

Mary E. Harrington

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Degrees

PhD 1986 Dalhousie University, Psychology, "Behavioral, anatomical and physiological studies of the geniculo-suprachiasmatic tract in the golden hamster."
MA 1982 University of Toronto, Psychology
BS 1980 Pennsylvania State University, Psychology

Awards and Honors

SRBR Director's Award for Service, 2022
Sherrerd Prize for Distinguished Teaching, 2007
President, Faculty for Undergraduate Neuroscience, 2006
Fellow, Faculty for Undergraduate Neuroscience, 2003
Research Career Development Award (NIH), 1994-1999.
Picker Fellowship, 1989-90.
Membership in Phi Beta Kappa, Psi Chi, Sigma Xi.
Graduate Fellowships: Connaught Fellowship, 1981-82; Killiam Fellowship 1982-86.

Employment History

2005- present	Tippit Professor in the Life Sciences
2003- present	Professor, Department of Psychology, Smith College
1995-2003	Associate Professor, Department of Psychology, Smith College.
1987-1995	Assistant Professor, Department of Psychology, Smith College.
1987-present	Member, Neuroscience and Behavior Program, University of Massachusetts at Amherst.
2000-present	Adjunct Member, Center for Neuroendocrine Studies, University of Massachusetts at Amherst.
1986-1987	Postdoctoral research, Dr. B. Rusak, Dalhousie University.

External Grants Received (Total \$6,364,776)

"*The effect of circadian disruption on the angiogenic response to hypoperfusion in the AD brain*" NIH R01 AG081841-01 (subcontract to Smith College, PI: Ken Arai, MGH), 05/01/2023 – 01/31/2028, \$775,845

"*In vivo tracking of bioluminescent markers of circadian rhythms in behaving animals*" NIH 2R15GM126545-03, 9/18/2023– 9/17/2026, \$396,250

"*Developing Training Materials for Experimental Rigor in Neuroscience*" NIH UE5NS128293, 8/1/2022 – 4/30/2025, \$269,161

"In vivo tracking of bioluminescent markers of circadian rhythms in behaving animals" NIH R15, 9/17/2019–9/14/2022, \$392,394

"In vivo tracking of bioluminescent markers of circadian rhythms in behaving animals" NIH R15, 9/15/2017 – 9/14/2019, \$385,288

"Sleep, Aging and Circadian Rhythm Disorders" NIH (subcontract on Program Project grant to CA Czeisler, Brigham and Women's Hospital), 07/01/2013 – 06/30/2018, \$221,358

"Building foundations for a neurobiology of fatigue: validating an animal model" NIH, 2/15/2012-1/31/2014, \$350,264

"RUI: Intercellular coupling of circadian clock cells in the liver" NSF, 1/15/2011 - 1/1/2014, \$530,000

"Age-related deficits in circadian system synchrony, EARDA Pilot Project Proposal", NIH, 7/1/2010-6/30/2011, \$5000

"Circadian clock suppression in cancer-related fatigue" NIH, 3/1/08 – 2/28/10, \$336,818

"Sharing and disseminating innovative approaches to teaching neuroscience in a liberal arts college" Mellon Foundation, 2008, \$14,000

"RUI: Environment-induced plasticity of circadian phase, period, and waveform", NSF, 9/1/06-8/31/08, \$200,000

"Potentiation of circadian clock phase shifts", NIH, 5/1/06 – 4/30/08, \$195,236.

"Workshop on Chronobiology in Buenos Aires, Argentina", NSF \$19,690

"Master-Slave Clock networks: Modeling, Analysis and Neurobiology" Collaborative grant with UMass Dept Computer Science and Engineering, NSF, \$49,000 Smith College portion of total budget of \$100,000, 10/01/04 – 9/30/05

"Radiation-induced apoptosis following artificially induced jet lag: A model to investigate the link between circadian rhythms and breast cancer", Mellon Foundation (Smith-Wesleyan grant), \$5,000

"RUI: Circadian rhythms in NPY and Y5 receptor deficient mice", NSF
4/01/03 – 3/31/2006, \$200,137

"Evaluation of Neuropeptide Y antagonists on circadian rhythms", Pfizer (total: \$218,748)
12/31/01-12/31/02, \$67,166.
12/31/02 – 9/1/04, \$86,582
9/1/04 – 8/30/05, \$65,000

"The Neural Basis of Biological Rhythms", NIH (total: \$1,800,587):
8/1/94 - 7/31/99, \$351,000, Research Career Development Award.
12/1/97-11/30/2000, \$562,148, Research grant.

12/1/93 - 11/30/97, \$418,291, Research grant.
3/1/95 - 4/30/97, \$22,608, National Research Service Award (to S. Biello).
9/15/88 - 11/30/93, \$430,842, First Independent Research Support and Transition.
9/1/91 - 11/30/93, \$15,698, Research Supplement for Underrepresented Minority Undergraduate Student (Teresa Hermida '93).

Participant in "Training in Neuroendocrinology" Univ. Mass. grant NIH.

Publications

Articles in Refereed Journals (undergraduate co-authors marked by asterisk):

1. Harrington, M.E. and D.V. Coscina. Early weight gain and behavioral responsivity as predictors of dietary obesity in rats. *Physiology and Behavior*, 30 (1983) 763-770.
2. Harrington, M.E., D.M. Nance and B. Rusak. Neuropeptide Y immunoreactivity in the hamster geniculo-suprachiasmatic tract. *Brain Research Bulletin*, 15 (1985) 465-472.
3. Harrington, M.E. and B. Rusak. Lesions of the thalamic intergeniculate leaflet alter hamster circadian rhythms. *Journal of Biological Rhythms*, 1(1986) 309-325.
4. Harrington, M.E., R. Mason and B. Rusak, The effects of neuropeptide-Y (NPY) on hamster suprachiasmatic neurons recorded in vitro, *J. Physiol. Lond.*, 386 (1987) P91-P91.
5. Harrington, M.E., D.M. Nance and B. Rusak. Double-labeling of neuropeptide Y-immunoreactive neurons which project from the geniculate to the suprachiasmatic nucleus. *Brain Research*, 410 (1987) 275-282.
6. Mason, R., M.E. Harrington and B. Rusak. Electrophysiological responses of hamster suprachiasmatic neurons to neuropeptide-Y (NPY) in the hypothalamic slice preparation. *Neuroscience Letters*, 80 (1987) 173-179.
7. Harrington, M.E. and B. Rusak. Ablation of the geniculo-hypothalamic tract alters circadian activity rhythms of hamsters housed under constant light. *Physiology and Behavior*, 42 (1988) 183-189.
8. Harrington, M.E. and B. Rusak. Photic responses of geniculo-hypothalamic tract neurons in the Syrian hamster, *Visual Neuroscience*, 2 (1989) 367-375.
9. Meijer, J.H., B. Rusak and M.E. Harrington. Photically responsive neurons in the hypothalamus of a diurnal ground squirrel, *Brain Research*, 501 (1989) 315-323.
10. Rusak, B., J.H. Meijer and M.E. Harrington. Hamster circadian rhythms are phase-shifted by electrical stimulation of the geniculo-hypothalamic tract, *Brain Research*, 493 (1989) 283-291.
11. M.E. Harrington, G.A. Eskes, P. Dickson and B. Rusak. Lesions dorsal to the suprachiasmatic nuclei abolish split activity rhythms of hamsters, *Brain Research Bulletin*, 24 (1990) 593-597.
12. M.E. Harrington and B. Rusak. Luminance coding properties of intergeniculate leaflet neurons in the golden hamster and the effects of chronic clorgyline, *Brain Research*, 554 (1991) 95-104.
13. S.M. Biello*, M.E. Harrington and R. Mason, Geniculo-hypothalamic tract lesions block chlordiazepoxide-induced phase advances in Syrian hamsters, *Brain Research*, 552 (1991) 47-52.

14. R. Mason, S.M. Biello* and M.E. Harrington, The effects of GABA and benzodiazepines on neurones in the suprachiasmatic nucleus (SCN) of Syrian hamsters, *Brain Research*, 552 (1991) 53-57.
15. M.E. Harrington, T. Rahmani and C.A. Lee*, Effects of damage to SCN neurons and efferent pathways on circadian activity rhythms of hamsters, *Brain Research Bulletin*, 30 (1993) 655-669.
16. E.L. Meyer*, M.E. Harrington and T. Rahmani, A phase response curve to the benzodiazepine chlordiazepoxide and the effect of geniculo-hypothalamic tract ablation, *Physiology and Behavior*, 53 (1993) 237-243.
17. Cote, N.K.* and M.E. Harrington, Histamine phase shifts the circadian clock in a manner similar to light, *Brain Research*, 613 (1993) 149-151.
18. Eaton, S.J.*, N.K. Cote*, and M.E. Harrington, Histamine synthesis inhibition reduces light-induced phase shifts of circadian rhythms, *Brain Research*, 695 (1995) 227-230.
19. D.A. Golombek, S.M. Biello, R.A. Rendon*, and M.E. Harrington, Neuropeptide Y phase shifts the circadian clock *in vitro* via a Y2 receptor, *Neuroreport*, 7 (1996) 1315-1319.
20. S.J. Eaton*, S. Eoh*, J. Meyer*, S. Hoque*, and M.E. Harrington, Circadian rhythm photic phase shifts are not altered by histamine receptor antagonists, *Brain Research Bulletin*, 41 (1996) 531-533.
21. M.E. Harrington, The ventral lateral geniculate nucleus and the intergeniculate leaflet: Interrelated structures in the visual and circadian systems, *Neuroscience and Biobehavioral Reviews*, 21 (1996) 705-727.
22. SM Biello, DA Golombek and ME Harrington, Neuropeptide Y and glutamate block each other's phase shifts in the suprachiasmatic nucleus *in vitro*, *Neuroscience*, 77 (1997) 1049-1057.
23. ME Harrington and S Hoque*, NPY opposes PACAP phase shifts via receptors different from those involved in NPY phase shifts, *NeuroReport*, 8 (1997) 2677-2680.
24. SM Biello, DA Golombek, KM Schak* and ME Harrington, Circadian phase shifts to neuropeptide Y *in vitro*: Cellular communication and signal transduction, *Journal of Neuroscience*, 17 (1997) 8468-8475.
25. AC Hall, RM Hoffmaster*, EL Stern*, ME Harrington and D Bickar, Suprachiasmatic nucleus neurons are glucose sensitive, *Journal of Biological Rhythms*, 12 (1997) 388-400.
26. J.L. Meyer*, A.C. Hall, and M.E. Harrington, Histamine phase shifts the hamster circadian pacemaker via a NMDA dependent mechanism, *Journal of Biological Rhythms*, 13 (1998) 288-295.
27. M Diaz-Munoz, MAR Dent, D Granados, AC Hall, ME Harrington, and R Aguilar-Roblero, Circadian rhythm of the intracellular calcium release channel (type 2 ryanodine receptor) in the suprachiasmatic nuclei of the rat, *NeuroReport*, 10 (1999) 481-486.
28. Harrington, M.E., Hoque, S.*, Hall, A.C., Golombek, D.A., Biello, S.M., Pituitary adenylate cyclase activating peptide (PACAP) phase shifts circadian rhythms in a manner similar to light via potentiation of NMDA currents, *Journal of Neuroscience*, 19 (1999) 6637-6642.
29. J.M. Lee*, K.M. Schak*, and M.E. Harrington, Inhibition of protein kinase A phase delays the mammalian circadian clock, *Brain Research*, 835 (1999) 350-353.

30. Hall, A.C., Earle-Cruickshanks, G.*, Harrington, M.E., Role of membrane conductances and protein synthesis in subjective day phase advances of the hamster circadian clock by neuropeptide Y, *European Journal of Neuroscience*, 11 (1999) 1-9.
31. K.M. Schak* and M.E. Harrington, Protein kinase C inhibition and activation phase advances the hamster circadian clock, *Brain Research*, 840 (1999) 158-161.
32. M.E. Harrington and K.M. Schak*, Neuropeptide Y phase advances the *in vitro* hamster circadian clock during the subjective day with no effect on phase during the subjective night, *Canadian Journal of Pharmacology and Physiology*, 78 (2000) 87-92.
33. P.C. Yannielli and M.E. Harrington, Neuropeptide Y applied *in vitro* can block the phase shifts induced by light *in vivo*, *NeuroReport*, 11 (2000) 1587-1591.
34. M.E. Harrington, S.M. Biello and P. Panula, Effects of histamine on circadian rhythms and hibernation, *Biological Rhythms Research*, 31 (2000) 374-390.
35. PC Yannielli and ME Harrington, Neuropeptide Y in the mammalian system: Effects on light-induced circadian responses, *Peptides*, 22 (2001) 547-556.
36. K.M. Schak*, S.P. Scordilis, G. Ferreyra, M.E. Harrington, Neuropeptide Y activates protein kinase C in hamster suprachiasmatic nuclei brain slices, *Biological Rhythm Research*, 32 (2001) 201-206.
37. P.C. Yannielli and M.E. Harrington, The neuropeptide Y5 receptor mediates the blockade of "photic-like" NMDA-induced phase shifts, *Journal of Neuroscience*, 21 (2001) 5367-5373.
38. C. Fukuhara, J. McKinley Brewer, J.C. Dirdena, E.L. Bittman, G. Tosini and M.E. Harrington, Neuropeptide Y rapidly reduces period1 and period2 mRNA levels in the hamster suprachiasmatic nucleus, *Neuroscience Letters*, 314 (2001) 119-122.
39. J. McKinley Brewer, P.C. Yannielli and M.E. Harrington, Neuropeptide Y differentially suppresses per1 and per2 mRNA induced by light in the suprachiasmatic nuclei of the golden hamster, *Journal of Biological Rhythms*, 17 (2002) 28-39.
40. P.C. Yannielli, J. McKinley Brewer and M.E. Harrington, Is novel wheel inhibition of per1 and per2 expression linked to phase shift occurrence?, *Neuroscience*, 112 (2002) 677-685.
41. C.A. Christian* and M.E. Harrington, Three days of novel wheel access diminishes light-induced phase delays *in vivo* with no effect on per1 induction by light, *Chronobiology International*, 19 (2002) 671-682.
42. A.C. Hall and M.E. Harrington, 'Experimental Methods in Neuroscience': an undergraduate neuroscience laboratory course for teaching ethical issues, laboratory techniques, experimental design and analysis, *The Journal of Undergraduate Neuroscience Education*, 2 (2003) A1-A7.
43. PC Yannielli, J. McKinley Brewer and M.E. Harrington, Blockade of the NPY Y5 receptor potentiates circadian responses to light: complementary *in vivo* and *in vitro* studies. *European Journal of Neuroscience*, 18 (2004) 891-897.
44. Hai-Ying M. Cheng, Karl Obrietan, Sean W. Cain, Bo Young Lee, Patricia V. Agostino, Nicholas A. Joza, Mary E. Harrington, Martin R. Ralph, Josef M. Penninger (2004) Dexas1 potentiates photic and suppresses non-photic responses of the circadian clock, *Neuron*, 43: 715-728.
45. PC Yannielli and ME Harrington (2004) Let there be 'more' light: enhancement of light actions on the circadian system through non-photic pathways, *Progress in Neurobiology* 74: 59-76.

46. S Soscia* and ME Harrington, Neuropeptide Y attenuates NMDA-induced phase shifts in the SCN of the NPY Y1 receptor knockout mice in vitro, *Brain Research*, 1023 (2004) 148-153.
47. S. Soscia* and ME Harrington (2005) Neuropeptide Y does not reset the circadian clock in NPY Y2^{-/-} mice, *Neuroscience Letters*, 373: 175-178.
48. G Lall and ME Harrington (2006) Potentiation of the resetting effects of light on circadian rhythms of hamsters using serotonin and neuropeptide Y receptor antagonists. *Neuroscience*, 141: 1545-52.
49. M Harrington, P Molyneux, S Soscia*, C Prabakar*, J McKinley-Brewer, and G Lall (2007) Behavioral and neurochemical sources of variability of circadian period and phase: Studies of circadian rhythms of npy^{-/-} mice, *American Journal of Physiology: Regulatory, Integrative and Comparative Physiology*, 292: R1306-1314.
50. PC Yannielli, PC Molyneux, ME Harrington, DA Golombek (2007) Ghrelin effects on the circadian system of mice. *J. Neurosci*, 27: 2890-5.
51. M Chansard, P Molyneux, K Nomura, ME Harrington, C Fukuhara (2007) c-Jun N-terminal kinase inhibitor SP600125 modulates the period of mammalian circadian rhythms, *Neuroscience* 145: 812-23.
52. Kessler EJ*, Sprouse J, Harrington ME. (2008) NAN-190 potentiates the circadian response to light and speeds re-entrainment to advanced light cycles. *Neuroscience*, 154: 1187-94.
53. Molyneux PC, Dahlgren MK*, and Harrington ME (2008) Circadian entrainment aftereffects in suprachiasmatic nuclei and peripheral tissues in vitro, *Brain Research*, 1228: 127-134.
54. Mickman C*, Stubblefield J*, Harrington ME, and Nelson DE (2008) Photoperiod alters the phase difference between activity onset in vivo and mPer2::luc peak in vitro, *American Journal of Physiology: Regulatory, Integrative and Comparative Physiology*, 295: R1688-94.
55. Kim HJ*, and Harrington ME (2008) Neuropeptide Y-deficient mice show altered circadian response to simulated natural photoperiod, *Brain Research* 1246: 96-100.
56. Agostino PV, Harrington ME, Ralph MR, and Golombek DA (2009) Casein kinase-1-epsilon (ck1e) and circadian photic responses in hamsters, *Chronobiology International*, 26: 126-133.
57. Davidson A, Castanon-Cervantes O, Leise T, Molyneux P, Harrington M (2009) Visualizing jet lag in the mouse suprachiasmatic nucleus and peripheral circadian timing system, *European Journal of Neuroscience*, 29: 171-80.
58. Guenther CJ*, Bickar D, Harrington ME (2009) Heme reversibly damps PERIOD2 rhythms in mouse suprachiasmatic nucleus explants. *Neuroscience*. 164: 832-841.
59. Harrington, M (2010) Location, location, location: important for jet-lagged loops, *J Clin Invest*, 120:2265-7.
60. Castillo C*, Carlson R*, Molyneux P, Harrington ME (2011) Restricted wheel access following a light cycle inversion slows re-entrainment without internal desynchrony as measured in Per2Luc mice, *Neuroscience*.182: 169-76
61. Wright KA*, Zimmerman EL*, Harrington ME, A modified Golgi-Cox procedure for use in undergraduate courses, *J Undergrad Neurosci Educ*, 10 (2011) A85-7.
62. Leise TL, Harrington ME (2011) Wavelet-based time series analysis of circadian rhythms. *J Biol Rhythms*, 26: 454-463.

63. Harrington, M (2012) Neurobiological studies of fatigue. *Prog. Neurobiol.* 99: 93-105.
64. Harrington ME (2012) Exercise strengthens circadian clocks. *J Physiol*, 590: 5929.
65. Leise TL, Harrington ME, Molyneux PC, Song I*, Queenan H*, Zimmerman E*, Lall GS, Biello SM (2013) Voluntary exercise can strengthen the circadian system in aged mice. *Age*, 35: 2137-2152.
66. David R. Bonsall and Mary E. Harrington, Circadian rhythm disruption in chronic fatigue syndrome, *Advances in Neuroimmune Biology*, 4 (2013) 265-274. DOI 10.3233/NIB-130074.
67. Guenther CJ*, Luitje ME*, Pyle LA*, Molyneux PC, Yu JK*, Li AS*, Leise TL, Harrington ME, Circadian rhythms of *Per2::Luc* in individual primary mouse hepatocytes and cultures, *PLoS One*, 9 (2014) e87573. Doi: 10.1371/journal.pone.0087573.
68. David R. Bonsall and Mary E. Harrington, Circadian regulation of arousal and its role in fatigue, (2015) *Circadian Medicine*, C. Colwell (Ed), Wiley-Blackwell.
69. Molyneux, P, Pyle, LA*, Dillon, M*, Harrington, ME (2015) A mouse primary hepatocyte culture model for studies of circadian oscillation, In *Current Protocols in Mouse Biology*, 5: 311-29. doi: 10.1002/9780470942390.mo150101. PubMed PMID: 26629774.
70. Bonsall DR, Kim H*, Tocci C*, Ndiaye A*, Petronzio A*, McKay-Corkum G*, Molyneux PC, Scammell TE, Harrington ME. (2015) Suppression of locomotor activity in female C57Bl/6J mice treated with Interleukin-1 β : Investigating a method for the study of fatigue in laboratory animals. *PLoS One*. 10:e0140678. PMID: 26469939.
71. Biello SM, Bonsall DR, Atkinson LA, Molyneux PC, Harrington ME, Lall GS. (2018) Alterations in glutamatergic signaling contribute to the decline of circadian photoentrainment in aged mice. *Neurobiol Aging*. 66:75-84. PubMed PMID: 29547750.
72. Leise TL, Goldberg A*, Michael J*, Montoya G*, Solow S*, Molyneux P, Vetrivelan R, Harrington ME. (2020) Recurring circadian disruption alters circadian clock sensitivity to resetting. *Eur J Nsc*, 51:2343-2354. PMID: 30269396.
73. Nicholls SK*, Casiraghi LP, Wang W*, Weber ET, Harrington ME. (2019) Evidence for internal desynchrony caused by circadian clock resetting. *Yale J Biol Med*. 92:259-270. PubMed PMID: 31249487.
74. Cenek L*, Klindziuk L*, Lopez C*, McCartney E*, Martin Burgos B*, Tir S*, Harrington, M.E., Leise, T.L. (2020) CIRCADAS: Shiny apps for exploration of experimental and synthetic circadian time series with an educational emphasis. *J Biol Rhythms*. 35:214-222 PMID: 31986956.
75. van der Vinne V, Martin Burgos B*, Harrington ME, Weaver DR. (2020) Deconstructing circadian disruption: Assessing the contribution of reduced peripheral oscillator amplitude on obesity and glucose intolerance in mice *J Pineal Res*, 69:e12654. doi:10.1111/jpi.12654
76. Lellupitiyage Don SS, Robertson KL, Lin H-H, Labriola C*, Harrington ME, Taylor SR, Farkas ME (2020) Nobiletin affects circadian rhythms and oncogenic characteristics in a cell-dependent manner. *PLoS ONE* 15(7): e0236315.
77. Merrow, M, Harrington, ME (2020) A functional context for heterogeneity of the circadian clock in cells. *Plos Biology*, 18:e3000927. doi: 10.1371/journal.pbio.3000927.

78. Tam, SKE, Brown, LA, Wilson, TS, Tir, S*, Potheary CA, van der Vinne, V, Foster, RG, Vyazovskiy, VV, Bannerman, DM, Harrington, M, Peirson, SN (2021) Dim light in the evening causes coordinated realignment of circadian rhythms, sleep, and short-term memory in mice. *Proceedings of the National Academy of Sciences*, 118:e2101591118. doi: 10.1073/pnas.2101591118
79. Martin-Burgos, B*, Wang, W*, William, I*, Tir, S*, Mohammad, I, Javed, R*, Smith, S*, Cui, Y*, Arzavala, J*, Mora, D*, Smith, CB, van der Vinne, V, Molyneux, PC, Miller, SC, Weaver, DR, Leise, TL, Harrington, ME (2022) Methods for detecting PER2::LUCIFERASE bioluminescence rhythms in freely moving mice. *J Biol Rhythms*, 37:78-93. doi: 10.1177/07487304211062829
80. Smith, CB, van der Vinne, V, McCartney, E*, Stowie, AC, Leise, TL, Martin-Burgos, BM*, Molyneux, PC, Garbutt, LA, Brodsky, MH, Davidson, AJ, Harrington, ME, Dallmann, R, Weaver, DR (2022) Cell-type specific circadian bioluminescence rhythms recorded in *Dbp* reporter mice. *J Biol Rhythms*, 37: 53-77. doi: 10.1177/07487304211069452.
81. Klerman, E., et al., (2022) Keeping an eye on circadian time in clinical research and medicine. *Clinical and Translational Medicine*, 12:e1131. Doi: 10.1002/ctm2.1131
82. Skapetze, L, Owino, A, Lo, EH, Arai, K, Merrow, M, Harrington, ME (in press) Rhythms in Barriers and Fluids: Circadian clock regulation in the aging neurovascular unit. *Neurobiology of Disease*.
83. Raizen, DM, et al., (2023) Beyond the symptom: the biology of fatigue. *Sleep*, 46:zsad069. Doi: 10.1093/sleep/zsad069.
84. Harrington, M, Takahashi, JS (2023) Patricia J. DeCoursey (28 December 1932 to 1 January 2022), *J. Biol. Rhythms*, 38: 242-244.

Editorials:

- Martino, TA, Harrington, ME (2020) The time for circadian medicine. *J Biol Rhythms* 35:419-420
- Cermakian, N, Harrington, ME (2021) Chronobiology in response to COVID-19. *J Biol Rhythms*, 36:3.
- Harrington, M (2023) Scientific Families. *J Biol Rhythms*, 38:219-220.

Book Review:

Harrington, M.E., *Neural oscillations*, *Science*, 257 (1992) 1146-1147.

Poem:

M.E. Harrington, *Feedback*, *Journal of Biological Rhythms*, 16 (2001) 277.

Books:

- M.E. Harrington, *The Design of Experiments in Neuroscience*, Wadsworth, Inc., 2005.
- M.E. Harrington, *The Design of Experiments in Neuroscience, Second Edition*, Sage, 2010.
- M.E. Harrington, *The Design of Experiments in Neuroscience, Third Edition*, Cambridge Univ. Press, 2020.

Recent Invited Scholarly Lectures and Other Professional Presentations

- 2023 “Properties of rhythms of skin from SCN-ablated mice”, Gordon Research Conference on Chronobiology.
- 2023 “A mouse tale: the center-periphery model”, Keynote address, RISER conference, Blacksburg, Virginia.
- 2023 “Hormones for Breakfast” UMass Amherst, May 2023.
- 2023 “Recording of bioluminescent rhythms from peripheral clocks: system properties following SCN ablation,” Canadian Society for Chronobiology, Guelph Ontario
- 2023 “Computing in Neuroscience”, Barnard College Panel discussion.
- 2022 “Methods for study of circadian rhythms in vivo”, Opsin Symposium, Seattle WA.
- 2022 “Experimental Design: Time to teach the basics”, Society for Neuroscience Symposium.
- 2021 “Approaches to study fatigue” session in NIH Blueprint for Neuroscience Research, “Beyond the symptom: The biology of fatigue”
- 2021 “Behind the Scenes Work of Scientific Journals.” University of Colorado Sleep and Circadian Summer School.
- 2021 “How to get your work published” for CINCHRON Marie Curie PhD students
- 2021 “Creating a Culture of Rigor” Neuroscience Scholars webinar
- 2020 “Impact of light and food cycles on liver phase using in vivo bioluminescent recordings of gene expression.” Poster SRBR.
- 2019 “Observing the circadian system adjust to a phase-shifted light cycle” Gordon Conference for Chronobiology, Barcelona.
- 2019 “Shifting the liver to a new time” Lab Talk, Oxford University, Oxford, UK.
- 2018 “Teaching Chronobiology” with Todd Weber, Workshop, SRBR, Amelia Island, FL.
- 2018 “Measuring Bioluminescence from Freely Behaving Mice”, Poster, SRBR, Amelia Island, FL.
- 2018 “Enhancing Rigor and Transparency” Webinar, Society for Neuroscience.
- 2017 “Measuring Bioluminescence from Freely Behaving Mice”, LASC, Valparaiso, Chile.
- 2017 “The Neurobiology of Fatigue” Univ. Pennsylvania, Philadelphia PA.
- 2017 “Building a model for the study of fatigue in mice” Sleep2017, Boston MA
- 2016 “Circadian rhythms disruption impact on health”, University of South Australia, Monash University, University Melbourne, Oct-Nov 2016
- 2016 “Flipping the classroom for student presentations: Podcasts coupled with on-line discussions”, Society for Neuroscience conference, San Diego, CA
- 2016 “Circadian clock disruption and health” Keynote address, Kendric C. Smith Interdisciplinary symposium, American Society for Photobiology, Tampa FL.
- 2016 Webinar: “Keeping a lab Notebook”, co-presenter with Dr. H. de la Iglesia, To Neuroscience Scholars Program awardees, Society for Neuroscience.

2016, “Juggling research, teaching, and service responsibilities in academia: Can you really do it all?” Society for Research on Biological Rhythms conference, Florida.

2016, “Developing and maintain records of research”, co-presenter with Dr. H. de la Iglesia, Society for Research on Biological Rhythms conference, Florida.

2016 “Smithies in Panama: An Integrative Field Course in the Tropics”, Sigma Xi Series, Smith College.

2015 “Optimizing experimental design for high-quality science” Society for Neuroscience Short Course, Chicago IL.

2015, “Talking about Sleep”, Smith College Reunion

2014, “Inflammation-induced Fatigue: Exploring neurobiological mechanisms and potential treatments” Society for Neuroscience, Washington DC

2014, “The Memory Muscle: Understanding the brain and keeping it fit”, Glenmeadow Learning in Retirement Series

2014, “Sleep through the ages”, Summer Science and Engineering Program, Smith College.

2014, “Sleep through the ages”, Loomis Retirement Community, South Hadley, MA

2013, “How your brain stores memories”, Loomis Retirement Community, South Hadley, MA

Other Professional Activities

Vice-Chair, Gordon Research Conference on Chronobiology, 2023- present.

Editor-in-Chief, *Journal of Biological Rhythms*, 2020-present

CoChair, 2020 International Chronobiology Summer School, with Dr. Karyn Esser. 05/14 – 08/27.

Chair, Education Committee, Society for Research on Biological Rhythms, 2018-2020

Trainee Day Planning Committee, Society for Research on Biological Rhythms, 2017-2018

Treasurer, Society for Biological Rhythms, 2016-2018

Editorial Board, *Neuroscience*, 2012- 2016

Associate Editor, *Journal of Neuroscience*, 2001-2007

External reviewer for Neuroscience Program site visits: Oberlin College (2002), Lafayette College (2005), Wellesley College (2006), Mt. Holyoke College (2011), Stonehill College (2015)

External reviewer for Psychology Dept. Connecticut College (2010), Davidson College (2014)

Expert for Faculty of 1000, 2008-2010

Program Committee, Society for Research on Biological Rhythms, 2009-2010

Advisory Board member, SOMAS (Support of mentors and their students in the neurosciences), 2006-2009

Electorate Nominating Committee, AAAS, 2003-2006

Beckman Scholars Advisory Panel, 2002-2003

Study Section Reviewer, NIH Biological Rhythms and Sleep Study Section, Oct., 2003, BioPsychology Study Section, Feb. 1999, and Feb. 2000, NIA 2013.

Member-at-Large, Executive Committee, Society for Research on Biological Rhythms, 1996-98.

Ad Hoc Reviewer for multiple journals (e.g. European Journal of Neuroscience, Journal of Biological Rhythms, Journal of Comparative Physiology, PNAS) and granting agencies (e.g. Air Force Office of Scientific Research, NSF, NIH, MRC Canada, Canada Research Chairs)

Dissertation committees:

Michele Dwyer, University of Massachusetts, Neuroscience and Behavior (NSB) Program, 1989-1993
(Primary supervisor)
Russ Margraf, Wesleyan University, Dept. of Biology, 1990-1992.
Yvon DeVille, University of Massachusetts, NSB program, 1990-1992.
Horacio de la Iglesia, University of Massachusetts, NSB Program, 1992-1997.
Piotr Zlomanczuk, Wesleyan University, Dept. of Biology, 1992-1994.
Debra Nickla, The City College of CUNY, Dept. of Biology, 1992-1993
Skirmantas Janusonis, University of Massachusetts, NSB Program, 1999-2001.
Melissa Birkett, University of Massachusetts, NSB Program, 2001-2003.
Liqun Liu, University of Massachusetts, NSB Program, 2003.
Mary Costello, University of Massachusetts, NSB Program, 2006-2007 (Primary supervisor)
Christina Gagliardi, University of Massachusetts, NSB Program, 2014.
Janna Mantua, University of Massachusetts, NSB Program, 2015-2016.
Hui-Hsien (Tanya) Lin, University of Massachusetts, Chemistry Dept., 2015-2020.

Professional Memberships

Society for Neuroscience (1982-present).
Society for Research on Biological Rhythms (1986-present).
Sigma Xi (1988-present)
Faculty for Undergraduate Neuroscience (2001 – present)
Psychoneuroimmunology Research Society (2012-2016)

College Service

2023-present, Director, Neuroscience Program
2014-2021 Director, Neuroscience Program
2006-present – Institutional Animal Care and Use Committee, (chair alternate from 2014 on)
1999- 2020 Neuroscience Program Study Abroad Advisor
2009 – present, Faculty adviser, Pioneer Valley Chapter Nu Rho Psi
2001-2005, 2007-2011, 2016-2021– Science Planning Committee
2014 – 2017 Lewis Global Studies Center Advisory Board, 2020-present, CSA board.
2020 – 2021 Science Center Distinguished Fellowships and Scholarships Committee
2001-2005, 2016-2020 – Board of Counselors (Chair, 2002-2005)
2013- 2016 Science Center Committee on Diversity
2000, 2016 –2020 Psychology Department Colloquium Chair
2012 – 2016 McKinley Honors Fellowship Committee
2014 – 2015 President, Smith College Chapter, Sigma Xi
2010- 2011 Science Center Renovations Operations Committee
2008 - 2011 Sherrerd Teaching Award Committee
2008 – Building 2 Planning Committee
2007 – Working group for Center for International Studies
2006 - Classroom Subcommittee
2006-2008 – Kahn Institute Advisory Board
2003-2004 Programming Committee for Engineering and Molecular Science Building
2003-2004 Subcommittee on Science Center classrooms (Chair)

2002 - Search Committee for Engineering Building Architect
2002 - 2003 – Search Committee for Health Psychology position (Chair)
2000-2002 - Institutional Animal Care and Use Committee
2000- 2001 - Mellon Faculty Career Enhancement Grant Committee
2000- 2001 Search Committee for the Manager of Inventory and Regulatory Affairs
1996-99 - Director, Smith College Neuroscience Program
1996 - Keck Foundation Neuroscience grant application (Chair)
1995-98 - Pioneer Valley chapter of Association for Women in Science (President)
1994-95 - President Elect, Pioneer Valley chapter of AWIS, in formation.
1993-94 - Search Committee, two Physiological Psychologist positions.
1992-93 - Search Committee, Physiological Psychologist position (Chair)
1992-93 - Science Center Safety Committee.
1992-93 - CAP Subcommittee on Course Selections.
1988-91 - Howard Hughes Medical Institute Grant Committee.
1988-91 - Institutional Animal Care and Use Committee.
1990-91 - Psychology Department Long Range Planning Committee.
1990-91 - Ford and Xerox Summer Internships Committee.
1990-91 - Ad Hoc Committee on Funding Sources and Academic Freedom.
1990-91 - CAP Science Literacy Subcommittee.
1988-90 - Psychology Department Colloquium Chair.
1987-88 - Psychology Department Secretary.
1987-88 - Howard Hughes Medical Institute Grant Application Committee