **496**: 82-88. https://doi.org/10.1016/0006-8993(89)91053-6 PMID: 2679970

40. Takahashi, J.S., N. Murakami, S.S. Nikaido, B.L. Pratt and L.M. Robertson. 1989. The avian pineal, a vertebrate model system of the circadian oscillator: cellular regulation of circadian rhythms by light, second messengers, and macromolecular synthesis. *Recent Prog Horm Res* **45**: 279-348; discussion 348-252. https://doi.org/10.1016/b978-0-12-571145-6.50010-8 PMID: 2682842

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355. Wickramaratne, A.C., E.S. Rasmussen, Y. Chelliah, F. Schuhmann, I.A. Solov'yov, H. Mouritsen, C.B. Green, B.D. Zoltowski and J.S. Takahashi. 2025. Structure of European robin cryptochrome 1 reveals a role in circadian rhythms, not magnetoreception. *iScience* **28**: 114015. https://doi.org/10.1016/j.isci.2025.114015 PMID: 41488359

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360. [37] Iiams, S.E., N.J. Skinner, M. Wight-Carter, V.A. Acosta-Rodriguez, C.B. Green and J.S. Takahashi. 2026. Time-restricted feeding extends healthspan in both sexes and lifespan in male C57BL/6 J mice. *Nature Aging* **6**: 1227-1243. https://doi.org/10.1038/s43587-026-01129-8 PMID: 42230994

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364. Wijshake, T., J. Rose, J.H. Jun, J. Zielke, L. Li, J.S. Takahashi, F. Rijo-Ferreira and M. Agathocleous. 2026. Ascorbate and TET2 couple balanced hematopoiesis to disease tolerance. *bioRxiv* 10.64898/2026.10.27.762224. https://doi.org/10.64898/2026.10.27.762224 PMID: 42990329

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BOOKS:

Takahashi, J.S., F.W. Turek and R.Y. Moore (Editors). 2001. *Handbook of Behavioral Neurobiology: Volume 12 Circadian Clocks*. Kluwer Academic/Plenum Publishing, New York, 770 pp. ISBN-10: 0306465043. ISBN-13: 978-0306465048

VIDEO:

1. Holiday Lectures on Science, *Clockwork Genes: Discoveries in Biological Time* (with Michael Rosbash), Howard Hughes Medical Institute, Chevy Chase, MD, December 2000. http://www.hhmi.org/biointeractive/clockwork-genes-discoveries-biological-time, http://www.hhmi.org/biointeractive/biology-four-dimensions, http://www.hhmi.org/biointeractive/mammalian-timekeeper

2. iBiology, iBioSeminars, on *Circadian Clocks,* 4 parts, San Francisco, CA, July 2013. https://www.ibiology.org/speakers/joe-takahashi/

3. TEDxSMU 2013 talk, Dallas, TX, November 2013. https://www.youtube.com/watch?v=ocqn3wYTCRM

[37] This article was featured in a *Nature Aging News & Views* (T.Y. Chang & M. Shirazu-Hiza, *Nature Aging* **(**2026) https://doi.org/10.1038/s43587-026-01145-8.

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4. 2019 Gruber Neuroscience Prize Ceremony and Lecture Video, Society for Neuroscience, October 20, 2019. https://youtu.be/k7_ZgSNMbkI

5. Cold Spring Harbor Leading Strand, Joseph Takahashi Symposium Interview, 85th Symposium on Biological Time Keeping, June 22, 2021. https://www.youtube.com/watch?v=K5_ELdUYVKA

6. UTSW Unscripted: Joseph Takahashi, Ph.D. https://www.youtube.com/watch?v=-nK9U2AZPUc

MEDIA (selected):

New York Times, The Argument Podcast, "We Need to Talk About the Dark Side of Daylight Saving Time. Why are we still changing our clocks twice a year?," November 3, 2021.
https://www.nytimes.com/2021/11/03/opinion/the-argument-daylight-saving-time.html

MedPage Today, Second Opinions, "Permanent Daylight Saving Time Is the
Wrong Choice— The Sunshine Protection Act will cause circadian misalignment with serious health consequences," March 28, 2022.
https://www.medpagetoday.com/opinion/second-opinions/97902?trw=no

TheScientist, "Opinion: Changing When and How Much We Eat May Extend Healthspan." J.S. Takahashi and C.B. Green, August 1, 2022.
https://www.the-scientist.com/opinion-changing-when-and-how-much-we-eat-may-extend-health-span-70237

PATENTS:

United States Patent No. 5,874,241. J.S. Takahashi, F.W. Turek and L.H. Pinto. *Clock gene and gene product.* Filed March 13, 1997. Issued February 23, 1999. (mouse *Clock* gene)

United States Patent No. 6,057,125. J.S. Takahashi, F.W. Turek and L.H. Pinto. *Clock gene and gene product.* Filed June 30, 1997. Issued May 2, 2000. (human *CLOCK* gene)

United States Patent No. 6,291,429. J.S. Takahashi, F.W. Turek and L.H. Pinto. *Clock gene and gene product.* Filed February 3, 2000. Issued September 18, 2001. (mammalian CLOCK polypeptide)

United States Patent No. 6,476,188 B1. M.W. Young, B. Kloss, J. Blau, J. Price, J.S. Takahashi and P.L. Lowrey. *A Novel Clock Gene and Methods of Use Thereof.* Filed April 20, 2000 by Rockefeller University. Issued November 5, 2002. (mammalian casein kinase1epsilon)

United States Patent No. 2012/0232003 A1. Joseph S. Takahashi, Steve A. Kay. *Compositions and Methods for Diabetes Applications.* Pub. Date: Sept. 13, 2012.

INVITED PRESENTATIONS:

1. Symposium on Physiology of Circadian Rhythms, Seventeenth International Ornithological Congress, Berlin, West Germany, June 1978.
2. Naito-International Symposium on Biological Rhythms and Their Central Mechanism, Tokyo, Japan, August 1978.
3. Hopkins Marine Station, Stanford University, Pacific Grove, California, February 1980.
4. Summer Course, Hopkins Marine Station, Stanford University, Pacific Grove, California, July 1980.

5. Max-Planck-Gesellschaft Symposium on Vertebrate Circadian Systems: Structure and Physiology, Schloss Ringberg, Rottach-Egern, West Germany, September 1980.
6. Max-Planck-Gesellschaft Symposium on Vertebrate Circadian Systems: Structure and Physiology, Schloss Ringberg, Rottach-Egern, West Germany, October 1980.
7. Role of the Pineal Organ in the Avian Circadian System, Gordon Research Conference on Chronobiology, Andover, New Hampshire, June 1981.
8. Pacemakers in the Avian Circadian System, Workshop on the Suprachiasmatic Nuclei, Harvard Medical School, Boston, Massachusetts, June 1981.
9. Department of Neurobiology and Physiology, Northwestern University, Evanston, Illinois, May 1982.
10. Biology Department, University of South Carolina, Columbia, South Carolina, October 1982.
11. Biology Department, University of Virginia, Charlottesville, Virginia, December 1982.
12. Biology Department, Temple University, Philadelphia, Pennsylvania, December 1982
13. Cellular Properties of Identified Circadian Pacemakers, Winter Conference on Brain Research, Keystone, Colorado, January 1983.
14. Laboratory of Cell Biology, National Heart, Lung and Blood Institute, Bethesda, Maryland, April 1983.
15. Department of Biology, Swarthmore College, Swarthmore, Pennsylvania, April 1983.
16. Department of Anatomy, Uniformed Services University of the Health Sciences, Bethesda, Maryland, April 1983.
17. Worcester Foundation for Experimental Biology, Shrewsbury, Massachusetts, May 1983.
18. Chronopharmacology and Metabolism of Circadian Pacemakers *in vivo* and *in vitro,* Gordon Research Conference on Chronobiology, Colby-Sawyer College, June 1983.
19. Chronobiology: Basic and Clinical Aspects, Intramural Research Program, Director's Conference Series, National Institute of Mental Health, Bethesda, Maryland, October 1983.
20. Society for Neuroscience Symposium, Clocks in the Test Tube: Toward a Mechanistic Analysis of Circadian Oscillators, Boston, Massachusetts, November 1983.
21. Neuroscience Program, Michigan State University, East Lansing, Michigan, December 1983.
22. International Congress on Neuroreceptor Mechanisms in Human Diseases, Fondazione Internazionale Menarini, Florence, Italy, March 1984.
23. Neural and Behavioral Biology Program, University of Illinois at Urbana-Champaign, Illinois, April 1984.
24. Cellular Analysis of Circadian Rhythms in the Vertebrate Pineal, Timberline Symposium on Biological Clocks, Timberline Lodge, Oregon, July 1984.
25. Department of Anatomy, Stritch School of Medicine, Loyola University, Illinois, November 1984.
26. Life Science-Chemistry-BRI Colloquium, University of Wisconsin-Parkside, Wisconsin, December 1984.
27. Symposium on Pineal-Retinal Relationships, National Eye Institute and National Institute of Child Health and Human Development, Sarasota, Florida, May 1985.
28. Neurophysiology of Vertebrate Rhythms, Gordon Research Conference on Chronobiology, Plymouth State College, July 1985.
29. Department of Physiology and Biophysics, University of Illinois at Chicago, Illinois, October 1985.
30. Searle Life Science Forum, Northwestern University, Evanston, Illinois, November, 1985.
31. Biology Department, Loyola University of Chicago, Illinois, November 1985.
32. Committee on Neurobiology, University of Chicago, Illinois, January 1986.
33. Department of Physiology and Biophysics, Chicago Medical School, Illinois, April 1986.
34. Department of Biology, University of Houston, Texas, April 1986.
35. U.S.-Japan Seminar on Mechanisms of Circadian Rhythms, East West Center, Honolulu, Hawaii, July 1986.
36. Honma Prize Lecture, 1986 Sapporo Symposium on Biological Rhythms, Sapporo, Japan, August 1986.
37. Mitsubishi-Kasei Institute of Life Sciences, Tokyo, Japan, August 1986
38. Tokyo Metropolitan Institute for Neurosciences, Tokyo, Japan, September 1986.
39. Nagoya University, Nagoya, Japan, September 1986.
40. National Institute of Basic Biology, Okazaki, Japan, September 1986.
41. Plenary Session on Behavioral Rhythms, First International Congress of Neuroethology, Tokyo, Japan, September 1986.
42. Neuronal Mechanisms Underlying Melatonin Regulation by Neurotransmitters, Light and Circadian Rhythms, Winter Conference on Brain Research, Vail, Colorado, January 1987.
43. Department of General Biology, Vanderbilt University, Tennessee, March 1987.
44. Department of Biology, University of Virginia, Virginia, April 1987.

45. Dorothy T. Kreiger Memorial Symposium: Neuroendocrinology, Endocrine Society Meetings, Indianapolis, June 1987.
46. Cellular Circadian Pacemakers, Gordon Research Conference on Chronobiology, Plymouth State College, July 1987.
47. Marine Biological Laboratory, Woods Hole, Massachusetts, July 1987.
48. Symposium on Central Regulation of Circadian Rhythms, XVIII International Conference of the International Society for Chronobiology, Leiden, The Netherlands, July 1987.
49. Department of Biology, Wesleyan University, Middletown, Connecticut, November 1987.
50. Rockefeller University, New York, December 1987.
51. Center for Endocrinology and Metabolism, Northwestern University, February 1988.
52. Searle Scholars Meeting, Itasca, Illinois, May 1988.
53. Symposium on Organization of Animal Circadian Systems, Society for Biological Rhythms Meeting, Wild Dunes, South Carolina, May 1988.
54. Organizer, Workshop on Pineal and Retinal Oscillators In Vitro, Society for Biological Rhythms Meeting, Wild Dunes, South Carolina, May 1988.
55. Laurentian Hormone Conference lecture, Quebec, Canada, August 1988.
56. G.D. Searle-Northwestern Research Symposium, Lincolnwood, Illinois, September 1988.
57. Department of Biology, University of Virginia, Charlottesville, October 1988.
58. M.D.-Ph.D. Program, Northwestern University, February 1989.
59. Endocrine Grand Rounds, Massachusetts General Hospital, Harvard Medical School, March, 1989.
60. Department of Physiology, Northwestern University, March 1989.
61. Institute for Reproductive Sciences, College of Physicians & Surgeons, Columbia University, May 1989.
62. Discussion leader, Vertebrate Retina and Pineal, Gordon Research Conference on Chronobiology, Plymouth State College, June 1989.
63. Avian Pineal Clock Function, Gordon Research Conference on Pineal Cell Biology, Plymouth State College, August 1989.
64. Symposium on Melatonin: New Light on CNS Mechanisms of Action, Society for Neuroscience, Phoenix, Arizona, November 1989.
65. Department of Biochemistry, Molecular Biology and Cell Biology, Northwestern University, November 1989.
66. Symposium on Alcohol and Circadian Rhythms (sponsored by Floyd Bloom), Scripps Clinic, La Jolla, California, December 1989.
67. Symposium on Frontiers in Neuroendocrinology, Satellite Symposium of American Society of Zoologists Meeting, Boston University, Massachusetts, December 1989.
68. Center for Biological Approaches to Behavior, University of Chicago, January 1990.
69. Department of Anatomy and Cell Biology, University of Kansas Medical Center, February 1990.
70. Institute for Neuroscience, Northwestern University, March 1990.
71. Committee on Neurobiology, University of Chicago, May 1990.
72. Symposium on Cellular Mechanisms of Melatonin Regulation and Action, Society for Biological Rhythms Meeting, Amelia Island, Florida, May 1990.
73. Serono Symposium on Follicle Stimulating Hormone, Northwestern University, Evanston, October 1990.
74. Meeting on Biological Rhythms and Depression, MacArthur Foundation Mental Health Research Network I, Chicago, November 1990.
75. Department of Pharmacology, Northwestern University, January 1991.
76. Department of Biological Sciences, Stanford University, January 1991.
77. Committee on Neurobiology, University of Chicago, January 1991.
78. Markey Center, University of Virginia, Charlottesville, April 1991.
79. Gordon Research Conference on Biological Regulatory Mechanisms, Holderness School, Plymouth, NH, June 1991.
80. Gordon Research Conference on Pineal Cell Biology, Andover, New Hampshire, August, 1991.
81. Gordon Research Conference on Chronobiology, Irsee, West Germany, October 1991
82. Department of Neuroscience, Case Western Reserve University, Cleveland, October 1991.
83. Society for Neuroscience Symposium, How Cells Keep Time: The Molecular and Cellular Basis of Circadian Rhythms, New Orleans, November 1991.
84. MacArthur Foundation Mental Health Research Network I, Dallas, January 1992.

85. Symposium on Molecular Basis of Biological Timing, NSF Center for Biological Timing, Charlottesville, VA, January 1992.
86. Department of Biology, Brandeis University, Waltham, Massachusetts, April 1992.
87. Neuroscience Program, Florida State University, Tallahassee, Florida, April 1992.
88. NSF Center for Biological Timing, Summer Course in Biological Timing, Charlottesville, VA, July 1992.
89. Wenner-Gren Center Symposium on Light and Biological Rhythms in Man, Stockholm, Sweden, September, 1992.
90. EMBO Workshop on Molecular Chronobiology, Leicester, England, September, 1992.
91. University of Wisconsin-Parkside, April 1993.
92. Department of Pharmacology, University of Washington, Seattle, April 1993.
93. MARC Program, Howard University, Washington, D.C., April 1993.
94. Workshop on Sleep Disorders / Dog Genetics, Millennium Pharmaceuticals, Inc., Cambridge, MA, July, 1993.
95. NICHD Workshop on Molecular and Environmental Substrates of Behavioral Development, Rockville, MD, August 1993.
96. Ciba Foundation Symposium on Circadian Clocks and Their Adjustment, London, UK, September, 1993.
97. Cincinnati Neurofest '93 Symposium, University of Cincinnati College of Medicine, Ohio, October 1993.
98. Gordon Research Conference on Pineal Cell Biology, Casa Sirena Resort, Oxnard, CA, January 1994.
99. Department of Genetics and Division of Medical Genetics, University of Washington, Seattle, March 1994.
100. Department of Neuroscience, Johns Hopkins University School of Medicine, Baltimore, March 1994.
101. Millennium Pharmaceuticals, Cambridge, April 1994.
102. The Society Symposium, Society for Research on Biological Rhythms, Amelia Island, Florida, May 1994.
103. Searle Life Science Forum, Northwestern University, Chicago, June 1994.
104. Department of Brain and Cognitive Sciences, Massachusetts Institute of Technology, Cambridge, July 1994.
105. Glaxo Research and Development, Greenford, United Kingdom, September 1994.
106. Department of Genetics, University of Wisconsin, Madison, February 1995.
107. Bristol-Myers Squibb, CNS Drug Discovery, Wallingford, CT, March 1995.
108. Research in Canine and Human Genetic Disease, The Wellcome Trust, Surrey, U.K., March 1995.
109. Bristol-Myers Squibb, Drug Discovery and Management, Princeton, NJ, April 1995.
110. Department of Genetics, Harvard Medical School, Cambridge, June 1995.
111. Animal Models of Psychiatric Diseases, MacArthur Foundation Research Network on Psychopathology and Development, Chicago, IL, June 1995.
112. Bristol-Myers Squibb Eighth Annual Neurosciences Colloquium, Wallingford, CT, June 1995.
113. APS Conference: Understanding the Biological Clock: From Genetics to Physiology, Dartmouth Medical School, Hanover, NH, July 1995.
114. 6th C.U. Ariëns Kappers Lecture, Netherlands Institute for Brain Research, Amsterdam, August 1995.
115. Conference on The Biology and Genetics of Complex Mammalian Traits, The Jackson Laboratory, Bar Harbor, Maine, September 1995.
116. Department of Molecular and Human Genetics, Baylor College of Medicine, Houston, October 1995.
117. Departments of Genetics, Neurobiology and Pharmacology, Duke University Medical Center, Durham, October 1995.
118. Biochronometry Tutorial, NSF Center for Biological Timing, Satellite Symposium, Society for Neuroscience, San Diego, November 1995.
119. Rockefeller University, New York, January 1996.
120. Department of Psychology, Smith College, Northampton, February 1996.
121. Plenary Speaker, Photoperiodism, Rhythms and Clocks Student Workshop, Smith College, Northampton, February 1996.
122. Department of Molecular and Cell Biology, University of California, Berkeley, April 1996.
123. Molecular and Cellular Sciences Program, Chicago Medical School, April 1996.
124. Photobiology Session Chair, Society for Research on Biological Rhythms, Amelia Island, Florida, May 1996.
125. 61st Cold Spring Harbor Symposium on Quantitative Biology, Function & Dysfunction in the Nervous System, Cold Spring Harbor Laboratory, May 1996.
126. The Jackson Laboratory, Bar Harbor, Maine, June 1996.
127. Invited Speaker, Mouse Molecular Genetics Meeting, Cold Spring Harbor Laboratory, August 1996.

128. Second Biennial Workshop in Mouse Molecular Neurogenetics, The Jackson Laboratory, Bar Harbor, Maine, September 1996.
129. Workshop-Conference on Response and Adaptation to the Environment, U.S. Army Research Office, Research Triangle Park, NC, October 1996.
130. University of Texas Southwestern Medical Center, Dallas, Texas, October 1996.
131. Something Old / Something New: Single Gene Mutations, Gene Knock-Outs, and New Opportunities in Behavioral Neuroscience, NIMH Satellite Symposium, Society for Neuroscience, Washington, D.C., November 1996.
132. Organizer, Short Course 1, What's Wrong with My Mouse? New Interplays Between Mouse Genetics and Behavior, Society for Neuroscience, Washington, D.C., November 1996.
133. Speaker, From Molecules to Behavior: NIMH's Mission in the 21st Century, NIMH Satellite Symposium, Society for Neuroscience, Washington, D.C., November 1996.
134. Banbury Center Conference, Genetic Approaches to Learning and Memory, Cold Spring Harbor Laboratory, December 1996.
135. Banbury Center Conference, Genomics to Physiology and Beyond: How Do We Get There?, Cold Spring Harbor Laboratory, February 1997.
136. Department of Genetics, University of Wisconsin, Madison, February 1997.
137. Program in Neuroscience, Yale University, New Haven, March 1997.
138. The Science of Brain Disease Symposium, Brain Awareness Week, National Institutes of Health, Bethesda, March 1997.
139. Neuroscience Symposium, University of California at San Francisco, March 1997.
140. Brigham and Women's Hospital, Harvard Medical School, Boston, April 1997.
141. Walter and Mary Elizabeth Glass Chair Lecture, April 1997.
142. Asher Basic & Clinical Sciences Seminar, Northwestern University Medical School, July 1997.
143. American Society of Neurochemistry / International Society of Neurochemistry, Symposium, Boston, MA, July 1997.
144. Asher Basic & Clinical Sciences Seminar, Northwestern University Medical School, July 1997.
145. Suprachiasmatic Nucleus Silver Anniversary Symposium, Harvard Medical School, Boston, MA, August 1997.
146. Experimental Genetics of the Laboratory Mouse, Jackson Laboratory, Bar Harbor, Maine, August 1997.
147. Bristol-Myers Squibb Tenth Annual Neurosciences Colloquium, Wallingford, CT, September 1997.
148. Air Force Office of Scientific Research Symposium, Air Force Academy, Fort Collins, CO, September 1997.
149. Ryan Lecture, Northwestern Alumni, Chicago, October 1997.
150. Silver Anniversary of the Sleep Disorders Center, Stanford University Medical Center, Palo Alto, CA, October 1997.
151. Mouse Behavior Course, Cold Spring Harbor Laboratory, November 1997.
152. Symposium, Chicago Chapter of the Society for Neuroscience, Chicago, November 1997.
153. Committee on Genetics, University of Chicago, January 1998.
154. Cell Biology, Anatomy and Neurobiology, Medical College of Wisconsin, Milwaukee, WI, February 1998.
155. Plenary Session Speaker and ENU Mutagenesis Co-Chair, Priority Setting for Mouse Genomics and Genetics Resources, NIH, Bethesda, MD, March 1998.
156. HHMI Conference on Molecular Genetic Approaches to Human Disease, Chevy Chase, MD, April 1998.
157. Northwestern University Medical School Alumni, April 1998.
158. Symposium, Society for Research on Biological Rhythms, Amelia Island, FL, May 1998.
159. Medical School Today Luncheon , Northwestern University Medical School, June 1998.
160. Neurobiology Course, Marine Biological Laboratory, Woods Hole, MA, July 1998.
161. Babraham Institute Fiftieth Anniversary Conference, Cambridge, MA, September 1998.
162. Priority Setting for Mouse Genomics and Genetics Resources: First Follow-Up Meeting, NIH, Bethesda, MD, October 1998.
163. Life Sciences Research Foundation Symposium, Keynote Lecture, Dallas, TX, October 1998.
164. Brain Research Interactive Conference, Genetically Dissecting Brain and Behavior, San Diego, CA, November 1998.
165. Presidential Lecture, Society for Neuroscience, Los Angeles, CA, November 1998.
166. NIH/NSF-Sponsored Sleep Workshop, Herndon, VA, December 1998.
167. Sequencing the Mouse Genome, Princeton University, Princeton, NJ, January 1999.

168. HHMI-NIH Research Scholars Program, Bethesda, MD, February 1999.
169. Howard Hughes Medical Institute, Headquarters Staff, Chevy Chase, MD, February 1999.
170. Howard Hughes Medical Institute Science Meeting, Bethesda, MD, April 1999.
171. American Society for Biochemistry and Molecular Biology "Biochemistry & Molecular Biology'99 Meeting," Symposium Speaker, San Francisco, CA, May 1999.
172. NIH Director's Seminar Series, Bethesda, MD, June 1999.
173. Genetics in the New Millenium: Directions for the Future, Bar Harbor, ME, July 1999.
174. Ruth Sager Memorial Lecture in Genetics, Woods Hole, MA, August 1999.
175. International Congress on Chronobiology, Plenary Speaker, Washington, D.C., August 1999.
176. A.J. Carlson Memorial Lecture, Division of Biological Sciences, University of Chicago, IL, September 1999.
177. Bristol-Myers Squibb Neuroscience Symposium, Wallingford, CT, September 1999.
178. Neuroscience Retreat, University of Chicago, Plenary Speaker, Chicago, IL, October 1999.
179. 1999 World Congress on Psychiatric Genetics, Symposium Speaker, Monterey, CA, October 1999.
180. Neurosciences Program, University of California at San Diego, CA, November 1999.
181. Howard Hughes Medical Institute, University of Iowa, College of Medicine, Symposium Speaker, Iowa, IO, December 1999.
182. Beckman Center 10th Anniversary, Stanford University School of Medicine, Stanford, CA January 2000.
183. NIH/National Institute of Mental Health, Bethesda, MD, January 2000.
184. Nobel Forum Research Lecture Series, Stockholm, Sweden, February 2000.
185. Gildea Lecture, Washington University, Department of Psychiatry, St. Louis, MO, February 2000.
186. Department of Molecular and Cellular Biology, Harvard University, Cambridge, MA, March 2000.
187. Department of Ophthalmology, Massachusetts Eye and Ear Institute, Harvard Medical School, Boston, MA, March 2000.
188. California Institute of Technology, Department of Biology, Pasadena, CA, April 2000.
189. Zaffaroni Foundation, Mountain View, CA, April 2000.
190. Plenary Lecture, Association for Research in Vision and Ophthalmology, Fort Lauderdale, FL, April 2000.
191. Howard Hughes Medical Institute Science Meeting, Bethesda, MD, May 2000.
192. Department of Molecular Biology, Princeton University, Princeton, NJ, May 2000.
193. NIH Second Followup Workshop on Priority Setting for Mouse Genomics and Genetics Resources, Bethesda, MD, May 2000.
194. Royal Swedish Academy of Sciences, Symposium Speaker, Stockholm, Sweden, June 2000.
195. Co-Chair (with Geoffrey Duyk), NIMH NIH Workshop, Setting Priorities for Phenotyping the Mouse Nervous System and Behavior, Warrenton, VA, June 2000.
196. Human Genome Center, University of Tokyo, Tokyo, Japan, September 2000.
197. Plenary Lecture, Japan Neuroscience Society 23rd Annual meeting, Yokohama, Japan, September 2000.
198. Ellison Medical Foundation 3rd Annual Symposium on Differential Gene Expression in Development and Aging, California Institute of Technology, Pasadena, CA, October 2000.
199. Michigan Life Sciences Research Corridor Site Visit Review, Washington Advisory Group, Van Andel Research Institute, Grand Rapids, MI, October 2000.
200. Systems Neuroscience Advisory Committee to Dean Jeremy Knowles, Faculty of Arts and Sciences, Harvard University, Cambridge, MA, November 2000.
201. Holiday Lectures on Science, *Clockwork Genes: Discoveries in Biological Time* (with Michael Rosbash), Howard Hughes Medical Institute, Chevy Chase, MD, December 2000.
202. Symposium, American Society for Cell Biology 40th Annual meeting, San Francisco, CA, December 2000.
203. Committee on Genetics, University of Chicago, Hyde Park, IL, February 2001.
204. Cold Spring Harbor Laboratory meeting, Genetic Basis of Neurological and Behavioral Disorders, sponsored by Klingenstein Fund. Cold Spring Harbor, NY, March 2001.
205. Merck Research Laboratories Scientific meeting, Newark, NJ, March 2001.
206. Keystone Symposia 2001, Molecular Clocks: Regulation of Circadian Behavioral Rhythms, Tahoe City, CA, March 2001.
207. Pharmacology Department, University of Texas Southwestern, Dallas, TX, April 2001.
208. NIH/Mouse Neuroscience Steering Committee meeting, Bethesda, MD, May 2001.
209. WCAS Board and Alumni Meeting, Northwestern University, Evanston Campus, IL 2001.
210. Cell and Molecular Biology, Northwestern University, Chicago Campus, IL, May 2001.
211. Novartis Pharmaceuticals National Speaker program, Madison, WI, June 2001.

212. Wisconsin Symposium: The Analysis of Human Biology-Genes, Genomes and Molecules, University of Wisconsin-Madison, WI, June 2001.
213. Plenary Lecture, Associated Professional Sleep Societies, Chicago, IL, June 2001.
214. NIH/National Institute on Drug Abuse Workshop: *The Hypothalamus and Addiction,* Bethesda, MD, July 2001.
215. Mouse Genome Analysis Workshop, NIH/NHGRI, Cambridge, MA, September 2001.
216. Howard Hughes Medical Institute Scientific Meeting, Chevy Chase, MD, September 2001.
217. Lecturer, Neil D. Graham Lecture, University of Toronto, Canada, Octobers 2001.
218. Speaker, Symposium on Integrative Genomics, University Michigan, Ann Arbor, MI, November 2001.
219. W. Alden Spencer Award Presentation and Lecture, Columbia University, New York, November 2001.
220. NIMH Mouse Behavioral Workshop, Half Moon Bay, CA, December 2001.
221. NIMH/NIDA Workshop on Setting Priorities for Functional Molecular Neuroanatomy in the Post-Genomic Era, Laguna Beach, CA, January 2002.
222. Center for Biological Timing Symposium, University of Virginia, Charlottesville, VA, January 2002.
223. NIH Mouse SNP Meeting, Bethesda, MD, January 2002.
224. Advances in Genome Biology and Technology (AGBT), Marco Island, FL, February 2002.
225. Biomedical Research and Technology Transfer Partnership Panel Review Meeting, Washington, DC, April 2002.
226. Howard Hughes Medical Institute Science Meeting, Chevy Chase, MD, May 2002.
227. McGovern Institute Symposium, MIT, Cambridge, MA, May 2002.
228. Plenary Lecture, McKnight Conference on Neuroscience, Aspen, CO, June 2002.
229. Presidential Symposium, Society for Research on Biological Rhythms Annual Meeting, Amelia Islands, FL, May 2002.
230. Workshop on ENU Mutagenesis, Chantilly, VA, July 2002.
231. Keynote Lecturer, Deutsche Forschungsgemeinschaft, Munich, Germany, July 2002.
232. Road Map Meeting with NIH Director, Elias Zerhouni, NIH, Bethesda, MD, August 2002.
233. Novartis Foundation Symposium "Molecular Clocks and Light Signalling," London, September 2002.
234. The Physiological Society Meeting, London, September 2002.
235. Flexner Lecture, Institute for Neurological Sciences, University of Pennsylvania, Philadelphia, PA, October 2002.
236. Jane Coffin Childs Fund Symposium, Lakeville, CT, October 2002.
237. University of North Carolina Neuroscience Symposium, Chapel Hill, NC, October 2002.
238. American Society of Nephrology 35th Annual Meeting and Scientific Exposition, Philadelphia, PA, November 2002.
239. Chair, Session on Forward Genetics, Functional Genomics Conference, Cambridge Healthtech Institute, Boston, MA, November 2002.
240. Molecular and Cellular Physiology Seminar Series, Stanford University School of Medicine. Stanford, CA, December 2002.
241. Zaffaroni Foundation meeting of the "Consortium for the Mouse Genetics of Addiction", San Francisco, CA, January 2003.
242. Phenomix Corporation, La Jolla, CA, February 2003.
243. Stowers Institute for Medical Research, Kansas City, MO, February 2003.
244. Recipient Eduard Buchner Prize Award, Presentation and Lecture, 54th Mosbacher Kolloquium, German Society for Biochemistry and Molecular Biology (GBM), Germany, March 2003.
245. 50th Anniversary Symposium on the Discovery of DNA, Genes, Brain, Behavior: Before and Beyond Genomics, NHGRI/NIH, Bethesda, MD, April 2003.
246. Gordon Research Conference on Chronobiology, Barga, Italy, May 2003.
247. NIH Workshop, Making Sense of SCN Heterogeneity: The Tissue is the Issue, Washington, DC, June 2003.
248. Jackson Laboratory 44th Short Course in Medical and Experimental Mammalian Genetics, Lecturer, Bar Harbor, ME, July 2003.
249. ENU Mutagenesis Meeting, Washington, DC, July 2003.
250. Symposium, Society for Developmental Biology 62nd Annual Meeting, Boston, MA, August 2003.
251. 1st World Congress of Chronobiology, Plenary Lecturer, Sapporo, Japan, September 2003.
252. Sapporo Symposium on Biological Rhythm, Sapporo, Japan, September 2003.
253. 1st International Sleep Disorders Forum, Montreal, Canada, October 2003.

254. 76th Annual Meeting, Japan Biochemical Society, Plenary Lecturer, Yokohama, Japan, October, 2003.
255. Howard Hughes Medical Institute Scientific Meeting, Bethesda, MD, November 2003.
256. PAS-Clocks-AhR Symposium, CEHR at Texas A & M University, TX, December 2003.
257. Workshop, Winter Conference on Brain Research, Copper Mountain, CO, January 2004.
258. Howard Hughes Medical Institute Workshop for Janelia Farm, MD, January 2004.
259. Aventis Pharmaceuticals Scientific Advisory Meeting, Short Hills, NJ, April 2004.
260. 14th Annual Einar Hille Memorial Lecture in Neuroscience, Seattle, WA, May 2004.
261. The Jackson Laboratory Neurogenetics Conference V, Bar Harbor, Maine, June 2004.
262. Endocrine Society 86th Annual Meeting, Plenary Speaker, New Orleans, LA, June 2004.
263. Symposium, Society for Research on Biological Rhythms, Whistler, BC, June 2004.
264. Organizer, 50th Anniversary of Circadian Clock Symposium, Center for Functional Genomics, Northwestern University, Evanston, IL, June 2004.
265. Sanofi-Synthelabo Second International Sleep Disorders Forum, Paris, France, September 2004.
266. Pfizer Lectureship in Sleep, University of Michigan, Ann Arbor, MI, September 2004.
267. Howard Hughes Medical Institute Scientific Meeting, Bethesda, MD, October 2004.
268. Aventis Winter Lecture Series, Frankfurt, Mannheim, Munich, Berlin, Germany, November 2004.
269. HHMI-NIH Research Scholars, Science Dinner Lecturer, Bethesda, MD, December 2004.
270. Workshop, Winter Conference on Brain Research, Breckinridge, CO, January 2005.
271. Colloquium Lectures, University of Wisconsin, Madison, Madison, WI, February 2005.
272. XXXV International Congress of Physiological Sciences, San Diego, CA, April 2005.
273. Plenary Speaker, 9th Berlin Colloquium of the Gottlieb Daimler and Karl Benz Foundation, Berlin, Germany, May 2005.
274. Lecturer, Molecular Embryology of the Mouse Course, Cold Spring Harbor, June 2005.
275. Gordon Research Conference on Chronobiology, Salve Regina, Rhode Island, August 2005.
276. Perspectives Lecture, European Pineal and Biological Rhythms Society, Xth Congress, Frankfurt, Germany, September 2005.
277. Speaker, 2nd Biannual F.M. Kirby Neuroscience Symposium, Harvard Medical School, Boston, September 2005.
278. Plenary Speaker, Latin American Symposium of Chronobiology Course, Buenos Aires, Argentina, October 2005.
279. Plenary Lecture, VIII Latin American Symposium of Chronobiology, Cordova, Argentina.
280. Speaker, Pineal Cell Biology Gordon Conference, Santa Barbara, CA, January 2006.
281. Vernon B. Mountcastle Lectureship in Neuroscience, Johns Hopkins School of Medicine, Baltimore, MD, March 2006.
282. Society for Research on Biological Rhythms Conference, Sandestin, FL, May 2006.
283. Monsanto Symposium, The Biology of Time, Chesterfield, MO, June 2006.
284. Karolinska Institute, Center for Biotechnology (CBT) Symposium on Nuclear Receptors 2006, Huddinge, Sweden, September 2006.
285. University of Illinois-Urbana, Champaign, CMB and Molecular Biophysics Training Grant Symposium, Keynote speaker, November 2006.
286. Howard Hughes Medical Institute Scientific Meeting, Janelia Farm, VA, December 2006.
287. Workshop Organizer, Winter Conference on Brain Research, Snowmass, CO, January 2007.
288. AstraZeneca Lecture, University of Manchester, Manchester, UK, February 2007.
289. MRC Laboratory of Molecular Biology, Cambridge, UK, February 2007.
290. Department of Molecular Biology, Princeton University, Princeton, NJ, February 2007.
291. Center for Genome Research and Biocomputing, Oregon State University, Corvallis, OR, March 2007.
292. Organizer (with Kevin Moses, Allan Bradley & Janet Rossant), Janelia Farm Conference on Expanding the Genetic Tool-Kit in Mouse, HHMI, Ashburn, VA, March 2007.
293. Lecturer, Graduate Training Program, University of Kentucky, Lexington, KY, April 2007.
294. Vice-Chair, Gordon Research Conference on Chronobiology, Aussois, France, May 2007.
295. Opening Lecture, Cold Spring Harbor Laboratory, 72nd Symposium: Clocks & Rhythms, May 2007.
296. 31st Carl F. Schmidt Honorary Lecture, Department of Pharmacology, University of Pennsylvania, Philadelphia, PA, June 2007.
297. Lecturer, Molecular Embryology of the Mouse Course, Cold Spring Harbor Laboratory, June 2007.

298. Lecturer, Workshop on Mechanisms of Arousal, Alertness & Attention, Banbury Conference Center, Cold Spring Harbor Laboratory, June 2007.
299. Howard Hughes Medical Institute Scientific Meeting, Janelia Farm, VA, September 2007.
300. Keynote lecture, NHLBI Workshop on Circadian-Coupled Cellular Function and Disease in Heart, Lung, and Blood Tissues, NIH, Baltimore, MD, September 2007.
301. Molecular & Integrative Physiology, 125th Anniversary Symposium, University of Michigan, September 2007.
302. Speaker, Department of Cellular and Molecular Medicine, UCSD, La Jolla, CA, October 2007.
303. Speaker, Harvey Lecture, Rockefeller University, New York, NY, October 2007.
304. University of Texas Southwestern Medical Center, Dallas, TX, October 2007.
305. Salk Institute for Biological Studies, La Jolla, CA, January 2008.
306. Speaker, Keystone Symposium, Genetics and Biochemistry of Sleep, Tahoe City, CA, March 2008.
307. Speaker, Workshop to Consider the Feasibility of a Sleep/Circadian Rhythms Gene Chip, NIH, Bethesda, MD, April 2008.
308. Speaker, Gordon Research Conference on Pineal Cell Biology, Lucca, Italy, April 2008.
309. Speaker, Bollum Symposium on Circadian Clocks, Department of Biochemistry, Molecular Biology and Biophysics, University of Minnesota, May 2008.
310. Speaker, Society for Research on Biological Rhythms Conference, Sandestin, FL May 2008.
311. Visiting Professorship Lecture, Department of Psychiatry, University of Pittsburgh School of Medicine, PA, June 2008.
312. Lecturer, CSHL Molecular Embryology of the Mouse 2008, Cold Spring Harbor Laboratory, NY, June 2008.
313. Speaker, National Academies Institute of Medicine, Neuroscience Grand Challenges Workshop, Washington D.C. June 2008.
314. Chair and Speaker, XX International Congress of Genetics 2008, Berlin, Germany, July 2008.
315. NIH Workshop on Neurobiological Basis of Circadian Rhythms Interaction with Complex Behaviors, Bethesda, MD, July 2008.
316. Lecturer, 49th Annual Short Course on Medical and Experimental Mammalian Genetics, Jackson Laboratory, Bar Harbor, MA, July 2008.
317. Abbott State of the Art Lecture, American Thyroid Association 79th Annual Meeting, Chicago, IL, October 2008.
318. Neurobiology & Genetics of Sleep and its Disorders Symposium, Stanford University Medical School, Palo Alto, CA, December 2008.
319. Chair and Organizer, Central and peripheral clocks: Links to sleep and metabolism, 47th American College of Neuropsychopharmacology Meeting, Scottsdale, AZ, December 2008.
320. Joint Seminars in Neuroscience, UCLA Brain Research Institute, Los Angeles, CA, February 2009.
321. Keynote Address, Pennington Scientific Symposium, Circadian Biology & Sleep: Missing Links in Obesity and Metabolism? Baton Rouge, LA, April 2009.
322. Molecular Embryology of the Mouse Course, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY, June 2009.
323. Board of Regents, University of Texas System, Austin, TX, July 2009.
324. Chair, Gordon Research Conference on Chronobiology, Salve Regina, Rhode Island, July 2009.
325. Lecture, Graduate School of Biomedical Sciences, Hiroshima University, Hiroshima, Japan, July 2009.
326. Special lecture, 36th International Union of Physiological Sciences 2009, Kyoto, Japan, August 2009.
327. Sapporo Symposium on Biological Rhythm, Sapporo, Japan, August 2009.
328. Plenary Lecture, XI Congress of the European Biological Rhythms Society, Strasbourg, France, August 2009.
329. Opening Speaker, Sanofi-Aventis Symposium on Circadian rhythm and clock genes: from molecular basis to therapeutic applications, Versailles, France, October 2009.
330. Speaker, Janelia Conference: Can new tools revolutionize understanding of hypothalamic neural circuits? October 2009.
331. WM Keck Center for Behavioral Biology distinguished lecture series, North Carolina State University, Raleigh, NC, November 2009.
332. Department of Pharmacology, UT Southwestern Medical Center, Dallas, TX, November 2009.
333. Speaker, President's Research Council, UT Southwestern Medical Center, Dallas, TX, January 2010.
334. Keynote Address, Nuclear Receptor Signaling Atlas (NURSA) annual meeting, Houston, TX, January 2010.
335. Plenary Lecture, NIDDK Workshop: Circadian Rhythms and Metabolic Disease, Bethesda, MD, April 2010.

336. NIH Wednesday Afternoon Lecture, National Institutes of Health, Bethesda, MD, May 2010.
337. NIA Workshop, Circadian Clocks and Their Role in Aging: Molecular Mechanisms, Bethesda, MD, June 2010.
338. Lecturer, Molecular Embryology of the Mouse Course, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY, June 2010.
339. Speaker, UT Southwestern Obesity Alliance Seminar Series on Nutrition, Metabolism and Obesity, July 2010.
340. Speaker, NIH Sleep Disorders Research Advisory Board meeting, Bethesda, MD, August 2010.
341. Lecture, Center for Integrative Genomics (CIG), University of Lausanne, Switzerland, September 2010.
342. Life Sciences Seminar Series, Department of Molecular Biology, University of Geneva, Switzerland, September 2010.
343. Department of Genetics & Development, Columbia University Medical Center, New York, NY, October 2010.
344. Keynote Speaker, Genetics Symposium, Penn State College of Medicine, Hersey, PA, October 2010.
345. Symposium on Energy Metabolism, Department of Physiology and Biophysics, University of Sao Paulo, Brazil, October 2010.
346. Distinguished Lecture Series, Scripps Research Institute, Jupiter, FL, October 2010.
347. Howard Hughes Medical Institute Scientific Meeting, Chevy Chase, MD, November 2010.
348. Special Lecturer, Society for Neuroscience Annual Meeting, San Diego, CA, November 2010.
349. Keynote Speaker, Second International Conference on Cellular Dynamics and Chemical Biology, Laboratory of Division of Cellular Dynamics, University of Science & Technology of China, Hefei, China, November 2010.
350. Plenary Speaker, 13th Annual Cell and Molecular Biology Symposium, University of North Carolina, Chapel Hill, NC, January 2011.
351. UCSF Biomedical Sciences Seminar Series, San Francisco, CA, January 2011.
352. Workshop, Winter Conference on Brain Research, Keystone, Colorado, January 2011.
353. Speaker, Genetics Interest Group, University of Utah, Salt Lake City, UT, February 2011.
354. Speaker, Neuroscience Seminar, Caltech, Pasadena, CA, March 2011.
355. Speaker, Neurobiology Seminar Series, Waggoner Center, University of Texas, Austin , TX, April 2011.
356. Ruth K. Broad and Shepard Broad Foundation Seminar Series on Neurobiology and Disease, Department of Neurobiology, Duke University Medical Center, Durham, NC, April 2011.
357. John M. Brookhart Lecture, Department of Physiology and Pharmacology, Oregon Health & Science University, Portland. OR, May 2011.
358. Speaker, Gordon Research Conference on Chronobiology, Barga, Italy, June 2011.
359. Speaker, HHMI Alumni Dinner, UT Southwestern, Dallas, TX, June 2011.
360. Guest Lecturer, Center for Neuroscience, University of Pittsburgh, 25th Annual Retreat, Oglebay, WV, September 2011.
361. Speaker, The 32nd Naito Conference on Biological Basis of Mental Functions and Disorders, Yamanashi, Japan, October 2011.
362. Speaker, The 5th International Workshop on Cell Regulations in Division and Arrest, Okinawa Institute of Science and Technology (OIST), Okinawa, Japan, October 2011.
363. Plenary Lecture, Global Center of Excellence, Advanced Systems-Biology: Designing The Biological Function, Workshop on "Designing the Circadian Clock," Nagoya University, Nagoya, Japan, November 2011.
364. Co-Chair, NIH National Cancer Institute, Division of Cancer Biology, Circadian Clocks and Cancer Workshop, Rockville, MD, December 12, 2011.
365. Eliot B. Shoolman Visiting Professor Seminar, Harvard Reproductive Endocrine Sciences Center, Massachusetts General Hospital, Boston, MA, January 2012.
366. Speaker, Gordon Research Conference on Pineal Cell Biology, Galveston, TX, January 2012.
367. Speaker, Center for Chronobiology Symposium, UCSD, La Jolla, CA, February 2012.
368. Co-Organizer (with Erin O'Shea), Janelia Farm Conference: Circadian Clocks: Mechanisms, Coordination, and Physiology, Janelia Farm Research Campus, HHMI, March 2012.
369. Plenary Speaker, International Symposium, Frontiers in Behavioral Brain Science, Solving the Mystery of Sleep, Tokyo, Japan, March 2012.
370. Plenary Speaker, Leopoldina Symposium, The Circadian System: from Chronobiology to Chronomedicine, Frankfurt, Germany, March 2012.

371. Lecture, F.M. Kirby Neurobiology Center, Children's Hospital Boston, and Department of Neurobiology, Seminar Series, Harvard Medical School, April 2012.
372. Speaker, Max Planck Institute, Biology/Medicine Section, Exploratory Symposium: Biology of Sleep, Munich, Germany, May 2012.
373. Pittendrigh/Aschoff Plenary Lecture, Society for Research on Biological Rhythms, Sandestin, FL, May 2012.
374. Speaker, FENS Forum of Neuroscience, Symposium on Circuits of Motivation: Network Principles of the Hypothalamus, Barcelona, Spain, July 2012.
375. Howard Hughes Medical Institute Scientific Meeting, Janelia Farm, VA, September 2012.
376. Plenary Lecture, Japan Neuroscience Society 35th Annual Meeting: Neuro2012, Nagoya, Japan, September 2012.
377. University Lecture Series, UT Southwestern Medical Center, Dallas, TX, October 2012.
378. Keynote Speaker, University of Texas Health Science Center at Houston, Annual Medical School Research Retreat, Houston, TX, October 2012.
379. PABMB Plenary Lecturer, Pan-American Association for Biochemistry and Molecular Biology, Argentine Society for Research in Biochemistry and Molecular Biology (SAIB), Mendoza, Argentina, October 2012.
380. Speaker, HiT Center Symposium on Human System Biology, Johns Hopkins University, Baltimore, MD, November 2012.
381. Panel Discussant, Links between Activity, Sleep and Mental Function: Translational Models, ACNP Annual Meeting, Hollywood, FL, December 2012.
382. Panel Speaker, Circadian rhythms and mood disorders: Clock genes and new treatment implications, ACNP Annual Meeting, Hollywood, FL, December 2012.
383. Molecular and Cellular Biology Seminar Series, The Scripps Research Institute, La Jolla, CA, January 2013.
384. Inaugural Symposium Speaker, UCLA Integrative Center for Neurogenetics, Los Angeles, CA, February 2013.
385. Speaker, Symposium on the role of circadian rhythms in sleep disorders and daily life, Southern Sleep Society Annual Meeting, Dallas, TX, March 2013.
386. Opening Plenary Speaker, 1st INSPIRE Meeting, What makes a good clock? Circadian clocks, brain function and development, Servier, Viareggio, Italy, March 2013.
387. Speaker, 1st Annual IIIS Symposium ~Solving the mystery of sleep~, World Premier International Research Center Initiative (WPI), International Institute for Integrative Sleep Medicine (IIIS), University of Tsukuba, Japan, March 2013.
388. WPI-IIIS Seminar, International Institute for Integrative Sleep Medicine (IIIS), University of Tsukuba, Japan, March 2013.
389. Co-organizer (with Garret FitzGerald) and speaker, 2013 Keystone Symposia on Molecular Clockworks and the Regulation of Cardio-Metabolic Function, Snowbird, Utah, April 2013.
390. Plenary Lecture, joint Human Genome organization HGM conference and International Congress of Genetics meeting, Singapore, April 2013.
391. Speaker, 1st Annual ITbM Symposium, World Premier International Research Center Initiative (WPI), Institute of Transformative Bio-Molecules (ITbM), Nagoya University, April 2013.
392. Plenary Lecture, 2013 Seoul International Congress of Endocrinology and Metabolism, Korean Endocrine Society, Seoul, Korea, May 2013.
393. Speaker, Symposium on Working Mechanisms of Body Clock, 2013 Seoul International Congress of Endocrinology and Metabolism, Seoul, Korea, May 2013.
394. Fourth Maurice B. Visscher Distinguished Lectureship, Department of Integrative Biology and Physiology, University of Minnesota Medical School, Minneapolis, MN, May 2013.
395. Seminar, National Institute on Drug Abuse, Intramural Research Program of NIDA Johns Hopkins Bayview Campus, Baltimore, MD, May 2013.
396. Keynote Speaker, Center for Sleep and Circadian Neurobiology Research Retreat, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA, May 2013.
397. Seminar, Instituto de Medicina Molecular, Lisbon, Portugal, June 2013.
398. Speaker, Gordon Research Conference on Chronobiology, Newport, RI, July 2013.
399. Speaker, National Space Biomedical Research Institute (NSBRI) Symposium, Genetics of Neurobehavioral Functions during the 12-Month ISS Mission (ISS12): Capitalizing on Discoveries in Circadian, Sleep and Stress Neurobiology, Houston, TX, August 2013.
400. Plenary Lecture, XII Congress of the European Biological Rhythms Society, Munich, Germany, August 2013.

401. Speaker, Symposium on Beyond Jet Lag: Targeting Aberrant Circadian Rhythm to Attack Diseases from Diabetes to Depression, 2013 American Chemical Society meeting, Indianapolis, IN, September 2013.
402. Speaker, Allen Institute for Brain Science, Annual Symposium: Open Questions in Neuroscience, Seattle, WA, September 2013.
403. Guest Speaker, Annual Retreat, Neuroscience Graduate Program, University of Southern California, Lake Arrowhead, CA, September 2013.
404. Speaker, TEDxSMU 2013 Annual Conference, Dallas, TX, October 2013.
405. Speaker, Neuroscience Colloquium, Washington University School of Medicine, St. Louis, MO, October 2013.
406. Speaker, 2014 Keystone Symposia on Obesity: A Multisystems Perspective, Vancouver, Canada, January 2014.
407. Session Chair, 2nd IIIS International Symposium, Solving the mystery of sleep, Tsukuba, Japan, January 2014.
408. Speaker, 8th Annual Salk/Fondation Ipsen/Nature Symposium on Genes and Physiology, Salk Institute, La Jolla, CA, January 2014.
409. Speaker, UC Irvine Medical Scientist Training Program Distinguished Lecture Series, Irvine, CA, February 2014.
410. Speaker, 2014 Spring Genetics Colloquium, University of Wisconsin, Madison, WI, February 2014.
411. Molecular Medicine Graduate Student Speaker, Department of Neuroscience and Regenerative Medicine, Georgia Regents University, Augusta, GA, March 2014.
412. Session Chair, Genetics of Mood and Sleep Disorders, 2nd INSPIRE Meeting, What makes a good homeostat? Influencing circadian and sleep-wake regulation for prevention and intervention in mood and anxiety disorders, Servier, Viareggio, Italy, April 2014.
413. Keynote Speaker, George Washington Institute for Neuroscience Symposium, Washington, DC, May 2014.
414. Speaker, Symposium, The Impact of Circadian Disruption on Shift Workers: Healthcare and Disease, Montefiore Hospital, Albert Einstein College of Medicine, New York, May 2014.
415. Quastel Lectureship, Silberman Institute of Life Sciences, Hebrew University of Jerusalem, Israel, May 2014.
416. Speaker, Symposium on Rhythms in Biology, Center for Integrative Genomics, University of Lausanne, Switzerland, June 2014.
417. John Grace Lecture, A Public Lecture, The 24-hour clock in our DNA, Center for Integrative Genomics, University of Lausanne, Switzerland, June 2014.
418. Symposium Speaker, Society for Research on Biological Rhythms, Big Sky, Montana, June 2014.
419. Co-Chair and Speaker, Symposium on Psychiatric disorders, 24-hour circadian rhythms: Clock genes and new treatment implications, CINP International College of Neuropsychopharmacology World Congress, Vancouver, Canada, June 2014.
420. Seminar, Senior Seminar, Themes in Biology, Biology Department, Swarthmore College, Swarthmore, PA, September 2014.
421. Speaker, Fujihara Seminar, Homeodynamics in Clocks, Sleep and Metabolism, Tokyo and Izu, Japan, September 2014.
422. Speaker, Aging Sciences Symposium, Tsukuba Global Science Week, Tsukuba, Japan, September 2014.
423. Keynote Speaker, 8th Annual Case Cardiovascular Center Research Retreat, Case Western Reserve University School of Medicine, Hunting Valley, Ohio, October 2014.
424. Speaker, Symposium on Genetics of Sleep and Circadian Disorders, 64th Annual Meeting of the American Society of Human Genetics, San Diego, CA, October 2014.
425. Keynote Speaker, 6th Annual Penn Genetics Symposium, Department of Genetics, University of Pennsylvania, Philadelphia, PA, November 2014.
426. Speaker, Howard Hughes Medical Institute Scientific Meeting, Janelia Research Campus, Ashburn, VA, November 2014.
427. Speaker, Symposium on A time for metabolism and hormones, Foundation IPSEN, Paris, France, December 2014.
428. Speaker, Conference on Timelines in Biology, Weizmann Institute of Science, Tel Aviv, Israel, December 2014.
429. Speaker, Hunt-Curtis Frontiers in Neuroscience Seminar Series, Ohio State University, Columbus, Ohio, February 2015.

430. Distinguished Visiting Scholar, Virginia Tech Carilion Research Institute (VTCRI) in Roanoke, Virginia, February 2015.
431. Speaker, 16th Servier-IGIS (International Group on Insulin Secretion) Symposium on The Islet and Metabolism Keep Time, St Jean Cap Ferrat, France, April 2015.
432. Session Chair, Opening Plenary Lecture, 3rd INSPIRE Meeting, Circadian rhythms and glucose metabolism, Servier, Viareggio, Italy, April 2015.
433. Speaker, Symposium on Music and the Brain, 1st Soluna International Music and Arts Festival, Dallas Symphony, Perot Museum of Nature and Science, Dallas, TX, May 2015.
434. Seminar, Visual Sciences Seminar, Department of Ophthalmology, UT Southwestern, May 2015.
435. Session Chair, Klingenstein-Simons Fellows meeting, Simons Foundation, New York, May 2015.
436. Speaker, Gordon Research Conference on Chronobiology, Melia Golf Vichy Catalan Business & Convention Center, Girona, Costa Brava, Spain, June 2015.
437. Opening Keynote Lecture, 20th EASD (European Association for the Study of Diabetes)-Hagedorn Oxford Workshop on Metabolism and Circadian Rhythm, Keble College, Oxford University, Oxford, UK, August 2015.
438. Co-organizer (with Sydney Brenner, Amita Sehgal and Scott Sternson) and speaker, Janelia Conference on Hypothalamic Circuits for Control of Survival Behaviors, Janelia Research Campus, HHMI, September 2015.
439. Plenary Speaker, 36th Annual Meeting of Japan Society for the Study of Obesity, Nagoya, Japan, October 2015.
440. Co-organizer (with Russell Foster) and speaker, The Brain Conferences on The Neurobiology of Sleep and Circadian Rhythm, Copenhagen, Denmark, October 2015.
441. Co-organizer (with Han Wang, Carla Green, Michael Hastings, Hiroki Ueda) and keynote speaker, Cold Spring Harbor Asia Conference on Biological Rhythms, Suzhou, China, October 2015.
442. Speaker, symposium on Translation of Circadian Biology: Implications for the Clinic, University of Pennsylvania Perelman School of Medicine, Philadelphia, PA, November 2015.
443. Speaker, symposium on Circadian Rhythm and Aging in Cells, Mice, and People, Gerontological Society of America 2015 Annual Meeting, Orlando, FL, November 2015.
444. Speaker, Center for Circadian Biology Symposium: From Cells to Clinic, University of California San Diego, La Jolla, CA. February 2016.
445. Speaker, Molecular & Developmental Biology Seminar Series, Cincinnati Children's Hospital Research Foundation, Cincinnati, OH, March 2016.
446. Speaker, Center for Brain Science, Molecular and Cellular Biology Department, Harvard University, Cambridge, MA, March 2016.
447. Speaker, Texas Society for Circadian Biology and Medicine 2016 Meeting, Texas A&M University, College Station, TX, April 2016.
448. Speaker, Pioneers in Neuroscience Lecture Series, University at Buffalo, Buffalo, NY, April 2016.
449. Keynote Speaker, Trainee Professional Development Day, Society for Research on Biological Rhythms, Innisbrook Resort, Palm Harbor, Florida, May 2016.
450. Speaker, Symposium on Epigenetics and Transcription Networks in Circadian Clocks, Society for Research on Biological Rhythms, Innisbrook Resort, Palm Harbor, Florida, May 2016.
451. Speaker, WPI-IIIS Seminar, International Institute for Integrative Sleep Medicine (IIIS), University of Tsukuba, Japan, August 2016.
452. Speaker, Howard Hughes Medical Institute Scientific Meeting, Janelia Research Campus, Ashburn, VA, September 2016.
453. Speaker, Center for Chronobiology Inaugural Symposium, Cincinnati Children's Hospital, Cincinnati, OH, September 2016.
454. Program Highlight Speaker, National Advisory Council on Aging, National Institute on Aging, NIH, Bethesda, MD, September 2016.
455. Plenary Speaker, 62nd Annual International Meeting, Radiation Research Society, Big Island, Hawaii, October 2016.
456. Peter C. Farrell Prize in Sleep Medicine Lecture, Brigham and Women's Hospital, Harvard Medical School, Boston, MA, October 2016.
457. Speaker, Symposium on Molecular and Physiological Aspects of Diabetes Mellitus, Karolinska Institutet, Stockholm, Sweden, November 2016.

458. Keynote Speaker, Center for Translational Environmental Health Research, Symposium on Circadian Modulation of Environmental Response: Tick-Tox, College Station, TX, November 2016.
459. Speaker, Neuroscience Institute, Morehouse School of Medicine, Atlanta, GA, December 2016.
460. Speaker, Department of Biochemistry and Molecular Biology, University of Texas Health Science Center at Houston, Houston, TX, January 2017.
461. Speaker, The Solomon H. Snyder Department of Neuroscience, Johns Hopkins University School of Medicine, Baltimore, MD, February 2017.
462. Speaker, International Symposium on Biological Timing and Health Issues in the 21st Century, Department of Zoology, University of Delhi, Delhi IndoUS Center for Biological Timing, and Indian Society for Chronobiology, New Delhi, India, February 2017.
463. Co-Organizer (with Won Lee) and Speaker, Circadian and Sleep Medicine Symposium, Peter O'Donnell Jr. Brain Institute, UT Southwestern Medical Center, Dallas, TX, March 2017.
464. Speaker, James L. Voogt Lecture in Neuroendocrinology, The Institute for Reproductive Health and Regenerative Medicine, University of Kansas Medical Center, Kansas City, KS, March 2017.
465. Speaker, Department of Molecular, Cellular and Developmental Biology, University of Michigan, Ann Arbor, MI, March 2017.
466. Speaker, Kresge Hearing Research Institute, University of Michigan Medical School, Ann Arbor, MI, April 2017.
467. Speaker, Department of Pharmacology Seminar Series, University of California, San Diego, La Jolla, CA, May 2017.
468. Speaker, Gordon Research Conference on Chronobiology, Stoweflake Conference Center, Stowe, VT, July 2017.
469. Speaker, Department of Physiology, Center for Neuroendocrinology, University of Otago, Dunedin, New Zealand, September 2017.
470. Plenary Speaker, New Zealand Medical Sciences Congress 2017, Queenstown, New Zealand, September 2017.
471. Speaker, Brain and Mind Centre, University of Sydney, Sydney, Australia, September 2017.
472. Speaker, Department of Cellular and Integrative Physiology, University of Texas Health San Antonio, San Antonio, TX, September 2017.
473. Speaker, National Cancer Institute, Division of Cancer Treatment & Diagnosis, Workshop on "State of the Science: Circadian Rhythm and Chronomedicine for Cancer and Other Diseases in the Era of Precision Medicine," NCI Shady Grove Campus, Rockville, MD, September 2017.
474. Speaker, Venetian Institute of Molecular Medicine, University of Padova, Padova, Italy, October 2017.
475. Opening Speaker, Fifth International Experimental Biology and Medicine Conference, Rijeka, Croatia, October 2017.
476. Sinauer Associates/OUP Distinguished Scientist Lecture, University of Massachusetts, Amherst, MA, October 2017.
477. Speaker, Institute for Translational Medicine and Therapeutics 12th Annual International Symposium, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA, October 2017.
478. Special Lecture, Society for Neuroscience, Annual Meeting, Washington, DC, November 2017.
479. Keynote Address, XIV Latin American Symposium on Chronobiology, Valparaiso, Chile, November 2017.
480. Speaker, ACNP Panel, American College of Neuropsychopharmacology 56th Annual Meeting, Palm Desert, CA, December 2017.
481. Chair, Panel on Circadian Clocks in Biology and Medicine: Central Control of Peripheral Oscillator Function, Winter Conference on Brain Research, Whistler, B.C., January 2018.
482. Distinguished Guest Lecture, Department of Molecular and Cellular Biology, Baylor College of Medicine, Houston, TX, February 2018.
483. Speaker, Keystone Symposium on Endoderm Development and Disease: Cross-Organ Comparison and Interplay, Taos, NM, March 2018.
484. Speaker, Department of Biology, University of Virginia, Charlottesville, VA, March 2018.
485. Speaker, National Institute of Biological Sciences, Beijing, China, April 2018.
486. Speaker, McGovern Brain Research Institute, Peking University, Beijing, China, April 2018.
487. Keynote Speaker, 2018 National Conference of Chinese Society for Cell Biology, Nanjing, China, April 2018.
488. Speaker, 34th International Forum on Frontiers of Neuroscience, Institute of Neuroscience, Chinese Academy of Sciences, Shanghai, China, April 2018.

489. Speaker, ARVO Symposium on Ocular and Systemic Circadian Rhythms: Implications for Vision Research, ARVO 2018 Annual Meeting, Honolulu, HI, April 2018.
490. Plenary Lecture, Society of Biological Psychiatry 73rd Annual Meeting, New York, NY, May 2018.
491. Master of Ceremonies, A Celebration of the 2017 Nobel Prize, Society for Research on Biological Rhythms, Amelia Island, FL, May 2018.
492. Speaker, Sleep Grand Rounds, Division of Sleep Medicine, Dept of Psychiatry and Behavioral Sciences, Stanford University School of Medicine, June 2018.
493. Speaker, Circadian Rhythm Workshop: Insights in Biological Pathways and Therapeutic Opportunities, Internal Medicine Research Unit, Metabolic Diseases, Pfizer, Inc., Cambridge, MA, June 2018.
494. Keynote Speaker, MCW Research Day, Medical College of Wisconsin, Milwaukee, WI, September 2018.
495. Speaker, 2018 International Symposium on Epigenetic Control and Cellular Plasticity, UC Irvine Center for Epigenetics & Metabolism, Irvine, CA, October 2018.
496. Keynote speaker, UT Southwestern in Space Symposium, UT Southwestern, Dallas, TX, October 2018.
497. Speaker, Centre for Biological Timing, School of Medicine, University of Manchester, Manchester, UK, November 2018.
498. Plenary Speaker, Transatlantic Medal Lecture, Society for Endocrinology, Glasgow, Scotland, UK, November 2018.
499. Program Chair, TAMEST 2019 Annual Conference, Neuroscience & Brain Health, Horseshoe Bay, TX, January 2019.
500. Luminary Speaker, Advances in Sleep and Circadian Science Conference, Sleep Research Society, Clearwater, FL, February 2019.
501. Speaker, Symposium on From Cells to Clinic, UC San Diego Center for Circadian Biology, La Jolla, CA, February 2019.
502. Speaker, Metabolism Day, Novo Nordisk Foundation Center for Basic Metabolic Research, University of Copenhagen, Copenhagen, Denmark, March 2019.
503. Speaker, 2019 Texas Society for Circadian Biology and Medicine meeting, Texas A&M, College Station, TX, April 2019.
504. 2019 Thomas Willis Lecture, Nuffield Department of Clinical Neurosciences, University of Oxford, Oxford, England, May 2019.
505. Keynote lecture, World Congress on The Basic Science of Exercise, Circadian Rhythms and Sleep, American College of Sports Medicine, Orlando, FL, May 2019.
506. Speaker, Gordon Research Conference on Chronobiology, Castelldefels, Spain, June 2019.
507. Keynote Lecture, IBRO World Congress 2019, Daegu, Republic of Korea, September 2019.
508. Seminar, Division of Integrative Biosciences & Biotechnology, Pohang University of Science & Technology (POSTECH), Pohang, Korea, September 2019.
509. Seminar, Calico Life Sciences LLC, South San Francisco, October 2019.
510. Peter and Patricia Gruber Lecture, The Gruber Foundation, Society for Neuroscience Annual Meeting, Chicago, IL, October 2019.
511. Circadian Keynote Lecture, 2019 Activated Egg Symposium, “Circadian Rhythms & Early Development,” Bedford Research Foundation, Boston, MA, November 2019.
512. Speaker, Distinguished Lecture Series, Duke University Program in Genetics & Genomics, Duke University, Durham, NC, November 2019.
513. Seminar, Molecular and Cellular Neuroscience Graduate Program at MIT, Boston, MA, February 2020.
514. Speaker, Howard Hughes Medical Institute Scientific Meeting, Janelia Research Campus, Ashburn, VA, February 2020.
515. Speaker, University of Colorado Boulder, Sleep and Circadian Summer School, virtual conference, August 2020.
516. Plenary Speaker, Japanese Society for Chronobiology, online meeting, Japan, September 2020.
517. Plenary Lecture, 2020 International Conference: Korean Society for Molecular and Cellular Biology, Korea, October 2020.
518. Speaker, Cooper Clinic, CME lecture, Dallas, Texas, October 2020.
519. Speaker, Circle of Friends, Lunch & Learn Virtual Event, UT Southwestern, October 2020.
520. Speaker, Frontiers in Circadian Medicine, New York Academy of Sciences, Webinar, November 2020.
521. Speaker, visiting scholar lecture series entitled “CNS Malignancies: From Basic Biology to Clinical Applications” Neuro-Oncology Branch, NCI, NIH, Bethesda, March 2021.

522. Speaker, Aging Institute Research Seminar Series, University of Pittsburgh and UPMC, virtual, April 2021.
523. Distinguished Speaker Lecture, Nutritional Sciences Graduate Student Association, virtual, University of Texas at Austin, April 2021.
524. Opening Speaker, LXXXV Cold Spring Harbor Symposium: Biological Time Keeping, virtual, June 2021.
525. Keynote Lecture and Co-Organizer, Impacts of Sleep and Circadian Biology on Alzheimer's Disease and Aging: A Focus on Genetics and Genomics, The Jackson Laboratory, Bar Harbor, Maine, in person, October 2021.
526. Opening Speaker, Virtual Workshop - Toward Precision Medicine: Circadian Rhythm of Blood Pressure and Chronotherapy for Hypertension, National Heart, Lung, and Blood Institute, NIH, October 2021.
527. Speaker, Virtual Science Meeting – Cellular and Organismal Physiology, Howard Hughes Medical Institute Scientific Meeting, March 2022.
528. Neuroscience Journal Club lecture, The M.R. Bauer Foundation Colloquium, Brandeis University, Waltham, MA, March 2022.
529. Distinguished Lecturer, The M.R. Bauer Foundation Colloquium, Brandeis University, Waltham, MA, March 2022.
530. Speaker, 13th Symposium of the Bial Foundation, Behind and Beyond the Brain, The mystery of time, Porto, Portugal, April 2022.
531. Guest Speaker, National Scientific Council on the Developing Child, Council Meeting, Boston, MA, June 2022.
532. Speaker, Aging Research and Drug Discovery meeting, University of Copenhagen, Copenhagen, Denmark, September 2022.
533. Lecture, Impacts of Sleep and Circadian Biology on Alzheimer's Disease and Aging: A Focus on Genetics and Genomics, The Jackson Laboratory, Bar Harbor, Maine, October 2022.
534. Organizer and co-host with Ignacio Provencio, Michael Menaker Memorial Symposium, University of Virginia, Charlottesville, VA, January 2023.
535. Speaker, CIRCAMET kickoff meeting, University of Copenhagen, Novo Nordisk Foundation Center for Basic Metabolic Research, Copenhagen, Denmark, January 2023.
536. Member, Measuring & Standardizing Light for Rodents Meeting, University of Manchester, Manchester, U.K., February 2023.
537. Speaker, 44th Lorne Genome Conference 2023, Mantra Lorne, Australia, February 2023.
538. Speaker, WEHI Director's Seminar, and Genetic Screening Workshop, Walter and Eliza Hall Institute of Medical Research, Melbourne, Australia, February 2023.
539. Speaker, Brain and Mind Centre, The University of Sydney, Sydney, Australia, February 2023.
540. Speaker, Keystone Symposia, Molecular Basis of Healthy Aging (X6), Breckenridge, CO, March 2023.
541. Speaker, Symposium on "Chrononutrition to optimize cardiometabolic health," SLEEP 2023 meeting, Sleep Research Society, Indianapolis, IN, June 2023.
542. Keynote Speaker, Gordon Research Seminar on Chronobiology, Bates College, Lewiston, ME, June 2023.
543. Plenary Speaker, R25 Colorado Sleep and Circadian Summer School, University of Colorado Boulder, August 2023.
544. Speaker, Howard Hughes Medical Institute Scientific Meeting, Janelia Research Campus, Ashburn, VA, October 2023.
545. Speaker, 2023 Masoro-Barshop Conference on Aging, UT Health Science Center at San Antonio, Bandera, TX, October 2023.
546. Speaker, National Institute of Biological Sciences (NIBS), Beijing, China, November 2023.
547. Speaker, Tsinghua University, Beijing, China, November 2023.
548. Speaker, Tsinghua IDG/McGovern 2023 International Conference on Neurological Disorders, Tsinghua University, Beijing, China, November 2023.
549. Distinguished Seminar, Spanish National Cancer Research Centre (CNIO), Madrid, Spain, November 2023.
550. Speaker, Cologne Seminars on Ageing Series, CECAD, University of Cologne, Germany, in collaboration with the Max Planck Institute for Biology of Ageing and the Max Planck Institute for Metabolism Research, Cologne, Germany, December 2023.
551. Speaker, Michael Hughes Memorial Lecture, Grand Rounds, John T. Milliken Department of Medicine, Division of Pulmonary and Critical Care Medicine, School of Medicine, Washington University in St. Louis, January 2024.
552. Speaker, Texas Society for Circadian Biology and Medicine meeting, Texas A&M, April 2024.

553. Distinguished Speaker, UCLA CTSI Distinguished Speaker Series, UCLA David Geffen School of Medicine, Los Angeles, CA, May 2024.
554. Workshop leader with Martha Merrow, Trainee Professional Development Day, Society for Research on Biological Rhythms, San Juan, Puerto Rico, May 2024.
555. Chair, Symposium "Time to Eat, Time to Exercise," Society for Research on Biological Rhythms, San Juan, Puerto Rico, May 2024.
556. Speaker, Altos Labs, Bay Area Institute of Science, Redwood City, CA, June 2024.
557. Keynote Speaker, 2024 Center On Biological Rhythms And Sleep (COBRAS) Annual Symposium, Washington University School of Medicine, St. Louis, MO, June 2024.
558. Lecturer, International Chronobiology Summer School, Japanese Society for Chronobiology, Institute of Transformative Bio-Molecules (WPI-ITbM), Nagoya University, Nagoya, Japan, August 2024.
559. Plenary Lecture, Sapporo Symposium on Biological Rhythm, Asian Forum on Chronobiology, Hokkaido University, Sapporo, Japan, August 2024.
560. Featured Speaker, Science and Cocktails "The Clock in Your Cells that Controls Your Life," Den Gra Hal, Copenhagen, Denmark, August 2024. https://www.scienceandcocktails.org/en/events/copenhagen/the-clock-in-your-cells-that-controls-your-life
561. Speaker, 11th Aging Research and Drug Discovery meeting, University of Copenhagen, Copenhagen, Denmark, August 2024.
562. Keynote Speaker, Cincinnati Circadian Conference (C3), Cincinnati Children's Hospital Medical Center, Cincinnati, OH, September 2024.
563. Speaker and Session Co-Chair, Mechanisms of Aging conference, Cold Spring Harbor Laboratory, NY, September 2024.
564. Keynote Speaker, 19th International Symposium of the Institute Network for Biomedical Sciences in Japan, Institute of Development, Aging and Cancer (IDAC), Tohoku University, Sendai, Japan, October 2024.
565. Thomas Hunt Morgan Distinguished Lecturer, Department of Biology, University of Kentucky, Lexington, KY, October 2024.
566. Lecture, Department of Physiology and Aging, College of Medicine, University of Florida, Gainesville, FL, February 2025.
567. Speaker, Symposium on "Biological Timekeeping, Aging and Disease," Center for Circadian Biology, UCSD, La Jolla, CA, March 2025.
568. Panelist, GESDA Healthspan Extension Anticipation Workshop (virtual), "the future of healthspan extension research," Vera Gorbunova, Chair, March 2025.
569. Speaker, Aging Research Seminar Series, Glenn Foundation for Medical Research, Knight Initiative for Brain Resilience, Stanford University, Palo Alto, CA, April 2025.
570. Keynote Lecture, American Headache Society, 67th Annual Scientific Meeting, Minneapolis, MN, June 2025.
571. Speaker, Gordon Research Conference on Chronobiology, Castelldefels, Barcelona, Spain, July 2025.
572. Plenary Lecture, 32nd Annual Meeting of the Japanese Society for Chronobiology, Kyoto, Japan, October 2025.
573. Lecture, Institute of Development, Aging and Cancer, Tohoku University, Sendai, Japan, October 2025.
574. Co-Organizer (with Shin Yamazaki, Carla Green), Texas Society for Circadian Biology and Medicine meeting, UT Southwestern (Pegasus Park), November 2025.
575. Keynote Speaker, SfN TAMU Fall Symposium, Institute for Neuroscience, Texas A&M University, College Station, TX, December 2025.
576. Lecture, Life Science Seminar Series, University of Geneva, Geneva, Switzerland, March 2026.
577. Lecture, Vollum Institute, Oregon Health & Science University, Portland, OR, April 2026.
578. Panel Discussant, Trainee Day and Circadian Medicine Day 2026, Society for Research on Biological Rhythms, Amelia Island, FL, May 2026.
579. Plenary Speaker, ICN2026, International Congress of Neuroendocrinology, Nagoya, Japan, July 2026.
580. Lecture, Institute of Transformative Bio-Molecules, Nagoya University, Nagoya, Japan, July 2026.
581. Keynote Lecture, IDAC 85th Anniversary Symposium: New Frontiers in Geroscience, Institute of Development, Aging and Cancer, Tohoku University, Sendai, Japan, July 2026.
582. Speaker, Cell Health Workshop, Allen Institute, Seattle, WA, July 2026.
583. Paul Doty Lecture, Department of Molecular and Cellular Biology, Harvard University, Cambridge, MA, October 2026.

584. Lecture, James A. Aleveras & Paul F. Glenn Formal Research Seminar, Buck Institute for Research on Aging, Novato, CA, October 2026.
585. Keynote Speaker, Florida Genetics Symposium, University of Florida, Gainesville, FL, November 2026.

GRANT SUPPORT:

Current Research Grants

NIH R01 DC020333, *Genetic Basis of Vocal Learning,* T. Roberts, MPI, J.S. Takahashi, MPI, F.K. Hamra, MPI. 09/27/2021 – 08/31/2026. Total Award Amount (including Indirect Costs): $4,421,167

NIH R01 AG072736, Circadian Rhythms and Lifespan, J.S. Takahashi, MPI, Carla Green, MPI. 05/01/2024-04/30/2029, Total Award Amount (including Indirect Costs): $3,174,064

NIH R01 DK140283, Genetic dissection of tissue-specific roles of a circadian NADPH phosphatase, Carla Green, MPI, J.S. Takahashi, MPI. 08/01/2026-07/31/2028, Total Award Amount (including Indirect Costs): $1,161,408.

A.L. Chilton Foundation, Small Molecule Modulators of the Circadian Clock in Mammals, J.S. Takahashi, PI. 06/19/2018-present, Total award: $500,000.

NIH R01 DK148676, Dissecting circadian chronoarchitecture of the intestine, Y. Obata, PI, S. Yamazaki, J.S. Takahashi, Co-PI, 07/01/2026-06/30/2031, Total Award Amount (including Indirect Costs): $2,363,232.

NIH F30 DK145145-01A1, The Role of SCN-expressed Ghrelin Receptors (GHSRs) in Time-of-Day Aligned Feeding, Soumya Kulkarni, PD/PI, Jeffrey Zigman, Mentor, J.S Takahashi, Co-Mentor, 07/01/2026-06/01/2030, Total Award Amount (including Indirect Costs): $209,372.00

NIH K99 AG097913-01A1, The Impact of Circadian Aligned Time-Restricted Feeding on Reproductive Rhythms and Aging, S. Iiams (Clever), PI. Total Award Amount (including Indirect Costs): $274,920

Pending

NIH R01 DK146339, Elucidation of function and connectivity of a novel midbrain light-entrainable circadian oscillator, S. Yamazaki, MPI, J.S. Takahashi, MPI. 07/01/2026-06/30/2031, Total Award Amount (including Indirect Costs): $3,473,960

Simons Foundation AN-AR-Fellow-00012963, Unveiling snoRNA: A New Therapeutic Avenue for Sleep Disorder in Autism Spectrum Disorder, Chang Hoon Lee, PD/PI, J.S. Takahashi, Mentor, 09/01/2025-08/01/2027, Total Award Amount (including Indirect Costs): $200,545

NIH K99 AG095300-01A1. The Role of Feeding Patterns and Circadian Rhythms in Mediating Health and Lifespan, H. Pak, PI. Total Award Amount (including Indirect Costs): $987,002

NIH R01 NS154006, Functional atlas of cell-type-specific oscillators in the suprachiasmatic nucleus, J.S. Takahashi, PD/PI. 04/01/2027-03/31/2032, Total Award Amount (including Indirect Costs): $2,805,027.

Completed Research Support (in past three years)

Howard Hughes Medical Institute, Investigator Award, J.S. Takahashi, renewed for five years, 11/01/2018-10/31/2023. This award covers the full salary and benefits of J.S. Takahashi, four postdoctoral associates,

three research technicians and one administrative assistant. A supply budget for seven positions and animal care is also provided. Annual direct costs (FY2023): $1,200,000.

NIH T32 HL139438, *The Cellular and Systems Biology of Sleep and Circadian Rhythms Training Program,* R.W. Greene, MPI, J.S. Takahashi, MPI. 07/01/2018-06/30/2024, Total direct costs: $1,220,212**.** Annual direct costs: $282,624.

NIH U54 CA280868, The Medical District UTSW-D FIRST Program, Helen Yin, PD/PI, 06/01/2023-5/31/2028 (discontinued in 2025), Total Award Amount (including Indirect Costs): $16,479,190

Milky Way Research Foundation MWRF210823, Enhancing the Circadian Molecular Clock to Rescue Aging, J.S. Takahashi, PI, Carla Green, Co-PI. 09/01/2021-07/31/2025 (NCE), Total Award Amount (including Indirect Costs): $3,450,000

NIH R01 DK140283, Genetic dissection of tissue-specific roles of a circadian NADPH phosphatase, Carla Green, MPI, J.S. Takahashi, MPI. 09/02/2024-07/31/2026, Total Award Amount (including Indirect Costs): $1,185,622

NIH R01 NS114527, Neural circuitry and functional significance of extra-SCN pacemakers, S. Yamazaki, PD/PI, J.S. Takahashi, Co-Investigator. 09/15/2020-06/30/2026, Total Award Amount (including Indirect Costs): $1,914,067

Previous Grant Support

Searle Foundation Leadership Fund for the Life Sciences, period of support 7/1/83 - 6/30/85. Total award $50,000.

Alfred P. Sloan Research Fellowship in Neuroscience, Alfred P. Sloan Foundation, grant no. SLN FDN BR-2366, period of support 9/16/83 - 9/15/85. Total award $25,000.

NIMH R01 MH39592-03, Cellular Analysis of Vertebrate Circadian Pacemakers. J.S. Takahashi, P.I. 9/1/84 - 8/31/87. Total direct costs: $174,016.

1985 Searle Scholars Program Fellowship, No. 85-H-107. The Chicago Community Trust. J.S. Takahashi, P.I. 7/1/85 - 6/30/88. Total award: $180,000.

NIMH F32 MH09466-02, NRSA Postdoctoral Fellowship, Barbara L. Pratt (Sponsor, J.S. Takahashi), Adrenergic Control of Melatonin Synthesis, 8/1/86 - 7/31/88. Total direct costs: $56,004

Upjohn Company Protocol #0157, Proposed experiments to examine the effects of triazolam on the mammalian circadian system. F.W. Turek and J.S. Takahashi, Co-investigators. 12/15/87 - 12/14/88. Total direct costs: $80,000.

NIMH F31 MH09465-03, NRSA Predoctoral Fellowship, Linda M. Robertson (Sponsor, J.S. Takahashi), Photic Entrainment of a Cellular Circadian System, 9/1/86 - 8/31/89. Total direct costs: $28,656.

NIH R01 DK38607-03, Characterization of Melatonin Receptors in Brain. M.L. Dubocovich, P.I., J.S. Takahashi, Co-P.I. 4/1/87 - 3/31/90. Total direct costs: $187,967.

NIMH F31 MH09572-03, NRSA Predoctoral Fellowship, Selene S. Nikaido (Sponsor, J.S. Takahashi), Cyclic Nucleotide Control of Avian Circadian Oscillator. 9/1/87 - 8/31/90. Total direct costs: $30,604.

NIH F32 EY06167-02, NRSA Postdoctoral Fellowship, Mary E. Pierce (Sponsor, J.S. Takahashi), Regulation of Melatonin in Retinal Cell Culture, 12/15/88 - 12/14/90. Total direct costs: $48,004.

NSF DCB-8451642, 1985 Presidential Young Investigator Award. J.S. Takahashi, P.I. 8/1/85 - 1/31/91. Total award: $312,500 (includes $25,000 per year base award plus $37,500 per year of matching funds).

NIMH R13 MH46738-01, Conference Grant: Society for Research on Biological Rhythms, F.W. Turek, P.I., J.S. Takahashi, Co-P.I. 6/1/90 - 5/31/91. Total direct costs: $24,380.

NIH S15 HD27646-01, Small Instrumentation Grant: Direct Quantification Systems Using Phosphoimaging. R.I. Morimoto, P.I., J.S. Takahashi, Co-P.I. 8/1/90 - 7/31/91. Total direct costs: $49,900.

NIMH F31 MH09929-02, NRSA Predoctoral Fellowship, Jina Janavs (Sponsor, J.S. Takahashi), Regulation of Melatonin in Y79 Retinoblastoma Cells, 10/1/89 - 9/30/92. Total direct costs: $23,000.

NIMH R01 MH41211-03, Circadian Rhythms in Mammals: Role of Protein Synthesis. F.W. Turek, P.I., J.S. Takahashi and S.I. Inouye, Co-P.I. 4/1/87 - 8/31/92. Total direct costs: $296,510.

NIH P01 HD21921-03, Program Project Grant, Follicle Stimulating Hormone: Control and Action. N.B. Schwartz, Program Director: F. Turek, P.I., J.S. Takahashi and J. Levine, Co-P.I. Photoperiodic Control of FSH Secretion. 8/1/87 - 11/30/92. Total direct costs: $355,436.

Higher Education Cooperation Act Grant, Science and Technology Center in Biological Timing, F.W. Turek, P.I., J.S. Takahashi, Co-P.I. 9/1/91 - 8/31/92, Total award: $150,000.

NIH T32 HD07068-15, Training Grant in Reproductive Biology, Director: F.W. Turek, period of support 7/1/88 - 6/30/93. Preceptors: Goldberg, Hunzicker-Dunn, Klein, Levine, Linzer, Mayo, Schwartz, Takahashi, Turek.

NIH T32 NS07223-10, Training Grant in Sensory Physiology and Psychophysics, Director: A. Farbman, period of support 7/1/87 - 6/30/92. Preceptors: Dallos, Enroth-Cugell, Farbman, Ferster, Linsenmeier, Peterson, Pinto, Rosenfeld, Segraves, Siegel, Takahashi, Troy.

NIMH R37 MH39592-08, Cellular Analysis of a Vertebrate Circadian Pacemaker. J.S. Takahashi, P.I. 12/1/87 - 12/31/92. Total direct costs: $536,007.

MacArthur Foundation, Mental Health Research Network I, Identification of Circadian Clock Mutants in the Mouse, J.S. Takahashi, P.I., F.W. Turek, Co-I., L.H. Pinto, Co-I., 6/1/92 - 5/31/93. Total award: $49,725.

NIH T32 GM08061-10, Cellular and Molecular Basis of Disease Training Program, Director: J.D. Engel, period of support 7/1/88 - 6/30/93. Preceptors consist of 47 faculty on both the Evanston and Chicago campuses.

NIH T32 NS07140-10, Training Grant in Cellular and Molecular Neuroscience, Director: T. Narahashi, period of support 7/1/88 - 6/30/93. Preceptors: Dubocovich, Farbman, Klein, Lipton, MacDonald, Paterson, Silinsky, Takahashi, Ten Eick, Yeh.

NSF DIR-8920162, Science and Technology Center in Biological Timing, G.D. Block, P.I., University of Virginia. Consortium with Northwestern University and Rockefeller University. F.W. Turek, P.I., J.S. Takahashi, Co-P.I., of Northwestern component of consortium proposal. Period of support: 2/1/91 - 1/31/94. Total costs for entire Center: $3,540,000. Total direct costs: $461,002. to Northwestern.

NIMH F32 MH10225-02, NRSA Postdoctoral Fellowship, Marianna Max (Sponsor, J.S. Takahashi), Circadian Function in Immortalized Chick Pineal Cells, 6/27/92 - 6/26/94. Total direct costs: $44,300.

NIMH F31 MH10241-02 NRSA Predoctoral Fellowship, Jon Kornhauser (Sponsor, J.S. Takahashi), Photic and Circadian Regulation of SCN Gene Expression, 9/25/92-9/24/94. Total direct costs: $23,600.

NIH R01 EY08467-05, Melatonin Synthesis in Retinal and Retinoblastoma Cells, J.S. Takahashi, P.I. 1/1/90 - 12/31/95. Total direct costs: $492,930.

NIMH F30 MH10189-03, NRSA Predoctoral M.D./Ph.D. Fellowship, Jose C. Florez (Sponsor, J.S. Takahashi), Circadian and Light-Induced Protein Expression in Cultured Chick Pineal Cells, 9/1/91 - 7/01/95. Total direct costs: $101,990.

NIMH F31 MH10287-03, NRSA Predoctoral Fellowship, Ken Seidenman (Sponsor, J.S. Takahashi), Neurotransmitter & Circadian Regulation of SCN *c-fos*, 6/1/92 - 5/31/95. Total direct costs: $36,608.

NIMH F32 MH10369-02, NRSA Postdoctoral Fellowship, R. Keith Barrett (Sponsor, J.S. Takahashi), Circadian Clock Regulation: Role of Protein Synthesis, 6/1/93 - 5/31/95. Total direct costs: $51,300.

NIH R01 MH41211-06, Circadian Rhythms in Mammals: Role of Protein Synthesis. F.W. Turek, P.I., J.S. Takahashi, Co-P.I. 9/1/92 - 8/31/95. Total direct costs: $313,309.

NIH R01 MH49241-03, Circadian Regulation of Immediate-Early Genes in SCN. J.S. Takahashi, P.I., K.E. Mayo, Co-P.I. 1/1/93 - 12/31/95. Total direct costs: $319,856.

NIH R37 MH39592-13, MERIT Award, Cellular Analysis of a Vertebrate Circadian Pacemaker. J.S. Takahashi, P.I. 1/1/93 - 12/31/97. Total direct costs: $679,576.

Bristol-Myers Squibb, Unrestricted Grant for Neuroscience Research, J.S. Takahashi, P.I., 7/1/95 - 6/30/00. Total direct costs: $500,000.

Air Force Office of Scientific Research, 97NL170, Genetic Analysis of Daily Activity in Humans and Mice, J.S. Takahashi, P.I., 6/1/97 - 6/30/99. Total direct costs: $481,080.

NIH P30 HD28048, Center for Research on Fertility and Infertility. F.W. Turek, P.I. This is a Center Core Grant to support research in reproduction and involves ten investigators that have access to five scientific core facilities for approved NIH projects. 4/1/96 - 3/31/01.

Army Research Office, 38532-LS, Uncovering the Genetic Basis of Sleep: Use of *Clock* Mutant Mice. F.W. Turek, P.I., J.S. Takahashi, Co-investigator, 4/1/98 - 3/31/01. Total direct costs: $203,832. Annual direct costs: $68,832.

NIH R01 HL59598-01, Genetic Analysis of Sleep Regulation in the Mouse. F.W. Turek, P.I., J.S. Takahashi, Co-Investigator. 9/30/97 - 9/29/01. Total direct costs: $900,000. Annual direct costs: $225,000.

NIH P01 AG11412-05, Program Project Grant, Alterations of Circadian Timing in Aging, E. Van Cauter, University of Chicago, Program Director. Project 4: Effects of Aging on Photic Entrainment and Immediate Early Gene Expression. J.S. Takahashi, P.I., 11% effort, 12/1/97 - 11/30/01. Total direct costs: ~$450,000. Annual direct costs: $90,651.

NSF DIR-8920162, Science and Technology Center in Biological Timing, G.D. Block, P.I., University of Virginia. Consortium with Northwestern University, Rockefeller University and Brandeis University. J.S. Takahashi, P.I., F.W. Turek and L.H. Pinto, Co-P.I., of Northwestern component of consortium proposal. Period of support: 2/1/97 - 1/31/02. Total costs to Northwestern: $2,305.734.

NIH F30 MH12250-03, NRSA Predoctoral M.D./Ph.D. Fellowship, Ashvin M. Sangoram (Sponsor, J.S. Takahashi), Analysis of Circadian Rhythms in *Clock* Knockout Mice, 7/1/99 - 6/30/02. Total direct costs: $79,152.

NIH R01 MH60789, QTL Analysis of Depressive, Stress-Hyperactive Behavior. E. Redei, P.I., J.S. Takahashi, Co-Investigator, 5% effort, 12/01/99-11/30/04.

Sandler Program of Asthma Research, Genome-Wide Mutagenesis to Find Genes that Regulate Airway Constrictor Responsiveness. J. Solway, U. Chicago, P.I., L.H. Pinto, P.I, and J.S. Takahashi, Co-Investigator, 5% effort, Northwestern Subcontract. 7/01/00-6/30/04. Total direct costs: $750,000.

NIH T32 GM008061, Cell and Molecular Basis of Disease Training Program, Director/PI: R. Holmgren, period of support 7/01/1983-6/30/2008. Preceptors consist of faculty on both the Evanston and Chicago campuses.

NIH T32 GM008152-21, Medical Scientist Training Program, Director: D. Engman, period of support 1/01/1987-6/30/2012. Preceptors consist of faculty on both the Evanston and Chicago campuses.

NIH T32 EY007128-11 Multidisciplinary Visual Science Training Program, Director: V. Sarthy, period of support 2/01/1997-1/31/2010. Preceptors consist of faculty on both the Evanston and Chicago campuses.

NIH T32 HL007909-10, Training Grant in Sleep Research, Director: F.W. Turek, period of support 7/01/1998-6/30/2008. Preceptors: J.S. Takahashi, R. Allada, J. Bass and P. Zee.

NIH T32 AG020418-07, Neuroscience in the Early Years: Predoctoral Training, E. Mugnaini, PI, period of support 5/1/2001-4/30/2011. Preceptors consist of faculty on both the Evanston and Chicago campuses.

NIH T32 NS041234-07, General Motor Control Mechanisms and Disease Training Grant. Director: D.J. Surmeier, period of support 7/15/2001-6/30/2011. Preceptors consist of faculty on both the Evanston and Chicago campuses.

NIH T32 AG020506-06, Mechanisms of Aging and Dementia Training Program, Director: J. Disterhoft, period of support 5/01/2002-4/30/2012. Preceptors consist of faculty on both the Evanston and Chicago campuses.

NIH T32 MH067564-05, Training Program in Neurobiology of Information Storage, Director: A. Routtenberg, period of support 7/01/2003-6/30/2008. Preceptors consist of faculty on both the Evanston and Chicago campuses.

Zaffaroni Foundation, Consortium for Mouse Genetics of Addiction. M.G. Caron, Coordinator, Duke University. J.S. Takahashi, P.I., 10% effort. Project 1: ENU Mutagenesis: Recessive Screen for Psychostimulant Action; M.G. Caron, P.I., Duke University, Project 2: ENU Mutagenesis Modifier Screen and Analysis of Monominergic Transmission; S. Barak Caine, P.I., Harvard Medical School, Project 3: Analysis of Drug Self-Administration Behavior. 04/01/01-3/31/06. Total direct costs for entire consortium: $2,948,376.

F31 NS47799, NIH Ruth L. Kirschstein National Research Service Award. Reproductive Defects in the Clock Mutant Mouse. B. Miller, Predoctoral Fellow, and J.S. Takahashi, Sponsor. The award covers tuition, health insurance and stipend for school year 3/01/04-6/30/06, total award of $29,341.

NIH R13NS059218, 2007 Chronobiology Gordon Research Conference. J.S. Takahashi, P.I., 2/15/07-1/31/08. Total costs: $10,000.

NIH P01 AI056352, Program Project, Molecular Mechanism of Asthma. J. Solway, Univ. of Chicago, P.I., L.H. Pinto, P.I., J.S. Takahashi, Co-Investigator, Northwestern University, 0.6 calendar month effort, 3/01/03-2/28/08. Annual direct cost to NU: $89,184.

NIH U01 MH61915, Mouse Mutagenesis: Phenotype-Driven Neuroscience Screens. J.S. Takahashi, PI. Consortium with Eric Kandel, Columbia University, Marc Caron, Duke University, and Val Sheffield, University of Iowa. The objectives of this proposal are to create a Center focused on large-scale ENU mutagenesis screens in the mouse. Five phenotypic domains are targeted for screening: 1) circadian rhythms; 2) fear conditioning; 3) vision; 4) neuroendocrine hormones; and 5) response to psychostimulants. The center is a consortium involving investigators at Columbia University, Duke University and University of Iowa. 04/01/01-08/31/07. Total costs: $17,258,822.

NIH U01 MH61915, Administrative Supplement 2 Mouse Neuroscience Phenotyping and Distribution Center. J.S. Takahashi, PI, W.A. Kibbe, M.H. Vitaterna, Co-PI, Northwestern. W.N. Frankel, PI, The Jackson Laboratory, D. Goldowitz, PI, U of Tennessee Health Sciences Center. The goal of this project is to provide for the formation of the Neuromice.org consortium to facilitate distribution of the mutant mice as well as disseminate information about the different mutant lines. 04/01/02-08/31/07. Total costs: $11,517,734.

Rett Syndrome Research Foundation, Fellowship, Genetic Dissection of Rett Syndrome: A Screen for Modifiers of MeCP2 in the Mouse. Hee-Kyung Hong (Sponsor, J.S. Takahashi), 10/1/2007-9/30/2009. Total costs: $100,000.

Award to Others: Takeda Pharmaceuticals of North America, Effects of Ramelteon on circadian rhythm of Suprachiasmatic Nucleus in Clock mutant mice. K. Shimomura, P.I., M.H. Vitaterna, Co-P.I., 10/1/07-9/30/08. Total costs: $209,771.

Howard Hughes Medical Institute, Investigator Award, J.S. Takahashi, renewed every ~5 years, 7/01/97-3/31/09 This award covers the full salary and benefits of J.S. Takahashi, four postdoctoral associates, three research technicians and one administrative assistant. A supply budget for seven positions and animal care is also provided. Annual direct costs: $1,200,000-2,000,000.

NIH R13NS065580, 2009 Chronobiology Gordon Research Conference. J.S. Takahashi, P.I., 3/1/09-2/28/10. Total costs: $20,000.

NARSAD 2008 Young Investigator Award. Mariko Izumo (Sponsor, J.S. Takahashi), 7/1/08-6/30/10. Total costs: $60,000.

Rett Syndrome Research Foundation, Regular Research Grant, Genetic Dissection of Rett Syndrome: A Screen for Modifiers of MeCP2 in the Mouse. Hee-Kyung Hong, P.I., (J.S. Takahashi, sponsor) 10/1/2009-9/30/2011. Total costs: $100,000.

NIH P50 MH074924, *Silvio O. Conte Center for Neuroscience Research: Chemical and Genetic Manipulation of Circadian Systems.* J.S. Takahashi, Director and P.I. Project 1, 4.20 calendar months effort, M. Menaker, University of Virginia, P.I. Project 2, S.L. McKnight, UT Southwestern Medical Center, P.I. Project 3, C.B. Green, University of Virginia, P.I. Project 4, J.B. Hogenesch, University of Pennsylvania, P.I. Project 5, L. Ptacek, UCSF, P.I. Project 6. 9/15/05-7/31/11. Total costs: $11,559,236. Annual direct costs: $1,896,927.

NIH F30 NS056551, NRSA Predoctoral M.D./Ph.D. Fellowship, Loss of Bmal1 in the SCN/brain of adult mice. Martina Pejchal (Sponsor, J.S. Takahashi), 9/1/2006-8/31/2011. Total costs: $164,800.

*NIH F32 DA*024556*, NRSA Postdoctoral Fellowship, Characterization & Cloning of the Response Psychostimulant Mutant Gridlock'd.* Vivek Kumar (Sponsor, J.S. Takahashi), 3/1/2008-2/28/2011. Total costs: $164,442.

NIH R01 MH078024, Identifying Circadian Rhythm Genes from Mouse Mutants, J.S. Takahashi, P.I., 0.6 calendar month effort, S.M. Siepka, Co-P.I. 5/01/07-10/30/12, Total direct costs: $1,212,723. Annual direct costs: $228,422.

NIH R01 AR056439, Regulation of Hair Follicle Cycling, Bogi Andersen, P.I., J.S. Takahashi, Subcontract P.I., 7/01/10 – 6/30/13, Total direct costs: $1,011,293. Annual direct costs (subcontract): $62,853.

NIH R01 GM104496, Molecular Interactions of Mammalian Circadian Clock Proteins, Hong Zhang, MPI, J.S. Takahashi, MPI. 07/01/2013-02/28/2017, Total direct costs: $766,308**.** Annual direct costs: $190,000.

UTHSC Houston Subcontract, University of Texas Health Science Center at Houston*, Role of clock-modulating small molecules against aging,* Takahashi, PI subcontract. 08/01/13-05/31/18, Annual direct costs: $30,000 direct/year subcontract

NIH R01 AR056439, Circadian Clock Regulation in Skin, Bogi Andersen, P.I., J.S. Takahashi, Subcontract P.I., 8/01/13 – 6/30/18, Total direct costs (subcontract): $345,000. Annual direct costs (subcontract): $66,242.

NIH R01 AG045795, Transcriptional Architecture and Chromatin Landscape of Circadian Clocks in Aging Tissue, J.S. Takahashi, MPI, Carla Green, MPI. 08/01/2013-05/31/2018, Total direct costs: $875,000**.** Annual direct costs: $175,000.

NIH R21 MH107672, Identification of human-relevant CLOCK molecular signaling pathways, Konopka, PI, J.S. Takahashi, Co-PI. 5/18/15-2/28/17, Total direct costs: $275,000**.** Annual direct costs: $150,000.

Sponsored Research Agreement SRA201803-0006, University of Tsukuba, J.S. Takahashi, PI. 04/01/2018-03/31/2021, Annual costs: 2,250,000 JPY (~$26,000).

NIH R01 AG045795, Transcriptional Architecture and Chromatin Landscape of Circadian Clocks in Aging Tissue, J.S. Takahashi, MPI, Carla Green, MPI. 08/01/2013-05/31/2019, Total direct costs: $875,000**.** Annual direct costs: $175,000.

NIH R01 NS103422, Sleep and Functional Genomics of Synaptic Modulation, R.W. Greene, PD/PI. J.S. Takahashi Co-Investigator, 08/01/2017-04/30/2022, Annual direct costs: $405,083.

NIH R01 NS106657, Cell-type-specific analysis of the suprachiasmatic nucleus, J.S. Takahashi, PD/PI. 09/25/2017-07/31/2022, Total direct costs: $1,093,750**.** Annual direct costs: $218,750.

NIH R56 AG072736, Circadian Rhythms and Lifespan, J.S. Takahashi, MPI, Carla Green, MPI. 09/30/2021-08/31/2022, Total direct costs: $205,000**.** Annual direct costs: $205,000.

TEACHING EXPERIENCE:

1977	Laboratory instructor, summer course on "Biological Clocks" organized by Professor C.S. Pittendrigh, Hopkins Marine Station, Stanford University, Pacific Grove, CA
1980	Lecturer, summer course on "Biological Clocks" organized by Professor C.S. Pittendrigh, Hopkins Marine Station, Stanford University, Pacific Grove, CA
1984-1985	Course Instructor, undergraduate lecture course entitled "Behavioral Neuroscience," (412-C23), Department of Neurobiology and Physiology
1985-1989	Course Instructor, graduate level seminar course entitled "Advanced Behavioral Neuroscience," (412-D07), Department of Neurobiology and Physiology
1986	Course Instructor, undergraduate lecture course entitled "Neural Systems and Behavior," (412-C23), Department of Neurobiology and Physiology
1986	Course Instructor, graduate level seminar course entitled "Cellular Physiology of Circadian Rhythms," (412-D21), Department of Neurobiology and Physiology
1986	Lecturer, Continuing Education Daytime Course entitled "New Topics in Human Biology," Organized by Professor N.B. Schwartz.
1987-1989	Course Instructor, undergraduate lecture course entitled "Neural Systems and Behavior," (412-C07), Department of Neurobiology and Physiology
1989-1999	Course Director, graduate level lecture course entitled "Cellular and Molecular Neuroscience," (845-D05), Core curriculum course in the Institute for Neuroscience Graduate Program
1990-1992	Course Director, graduate level lecture course entitled "Behavioral Neuroscience," (845-D20), Core curriculum course in the Institute for Neuroscience Graduate Program
1990	Guest lecturer, graduate level seminar course entitled "Central Pattern Generation," (1445-D16), Department of Physiology, Northwestern University Medical School
1992-1999	Course Director, graduate level lecture course entitled "Neural Systems and Behavior," (845-D20), Core curriculum course in the Institute for Neuroscience Graduate Program
1992	Guest lecturer, graduate level lecture course entitled "Cellular Physiology," (1404-D30), Integrated Graduate Program, Northwestern University Medical School
1992	Lecturer, summer course in "Biological Timing," NSF Center for Biological Timing, Charlottesville, VA
1993	Guest Speaker on "Asian Americans in Science," undergraduate student organized seminar on "The Asian American Experience"
1995	Lecturer, short course entitled "Biochronometry Tutorial," NSF Center for Biological Timing, in conjunction with Society for Neuroscience meeting, San Diego.
1996	Guest lecturer, graduate level lecture course entitled "Cell Biology," Interdepartmental Graduate Program in Biological Sciences, Northwestern University

1996	Organizer, Short Course, What's Wrong with My Mouse? New Interplays Between Mouse Genetics and Behavior, Society for Neuroscience, Washington, D.C.,
1997-1999	Lecturer, graduate level lecture course entitled "Molecular Biology and Development," (D02), Interdepartmental Graduate Program in Biological Sciences, Northwestern University
1997	Lecturer, one day course on “An Introduction to Genetics: from Genes to Populations,” Department of Preventative Medicine, Northwestern University Medical School
1997	Lecturer, Experimental Genetics of the Laboratory Mouse Course, Jackson Laboratory, Bar Harbor, Maine
1997	Lecturer, Mouse Behavior Course, Cold Spring Harbor Laboratory, New York
1998	Lecturer, Neurobiology Course, Marine Biological Laboratory, Woods Hole, MA
1999-2000	Lecturer, Institute for Neuroscience, Fundamentals of Neuroscience, (team taught)
2000	Holiday Lectures on Science, *Clockwork Genes: Discoveries in Biological Time* (with Michael Rosbash), Howard Hughes Medical Institute, Chevy Chase, MD. Nationwide educational outreach program for high school students via satellite TV, web cast and live audience. See: http://www.holidaylectures.org/
2001-2007	Course Instructor, new undergraduate lecture course entitled "Functional Genomics," (Biol Sci 378), Undergraduate Program in Biological Sciences
2001	Lecturer, Mouse Behavior Course, Cold Spring Harbor Laboratory, New York
2003	Lecturer, 44th Annual Short Course in Medical and Experimental Mammalian Genetics, Jackson Laboratory, Bar Harbor, Maine
2005	Lecturer, Molecular Embryology of the Mouse Course, Cold Spring Harbor Laboratory, New York
2005	Latin American Symposium, Chronobiology Course, Buenos Aires, Argentina
2007	Lecturer, Molecular Embryology of the Mouse Course, Cold Spring Harbor Laboratory, New York
2007	Lecturer, Workshop on Mechanisms of Arousal, Alertness & Attention, Banbury Conference Center, Cold Spring Harbor Laboratory, New York
2008	Lecturer, CSHL Molecular Embryology of the Mouse 2008, Cold Spring Harbor Laboratory, New York
2008	Lecturer, 49th Annual Short Course on Medical and Experimental Mammalian Genetics, Jackson Laboratory, Bar Harbor, Maine
2009	Lecturer, CSHL Molecular Embryology of the Mouse 2009, Cold Spring Harbor Laboratory, New York
2010-2017	Lecturer, Fundamentals of Neuroscience graduate core course, UT Southwestern

2010	Lecturer, CSHL Molecular Embryology of the Mouse 2010, Cold Spring Harbor Laboratory, New York
2013	Lecturer, CSHL Mouse Development, Stem Cells and Cancer 2013, Cold Spring Harbor Laboratory, New York
2017-present	Lecturer, Neuroscience Core Course, UT Southwestern
2021-present	Co-Organizer and Lecturer, Workshop on Impacts of Sleep and Circadian Biology on Alzheimer's Disease and Aging: A Focus on Genetics and Genomics, The Jackson Laboratory, Bar Harbor, Maine
2021	Lecturer, Molecular Metabolism and Metabolic Disease (3MD) master class, UT Southwestern
2023-present	Co-Organizer (with Kenneth Wright and Gianluca Tosini) and Lecturer, R25 Colorado Sleep and Circadian Summer School, University of Colorado Boulder

SERVICE AS ADVISOR:

Previous Research Associates

Dr. Shin-Ichi T. Inouye, Visiting Scholar/Senior Research Associate (August 1985-December 1985). Present position: Professor, Department of Biology and Chemistry, Yamaguchi University, Yoshida, Yamaguchi 753-8512, Japan.

Dr. Barbara L. Pratt, Postdoctoral Fellow (July 1985-August 1988). Recipient of an individual NRSA Postdoctoral Fellowship (*NIMH F32 MH09466*). Subsequent position: Assistant Professor, Department of Biology, Allegheny College, Pennsylvania. Present position: Coordinator of Instruction and Advertisement, Community College of Vermont.

Dr. Marilyn J. Duncan, Postdoctoral Fellow (October 1985-August 1988). Jointly advised with Dr. M. Dubocovich. Recipient of an individual NRSA Postdoctoral Fellowship (*NIH F32 NS07909*). Present position: Professor, Department of Anatomy and Neurobiology, University of Kentucky Medical School, Lexington, KY.

Dr. Noboru Murakami, Visiting Scholar/Senior Research Associate (June 1987-May 1989). Present position: Professor, Department of Veterinary Physiology, Miyazaki University, Miyazaki City, Japan.

Dr. Ken Ohi, Visiting Scholar/Senior Research Associate (May 1989-March 1992). Present position: Associate Professor, Department of Psychiatry, Shiga University Medical School, Shiga, Japan.

Dr. Mary E. Pierce, Research Associate (December 1987-June 1992). Recipient of an individual NRSA postdoctoral fellowship (*NIH F32 EY06167*). Subsequent position: Assistant Professor, Department of Physiology, SUNY Health Sciences Center, Syracuse, NY.

Dr. Hooshmand Sheshberadaran, Research Associate (November 1989-July 1992). Studied the regulation of opsin gene expression in chick retinal and pineal cells. Subsequent position: Clinical Research Associate, Pharmacia Sverige AB, Medical Department, SE-112 87 Stockholm, Sweden. Current position: Chief Operating Officer, MedMelior/Better Life Pharma Inc.

Dr. Marianna Max (Ph.D. with Michael Menaker, University of Virginia), Postdoctoral Fellow (June 1991-June 1995). Cloning and expression of photoreceptor visual pigments and G proteins in the avian pineal. Recipient of a NRSA Postdoctoral Fellowship (*NIMH F32 MH10225).* Present position: Associate Professor, Department of Neuroscience, Mount Sinai School of Medicine, New York, NY.

Dr. Sandra L. Gilbert (Ph.D. with Phillip Sharp, Massachusetts Institute of Technology), Associate, Howard Hughes Medical Institute (Nov 1999-Aug 2000). Genetic analysis of behavior in mice. Present position: Research Associate, Department of Human Genetics, with Dr. Bruce Lahn, University of Chicago.

Dr. R. Keith Barrett (Ph.D. with Herbert Underwood, North Carolina State University), Postdoctoral Fellow (June 1992-Jan 2001). Genetics of circadian rhythms in zebrafish. Recipient of a NRSA Postdoctoral Fellowship (*NIMH F32 MH10369).* Self employed.

Dr. Marina Antoch (Ph.D. with Andrey N. Belozersky, Moscow State University), Research Associate (September 1994-July 1999). Research Specialist, Howard Hughes Medical Institute (August 1999-May 2001). Physical mapping of the *Clock* region in mice, and BAC expression and mutant rescue in transgenic mice. Current position: Professor of Oncology, Roswell Park Cancer Institute, Buffalo, NY.

Dr. David King, Postdoctoral Fellow (February 1999-November 2000). Associate, Howard Hughes Medical Institute (December 2000-October 2001). Genetic and molecular analysis of circadian rhythms in the mouse. Current position: Principal Bioinformatics Scientist/Precision Medicine, Tempus, Inc.

Dr. Phillip L. Lowrey, Postdoctoral Fellow, CCBM, Northwestern, (December 2000-May 2001) Associate, Howard Hughes Medical Institute (June 2001-present). Functional characterization of the role of casein kinase I epsilon in the mammalian circadian system. Current position: Associate Professor, Department of Biology, Rider University, Lawrenceville, NJ.

Dr. Sharon S. Low, Postdoctoral Fellow, (July 2001-August 2002), Visiting Scientist and proprietor of MusWorks, as recipient of NIH SBIR (Small Business Innovation Research) grant. (September 2002-) Chimera analysis of the mouse circadian mutation, *Clock*. Current position: Assistant Director, Division of Receipt and Referral (DRR), Center for Scientific Review, National Institutes of Health.

Dr. Erin McDearmon Blondell (Ph.D. with James Ervasti, Univ. of Wisconsin, Madison), Associate, Howard Hughes Medical Institute (2001-2007). Conditional regulation of *Bmal1* in central and peripheral circadian tissues. Current position: Director, Immunology Pipeline Medical Affairs at AbbVie, North Chicago, IL.

Dr. Martha Hotz Vitaterna (Ph.D. with Fred Turek, Northwestern University), Sr. Research Associate (June 1992-Nov. 2001). Isolation and genetic analysis of circadian clock mutants in the mouse. Research Assistant Professor, Center for Functional Genomics, Northwestern (2001-2006). Current position: Executive Director, Center for Sleep and Circadian Biology, Northwestern.

Dr. Kazuhiro Shimomura (D.V.M., Ph.D., University of Tokyo), Research Associate (1994-1998 and 2000) Associate, Howard Hughes Medical Institute (September 1998-July 2000). Research Assistant Professor, Center for Functional Genomics (2001-2009). Quantitative trait loci (QTL) analysis of circadian rhythms in mice. Subsequent positions: Senior Scientist, Amano Enzyme U.S.A. Co., Ltd., Elgin, IL; Chief Science Officer, Matsutani America, Inc., Itasca, IL. Current position: Research Assistant Professor, Department of Neurology, Feinberg School of Medicine, Northwestern University, Chicago, IL.

Dr. Carrie Partch (Ph.D. with Aziz Sancar, University of North Carolina, Chapel Hill), Associate, HHMI, Department of Neuroscience, UT Southwestern Medical Center (October 2010-August 2011). Current position: Professor (tenured), Investigator, Howard Hughes Medical Institute, Department of Chemistry, University of California, Santa Cruz, CA.

Dr. Hee-Kyung Hong (Ph.D. with Aravinda Chakravarti, Case Western), Associate, Howard Hughes Medical Institute (2000-2005). Senior Research Scientist, Center for Functional Genomics (2005-2009). Recipient of Rett Syndrome Research Foundation, Fellowship and Regular Research Grant. Positional cloning of hydrocephaly mutants. Conditional expression and analyses of *Clock* in the mammalian circadian system. ENU screening and positional cloning of novel neurological mutants in mouse. Current position: Research Assistant Professor, Department of Medicine, Feinberg School of Medicine, Northwestern University, Chicago. IL (2009-present).

Dr. Sandra Siepka (PhD. with David Clayton, University of Illinois, Urbana-Champaign), Associate, Howard Hughes Medical Institute (March 1998-June 2002). Research Associate, Center for Functional Genomics (July 2002-2009). Research Assistant Professor, Department of Neurobiology & Physiology, Northwestern University (April 2009-2013). ENU mutagenesis screening of circadian clock mutants. Current position: Senior Program Coordinator, Department of Chemistry, Northwestern University, Evanston, IL.

Dr. Nobuya Koike (Ph.D. with Yoshiyuki Sakaki, University of Tokyo), Senior Research Associate, Department of Neuroscience, UT Southwestern Medical Center (2009-2013). Cistromic and transcriptomic analysis of circadian gene expression in mouse. Current position: Associate Professor, Institute for Development, Aging and Cancer (IDAC), Tohoku University, Sendai, Japan.

Dr. Seung Hee Yoo (Ph.D. in my lab, 1999-2003, Visiting Graduate Student, Korea Advanced Institute of Sciences and Technology), Postdoctoral Fellow (February 2006–2009), Center for Functional Genomics. Associate, Howard Hughes Medical Institute (2007-2009). Instructor, Department of Neuroscience, UT Southwestern (2009-2013). Biochemistry and genetics of circadian clock proteins. Current position: Associate Professor (tenured), Department of Biochemistry and Molecular Biology, UT Health Science Center at Houston, Houston, TX

Dr. Vivek Kumar (Ph.D. with M. Geof Rosenfeld, UCSD), Postdoctoral Fellow, Center for Functional Genomics (2004-2006, Supported by NIH grant to J.S.T.). Associate, Howard Hughes Medical Institute (October 2006-2009). Research Fellow II (2009-2011), Instructor (2011-2014), Department of Neuroscience, UT Southwestern Medical Center. Recipient of a NRSA Postdoctoral Fellowship (*F32 DA024556).* Forward genetic ENU screening and positional cloning of mouse mutants in response to psychostimulants. Current position: Professor (tenured), The Jackson Laboratory, Bar Harbor, ME

Dr. Guocun Huang, (Ph.D. with Jing-San Sun at Institute of Botany, Chinese Academy of Sciences), Instructor, Department of Neuroscience, UT Southwestern Medical Center (July 2009-2014). NAD biosensor development. Current position: Assistant Professor, Suda University, Suzhou, China.

Dr. Jennifer Mohawk, (Ph.D. with Theresa Lee at University of Michigan), Associate (September 2010-2013), Research Specialist (2013-2015) HHMI, Department of Neuroscience, UT Southwestern Medical Center. Role of MEF2 in mouse circadian rhythms, and circadian regulation of gene expression in the brain. Current position: Executive Director, Medical Affairs, Apogee Therapeutics.

Dr. Lucia Pagani, (Ph.D. with Anne Eckert at University Basel), Postdoctoral Fellow, Department of Neuroscience, UT Southwestern Medical Center (October 2011-2016). Recipient of a Swiss National Foundation Fellowship. Circadian rhythms in bipolar I depression using actigraphy and cell-based fibroblasts assays for circadian rhythms. Current position: Data Scientist, Joseph Hage Aaronson, LLP, London, England.

Dr. Marleen de Groot (Ph.D. with Benjamin Rusak, Dalhousie), Postdoctoral Fellow, Center for Functional Genomics, (2004-2006, Supported by NIH grant to J.S.T.). Associate, Howard Hughes Medical Institute (2006-2011). Research Specialist, Howard Hughes Medical Institute (2011-2017). Genetic analysis of a circadian entrainment mutant in California mice (*Peromyscus californicus*). ENU screening and positional cloning of body weight and obesity mutants in mouse.

Dr. Junmei Fan, (Ph.D. with Tao Xu at Institute of Biophysics, Chinese Academy of Sciences), Research Scientist, Department of Neuroscience, UT Southwestern Medical Center (December 2009-2018). Electrophysiological analysis of GABA neurotransmission in the SCN. Current position: Professional Data Scientist, AT&T,

Dr. Yue Zhang, (Ph.D. with William Mair, Department of Genetics and Complex Diseases, Harvard T. H. Chan School of Public Health) (June 2018-September 2019). Current position: Project Leader, BCG (Boston Consulting Group | Life Sciences Strategy, Atlanta, GA.

Dr. Takeshi Katafuchi, (Ph.D. with Prof. Hirose, Graduate School of Biological Science, Tokyo Institute of Technology) (October 2018-December 2019). Current position: Associate Professor, School of Medicine, Department of Medicine, Nihon University, Tokyo, Japan.

Dr. Kimberly Cox, (Ph.D. with Emilie Rissman, Department of Biology, University of Virginia, Charlottesville, VA) (November 2018-July 2020). Current position: Assistant Professor, Randolph Macon College, Ashland, VA.

Dr. Pin Xu, (Ph.D. with Alison K. Hall at Case Western Reserve University), Instructor, Department of Neuroscience, UT Southwestern Medical Center (August 2012-2020). Forward genetic analysis and cloning of fear conditioning mutants in mouse. Current position: Advanced Analytics Consultant, Blue Cross and Blue Shield of Illinois, Montana, New Mexico, Oklahoma & Texas.

Dr. Yongli Shan, (Ph.D. with Xueliang Zhu at Shanghai Institute of Biochemistry and Cell Biology), Research Scientist, Department of Neuroscience, UT Southwestern Medical Center (August 2009-November 2020). Real-time bioluminescence and fluorescence circadian reporters. Current position: Associate Director of Biology, Firefly Bio, South San Francisco.

Dr. Yan Li, (Ph.D. with Xueliang Zhu at Shanghai Institute of Biochemistry and Cell Biology), Research Scientist, Department of Neuroscience, UT Southwestern Medical Center (October 2009-November 2020). Analysis of single-cell period variation in fibroblasts, neurons and ES cells. Current position: Senior Scientist I, Eikon Therapeutics, Hayward, CA.

Dr. Filipa Rijo-Ferreira (Ph.D. with Luisa Figueiredo, Instituto de Medicina Molecular, Lisbon, Portugal, Student, Graduate Program in Areas of Basic and Applied Biology (GABBA), University of Porto (http://gabba.up.pt/), Associate, Howard Hughes Medical Institute (August 2016-December 2020); Department of Neuroscience, UT Southwestern Medical Center (January 2021-December 2021). Current position: Assistant Professor of Infectious Diseases and Vaccinology (tenure track), School of Public Health and Department of Molecular and Cell Biology, University of California Berkeley, CA.

Dr. Victoria A. Acosta-Rodriguez, (Ph.D. with Mario E. Guido at National University of Cordoba, Argentina), Postdoctoral Fellow, Department of Neuroscience, UT Southwestern Medical Center (October 2013 - 2019). Instructor, Department of Neuroscience, UT Southwestern Medical Center (2019 – December 2023). Circadian regulation of aging and longevity. Current position: Earl Stadtman Investigator, Circadian Biology of Aging Unit, Translational Gerontology Branch, National Institute on Aging, Baltimore, MD.

Dr. Chang Hoon Lee, (Ph.D. with R. Adron Harris at Institute for Cell and Molecular Biology, University of Texas, Austin), Research Scientist, Department of Neuroscience, UT Southwestern Medical Center (July 2017-2025. Circadian gene expression in the brain of normal and autism mouse models. Current position: Assistant Professor (tenure-track), School of Health Sciences, Missouri State University, Springfield, MO.

Current Research Associates

Dr. Mariko Izumo, (Ph.D. with Carl Johnson at Vanderbilt), Postdoctoral Fellow, Center for Functional Genomics (2006-2009). Research Scientist, Department of Neuroscience, UT Southwestern Medical Center (April 2009-present). Recipient of a NARSAD 2008 Young Investigator Award. Molecular and cellular organization of the suprachiasmatic nucleus in mice.

Dr. Shuzhang Yang, (Ph.D. with Masaaki Yoshikawa at Kyoto University), Research Specialist, Howard Hughes Medical Institute (2008-2009), HHMI, Department of Neuroscience, UT Southwestern Medical Center (April 2009-present). Mechanisms of circadian periodicity and temperature compensation.

Dr. Noheon Park, (Ph.D. with Kyungjin Kim at Seoul National University), Postdoctoral Fellow, Department of Neuroscience, UT Southwestern Medical Center (June 2013-present). Genome-wide circadian regulation of RNA polymerase II.

Dr. Byeongha Jeong, (Ph.D. in Physics with Kyoung J. Lee at Korea University), Postdoctoral Fellow, Department of Neuroscience, UT Southwestern Medical Center (July 2016-present). Cellular coupling of the suprachiasmatic nucleus.

Dr. Emil Sjulstok Rasmussen, (Ph.D. with Ilia A. Solov'yov at University of Southern Denmark), Postdoctoral Fellow (jointly supervised with Dr. Carla Green), Department of Neuroscience, UT Southwestern Medical Center (September 2019-present). Lundbeck Foundation Postdoc award 2019. Molecular dynamics and structural analysis of circadian proteins and bioinformatics.

Dr. Ayako Suzuki, (Ph.D. Kyoto University 2003). Instructor, Department of Neuroscience, UT Southwestern Medical Center (December 2019-present). The *Clock* gene and metabolism.

Dr. Samantha Iiams Clever, (Ph.D. with Christine Merlin at Texas A&M), Postdoctoral Fellow, T32 *The Cellular and Systems Biology of Sleep and Circadian Rhythms Training Program*, Department of Neuroscience, UT Southwestern Medical Center (June 2021-present). Time restricted feeding and longevity.

Dr. Isara Laothamatas, (Ph.D. with Carla Green at UT Southwestern), Postdoctoral Fellow, Department of Neuroscience, UT Southwestern Medical Center (October 2021-present). Molecular mechanisms of the circadian clock and circadian drug discovery.

Dr. Nathan Skinner, (Ph.D. with Alexander Tups, University of Otago, Dunedin, New Zealand), Postdoctoral Fellow, Department of Neuroscience, UT Southwestern Medical Center (November 2021-present). Role of the *Clock* gene in aging and longevity.

Dr. Heidi Pak, (Ph.D. with Dudley Lamming, University of Wisconsin, Madison), Postdoctoral Fellow, Department of Neuroscience, UT Southwestern Medical Center (June 2022-present). Caloric restriction and circadian mechanisms.

Atossa Ghorashi, (Ph.D. with Jennifer Kohler, UT Southwestern), Postdoctoral Fellow, Department of Neuroscience, UT Southwestern Medical Center (July 2025-present). Regulation of the *Clock* gene and microbiome in aging and longevity.

Previous Graduate Students.

Dwight E. Nelson (1983-1989). Ph.D. Neurobiology and Physiology, December 1989. Thesis title: Photic sensitivity of the circadian pacemaker and the visual pathway that subserves it in the golden hamster. Present position: Principal, Neureux LLC, Minneapolis, MN; previous: Sr. Principal Scientist, Medtronic Neuromodulation Research, Minneapolis, MN.

Linda M. Robertson (1984-1990). Ph.D. Neurobiology and Physiology, October 1990. Thesis title: The avian pineal: Characterization of a cellular circadian system. Recipient of a NRSA Predoctoral Fellowship (*NIMH F31 MH09465*). Current position: Principal, Vincere Consulting, LLC, San Diego, CA; previous: Vice President, Regulatory Affairs, IGNYTA, Inc., San Diego.

Selene S. Nikaido (1985-1990). Ph.D. Institute for Neuroscience, September 1990. Thesis title: Second messenger regulation of circadian melatonin production in chick pineal cells. Recipient of a NRSA Predoctoral Fellowship (*NIMH F31 MH09572*). Current position: Associate Professor of Biology, University of Central Missouri.

Jina L. Janavs, M.D./Ph.D. Student (1988-1992). Ph.D. Neurobiology and Physiology, June 1992. M.D. June 1994. Thesis topic: The role of protein and RNA synthesis in the regulation of melatonin production by Y79 human retinoblastoma cells. Recipient of a NRSA Predoctoral Fellowship (*NIMH F31 MH09929*). Subsequent position: Resident, Department of Medicine, University of California, San Francisco, CA. Current position: Neurology, Director, Hayward/ Fremont Stroke Program, Fremont Medical Center, California.

Jon M. Kornhauser (1989-1995). Ph.D. Institute for Neuroscience, August 1995. Jointly advised with Kelly Mayo. Thesis topic: Regulation of immediate early gene expression by light and by circadian oscillators in the suprachiasmatic nucleus. Recipient of a NRSA Predoctoral Fellowship (*NIMH F31 MH10241).* Current position: Product Data Scientist, Cell Signaling Technology, Danvers, MA.

Jose C. Florez, M.D./Ph.D. Student (1990-1995). Ph.D. Institute for Neuroscience, July 1995. M.D. June 1997. Role of protein synthesis in circadian melatonin regulation in chick pineal cells. Recipient of a NRSA M.D./Ph.D. Fellowship (*NIMH F30 MH10189).* Current position: Professor and Chair, Department of Medicine, Massachusetts General Brigham, where he holds the Jackson Clinical Professor Chair in Medicine at Harvard Medical School.

Jonathan P. Wisor, Visiting Predoctoral Fellow, Neuroscience Program, UCLA (1993-1997). Ph.D. April 1997. Regulation of *vgf* gene expression in the suprachiasmatic nucleus. Current position: Associate Professor (tenured), Department of Veterinary Comparative Anatomy, Pharmacology and Physiology, Washington State University. Spokane, WA.

Kenneth J. Seidenman (1991-1998). Ph.D., Institute for Neuroscience, September 1998. Cloning of a Putative Chicken Clock Ortholog and Alteration of a Circadian Rhythm, In Vitro, by Overexpression of a CLOCK paralog, NPAS2 Recipient of a NRSA Predoctoral Fellowship (*NIMH F31 MH10287).* Current position: Patent Attorney at FB Rice, Melborne, Australia.

David P. King, (1993-1999). Ph.D., Institute for Neuroscience, February 1999. Positional Cloning of the Mouse Circadian *Clock* Gene: Genetic Mapping, Physical Mapping and Molecular Identification of a Mutant Allele. Current position: Principal Bioinformatics Scientist/Precision Medicine, Tempus, Inc.

Ashvin M. Sangoram, (1995-2000). M.D./Ph.D. Institute for Neuroscience, April 2000. Molecular Foundations of Biological Clocks: Mammalian Circadian Autoregulatory Feedback Network and Analysis of the *Timeless* Gene. Recipient of a NRSA M.D./Ph.D. Fellowship (*NIMH F30 MH12250).* Penultimate position: Neonatal Fellow (in Matt Scott's laboratory), Lucile Packard Children's Hospital, Stanford School of Medicine, Palo Alto, CA. Current position: Neonatal Medicine, San Leandro Medical Center, California.

Yaliang Zhao, (1994-2000). Ph.D. Institute for Neuroscience, December 2000. The Role of Calcium/Calmodulin-dependent Protein Kinase II in Regulation of Circadian Rhythms in Mice. Subsequent position: Research Scientist, Wyeth, Andover, MA.

Phillip L. Lowrey, (1992-2000). Ph.D. Institute for Neuroscience, December 2000. Genetic Mapping, Positional Syntenic Cloning and Functional Characterization of the Mammalian Circadian System Mutation *tau.* Current position: Associate Professor (tenured), Department of Biology, Rider University, Lawrenceville, NJ.

Sharon S. Low (and Sharon S. Low- Zeddies), (1994-2001). Ph.D. Institute for Neuroscience, June 2001. Chimera Analysis of the Effects of the *Clock* mutation on Circadian Behavior in Mice*.* Current position: Assistant Director, Division of Receipt and Referral (DRR), Center for Scientific Review, National Institutes of Health.

Lisa D. Wilsbacher, (1995-2001) M.D./Ph.D., Institute for Neuroscience June 2001. Role of *Bmal1* in the Mouse Circadian System. Current position: Assistant Professor in Medicine (tenure track), Cardiology and Feinberg Cardiovascular Research Institute, Northwestern University, Chicago, IL.

Nasim Ahmadiyeh (2000-2003) M.D./Ph.D. Student, Institute for Neuroscience, June 2003. Jointly advised with Eva Redei. Supported by MSTP program, NIH grants to E.R. and J.S.T. and HHMI funds. Identify genetic loci responsible for differences in stress reactivity and coping styles in rats and create congenic strains of these loci. Subsequent positions: Resident, Surgery, Brigham and Women's Hospital, Boston, MA; Research Fellow, Dana Farber Cancer Institute, Boston, MA.; and, Clinical Instructor Health Sciences, Department of Surgery, UCSF School of Medicine, San Francisco, CA. Current position: Assistant Professor, Medical Director, Comprehensive

Breast Care Program, Truman Medical Center, Department(s) of Surgery, Truman Medical Center - UMKC Health Sciences District.

Anne-Marie Chang (1996-2003) Ph.D., Institute for Neuroscience June 2003. Supported by University Fellowship, Teaching Assistantship, NIH Training Grant, NIH grant and HHMI funds to J.S.T. Phenotypic characterization and genetic analysis of human circadian rhythm sleep disorders. Postdoctoral fellow with Dr. Charles Czeisler, Brigham and Women's Hospital, Boston, MA. Current position: Instructor in Medicine, Brigham and Women's Hospital, Division of Sleep Medicine, Boston, MA. Position in Fall 2013: Associate Professor (tenured), Biobehavioral Health and College of Nursing, Penn State University, University Park, PA.

Seung-Hee Yoo, (1999-2003). Visiting Graduate Student, BMRC scholarship, Department of Biological Sciences, KAIST (Korea Advanced Institute of Sciences and Technology), 373-1 Kusong-dong, Yusong-gu, Taejon 305-701 Korea. Graduated December 2003. Current position: Associate Professor (tenured), Department of Biochemistry and Molecular Biology, UT Health Science Center at Houston, Houston, TX

Brooke H. Miller (2001-2005) Ph.D., Institute for Neuroscience June 2005. Recipient of an NSF Graduate Fellowship and an NRSA Predoctoral Fellowship (*F31 NS47799).* Also supported by HHMI funds to J.S.T. Reproductive defects in *Clock* mutants; regulation of SCN gene expression patterns. Postdoctoral fellow with Mat Pletcher, Scripps Research Institute Florida. Current position: Consultant, Etalon Diagnostics, Menlo Park, CA; Affiliate Professor, Departments of Physiology and Functional Genomics, University of Florida College of Medicine, Gainesville, FL.

Ethan D. Buhr (2000-2008), Ph.D., Institute for Neuroscience June 2008. Supported by University Fellowship, Teaching Assistantship, NIH Training Grant, NIH grants and HHMI funds to J.S.T. Temperature entrainment of central vs. peripheral circadian oscillators in the mouse. Current position: Research Associate Professor, Department of Ophthalmology, University of Washington, Seattle, WA.

Jason Chong (2001-2009), Ph.D., Interdepartmental Biological Sciences Program (IBIS) June 2009. Supported by University Fellowship, Teaching Assistantship, NIH Training Grant, NIH grants and HHMI funds to J.S.T. Analysis of *Clock* null mutations and tissue-specific and conditional expression and rescue of the *Clock* locus in mice. Postdoc position: Postdoctoral Fellow with Thomas E. Wellems, Laboratory of Malaria and Vector Research, NIAID, NIH, Bethesda, MD. Current position: Associate, Booz Allen Hamilton, Rockville, MD.

Caroline H. Ko (2001-2009), Visiting Graduate Student, Ph.D. June 2009, Department of Psychology, University of Toronto, Canada. Supported by NIH grants to J.S.T. and HHMI funds. Differential effects of circadian mutations on central vs. peripheral circadian oscillators in mouse. Subsequent positions: Postdoc with Chad Mirkin, then Scientific Officer & Industrial Liaison, International Institute for Nanotechnology, Northwestern University, Evanston, IL. Current position: Project Leader of NewCures initiative, Innovation and New Ventures Office (INVO), Northwestern University. Assistant Professor of Neurosurgery on the Research Track (2024-), Washington University St. Louis.

Martina Pejchal (2003-2009), M.D./Ph.D. Student, Ph.D., Institute for Neuroscience June 2010. Supported by MSTP program, NIH grants to J.S.T. and HHMI funds. Recipient of a NRSA M.D./Ph.D. Fellowship (*F30 NS056551*). Tissue-specific regulation of *Bmal1* and circadian rhythms in mouse. Current position: Resident, Department of Pathology, University of Pittsburgh Medical Center, Pittsburgh, PA

Aaron Schirmer (2004-2009), Ph.D., Institute for Neuroscience March 2009. Supported by University Fellowship, Teaching Assistantship, NIH Training Grant, NIH grants and HHMI funds to J.S.T. Conditional regulation of the *Cry* and *Per* genes and their effects on circadian behavior. Current position: Associate Professor (tenured), Department of Biology, Northeastern Illinois University, Chicago, IL.

Ivan Lee (2009-2013), MSTP-M.D./Ph.D. Student, Integrative Biology Program, Department of Neuroscience, UT Southwestern Medical Center. Jointly advised with Masashi Yanagisawa. Ph.D. August 2013. Supported by MSTP program, grants to J.S.T. and M.Y. Cellular basis of behavioral circadian rhythms in mammals- the role of

Neuromedin S (NMS)-ergic neurons in the suprachiasmatic nuclei. Current position: Resident, Pediatrics, Stanford University.

Onelia Gagliano, (2014-2016), Visiting Ph.D. Student, University of Padova, Industrial Engineering, Padova, Italy. Advisor: Nicola Elvassore, University of Padova.

Filipa Ferreira (2012-2016), Visiting Ph.D. Student, Graduate Program in Areas of Basic and Applied Biology (GABBA), University of Porto (http://gabba.up.pt/). Supported by the GABBA program. Advisor: Luisa Figueiredo, Instituto de Medicina Molecular, Lisbon, Portugal (http://www.imm.fm.ul.pt/web/imm/parasitemoleculargenetics). Thesis title: How does *Trypanosoma brucei* disrupt host circadian rhythm?

Miles Fontenot (2013-2017), MSTP-M.D./Ph.D. Student, Neuroscience Program, Department of Neuroscience, UT Southwestern Medical Center. Jointly advised with Gena Konopka.

I-Mei Liao (2018-2022), Ph.D., Neuroscience Program, Department of Neuroscience, UT Southwestern Medical Center. Thesis title: Circadian timekeeping of body temperature by the mammalian suprachiasmatic nucleus.

Current Graduate Students

Lauren Palluth (2022-present), Ph.D. Student, Cell and Molecular Biology Program, Department of Neuroscience, UT Southwestern Medical Center. Jointly advised with Carla Green.

Soumya Kulkarni, (2024-present), M.D/Ph.D. Student, MSTP Program, UT Southwestern Medical Center. Jointly advised with Jeffrey Zigman.

Visiting Scholars

Dr. Michikazu Samejima, Visiting Scientist (July 1989-August 1989). Home Institution: Department of Physiology, Hamamatsu University School of Medicine.

Dr. Robert Barlow, Jr., Visiting Scholar in Residence in Neurobiology & Physiology (October 1989- November 1989). Home Institution: Institute for Sensory Research, Syracuse University, New York.

Dr. William Gern, Visiting Scientist (sabbatical) (January 1990-May 1990). Home Institution: Department of Zoology, University of Wyoming.

Dr. Minoru Tanaka, Visiting Scientist (December 1996-December 1997). Home Institution: Institute for Basic Biology, Okazaki 444, Japan.

Dr. Tadashi Furukawa, Visiting Scientist (September 2001-August 2002). Home Institution: Medicinal Safety Research Laboratories, Sankyo Co., Ltd. Japan.

Dr. Karyn Esser, Visiting Scientist (September 2002-June 2003). Home Institution: University of Kentucky, Lexington, KY.

Current Staff

Chryshanthi Joseph, Research Associate, UTSW
Yoga Chelliah, Research Specialist III, UTSW
Kimberly Brown, Research Technician II, UTSW
Guadelupe Martinez, Research Assistant II, UTSW
Aline Torres, Research Assistant II, UTSW

Giselle Flowers, Research Assistant I, UTSW
Adrain Herrera, Research Tech II, UTSW
Shelley Dixon, Departmental Coordinator, UTSW

Independent Study - Graduate Students

Barbara Liepe	412-D99	1984
Dwight Nelson	412-D99, E90	1984, 1985, 1986
Linda Robertson	412-D99, E90	1984, 1985, 1986
Selene Nikaido	860-D99, E90	1985, 1986, 1987
Mimi Montgomery	412-D99	1985 (Su)
Julie A. Watson	860-D99	1985 (F)
Jina Janavs	412-D99, E90	1988, 1989
Angela Bauer	860-D99	1988 (F)
Jon Kornhauser	860-D99	1989 (W, S)
Laure Haak	412-D99, E90	1989 (F), 1990, 1991 (W, S)
Zhe Zhang	412-E90	1990 (W, F), 1991 (W, S)
Andrew Wolfe	845-D99	1990 (F)
Ken Seidenman	845-D99, E90	1991 (W, S)
Phil Lowrey	845-D99, E90	1992 (S, Su, F), 1993 (W)
Nicole Singh	412-D99	1992 (F), 1993 (W, S)
James Lin	412-D99	1992 (F), 1993 (W, S)
Linda Lundin	845-D99	1993 (W)
John Hogenesch	845-D99	1993 (W)
Chi Zhang	845-D99	1993 (S)
Sharon Low	845-D99	1993 (F), 1994, 1995
David King	845-D99	1993 (F), 1994, 1995
Yaliang Zhao	845-D99	1994, 1995
Thomas Steeves	845-D99	1995 (Su), 1995 (F), 1996
Lisa Wilsbacher	845-D99	1995 (F), 1996 , 1997
Ashvin Sangoram	845-D99	1995 (F), 1996, 1997
Anne-Marie Chang	845-D99	1996. 1997
Ethan Fruechte	845-D99	1998, 1999
Nathan Staff	845-D99	1999
Brian Macias	0815-D99	2000
Nicole Lapointe	845-D99	2001
Ethan Buhr	845-D99 NUIN 590	2001, 2003, 2004
Brooke Miller	845 D99 NUIN 590	2001, 2003, 2004
Jason Chong	845 D99 IBIS 590	2001, 2003, 2004
Tina Pejchal	NUIN 590	2003, 2004
Aaron Schirmer	NUIN 590	2004, 2005
Saul Arellano	IBiS	2005
Ivan Lee	UTSWMC	2009
Nathaniel Schaffer	UTSWMC	2009
Jiaxi Wu	UTSWMC	2011
Clinton Taylor	UTSWMC	2011
Hunkar Gizem Yesilyurt	UTSWMC	2011

Dissertation/Qualifying Exam Committee

Charles Bruehl	1983	Neuroscience Program
Keith Anderson	1983	Neurobiology and Physiology
Karen Lankford	1984	Neurobiology and Physiology
Richard Smith	1985	Neurobiology and Physiology
Dwight Nelson	1985	Neurobiology and Physiology
Julie A. Watson	1985	Neuroscience Program
Charles Yancy	1986	Neuroscience Program

Linda M. Robertson	1986	Neurobiology and Physiology, Chairman
Selene S. Nikaido	1987	Neuroscience Program, Chairman
Martha Hotz	1988	Neurobiology and Physiology
Jina Janavs	1989	Neurobiology and Physiology, Chairman
Carmen Wickland	1989	Neuroscience Program
Barbara Dau	1989	Neurobiology and Physiology
Howard Martin	1989	Institute for Neuroscience
Zhe Zhang	1990	Biochemistry, Cell Biology and Molecular Biology
Alfred Lord	1990	Neurobiology and Physiology
Renee Sanger Redman	1990	Cell, Molecular and Structural Biology
Jon Kornhauser	1990	Institute for Neuroscience, Chairman
Fe Abogadie	1990	Institute for Neuroscience
Peter J. Meberg	1990	Psychology
Jose Florez	1991	Institute for Neuroscience
Laure Haak	1991	Neurobiology and Physiology
Ken Seidenman	1991	Institute for Neuroscience
Cheryl Chamberlain	1992	Institute for Neuroscience
Yan Zhang	1993	Institute for Neuroscience
Plamen Penev	1993	Institute for Neuroscience
Philip Lowrey	1993	Institute for Neuroscience
Steven Bodovitz	1994	Institute for Neuroscience
Jonathan Wisor	1994	Neuroscience Program, U.C.L.A.
Sharon Low	1995	Institute for Neuroscience
Yaliang Zhao	1995	Institute for Neuroscience
Jordan Shavit	1996	Interdepartmental Program in Biological Sciences
Orfeu Buxton	1997	Institute for Neuroscience
David King	1997	Institute for Neuroscience
Y. Zhou	1997	Institute for Neuroscience
Sharon Low-Zeddies	1997	Institute for Neuroscience
Lisa Wilsbacher	1997	Institute for Neuroscience
Thomas Steeves	1997	Institute for Neuroscience
Ashvin Sangoram	1998	Institute for Neuroscience
Yaliang Zhao	1998	Institute for Neuroscience
Leah Solberg	1998	Institute for Neuroscience
Anne-Marie Chang	1998	Institute for Neuroscience
Dan Kolker	1998	Institute for Neuroscience
Stephanie Pangas	2000	Interdepartmental Program in Biological Sciences
Nasim Ahmadiyeh	2000	Institute for Neuroscience
Jason Chong	2003	Interdepartmental Program in Biological Sciences
Brooke Miller	2003	Institute for Neuroscience
Ethan Buhr	2003	Institute for Neuroscience
Aaron Schirmer	2005	Institute for Neuroscience
Tina Pejchal	2005	Institute for Neuroscience
Billie Macheva	2007	Interdepartmental Biological Sciences Program
Debbie Fenner	2007	Interdepartmental Biological Sciences Program
Stan Atkin	2009	UT Southwestern, Mangelsdorf and Kliewer
Victor Salinas	2010	UT Southwestern, Ranganathan
Jeremy J. Stubblefield	2010	UT Southwestern, Green
Carly Hale	2010	UT Southwestern, Huber
Makito Sato	2011	UT Southwestern, Yanagisawa
Mehreen Kouser	2011	UT Southwestern, Cowan
Chris Javadi	2011	UT Southwestern, Elmquist
Alexander Chang	2010	Integrated Biology, UT Southwestern, Yanagisawa
Ivan Lee	2011	Integrated Biology, UT Southwestern, Takahashi
Mian Zhou	2011	Integrated Biology, MOD, UT Southwestern, Yi Liu

Clark Rosensweig	2012	UT Southwestern, Green
Daniel Araujo	2012	UT Southwestern, Konopka
Svetlana Lvovskaya	2012	UT Southwestern, Smith
Yasemin Onder	2012	UT Southwestern, Green
Miles Fontenot	2013	UT Southwestern, Konopka
Marissa Co	2014	UT Southwestern, Konopka
Genaro Hernandez	2015	UT Southwestern, Mangelsdorf/Kliewer
Stephanie Lepp	2016	UT Southwestern, Konopka
Jing Zhang	2017	GDD, UT Southwestern, Grishin
Jun Guo	2017	UT Southwestern, Wei Xu
Danyal Alam	2017	UT Southwestern, Roberts
Isara Laothamatas	2017	GDD, UT Southwestern, Green
Emily Seonhye Park	2018	UT Southwestern, Konopka
Anushka Wickramaratne	2018	UT Southwestern, Green
I-Mei Liao	2018	UT Southwestern, Takahashi
Richard Rueda	2020	UT Southwestern, Madabhushi
Lance Heady	2020	UT Southwestern, Madabhushi
Anne Ojo	2020	UT Southwestern, Green
Therese Koch	2021	UT Southwestern, Roberts
Yuki Inaba	2022	GDD, UT Southwestern, Tamia Harris-Tryon
Menaka Sanghvi	2022	GDD, UT Southwestern, Jun Wu
Lauren Palluth	2023	CMB, UT Southwestern, Carla Green/Takahashi

Master's Degree Final Exam Committee

Philip M. Majewski	1986	M.S.,	Neurobiology and Physiology, F. Turek
Fwu-Shan Sheu	1988	M.S.,	Psychology, A. Routtenberg
Peggy Polombi	1989	M.S.,	Neuroscience Program,
Celestine Smythe	1994	M.S.,	Neurobiology and Physiology, T. Siddique
Nicole Singh	1996	M.S.,	Neurobiology and Physiology, J. Takahashi
James Lin	1996	M.S.,	Neurobiology and Physiology, J. Takahashi
Thomas Steeves	1998	M.S.,	Neurobiology and Physiology, J. Takahashi
Ethan Fruechte	1999	M.S.	Neurobiology and Physiology, J. Takahashi
Brian Macias	2001	M.S.	Biotechnology Program, J. Takahashi
Catherine Marie Smith	2009	M.S.	Neurobiology and Physiology, J. Takahashi
Laura van Rosmalen	2016	M.S.	University of Groningen, R. Hut, Takahashi

Dissertation Final Exam Committee

David J. Earnest	1984	Ph.D., Neurobiology and Physiology, F. Turek
Jennifer Swann	1985	Ph.D., Neurobiology and Physiology, F. Turek
Kay L. Jorgenson	1985	Ph.D., Neuroscience Program, N. Schwartz
Charles L. Bruehl	1985	Ph.D., Neuroscience Program, R. Berry
Jill J. Milette	1986	Ph.D., Neurobiology and Physiology, F. Turek
Keith D. Anderson	1986	Ph.D., Neurobiology and Physiology, F. Turek
Richard Smith	1989	Ph.D., Neurobiology and Physiology, F. Turek
Dwight E. Nelson	1989	Ph.D., Neurobiology and Physiology, J. Takahashi
Linda Robertson	1990	Ph.D., Neurobiology and Physiology, J. Takahashi
Selene Nikaido	1990	Ph.D., Institute for Neuroscience, J. Takahashi
Renee S. Redman	1991	Ph.D., Cell, Molecular, Structural Biology, R. Berry
Jina Janavs	1992	Ph.D., Neurobiology and Physiology, J. Takahashi
Martha Hotz Vitaterna	1992	Ph.D., Neurobiology and Physiology, F. Turek
Carmen Wickland	1992	Ph.D., Neurobiology and Physiology, F. Turek
Peter Meberg	1993	Ph.D., Psychology, A. Routtenberg
Leslie Besecke	1994	Ph.D., Institute for Neuroscience, J. Levine
Jose Florez	1995	Ph.D., Institute for Neuroscience, J. Takahashi
Plamen Penev	1995	Ph.D., Institute for Neuroscience, F. Turek

Yan Zhang	1995	Ph.D., Institute for Neuroscience, F. Turek
Jon Kornhauser	1995	Ph.D., Institute for Neuroscience, J. Takahashi
Jonathan Wisor	1997	Ph.D., Neuroscience Program, U.C.L.A.
Jordan Shavit	1998	MSTP, M.D./Ph.D. Program, D. Engel
Ken Seidenman	1998	Institute for Neuroscience, J. Takahashi
David King	1998	Institute for Neuroscience, J. Takahashi
Orfeu Buxton	1999	Institute for Neuroscience, F. Turek
Yinghui Zhou	2000	Institute for Neuroscience, D. Engel
Erik Naylor	2000	Institute for Neuroscience, F. Turek
Ashvin Sangoram	2000	Institute for Neuroscience, J.S. Takahashi
Philip Lowrey	2000	Institute for Neuroscience, J.S. Takahashi
Yaliang Zhao	2000	Institute for Neuroscience, J.S. Takahashi
Sharon Low-Zeddies	2001	Institute for Neuroscience, J.S. Takahashi
Lisa Wilsbacher	2001	Institute for Neuroscience, J.S. Takahashi
Dan Kolker	2001	Institute for Neuroscience, F. Turek
Stephanie Pangas	2001	IBiS, T. Woodruff
Nasim Ahmadiyeh	2003	Institute for Neuroscience, J.S. Takahashi
Anne Marie Chang	2003	Institute for Neuroscience, J.S. Takahashi
Brooke Miller	2005	Institute for Neuroscience, J.S. Takahashi
Ethan Buhr	2008	Institute for Neuroscience, J.S. Takahashi
Jason Chong	2008	IBiS, J.S. Takahashi
Aaron Schirmer	2009	Institute for Neuroscience, J.S. Takahashi
Caroline H. Ko	2009	University of Toronto
Tina Pejchal	2010	Institute for Neuroscience, J.S. Takahashi
Alexander Chang	2010	Integrated Biology, UT Southwestern, Yanagisawa
Stan Atkin	2012	M.D./Ph.D. Program, UT Southwestern
Ivan Lee	2013	Integrated Biology Program, UT Southwestern
Makito Sato	2013	Integrated Biology, UT Southwestern, Yanagisawa
Chris Javadi	2015	M.D./Ph.D. Program, UT Southwestern, Elmquist
Onelia Gagliano	2015	University of Padova, Dept of Industrial Engineering, Italy
Victor Salinas	2016	UT Southwestern, Ranganathan
Jeremy J. Stubblefield	2016	Neuroscience, UT Southwestern, Green
Filipa Ferreira	2016	GABBA, University of Porto
Clark Rosensweig	2017	UT Southwestern, Green
Stephanie Lepp	2018	UT Southwestern, Konopka
Genaro Hernandez	2019	UT Southwestern, Mangelsdorf/Kliewer
Marissa Co	2019	UT Southwestern, Konopka
Jing Zhang	2020	UT Southwestern, Grishin
Jun Guo	2021	UT Southwestern, Wei Xu
Isara Laothamatas	2021	UT Southwestern, Green
Emily Seonhye Park	2021	UT Southwestern, Konopka
Anushka Wickramaratne	2021	UT Southwestern, Green
I-Mei Liao	2023	UT Southwestern, Takahashi
Danyal Alam	2023	UT Southwestern, Roberts

Independent Study - Undergraduate Students

Barbara Harris	ISP-C98	1989 (S)
John-Marc Chandonia	ISP-C98	1989 (F)
Kim Klausner	412-C99	1989 (F)
Elizabeth Ennis	ISP-C98	1990 (W)
Ashvin Sangoram	ISP-C98, 412-D99	1992 (F), 1993 (W, S)
Patricia Lee	412-C99	1992 (F), 1993 (W, S, F), 1994 (S)
Peter Zemenides	C99	1998, 1999, 2000
Jenny Wu	C99	1999
Evan Ransom	C99	2000

Sheraz Uddin	C99	2001 (W)
David Chih-dah Hsu	C99	2002 (W). 2003
Mark Richards	C99	2003, 2004 (W)
Kush Patel	ISP 398	2003 (W)
Anna Volerman	C99	2004 (W)
Seraz Uddin	Undergraduate Research, Biological Sciences	
David Chih-dah Hsu	Undergraduate Research, Biological Sciences	
Marc Richards	Undergraduate Research, Biological Sciences	
Joseph Konopka	Undergraduate Research. WCAS	
Rajeev Mannem	Undergraduate Research, WCAS	
Elaine Tsao	Northwestern, School of Music	
Katharine Lum	Undergraduate Research, WCAS (Honors)	
Kush Patel	Undergraduate, Integrated Science Program (Honors 2005)	
Vinfield Ta	Undergraduate Research, WCAS (Highest Honors 2007)	
Jennifer Mie Kasanuki U	ndergraduate Research, Biological Sciences	
Yinin Hu	Undergraduate Research, Biological Sciences	
Tiffany Li Wen Ching,	Undergraduate Research, WCAS	
Peter Selim Hanna	Undergraduate Research, WCAS	
Samuel Sang Lee	Undergraduate Research, WCAS	
Vinfield Xuan Ta	Undergraduate Research, WCAS	

Great Lakes Cluster Pew Science Undergraduate Research Fellow Program

John-Marc Chandonia	1989	Computer Modeling
Tracy Thibert	1990	Molecular Neurobiology

IBM-Integrated Science Program Summer Research Program for Women

Elizabeth Ennis	1990	Melatonin in Retinoblastoma Cells

Cellular and Molecular Neuroscience Medical Student Summer Training (NIH)

Richard Munson	1989	Protein Phosphorylation

NSF Center - Undergraduate Summer Research Fellow

Ashvin Sangoram	1992	Molecular Neurobiology
Michael Szurek	1993	RAPD genetic markers in hamsters
Djerrick Tan	1994	Contextual fear conditioning in mice

Minority Undergraduate Summer Research Program

Charnita Ziegler	1991	Hamster Circadian Rhythms
Lashina Lewis	1992	Molecular Neurobiology

Minority High School Student Research Apprentice Program (NIH)

Kurt H. Huang	1988	Computer Modeling
Victoria Wang	1990, 1991	Molecular Neurobiology
Chaffee Tran	1992	Screening Mouse Mutants

Howard Hughes Medical Institute Summer Research Students

Peter Zemenides	1998	Genetic mapping and QTL analysis
Rachel Gianfortune (MIT)	1999	Zebrafish circadian rhythms
Andrew Lin	2000	QTL analysis of circadian rhythms
Katherine Lum	2001, 2003	Genetic mapping
David Jacobson	2001, 2002	Mouse Chr. 1 haplotype analysis
Katharine Lum	2003	Genetic mapping, RNA expression
Victoria Rodriguez	2004	HHMI EXROP
Annie Lum (Boston U)	2005	Genetic mapping
Annie Lum (Boston U)	2006	Genetic mapping and modeling

Erika Jang		2006	Food entrainment
Nikki Okonkwo	2	006	HHMI EXROP
Meghan Tellon (UVA)		2007	Mouse obesity mutants
Richard C. Sando		2008	Casein kinase 1 epsilon mutants

Multi-Institutional Summer Undergraduate Research Program to Promote Diversity and Excellence in Sleep and Circadian Research Careers (R25)

Keyanna Adams	2023	Northwestern University

DEPARTMENTAL AND UNIVERSITY SERVICE:

1983-1984
Graduate Curriculum Committee, Neurobiology and Physiology
Organizer: Departmental faculty seminars for new graduate students
Secretary to the Department
Ad hoc committee to prepare report to Chairperson Peter Dallos on long-range developments of the Department, Chaired by E. Frank

1984-1985
Chair, Professional Relations Committee, Neurobiology and Physiology
Faculty Search Committee, Neurobiology and Physiology
Ad hoc committee to prepare report to Dean Weingartner, Chaired by F. Turek

1985-1986
Chair, Professional Relations Committee, Neurobiology and Physiology
Faculty Search Committee, Neurobiology and Physiology
Committee on Academic Standing, College of Arts and Sciences
Life Sciences Building Committee, College of Arts and Sciences
Animal Care Committee, University

1986-1987
Faculty Search Committee, Neurobiology and Physiology
Life Sciences Building Committee, College of Arts and Sciences
Committee on Academic Standing, College of Arts and Sciences
Animal Care Committee, University

1987-1988
Associate Chair, Neurobiology and Physiology
Chair, Faculty Search Committee, Neurobiology and Physiology
Committee on Academic Standing, College of Arts and Sciences
Blue Ribbon Curriculum Committee, College of Arts and Sciences
Curriculum Committee, Interdepartmental Graduate Program in Neuroscience
Materials Science and Life Science Building Committee, College of Arts and Sciences
Animal Care Committee, University
University Appeals Board

1988-1989
Associate Chair, Neurobiology and Physiology
Chair, Faculty Search Committee, Neurobiology and Physiology
Acting Associate Director, Institute for Neuroscience
Curriculum Committee, Institute for Neuroscience
Admissions Committee, Institute for Neuroscience
Materials Science and Life Science Building Committee, College of Arts and Sciences
University Appeals Board

1989-1990
Associate Chair, Neurobiology and Physiology
Faculty Search Committee, Neurobiology and Physiology
Acting Associate Director, Institute for Neuroscience
Curriculum Committee, Institute for Neuroscience
Admissions Committee, Institute for Neuroscience
Materials Science and Life Science Building Committee, College of Arts and Sciences
University Appeals Board
Neuroscience Working Group, University

Basic Sciences Committee, Cancer Center

1990-1991
Associate Chair, Neurobiology and Physiology
Faculty Search Committee, Neurobiology and Physiology
Acting Associate Director, Institute for Neuroscience
Curriculum Committee, Institute for Neuroscience
Materials Science and Life Science Building Committee, College of Arts and Sciences
University Appeals Board
Neuroscience Working Group, University
Basic Sciences Committee, Cancer Center
Search Committee for Director of Institute for Neuroscience

1991-1992
Acting Chair, Neurobiology and Physiology
Acting Associate Director, Institute for Neuroscience
Curriculum Committee, Institute for Neuroscience
Materials Science and Life Science Building Committee, College of Arts and Sciences
University Appeals Board
Faculty Planning Committee, University
Search Committee for Director of Institute for Neuroscience
Advisory (Steering) Committee, NSF Center for Biological Timing

1992-1993
Associate Chair, Neurobiology and Physiology
Acting Associate Director, Institute for Neuroscience
Curriculum Committee, Institute for Neuroscience
University Appeals Board
Search Committee for Director of Institute for Neuroscience
Advisory (Steering) Committee, NSF Center for Biological Timing

1993-1994
Associate Chair, Neurobiology and Physiology
Acting Associate Director, Institute for Neuroscience
Curriculum Committee, Institute for Neuroscience
University Appeals Board
Search Committee for Director of Institute for Neuroscience
Advisory (Steering) Committee, NSF Center for Biological Timing
Departmental Program Review Committee, Neurobiology and Physiology

1994-1995
Associate Chair, Neurobiology and Physiology
Acting Associate Director, Institute for Neuroscience
Faculty Search Committee, Neurobiology and Physiology
Curriculum Committee, Institute for Neuroscience
University Appeals Board
Advisory (Steering) Committee, NSF Center for Biological Timing
Life Sciences Planning Subcommittee
Associate Director, Center for Circadian Biology and Medicine

1995-1996
Associate Chair, Neurobiology and Physiology
Faculty Search Committee, Neurobiology and Physiology
Curriculum Committee, Institute for Neuroscience
University Appeals Board

Advisory (Steering) Committee, NSF Center for Biological Timing
Associate Director, Center for Circadian Biology and Medicine
Committee on Intellectual Property, University
Life Sciences Planning Subcommittee

1996-1997
Faculty Search Committee, Neurobiology and Physiology
Curriculum Committee, Institute for Neuroscience
University Appeals Board
Advisory (Steering) Committee, NSF Center for Biological Timing
Associate Director, Center for Circadian Biology and Medicine
Committee on Intellectual Property, University
Ad hoc committee for Promotion and Tenure Committee

1997-1998
Faculty Search Committee, Neurobiology and Physiology
Curriculum Committee, Institute for Neuroscience
University Appeals Board
Advisory (Steering) Committee, NSF Center for Biological Timing
Associate Director, Center for Circadian Biology and Medicine
Medical School Genetics Search Committee

1998-1999
Curriculum Committee, Institute for Neuroscience
University Appeals Board
Advisory (Steering) Committee, NSF Center for Biological Timing
Associate Director, Center for Circadian Biology and Medicine
Medical School Genetics Search Committee
Searle Life Sciences Committee

1999-2000
Curriculum Committee, Institute for Neuroscience
Advisory (Steering) Committee, NSF Center for Biological Timing
Medical School Genetics Search Committee
Searle Life Sciences Advisory Group
Life Sciences Vision Committee
University Appeals Board
Committee for Excellence in the Life Sciences
Bioinformatics Task Force

2000-2001
Advisory (Steering) Committee, NSF Center for Biological Timing
Searle Life Sciences Advisory Group
Committee for Excellence in the Life Sciences
Faculty Search Committee, Biological Sciences Division
Shared Resource Committee, Department of Neurobiology and Physiology
University Appeals Board

2001-2002
Director, Center for Functional Genomics
Advisory (Steering) Committee, NSF Center for Biological Timing
Searle Life Sciences Advisory Group
Committee for Excellence in the Life Sciences
Shared Resource Committee, Department of Neurobiology and Physiology
University Appeals Board

2002-2003
Director, Center for Functional Genomics
Committee on Animal Resources
Shared Resource Committee, Department of Neurobiology and Physiology
University Appeals Board
Genetics Search Committee, NUMS
WCAS Promotion and Tenure Ad Hoc Committee

2003-2004
Director, Center for Functional Genomics
Committee on Animal Resources
Shared Resource Committee, Department of Neurobiology and Physiology
Genetics Search Committee, NUMS
NU Roadmap for Research Committee
Center for Genetic Medicine Executive Committee
Bioinformatics Consulting Group Advisory Committee

2004-2005
Director, Center for Functional Genomics
Committee on Animal Resources
Center for Genetic Medicine Executive Committee
Shared Resource Committee, Department of Neurobiology and Physiology

2005-2006
Director, Center for Functional Genomics
Committee on Animal Resources
Advisory Committee for the Selection of Searle Leadership Fund Recipients
Shared Resource Committee, Department of Neurobiology and Physiology

2006-2007
Director, Center for Functional Genomics
Shared Resource Committee, Department of Neurobiology and Physiology
Advisory Committee for the Selection of Searle Leadership Fund Recipients
Committee on Animal Resources
NRC Ratings Steering Committee

2007-2008
Director, Center for Functional Genomics
Shared Resource Committee, Department of Neurobiology and Physiology
Committee on Animal Resources

2008-2009
Director, Center for Functional Genomics
Shared Resource Committee, Department of Neurobiology and Physiology
Committee on Animal Resources

2009-2010
Chair, Department of Neuroscience, UT Southwestern Medical Center
Animal Resource Center Advisory Committee Meeting, UT Southwestern Medical Center
Dean's Advisory Committee, UT Southwestern Medical Center
Faculty Council, UT Southwestern Medical Center
6-Year Plan Research Sub-committee, UT Southwestern Medical Center
Children's Medical Center, Pediatric Research Institute, Scientific Board

2010-2011
Chair, Department of Neuroscience, UT Southwestern Medical Center
Animal Resource Center Advisory Committee Meeting, UT Southwestern Medical Center
Dean's Advisory Committee, UT Southwestern Medical Center
Faculty Council, UT Southwestern Medical Center
Neuroscience Graduate Program, Advisory Committee
Children's Medical Center, Pediatric Research Institute, Scientific Board
Sleep Medicine Workgroup, UT Southwestern Medical Center
UT Southwestern Scientific Computing Ad Hoc Committee
Cell Biology Department Chair Search Committee

2011-2012
Chair, Department of Neuroscience, UT Southwestern Medical Center
Animal Resource Center Advisory Committee Meeting, UT Southwestern Medical Center
Dean's Advisory Committee, UT Southwestern Medical Center
Faculty Council, UT Southwestern Medical Center
Endowed Scholars Committee
Neuroscience Graduate Program, Advisory Committee
Children's Medical Center, Pediatric Research Institute, Scientific Board

2012-2013
Chair, Department of Neuroscience, UT Southwestern Medical Center
Animal Resource Center Advisory Committee Meeting, UT Southwestern Medical Center
Dean's Advisory Committee, UT Southwestern Medical Center
Faculty Council, UT Southwestern Medical Center
Endowed Scholars Committee
Neuroscience Graduate Program, Advisory Committee
Bioinformatics Department Chair Search Committee

2013-2014
Chair, Department of Neuroscience, UT Southwestern Medical Center
Animal Resource Center Advisory Committee Meeting, UT Southwestern Medical Center
Dean's Advisory Committee, UT Southwestern Medical Center
Faculty Council, UT Southwestern Medical Center
Endowed Scholars Committee
Neuroscience Graduate Program, Advisory Committee
Bioinformatics Department Chair Search Committee

2014-2015
Chair, Department of Neuroscience, UT Southwestern Medical Center
Animal Resource Center Advisory Committee Meeting, UT Southwestern Medical Center
Dean's Advisory Committee, UT Southwestern Medical Center
Faculty Council, UT Southwestern Medical Center
Endowed Scholars Committee
Neuroscience Graduate Program, Advisory Committee
Strategic Planning Committee for the Neurosciences
UT System Neuroscience Council
UT System Neuroscience Institute Advisory Council

2015-2016
Chair, Department of Neuroscience, UT Southwestern Medical Center
Animal Resource Center Advisory Committee Meeting, UT Southwestern Medical Center
Dean's Advisory Committee, UT Southwestern Medical Center
Faculty Council, UT Southwestern Medical Center

Endowed Scholars Committee
Neuroscience Graduate Program, Advisory Committee
Strategic Planning Committee for the Neurosciences
Neuroscience Steering Committee, Peter O'Donnell Jr. Brain Institute
UT System Neuroscience Council
UT System Neuroscience Institute Advisory Council

2016-2017
Chair, Department of Neuroscience, UT Southwestern Medical Center
Animal Resource Center Advisory Committee Meeting, UT Southwestern Medical Center
Dean's Advisory Committee, UT Southwestern Medical Center
Faculty Council, UT Southwestern Medical Center
Endowed Scholars Committee
Neuroscience Graduate Program, Advisory Committee
Strategic Planning Committee for the Neurosciences
Neuroscience Steering Committee, Peter O'Donnell Jr. Brain Institute
UT System Neuroscience Council
UT System Neuroscience Institute Advisory Council

2017-2018
Chair, Department of Neuroscience, UT Southwestern Medical Center
Animal Resource Center Advisory Committee Meeting, UT Southwestern Medical Center
Dean's Advisory Committee, UT Southwestern Medical Center
Faculty Council, UT Southwestern Medical Center
Endowed Scholars Committee
Neuroscience Graduate Program, Advisory Committee
Neuroscience Steering Committee, Peter O'Donnell Jr. Brain Institute
Search Committee for Director of Peter O'Donnell Jr. Brain Institute

2018-2019
Chair, Department of Neuroscience, UT Southwestern Medical Center
Animal Resource Center Advisory Committee Meeting, UT Southwestern Medical Center
Dean's Advisory Committee, UT Southwestern Medical Center
Faculty Council, UT Southwestern Medical Center
Endowed Scholars Committee
Neuroscience Graduate Program, Advisory Committee
NCP6 Brain Institute & Cancer Center Executive Committee
Neuroscience Steering Committee, Peter O'Donnell Jr. Brain Institute
Search Committee for Director of Peter O'Donnell Jr. Brain Institute

2019-2020
Chair, Department of Neuroscience, UT Southwestern Medical Center
Animal Resource Center Advisory Committee Meeting, UT Southwestern Medical Center
Faculty Council, UT Southwestern Medical Center
Neuroscience Graduate Program, Advisory Committee
NCP6 Brain Institute & Cancer Center Executive Committee
Search Committee for Chair of Department of Neurology and Neurotherapeutics
O'Donnell Brain Institute Steering Committee
Neural Scientist Training Program (NSTP), OBI, Selection Committee and Mentoring Committee

2020-2021
Chair, Department of Neuroscience, UT Southwestern Medical Center
Animal Resource Center Advisory Committee Meeting, UT Southwestern Medical Center
Faculty Council, UT Southwestern Medical Center
Neuroscience Graduate Program, Advisory Committee

NCP6 Brain Institute & Cancer Center Executive Committee
O'Donnell Brain Institute Steering Committee
Neural Scientist Training Program (NSTP), OBI, Selection Committee and Mentoring Committee
Campus Relations and Security Committee

2021-2022
Chair, Department of Neuroscience, UT Southwestern Medical Center
Animal Resource Center Advisory Committee Meeting, UT Southwestern Medical Center
Faculty Council, UT Southwestern Medical Center
Neuroscience Graduate Program, Advisory Committee
NCP6 Brain Institute & Cancer Center Executive Committee
O'Donnell Brain Institute Steering Committee
Neural Scientist Training Program (NSTP), OBI, Selection Committee and Mentoring Committee
Campus Relations and Security Committee
Department of Neurology Sleep Section Search Committee

2022-2023
Chair, Department of Neuroscience, UT Southwestern Medical Center
Animal Resource Center Advisory Committee Meeting, UT Southwestern Medical Center
Faculty Council, UT Southwestern Medical Center
Neuroscience Graduate Program, Advisory Committee
NCP6 Brain Institute & Cancer Center Executive Committee
O'Donnell Brain Institute Steering Committee
Neural Scientist Training Program (NSTP), OBI, Selection Committee and Mentoring Committee
Campus Relations and Security Committee
Department of Neurology Sleep Section Search Committee

2023-2024
Chair, Department of Neuroscience, UT Southwestern Medical Center
Animal Resource Center Advisory Committee Meeting, UT Southwestern Medical Center
Faculty Council, UT Southwestern Medical Center
Neuroscience Graduate Program, Advisory Committee
NCP6 Brain Institute & Cancer Center Executive Committee
O'Donnell Brain Institute Steering Committee
Neural Scientist Training Program (NSTP), OBI, Selection Committee and Mentoring Committee
Campus Relations and Security Committee
Search Committee for Chair of Department of Psychiatry

2024-2025
Chair, Department of Neuroscience, UT Southwestern Medical Center
Animal Resource Center Advisory Committee Meeting, UT Southwestern Medical Center
Faculty Council, UT Southwestern Medical Center
Neuroscience Graduate Program, Advisory Committee
O'Donnell Brain Institute Steering Committee
Neural Scientist Training Program (NSTP), OBI, Selection Committee and Mentoring Committee
Chair, Human Cell Core Committee, OBI, UTSW

2025-2026
Chair, Department of Neuroscience, UT Southwestern Medical Center
Animal Resource Center Advisory Committee Meeting, UT Southwestern Medical Center
Faculty Advisory Board, UT Southwestern Medical Center
Neuroscience Graduate Program, Advisory Committee
O'Donnell Brain Institute Steering Committee
Neural Scientist Training Program (NSTP), OBI, Selection Committee and Mentoring Committee
Chair, Human Cell Core Committee, OBI, UTSW

2026-2027
Chair, Department of Neuroscience, UT Southwestern Medical Center
Animal Resource Center Advisory Committee Meeting, UT Southwestern Medical Center
Faculty Advisory Board, UT Southwestern Medical Center
Neuroscience Graduate Program, Advisory Committee
O'Donnell Brain Institute Steering Committee
Neural Scientist Training Program (NSTP), OBI, Selection Committee and Mentoring Committee

Research Interests

My laboratory discovered the first circadian clock gene in mammals and this discovery eventually led to the description of the molecular mechanism of the circadian clock in mouse and humans. Circadian clocks are transcriptional/translational 24-hour negative feedback loops that drive rhythmic expression of thousands of genes, dynamic epigenetic modifications of chromatin and are embedded within metabolic pathways. In the mouse liver, there are genome-wide transcriptional and epigenetic programs driven by the circadian transcriptional activators, CLOCK and BMAL1, that occur each day. Importantly, there are many links between the circadian system and metabolism, immune function, cancer and aging. High-amplitude circadian rhythms correlate with well-being, whereas clock dysfunction leads to metabolic disorders, premature aging and reduced lifespan. In the last five years, we have shifted our focus to study the role of circadian timing in aging and longevity. Recently, we have obtained compelling evidence that the timing of nutrient consumption is critical for extending both healthspan and lifespan in mouse models. This behavioral intervention is important because it likely applies to human health and because lifestyle and behavioral interventions can be adopted to ameliorate the effects of aging in people.

A. Identification of circadian clock genes and description of the molecular mechanism of the circadian clock in mammals. My laboratory is focused on understanding the molecular mechanism of circadian clocks in mammals. We have used mouse genetics as a tool for discovery of the critical genes involved in the generation of circadian rhythms of mammals. Our initial discovery of the *Clock* gene using forward genetic screens and positional cloning, and the identification of BMAL1 as the heterodimeric partner of CLOCK, led to idea that the CLOCK:BMAL1 transcriptional activator complex was upstream of the *Period* and *Cryptochrome* genes whose gene products then repressed CLOCK:BMAL1 to form an autoregulatory transcriptional feedback loop. Together, this work led to a description of a model of the circadian clock in mammals.

- Vitaterna, M.H., D.P. King, A.M. Chang, J.M. Kornhauser, P.L. Lowrey, J.D. McDonald, W.F. Dove, L.H. Pinto, F.W. Turek and **J.S. Takahashi**. 1994. Mutagenesis and mapping of a mouse gene, *Clock*, essential for circadian behavior. ***Science*** 264: 719-725. https://doi.org/10.1126/science.8171325 PMID: 8171325
- King, D.P., Y. Zhao, A.M. Sangoram, L.D. Wilsbacher, M. Tanaka, M.P. Antoch, T.D. Steeves, M.H. Vitaterna, J.M. Kornhauser, P.L. Lowrey, F.W. Turek and **J.S. Takahashi**. 1997. Positional cloning of the mouse circadian *Clock* gene. ***Cell*** 89: 641-653. https://doi.org/10.1016/s0092-8674(00)80245-7 PMID: 9160755
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- Gekakis, N., D. Staknis, H.B. Nguyen, F.C. Davis, L.D. Wilsbacher, D.P. King, **J.S. Takahashi** and C.J. Weitz. 1998. Role of the CLOCK protein in the mammalian circadian mechanism. ***Science*** 280: 1564-1569. https://doi.org/10.1126/science.280.5369.1564 PMID: 96161124
- Darlington, T.K., K. Wager-Smith, M.F. Ceriani, D. Staknis, N. Gekakis, T.D. Steeves, C.J. Weitz, J.S. Takahashi and S.A. Kay. 1998. Closing the circadian loop: CLOCK-induced transcription of its own inhibitors per and tim. ***Science*** 280: 1599-1603. https://doi.org/10.1126/science.280.5369.1599 PMID: 9616122
- Steeves, T.D., D.P. King, Y. Zhao, A.M. Sangoram, F. Du, A.M. Bowcock, R.Y. Moore and **J.S. Takahashi**. 1999. Molecular cloning and characterization of the human CLOCK gene: expression in the suprachiasmatic nuclei. ***Genomics*** 57: 189-200. https://doi.org/10.1006/geno.1998.5675 PMID: 10198158
- Vitaterna, M.H., C.P. Selby, T. Todo, H. Niwa, C. Thompson, E.M. Fruechte, K. Hitomi, R.J. Thresher, T. Ishikawa, J. Miyazaki, **J.S. Takahashi** and A. Sancar. 1999. Differential regulation of mammalian period genes and circadian rhythmicity by cryptochromes 1 and 2. ***Proc Natl Acad Sci U S A*** 96: 12114-12119. https://doi.org/10.1073/pnas.96.21.12114 PMID: 10518585
- Bunger, M.K., L.D. Wilsbacher, S.M. Moran, C. Clendenin, L.A. Radcliffe, J.B. Hogenesch, M.C. Simon, **J.S. Takahashi** and C.A. Bradfield. 2000. Mop3 is an essential component of the master circadian pacemaker in mammals. ***Cell*** 103: 1009-1017. https://doi.org/10.1016/s0092-8674(00)00205-1 PMID: 11163178 (*Mop3* aka *Bmal1*)

B. Regulators of the core circadian clock mechanism. My laboratory has discovered important regulators of circadian clock proteins such Casein kinase 1ε from the hamster *tau* mutation which regulates PER stability, and the E3 ubiquitin ligase complexes involving the F-Box proteins, FBXL3 and FBXL21 which regulate the stability of the CRY proteins. We have conducted high throughput screens for small molecules that modulate period and amplitude of circadian rhythms.

- Lowrey, P.L., K. Shimomura, M.P. Antoch, S. Yamazaki, P.D. Zemenides, M.R. Ralph, M. Menaker and **J.S. Takahashi**. 2000. Positional syntenic cloning and functional characterization of the mammalian circadian mutation tau. ***Science*** 288: 483-492. https://doi.org/10.1126/science.288.5465.483 PMID: 10775102
- Siepka, S.M., S.H. Yoo, J. Park, W. Song, V. Kumar, Y. Hu, C. Lee and **J.S. Takahashi**. 2007. Circadian mutant *Overtime* reveals F-box protein FBXL3 regulation of cryptochrome and period gene expression. ***Cell*** 129: 1011-1023. https://doi.org/10.1016/j.cell.2007.04.030 PMID: 17462724
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- Yoo, S.H., J.A. Mohawk, S.M. Siepka, Y. Shan, S.K. Huh, H.K. Hong, I. Kornblum, V. Kumar, N. Koike, M. Xu, J. Nussbaum, X. Liu, Z. Chen, Z.J. Chen, C.B. Green and **J.S. Takahashi**. 2013. Competing E3 ubiquitin ligases govern circadian periodicity by degradation of CRY in nucleus and cytoplasm. ***Cell*** 152: 1091-1105. https://doi.org/10.1016/j.cell.2013.01.055 PMID: 23452855

C. Analysis of central and peripheral circadian oscillators. With the discovery and cloning of clock genes came the realization that their expression was ubiquitous. What was perhaps even more surprising was the observation using circadian gene reporter technology that essentially every peripheral organ system and tissue has the capacity to express autonomous circadian rhythms. These distributed circadian oscillators can function independently of the central clock located in the suprachiasmatic nucleus (SCN). My laboratory has also contributed to our understanding of the role of the SCN as a master pacemaker to synchronize peripheral oscillators(Yoo et al. 2004; Hong et al. 2007; Kornmann et al. 2007; Buhr et al. 2010; Hughes et al. 2012)(Yoo et al. 2004; Hong et al. 2007; Kornmann et al. 2007; Buhr et al. 2010; Hughes et al. 2012)(Yoo et al. 2004; Hong et al. 2007; Kornmann et al. 2007; Buhr et al. 2010; Hughes et al. 2012), as well as the role of intercellular coupling in robustness of the SCN oscillator(Buhr et al. 2010; Liu et al. 2007; Ko et al. 2010; Welsh et al. 2010)(Buhr et al. 2010; Liu et al. 2007; Ko et al. 2010; Welsh et al. 2010)(Buhr et al. 2010; Liu et al. 2007; Ko et al. 2010; Welsh et al. 2010).

- Low-Zeddies, S.S. and **J.S. Takahashi**. 2001. Chimera analysis of the *Clock* mutation in mice shows that complex cellular integration determines circadian behavior. ***Cell*** 105: 25-42. https://doi.org/10.1016/s0092-8674(01)00294-x PMID: 11301000
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- Shan, Y., J.H. Abel, Y. Li, M. Izumo, K.H. Cox, B. Jeong, S.H. Yoo, D.P. Olson, F.J. Doyle, 3rd and **J.S. Takahashi**. 2020. Dual-Color Single-Cell Imaging of the Suprachiasmatic Nucleus Reveals a Circadian Role in Network Synchrony. ***Neuron*** 108: 164-179 e167. https://doi.org/10.1016/j.neuron.2020.07.012 PMID: 32768389
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D. Role of clock genes in metabolic disorders. In collaboration with my colleague, Joe Bass, we have found that both *Clock* and *Bmal1* play critical roles in metabolism. The original *Clock-Δ19* mutant is susceptible to metabolic disorders with age and with high-fat diet. We have shown that conditional deletion of *Bmal1* in pancreatic islets causes diabetes due to an insufficiency of insulin release. In addition, CLOCK and BMAL1 regulate NAMPT-mediated NAD+ biosynthesis. Recently, we have described the behavioral effects of time- and caloric-restriction on mouse activity and feeding behavior.

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E. Molecular architecture of the circadian clock. Using ChIP-seq and RNA-seq we have defined the *cis*-regulatory network of the entire core circadian transcriptional regulatory loop on a genome scale and find a highly stereo-typed, time-dependent pattern of core circadian transcription factor binding, RNAPII occupancy, RNA expression and chromatin states. We define three distinctive phases of the circadian cycle: 1) a poised phase in which CLOCK:BMAL1 and CRY1 bind to E-box sites in a transcription-ally silent state associated with RNAPII-Ser5P; 2) a temporally coordinated transcriptional activation phase in which RNAPII and p300 recruitment, pre-mRNA transcript expression, and H3K9ac, H3K4me3 and H3k27ac occupancy oscillate; and 3) a repression phase in which PER1, PER2 and CRY2 occupancy peaks. We have also solved the crystal structure of the CLOCK:BMAL1 bHLH-PAS transcriptional activator complex. This is likely the first example of isolating a behavioral mutant, cloning the gene, and solving the crystal structure of the protein in a single laboratory. In addition, we have identified genetic modifiers of the *Clock* mutation and described how one of them, USF1, competes for DNA occupancy with CLOCK:BMAL1 to rescue E-Box driven transcriptional targets. Finally, we have described how stochastic and epigenetic mechanisms (DNA methylation) regulate the periodicity of cell autonomous circadian oscillators and regulate their heritability of circadian period.

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E. Circadian clocks in parasites. Filipa Rijo-Ferreira was the lynchpin in forging a novel collaboration between my circadian rhythms laboratory at the UT Southwestern and the laboratory of Luisa Figueiredo at the Instituto de Medicina Molecular (iMM) in Lisbon, Portugal. These studies first showed that the sleeping sickness parasite, *Trypanosome brucei,* possessed an endogenous circadian clock in vitro, and in mice in vivo, *T. brucei* not only affected sleep but had profound effects on the circadian system of the host (mouse) causing a shortening of period and advanced phase angle of entrainment. Thus, we proposed that sleeping sickness is actually a circadian disorder. In a second series of work on malaria, Filipa discovered that the periodic fevers that are characteristic of this disease are the result of an intrinsic clock in the *Plasmodium* parasite. The rhythmic aspect of this infection has been known for a long time, but the prevailing view in the field was that this was driven by the *Plasmodium* cell cycle and more recently by the host's circadian rhythms. We showed that the parasite rhythms were intrinsic, because in the absence of environmental cues or any host circadian rhythms the parasite transcriptome remained rhythmic, with 60% of all genes maintaining rhythmic expression patterns. Taken together she was able to show that the parasite population requires host cues to synchronize to each other but that the rhythms themselves are intrinsically driven by the parasite clock.

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F. Role of the circadian clock in aging and longevity. My laboratory has been studying the behavioral effects of caloric restriction (CR) in mice, and we have found that CR leads to dramatic changes in the pattern of food intake. In contrast to normally fed mice, which distribute their food intake over the 24-hour day, mice on caloric restriction adopt a severe feeding and fasting pattern in which they consume all their food within a few hours each day. In order to disentangle the contribution of calories, fasting and circadian alignment of eating on longevity, we have recently completed a compelling longevity study. We demonstrated that CR is sufficient to extend lifespan but that the pattern and circadian alignment of feeding under CR acts synergistically to extend lifespan. Calorie reduction alone increases lifespan only by ~10%, while time-restricted CR during the active phase extends lifespan more than 3 times longer (35%). Circadian alignment of feeding enhances CR-mediated benefits on survival independently of fasting duration and body weight. Aging promotes widespread increases inflammation and decreases in metabolism in the liver from *ad lib* fed mice; whereas, CR at night ameliorates these aging-related changes. Thus, circadian interventions promote longevity and provide a new mechanism for the treatment and management of aging.

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