

RANDY J. NELSON

CURRICULUM VITAE

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EDUCATION (University of California, Berkeley)

AB	Psychology (High Honors)	1978
MA	Psychology	1980
PhD	Psychology	1983
PhD	Endocrinology	1984

PROFESSIONAL EXPERIENCE

Post-Doctoral Fellow, University of Texas, Austin (Drs. F.H. Bronson & C. Desjardins, Sponsors), 1984-1986.

Assistant Professor of Psychology, The Johns Hopkins University, Baltimore, MD 1986-1991.

Assistant Professor of Population Dynamics, Reproductive Biology Division, The Johns Hopkins University, School of Hygiene and Public Health, Baltimore, MD 1986-1991 (Joint appointment).

Associate Professor of Psychology, The Johns Hopkins University, Baltimore, Maryland, 1991-1996.

Associate Professor of Population Dynamics, Reproductive Biology Division, The Johns Hopkins University, School of Hygiene and Public Health, Baltimore, MD 1991-1996 (Joint appointment).

Program Director, Physiology and Behavior Program, Integrative Biology and Neuroscience Division, National Science Foundation, Arlington, Virginia, 1995-1996.

Professor of Psychology, The Johns Hopkins University, Baltimore, MD 1996-2000.

Professor of Neuroscience, The Johns Hopkins University, Baltimore, MD 1996-2000.

Professor of Biochemistry & Molecular Biology, Reproductive Biology Division, The Johns Hopkins University, School of Hygiene and Public Health, Baltimore, MD 1996-2000 (Joint appointment).

Program Director, Neuroendocrinology Program, Integrative Biology and Neuroscience Division, National Science Foundation, Arlington, Virginia, 1998.

Distinguished Professor of Social and Behavioral Sciences, The Ohio State University, Columbus, Ohio 2000-2009.

Professor of Psychology and Neuroscience, The Ohio State University, Columbus, Ohio; 2000-2018.

Co-Director, Neuroscience Graduate Studies Program, The Ohio State University, Columbus, Ohio; 2003-2009.

Member: Institute for Behavioral Medicine Research, The Ohio State University, Columbus, Ohio; 2004-2018.

Professor of Evolution, Ecology, and Organismal Biology, The Ohio State University, Columbus, Ohio; 2005-2015.

Visiting Scholar, Department of Psychology, University of California, San Diego; 2009-present.

Visiting Scientist, Laboratory of Genetics, Salk Institute, San Diego; 2009-present.

Chair, Department of Neuroscience, The Ohio State University, Columbus, Ohio; 2009-2018.

Brumbaugh Chair in Brain Research and Teaching, The Ohio State University, Columbus, Ohio; 2009-2018.

Distinguished Professor of the College of Medicine, The Ohio State University, Columbus, Ohio; 2012-2018.

Distinguished University Professor, The Ohio State University, Columbus, Ohio; 2013-2018.

Co-Director, Ohio State Neuroscience Research Institute, The Ohio State University, Columbus, Ohio; 2014-2018.

Faculty Lead, Brain Injury Discovery Theme, The Ohio State University, Columbus, Ohio; 2015-2018.

Professor and Chair of Neuroscience, West Virginia University, Morgantown, WV; 2018-present.

Hazel Ruby McQuain Chair for Neurological Research, West Virginia University, Morgantown, WV; 2018-present.

Executive Director of Foundational Research, Rockefeller Neuroscience Institute, West Virginia University, Morgantown, WV; 2018-present.

Director of Neuroscience Graduate Program, West Virginia University, Morgantown, WV; 2018-2022.

Executive Director of the West Virginia University Center for Foundational Neuroscience Research and Education, West Virginia University, Morgantown, WV; 2020-present.

HONORS AND AWARDS

Phi Beta Kappa, 1978

Psi Chi, 1978.

National Institute of Mental Health Pre-Doctoral Traineeship, 1981-1983.

Distinguished Teacher, Committee on Teaching of the Berkeley
Division of the Academic Senate, University of California, 1981-1982, 1982-1983.

National Institutes of Health Individual Post-Doctoral Fellowship, 1984-1986.

Sigma Xi, 1985.

NIH, James A. Shannon Award for Innovative Research, National Cancer Institute, 1992-1994.

Distinguished Professor of Social and Behavioral Sciences, 2000-2009.

Ohio State University Psychology Department Fred Brown Research Award, 2001-2002.

ALPCO/Buhlmann Distinguished Lectureship, Society for Light Treatment & Biological Rhythms, 2002.

Fellow, American Association for the Advancement of Science, Elected 2002.

J.P. Scott Memorial Distinguished Lectureship in Neuroscience, Bowling Green State University, 2004.

Accomplishment Based NSF Grant Renewal, "Photoperiodic effects on immune function." 2004-2009.

Fellow, American Psychological Association, Division 6, Elected 2005.

Fellow, Association for Psychological Science, Elected 2006.

Distinguished Scholar Award, Ohio State University, 2006.

Fellow, Animal Behavior Society, Elected 2006.

Ohio State University Psychology Department Fred Brown Research Award, 2007-2008.

Distinguished Lecturer, Ohio State University, 2008-2009.
"Faculty of 1000 Biology," Invited contributing Faculty Member (Neural homeostasis) (renamed to Faculty Opinions), 2008-present.
Nu Rho Psi Induction, 2010.
Alumni Distinguished Teaching Award, Ohio State University, 2009.
Ohio State University Academy of Teaching, 2009-2018.
President, Central Ohio Chapter of the Society for Neuroscience, 2006-2012.
Vice-President, US Midwest, National Nu Rho Psi Honor Society (Neuroscience Honor Society). 2012-2015.
Dr. John D. and E. Olive Brumbaugh Chair in Brain Research and Teaching, 2009-2018.
Distinguished Professor, College of Medicine, Ohio State University Medical Center, 2012-2018.
Distinguished University Professor, The Ohio State University, 2013-2018
Howard Bern Lecturer, Society for Integrative and Comparative Biology, West Palm Beach, FL, 2015.
Daniel Lehrman Lifetime Career Award, Society for Behavioral Neuroendocrinology, 2016.
Award for Education in Neuroscience, Society for Neuroscience, 2017.
American Psychological Association Neal Miller Distinguished Lecture, Washington, DC, 2020.

MEMBERSHIPS IN PROFESSIONAL SOCIETIES

American Association for the Advancement of Science, Fellow
American Psychological Association, Fellow
American Society of Mammalogists
Animal Behavior Society, Fellow
Association for Psychological Science, Fellow
Psychoneuroimmunology Research Society
Society for Behavioral Neuroendocrinology
 Co-organizer of first annual meeting
 Advisory Board 2004-2007
 Chair, Program Committee, 2006-2007
 Program Committee, 2007-2009
 Chair, Web Committee, 2009-2011
 Advisory Committee, 2011-present
Society for Neuroscience
Society for the Study of Biological Rhythms
Society for the Study of Reproduction
 Member of the Education Committee, 1982-1983; 1985-1986
 Chairperson of the Education Committee, 1986-1987
Member of the Membership Committee; 1990-1994.

PROFESIONAL SERVICE

Grant Application Reviewer:

Behavioral and Neurosciences Study Section, NIH, 1986-1987.
National Science Foundation (ad hoc reviewer), 1986-2008
National Science Foundation (Dissertation Improvement Panel), 2003.
NSF Site Visit Panelist, chair, 2002
 Study Panel Member, 1995-1997. Animal Behavior, NSF
 Animal Behavior Program Officer, NSF, 1996-1997.

Neuroendocrinology Program Officer, NSF, 1998-1999.
Study Panel Member 1995-1996. Minority Biomedical Research Support, Physiology Review Panel, NIGMS, NIH.
Study Panel Member 1998-1999. Psychopharmacology Review Panel, NIDA, NIH.
Study Panel Member, 2000-2001. IFCN-2, NIH.
Study Panel Ad hoc member, 2002-2003 BBBP-1, NIH
Study Panel Member, 2002-2003, NIH Special Emphasis Panel IFCN-1.
Study Panel Ad hoc member, 2005-2006, NIH BRS panel.
Study Panel Ad hoc member, 2006-2008, NIH, Chronic Fatigue Syndrome RFA panel.
Study Panel, Member, 2006-2009, NIH Neuroscience Blueprint Conte Center grant panel.
Study Panel, Member, 2007-2009, NIH Neurogenetics and Neurogenomics panel.
Study Panel Member, 2007, NIH Novel Genetic Tools to Study Brain Function panel
Study Panel Member, 2014-2018, NIH Conflict: Integrative Neuroscience panel
Study Panel Member, 2008-2009, NIH T32 Training Grants panel.
Medical Research Council (Great Britain), 2002-2003
NSF Neuroendocrinology Preproposal Panel, 2013-2015.
Guggenheim Foundation
Whitehall Foundation
Sloan Foundation
World Wildlife Fund
Burroughs-Wellcome Fund
Austrian Science Foundation (Förderung der wissenschaftlichen Forschung)
Natural Sciences and Engineering Research Council of Canada
Israel Science Foundation
Science Foundation Ireland
Biotechnology and Biological Sciences Research Council (UK)
Saskatchewan Health Research Foundation
US-Israel Binational Science Foundation
Spanish Ministry of Health Cooperative Research Networks
UK National Centre for the Replacement, Refinement and Reduction of Animals in Research
Ontario Mental Health Foundation
Wellcome Foundation
Swiss National Science Foundation

Editor:

Newsletter for the Society for the Study of Reproduction; 1986-1988.
Associate Editor: *Hormones and Behavior*; 2012-2018.
Associate Editor: *Journal of Experimental Zoology A: Ecological Genetics and Physiology*; 2014-2019.
Co-Editor in Chief: *Journal of Experimental Zoology A: Ecological Genetics and Physiology*; 2020-2021
Editor in Chief: *Journal of Experimental Zoology A: Ecological Genetics and Physiology*; 2021-

Editorial Board Memberships:

Journal of Pineal Research; 1998-2002.
Behavioral Neuroscience; 1997-2024.
Frontiers in Behavioral Neuroscience; 2007-2024.
Frontiers in Integrative Pharmacology; 2010-2014.
Brain, Behavior, and Immunity; 2007-2015.
Physiology & Behavior; 2008-2024.

International Journal of Zoology; 2008-2016.
Advanced Studies in Biology; 2008-2018.
Open Journal of Neuroendocrinology; 2008-2019.
Hormones and Behavior; 2012-2022.
Associate Editor; 2012-2017.
Journal of Biological Rhythms; 2014-2022.
Oxford Research Encyclopedia in Neuroscience; 2014-2024.
Journal of Experimental Zoology; 2013-2024.
Associate Editor; 2013-2020
Editor-in-Chief; 2021-2024.

Advisory Boards:

Society for Behavioral Neuroendocrinology, 2001-2007; 2012-2022.
Program Committee Chair, 2006-2007.
Allyn & Bacon Publishers, Faculty Advisory Board, 2008-2009.
Neuroscience Advisory Committee, Center for Global Nonkilling, 2008-2019.
National Science Foundation, Advisory Committee, Biology Directorate, 2014-2018.
National Science Foundation, Alan T. Waterman Award Committee, 2014-2017.
National Academies of Science Committee on the NSF Rules of Life, 2022-2023.
National Academies of Science Planning Committee for four national workshops: epigenetics
microbiome synthetic cell, and cross-cutting workshops, 2022-2023.

BOOK SERIES EDITOR

Hormones, Brain and Behaviour Series. 2000-2008. Published by Springer-Verlag, New York. Gregory Ball, Jacques Balthazart, and Randy J. Nelson (co-editors).
Oxford Series in Behavioral Neuroendocrinology. 2009-present. Published by Oxford University Press, New York. Gregory Ball, Jacques Balthazart, and Randy J. Nelson (co-editors).
Handbook of Psychology. Biopsychology, Vol. 3. 2002. Wiley & Sons, New York. Michela Gallagher and Randy J. Nelson (co-editors).
Handbook of Psychology. Biopsychology and Neuroscience, Vol. 3. 2013. Wiley & Sons, New York. Randy J. Nelson and Sheri Mizumori (co-editors).
Encyclopedia of Animal Behavior. 2019. Second Edition. Elsevier Major Reference Works, Oxford, UK. Randy J. Nelson (Hormones and Behavior section editor).
Oxford Encyclopedia of Neuroscience. Neuroendocrine and Autonomic section. 2023. Oxford University Press, New York. Randy J. Nelson (Editor).

PUBLICATIONS

Journal Articles and Book Chapters

1. Carmichael, M.S., Nelson, R.J. & Zucker, I. 1981. Hamster activity and estrous cycles: Control by a single versus multiple circadian oscillator(s). *Proceedings of the National Academy of Sciences (USA)*, 78:7830-7834. doi:10.1073/pnas.78.12.7830. PMID: 6950423.
2. Nelson, R.J. & Zucker, I. 1981. Photoperiodic control of reproduction in olfactory-bulbectomized rats. *Neuroendocrinology*, 32:266-271. doi:10.1159/000123171. PMID: 7242854.
3. Nelson, R.J. & Zucker, I. 1981. Absence of extraocular photoreception in diurnal and nocturnal rodents exposed to direct sunlight. *Comparative Biochemistry and Physiology*, 69A:145-148. doi:10.1016/0300-9629(81)90651-4.

4. Nelson, R.J., Bamat, M.K. & Zucker, I. 1982. Photoperiodic regulation of testis function in rats: Mediation by a circadian mechanism. *Biology of Reproduction*, 26:329-335. doi:10.1095/biolreprod26.2.329. PMID: 7066459.
5. Beasley, L.J. & Nelson, R.J. 1982. Thyroid gland influences the period of hamster oscillations. *Experientia*, 38:870-871. doi:10.1007/BF01972325. PMID: 6809491.
6. Forger, N.G. & Nelson, R.J. 1983. Rhythms of barbiturate-induced sleep time in deer mice entrained to non-twenty-four hour photocycle. *Physiology and Behavior*, 31:379-383. doi:10.1016/0031-9384(83)90205-6. PMID: 6355008.
7. Nelson, R.J., Dark, J. & Zucker, I. 1983. Influence of photoperiod, nutrition and water availability on reproduction of male California voles (*Microtus californicus*). *Journal of Reproduction and Fertility*, 69:473-477. doi:10.1530/jrf.0.0690473. PMID: 6355461.
8. Heske, E.J. & Nelson, R.J. 1984. Pregnancy interruption in *Microtus ochrogaster*: Laboratory artifact or field phenomenon? *Biology of Reproduction*, 31:97-103. doi:10.1095/biolreprod31.1.97. PMID: 6380603.
9. Nelson, R.J., Fleming, A.S., Wysocki, C.J., Shinder, T.W. & Zucker, I. 1985. Chemosensory and neural influences on photoperiodic responsiveness of laboratory rats. *Neuroendocrinology*, 40: 285-290. doi:10.1159/000124088. PMID: 3990912.
10. Nelson, R.J. 1985. Photoperiod influences reproduction in the prairie vole, *Microtus ochrogaster*. *Biology of Reproduction*, 33:596-602. doi:10.1095/biolreprod33.3.596. PMID: 3902106.
11. Nelson, R.J. 1985. Photoperiodic regulation of reproductive development in male prairie voles: Influence of laboratory breeding. *Biology of Reproduction*, 33:418-422. doi:10.1095/biolreprod33.2.418. PMID: 3899205.
12. Smale, L., Nelson, R.J. & Zucker, I. 1985. Neuroendocrine responsiveness to oestradiol and male urine in the neonatally androgenized prairie vole (*Microtus ochrogaster*). *Journal of Reproduction and Fertility*, 74:491-496. doi:10.1530/jrf.0.0740491. PMID: 3900382.
13. Nelson, R.J., Mason, R.T., Krohmer, R.W. & Crews, D. 1987. Pinealectomy blocks vernal courtship behavior in red-sided garter snakes. *Physiology and Behavior*, 39:231-233. doi:10.1016/0031-9384(87)90014-x. PMID: 3575458.
14. Nelson, R.J. 1987. Photoperiod-nonresponsive morphs: A possible variable in microtine population density fluctuations. *American Naturalist*, 130:350-369. doi:0003-014718713003-00.
15. Nelson, R.J. & Desjardins, C. 1987. Water availability affects reproduction in deer mice. *Biology of Reproduction*, 37:257-260. doi:10.1095/biolreprod37.2.257. PMID: 3676383.
16. Nelson, R.J. & Zucker, I. 1987. Spontaneous testicular recrudescence of Syrian hamsters: Role of stimulatory photoperiods. *Physiology and Behavior*, 39:615-618. doi:10.1016/0031-9384(87)90161-2. PMID: 3588707.
17. Nelson, R.J. 1987. Gonadal regression induced by caloric restriction is not mediated by the pineal gland in deer mice (*Peromyscus maniculatus*). *Journal of Pineal Research*, 4:339-345. doi:10.1111/j.1600-079x.1987.tb00871.x. PMID: 3625465.
18. Rissman, E.R., Nelson, R.J., Blank, J.L. & Bronson, F.H. 1987. Reproductive response of a tropical mammal, the musk shrew (*Suncus murinus*), to photoperiod. *Journal of Reproduction & Fertility*, 81:563-566. doi:10.1530/jrf.0.0810563. PMID: 3430473.
19. Smale, L., Nelson, R.J. & Zucker, I. 1988. Daylength influences pelage and prolactin concentrations but not reproduction in the prairie vole, *Microtus ochrogaster*. *Journal of Reproduction and Fertility*, 83:99-106. doi:10.1530/jrf.0.0830099. PMID: 3294399.
20. Nelson, R.J. 1988. Restricted water intake influences male reproduction in two strains of house mice (*Mus musculus*). *Physiology & Behavior*, 43:217-221. doi:10.1016/0031-9384(88)90241-7. PMID: 3212059.
21. Blank, J.L., Nelson, R.J. & Buchberger, A. 1988. Cytochrome oxidase activity in brown fat varies with reproductive response and use of torpor in deer mice. *Physiology & Behavior*, 43:301-306. doi:10.1016/0031-9384(88)90191-6. PMID: 2845453.

22. Blank, J.L., Nelson, R.J., Vaughan, M.K. & Reiter, R.J. 1988. Pineal melatonin content in photoperiod-responsive and nonresponsive phenotypes of deer mice. *Comparative Biochemistry and Physiology*, 91A:535-537. doi:10.1016/0300-9629(88)90631-7. PMID: 2906835.
23. Crews, D., Hingorani, V. & Nelson, R.J. 1988. Role of the pineal gland in the control of annual reproductive and physiological cycles in the red-sided garter snake (*Thamnophis sirtalis parietalis*). *Journal of Biological Rhythms*, 3:293-302. doi:10.1177/074873048800300307.
24. Quinlan, D.M., Nelson, R.J., Partin, A.W., Mostwin, J.L. & Walsh, P.C. 1989. The rat as a model for the study of penile erection. *Journal of Urology*, 141:656-661. doi:10.1016/s0022-5347(17)40926-8. PMID: 2918611.
25. Nelson, R.J., Frank, D., Smale, L. & Willoughby, S.B. 1989. Photoperiod and temperature affect reproductive and nonreproductive functions in male prairie voles (*Microtus ochrogaster*). *Biology of Reproduction*, 40:481-485. doi:10.1095/biolreprod40.3.481. PMID: 2667648.
26. Gubernick, D. & Nelson, R.J. 1989. Prolactin and paternal behavior in a biparental Mouse (*Peromyscus californicus*). *Hormones and Behavior*, 23:203-210. doi:10.1016/0018-506X(89)90061-5. PMID: 2744739.
27. Nelson, R.J., Frank, D., Bennett, S.A. & Carter, C.S. 1989. Simulated drought influences reproduction in male prairie voles. *Physiology & Behavior*, 46: 849-852. doi:10.1016/0031-9384(89)90047-4. PMID: 2697880.
28. Smale, L., Lee, T.M., Nelson, R.J. & Zucker, I. 1990. Prolactin counteracts effects of short day length on pelage growth in the meadow vole, *Microtus pennsylvanicus*. *Journal of Experimental Zoology*, 253:186-188. doi:10.1002/jez.1402530208. PMID: 2179462.
29. Nelson, R.J., Badura, L. & Goldman, B.D. 1990. Mechanisms of seasonal cycles of behavior. *Annual Review of Psychology*, 41:81-108. doi: 10.1146/annurevs.ps.41.020190.000501. PMID: 2407180.
30. Nelson, R.J. & Shiber, J.R. 1990. Photoperiod affects reproductive responsiveness to 6-methoxy-2-benzoxazolinone in house mice. *Biology of Reproduction*, 43:586-591. doi:10.1095/biolreprod43.4.586. PMID: 2289012.
31. Nelson, R.J. 1990. Photoperiodic responsiveness in laboratory house mice. *Physiology & Behavior*, 48:403-408. doi:10.1016/0031-9384(90)90335-2. PMID: 2267249.
32. Moffatt, C.A., Bennett, S.A. & Nelson, R.J. 1991. Effects of photoperiod and 6-methoxy-2-benzoxazolinone on induced estrus in prairie voles. *Physiology & Behavior*, 49:27-31. doi:10.1016/0031-9384(91)90225-d. PMID: 2017478.
33. Quinlan, D.M., Nelson, R.J. & Walsh, P.C. 1991. Cavernous nerve grafts restore erectile function in a rat model. *Journal of Urology*, 145:380-383 doi:10.1038/ijir.2014.32. PMID: 1988738.
34. Burgers, J.K., Nelson, R.J., Quinlan, P.C. & Walsh, P.C. 1991. Nerve growth factor, nerve grafts and amniotic membrane grafts restore erectile function in rats. *Journal of Urology*, 146:463-468. doi: 10.1016/s0022-5347(17)37825-4. PMID: 1856953.
35. Nelson, R.J. 1991. Maternal diet influences reproductive development in male prairie vole offspring. *Physiology & Behavior*, 50:1063-1066. doi: 10.1016/0031-9384(91)90438-t. PMID: 1805270.
36. Nelson, R.J., Kita, M., Blom, J.M.C. & Rhyne-Grey, J. 1992. Photoperiod influences the critical caloric intake necessary to maintain reproduction among male deer mice (*Peromyscus maniculatus*). *Biology of Reproduction*, 46:226-232. doi: 10.1095/biolreprod46.2.226. PMID: 1536898.
37. Moffatt, C.A. & Nelson, R.J. 1992. May/December romance: Adaptive significance *non probabilis est*. *Behavioral and Brain Sciences*, 15:106-107. doi:1017/S0140525X00067753.
38. Ruby, N.F., Nelson, R.J., Licht, P. & Zucker, I. 1993. Prolactin and testosterone inhibit torpor in Siberian hamsters. *American Journal of Physiology*, 264:R123-R128. doi:10.1152/ajpregu.1993.264.1.R123. PMID: 8430873.

39. Goldman, B.D. & Nelson, R.J. 1993. Melatonin and seasonality in mammals. In: *Melatonin: Biosynthesis, Physiological Effects and Clinical Applications*. H.S. Yu & R.J. Reiter (Eds), CRC Press:New York, pp. 225-252.
40. Nelson, R.J. 1993. The effects of simulated drought on reproductive function of deer mice (*Peromyscus maniculatus bairdii*). *Physiological Zoology*, 66:99-114. doi:0031-935X/93/6601-9229.
41. Calhoun, S., Hulse, S.H., Braaten, R.F., Page, S.C. & Nelson, R.J. 1993. Preference for conspecific and alien song by canaries (*Serinus canaria*) and European starlings (*Sturnus vulgaris*) as a function of photoperiod. *Journal of Comparative Psychology*, 107:235-241. doi:10.1037/0735-7036.107.3.235.
42. Nelson, R.J. & Blom, J.M.C. 1992. 6-Methoxy-2-benzoxazolinone and photoperiod: Prenatal and postnatal influences on reproductive development in prairie voles (*Microtus ochrogaster*). *Canadian Journal of Zoology*, 71:776-789. doi:10.1139/z93-103.
43. Gorman, M.R., Ferkin, M.H., Nelson, R.J. & Zucker, I. 1993. Reproductive status influences odour preferences of the meadow vole, *Microtus pennsylvanicus*, in winter day lengths. *Canadian Journal of Zoology*, 71:1748-1754. doi:10.1139/z93-248.
44. Moffatt, C.A., DeVries, A.C. & Nelson, R.J. 1993. Winter adaptations of male deer mice (*Peromyscus maniculatus*) and prairie voles (*Microtus ochrogaster*) that vary in reproductive responsiveness to photoperiod. *Journal of Biological Rhythms*, 8:221-232. doi:10.1177/074873049300800305. PMID: 8280911.
45. Moffatt, C.A. & Nelson, R.J. 1994. Day length influences proceptive behavior of female prairie voles (*Microtus ochrogaster ochrogaster*). *Physiology & Behavior*, 55:1163-1165. doi:10.1016/0031-9384(94)90405-7. PMID: 8047587.
46. O'Hara, B.F., Donovan, D.M., Lindberg, I., Brannock, M.T., Ricker, D.D., Moffatt, C.A., Klaunberg, B.A., Schindler, C., Chang, T.S.K., Nelson, R.J. & Uhl, G.R. 1994. Proenkephalin transgenic mice: A short promoter confers high testis expression and reduced infertility. *Molecular Reproduction and Development*, 38:275-284. doi:10.1002/mrd.1080380308. PMID: 7917279.
47. Blom, J.M.C., Gerber, J. & Nelson, R.J. 1994. Day length affects immune cell numbers in deer mice: interactions with age, sex, and prenatal photoperiod. *American Journal of Physiology*, 267: R596-R601. doi:10.1152/ajpregu.1994.267.2.R596. PMID: 8067473.
48. Nelson, R.J., Moffatt, C.A. & Goldman, B.D. 1994. Reproductive and nonreproductive responsiveness to photoperiod in laboratory rats function in male rats. *Journal of Pineal Research*, 17:123-131. doi:10.1111/j.1600-079x.1994.tb00123.x. PMID: 7897584.
49. Nelson, R.J., & Blom, J.M.C. 1994. Photoperiodic effects on tumor development and immune function. *Journal of Biological Rhythms*, 9:233-249. doi:10.1177/074873049400900305. PMID: 7772792.
50. Moffatt, C.A., Nelson, R.J. & Ball, G.F. 1995. The effects of photoperiod on olfactory c-fos expression in prairie voles, *Microtus ochrogaster*. *Brain Research*, 677:82-88. doi:10.1016/0006-8993(95)00125-a. PMID: 7606471.
51. Nelson, R.J., Gubernick, D.J. & Blom, J.M.C. 1995. Influences of photoperiod, green food, and water intake on reproduction in male California mice (*Peromyscus californicus*). *Physiology & Behavior*, 57:1175-1180. doi:10.1016/0031-9384(94)00380-n. PMID: 7652040.
52. Blom, J.M.C., Tamarkin, L., Shiber, J.R. & Nelson, R.J. 1995. Learned immunosuppression is associated with an increased risk of chemically-induced tumors. *Neuroimmunomodulation*, 2:92-99. doi:10.1159/000096877. PMID: 8521145.
53. Moffatt, C.A., Gerber, J.M., Blom, J.M.C., Kriegsfeld, L.J. & Nelson, R.J. 1995. Photoperiodic effects on steroid negative-feedback in female prairie voles (*Microtus ochrogaster*). *General and Comparative Endocrinology*, 100:92-95. doi:10.1006/gcen.1995.1137. PMID: 8575664.

54. Nelson, R.J., Demas, G.E., Huang, P., Fishman, M.C., Dawson, V., Dawson, T.M. & Snyder, S.H. 1995. Behavioural abnormalities in male mice lacking neuronal nitric oxide synthase. *Nature*, 378:383-386. doi:10.1038/378383a0. PMID: 7477374.
55. Nelson, R.J., Demas, G.E., Klein, S.L. & Kriegsfeld, L.J. 1995. The influence of season, photoperiod, and pineal melatonin on immune function. *Journal of Pineal Research*, 19:149-165. doi:10.1111/j.1600-079x.1995.tb00184.x. PMID: 8789246.
56. Nelson, R.J., Fine, J.M., Demas, G.E. & Moffatt, C.A. 1996. Photoperiod and population density interact to affect reproductive, adrenal, and immune function in male prairie voles (*Microtus ochrogaster*). *American Journal of Physiology*, 270:R571-577. doi:10.1152/ajpregu/1996.270.3.R571. PMID: 8780222.
57. Nelson, R.J., DeVries, A.C., Asfaw, B. & Demas, G.E. 1996. Influence of photoperiod on corticosterone levels and immune function in prairie voles, *Microtus ochrogaster*. *Canadian Journal of Zoology*, 74:576-581. doi:10.1152/ajpregu.1996.270.3.R571. PMID: 8780222.
58. Kriegsfeld, L.J. & Nelson, R.J. 1996. Gonadal and photo periodic influences on body mass regulation in adult male and female prairie voles. *American Journal of Physiology*, 270:R1013-R1018. doi:10.1152/ajpregu.1996.270.R1013. PMID: 8928899.
59. Demas, G.E. & Nelson, R.J. 1996. Photoperiod and temperature interact to affect immune parameters in adult male deer mice (*Peromyscus maniculatus*). *Journal of Biological Rhythms*, 11:94-102. doi:10.1177/074873049601100202. PMID: 8744237.
60. Burnett, A.L., Nelson, R.J., Calvin, D., Demas, G.E., Klein, S.L., Kriegsfeld, Dawson, T.M. & Snyder, S.H. 1996. Nitric oxide-dependent penile erection in mice lacking neural nitric oxide synthase. *Molecular Medicine*, 2:288-296. doi:10.1007/BF03401627. PMID: 8784782
61. Dawson, T.M., Nelson, R.J. & Snyder, S.H. 1996. NOS and aggression-Reply. *Trends in Neuroscience*, 19:278.
62. Nelson, R.J. & Demas, G.E. 1996. Seasonal changes in immune function. *Quarterly Review of Biology*, 71:511-548. doi:10.1086/419555. PMID: 8987173
63. Klein, S.L., Kriegsfeld, L.J., Hairston, J.E., Rao, V., Nelson, R.J. & Yarowsky, P.J. 1996. Characterization of sensorimotor performance, reproductive and aggressive behaviors in segmental trisomic 16 (Ts65Dn) mice. *Physiology & Behavior*, 60:1159-1164. doi:10.1016/0031-9384(96)00218-1. PMID: 8884947.
64. Demas, G.E., Nelson, R.J., Krueger, B.K., & Yarowsky, P.J. 1996. Spatial memory deficits in segmental trisomic Ts65Dn mice. *Behavioral Brain Research*, 82:85-92. doi:10.1016/s0166-4328(97)81111-4. PMID: 9021073.
65. Demas, G.E., Klein, S.L. & Nelson, R.J. 1996. Reproductive and immune responses to photoperiod and melatonin are linked in *Peromyscus* subspecies. *Journal of Comparative Physiology A*, 179:819-825. doi:10.1007/BF00207360. PMID: 8956499.
66. Klein, S.L. & Nelson, R.J. 1996. Sex differences in immune function reflect the mating system and hormonal status of males. *Italian Journal of Anatomy and Embryology*, 101 (Suppl 1): 181.
67. Klein, S.L., Taymans, S.E., DeVries, A.C. & Nelson, R.J. 1996. Cellular immunity is not compromised by high serum corticosterone concentrations in prairie voles. *American Journal of Physiology*, 271:R1608-R1613. doi:10.1152/ajpregu.1996.271.6.R1608. PMID: 8997359.
68. Nelson, R.J. 1996. The role of melatonin in mediating seasonal energetic and immunologic adaptations. *Italian Journal of Anatomy and Embryology*, 101 (Suppl 1):76-77.
69. Taymans, S.E., DeVries, A.C., DeVries, M.B., Nelson, R.J., Friedman, T.C., Castro, M. Detera-Wadleigh, S., Carter, C.S. & Chrousos, G.P. 1997. The hypothalamic-pituitary-adrenal axis of prairie voles (*Microtus ochrogaster*): Evidence for target tissue glucocorticoid resistance. *General and Comparative Endocrinology*, 106:48-61. doi:10.1006/gcen.1996.6849. PMID: 9126465.
70. Burnett, A.L., Calvin D., Chamness, S., Liu, J-X, Nelson, R.J., Klein, S.L., Dawson, V.L., Dawson, T.M. & Snyder, S.H. 1997. Urinary bladder-urethral sphincter dysfunction in mice with

- targeted disruption of neuronal nitric oxide synthase models idiopathic voiding disorders in humans. *Nature Medicine*, 5:571-574. doi:10.1038/nm0597-571. PMID: 9142130.
71. DeVries, A.C., Young, W.S. & Nelson, R.J. 1997. Reduced aggressiveness in mice with targeted disruption of the gene for oxytocin. *Journal of Neuroendocrinology*, 9:363-368. doi:10.1046/j.1365-2826.1997.t01-1-00589.x. PMID: 9181490.
72. Nelson, R.J. 1997. Sex differences in persistent sexual and aggressive behavior among mice lacking neuronal nitric oxide synthase. In *Violence: From Biology to Sociology. Excerpta Medica International Congress. Series 1135*. Edited by J.S. Grisolia, J. Sanmartin, J.L. Luján, & S. Grisolia. Elsevier Science: Amsterdam, pp. 59-69.
73. Nelson, R.J. 1997. The use of genetic "knock-out" mice in behavioral endocrinology research. *Hormones and Behavior*, 31:188-196. doi:10.1006/hbeh.1997.1381.
74. Demas, G.E., DeVries, A.C. & Nelson, R.J. 1997. Effects of photoperiod and 2-deoxy-D-glucose-induced metabolic stress on immune function in female deer mice. *American Journal of Physiology*, 272:R1762-R1767. doi:10.1152/ajpregu.1997.272.6.R1762. PMID: 9227588.
75. Klein, S.L. & Nelson, R.J. 1997. Sex differences in immunocompetence vary between two *Peromyscus* species. *American Journal of Physiology*, 273:R655-R660. doi:10.1152/ajpregu.1997.273.2.R655. PMID: 9277551.
76. Nelson, R.J., Marinovic, A.C., Moffatt, C.A., Kriegsfeld, L.J. & Kim, S. 1997. The effects of photoperiod and food intake on reproductive development in male deer mice (*Peromyscus maniculatus*). *Physiology & Behavior*, 62:945-950. doi:10.1016/s0031-9384(97)00136-4. PMID: 9333185.
77. Demas, G.E., Eliasson, M.J.L., Dawson, T.M., Dawson, V.L., Kriegsfeld, L.J., Nelson, R.J. & Snyder, S.H. 1997. Inhibition of neuronal nitric oxide synthase increases aggressive behavior in mice. *Molecular Medicine*, 3: 610-616. doi:10.1007/BF03401818. PMID: 9323712.
78. Nelson, R.J. & Demas, G.E. 1997. Role of melatonin in mediating seasonal energetic and immunologic adaptations. *Brain Research Bulletin*, 44:423-430. doi:10.1016/s0361-9230(97)00222-0. PMID: 9370207.
79. Klein, S.L., Hairston, J.E., DeVries, A.C. & Nelson, R.J. 1997. Social environment and steroid hormones affect species and sex differences in immune function among voles. *Hormones and Behavior*, 32: 30-39. doi:10.1016/hbeh.1997.1402. PMID: 9344689.
80. Nelson, R.J., Kriegsfeld, L.J., Dawson, V.L. & Dawson, T.M. 1997. Effects of nitric oxide on neuroendocrine function and behavior. *Frontiers in Neuroendocrinology*, 18: 463-491. doi:10.1006/frne.1997.0156. PMID: 9344634.
81. Demas, G.E., Chefer, V., Talan, M.C. & Nelson, R.J. 1997. Metabolic costs of an antigen-stimulated immune response in adult and aged C57BL/6J mice. *American Journal of Physiology*, 273:R1631-R1637. doi:10.1152/ajpregu.1997.273.5.R1631. PMID: 9374803.
82. Demas, G.E., Williams, J.M. & Nelson, R.J. 1997. Amygdala but not hippocampal lesions impair olfactory memory for mate in prairie voles (*Microtus ochrogaster*). *American Journal of Physiology*, 273:R1683-R1689. doi:10.1152/ajpregu.1997.273.5.R1683. PMID: 9374810.
83. Kriegsfeld, L.J., Dawson, T.M., Dawson, V.L., Nelson, R.J. & Snyder, S.H. 1997. Aggressive behavior in male mice lacking the gene for neuronal nitric oxide synthase requires testosterone. *Brain Research*, 769:66-70. doi:10.1016/s0006-8993(97)00688-4. PMID: 9374274
84. DeVries, A.C., Gerber, J.M., Richardson, H.N., Moffatt, C.A., Demas, G.E., Taymans, S.E., & Nelson, R.J. 1997. Stress affects corticosteroid and immunoglobulin concentrations in male house mice (*Mus musculus*) and prairie voles (*Microtus ochrogaster*). *Comparative Biochemistry and Physiology A*, 118A: 655-663. doi:10.1016/s0300-9629(97)87355-0. PMID: 9406441.
85. Klein, S.L. & Nelson, R.J. 1998. Adaptive immune responses are linked to the mating systems of arvicoline rodents. *American Naturalist*, 151:59-67. doi:10.1086/286102. PMID: 18811424.

86. Demas, G.E. & Nelson, R.J. 1998. Social, but not photoperiodic, influences on reproductive function in male *Peromyscus aztecus*. *Biology of Reproduction*, 58:385-389. doi:10.1095/biolreprod58.2.385. PMID: 9475393.
87. Burnett, A.L., Johns, D.G., Kriegsfeld, L.J., Klein, S.L., Calvin, D.C., Demas, G.E., Schramm, L.P., Tonegawa, S., Nelson, R.J., Snyder, S.H. & Poss, K.D. 1998. Ejaculatory abnormalities in mice with targeted disruption of the gene for heme oxygenase-2. *Nature, Medicine*, 4:84-87. doi:10.1038/nm0198-084. PMID: 9427611.
88. Nelson, R.J., Demas, G.E., & Klein, S.L. 1998. Photoperiodic mediation of seasonal breeding and immune function in rodents: A multi-factorial approach. *American Zoologist*, 38:226-237. doi:10.1093/icb/38.1.226.
89. Demas, G.E., Nelson, R.J., Krueger, B.K. & Yarowsky, P.J. 1998. Impaired spatial working and reference memory in segmental trisomy (Ts65Dn) mice. *Behavioural Brain Research*, 90:199-201. doi:10.1016/s0166-4328(97)00116-2. PMID: 9521551.
90. Nelson, R.J. & Young, K.A. 1998. Behavior in mice with targeted disruption of single genes. *Neuroscience & Biobehavioral Reviews*, 22:453-462. doi:10.1016/s0149-7634(97)00053-5. PMID: 9579332.
91. Demas, G.E. & Nelson, R.J. 1998. Short-day enhancement of immune function is independent of steroid hormones in deer mice (*Peromyscus maniculatus*). *Journal of Comparative Physiology B*, 168:419-426. doi:10.1007/s003600050161. PMID: 9747522.
92. Demas, G.E. & Nelson, R.J. 1998. Photoperiod, ambient temperature, and food availability interact to affect reproductive and immune function in adult male deer mice (*Peromyscus maniculatus*). *Journal of Biological Rhythms*, 13:253-262. doi:10.1177/074873098129000093. PMID: 9615289.
93. Demas, G.E. & Nelson, R.J. 1998. Exogenous melatonin enhances cell-mediated, but not humoral immune function in adult male deer mice (*Peromyscus maniculatus*). *Journal of Biological Rhythms*, 13:245-252. doi:10.1177/07487309812900084. PMID: 9615288.
94. Kriegsfeld, L.J. & Nelson, R.J. 1998. Short photoperiod affects reproductive function, but not dehydroepiandrosterone concentrations in male deer mice (*Peromyscus maniculatus*). *Journal of Pineal Research*, 25:101-105. doi:10.1111/j.1600-079x.1998.tb00546.x. PMID: 9755031.
95. Bentley, G.E., Demas, G.E., Nelson, R.J. & Ball, G.F. 1998. Melatonin, immunity and cost of reproductive state in male European starlings. *Proceedings of the Royal Society B, London*, 265:1191-1195. doi:10.1098/rspb.1998.0418. PMID: 9699312.
96. Walensky, L.D., Shi, Z-T., Blackshaw, S., DeVries, A.C., Demas, G.E., Gascard, P., Nelson, R.J., Conboy, J.G., Rubin, E.M., Snyder, S.H. & Mohandas, N. 1998. Neurobehavioral deficits in mice lacking the erythrocyte membrane cytoskeletal protein 4.1. *Current Biology*, 8:1269-1272. doi:10.1016/s0960-9822(07)00536-2. PMID: 9822582.
97. Klein, S.L., Carnovale, D.M., Burnett, A.L., Wallach, E.E., Zacur, H., Crone, J.K., Dawson, V.L., Nelson, R.J. & Dawson, T.M. 1998. Impaired ovulation in mice with targeted deletion of the neuronal isoform of nitric oxide synthase. *Molecular Medicine*, 4:658-664. doi:10.1007/BF03401926. PMID: 9848082.
98. Klein, S.L. & Nelson, R.J. 1998. Influence of sex and mating system on cell-mediated immune responses in voles. *Canadian Journal of Zoology*, 76:1394-1398. doi:10.1139/z98-07.1.
99. Young, W.S., Shepard, E., DeVries, A.C., Zimmer, A., LaMarca, M.E., Ginns, E.I., Amicol, J., Nelson, R.J., Hennighausen, L. & Wagner, K-U. 1998. Targeted reduction of oxytocin expression provides insights into its physiological roles. *Advances in Experimental Medicine and Biology*, 449:231-240. doi:10.1007/978-1-4615-4871-3_30. PMID: 10026810.
100. Kriegsfeld, L.J., Elliason, M., Demas, G.E., Blackshaw, S., Dawson, T.M., Nelson, R.J. & Snyder, S.H. 1999. Nocturnal motor coordination deficits in neuronal nitric oxide synthase knock-out mice parallel altered citrulline production. *Neuroscience*, 89:311-315. doi:10.1016/s0306-4522(98)00614-9. PMID: 10077313.

101. Nelson, R.J. 1999. Photoperiodism, vertebrates. In: *Encyclopedia of Reproduction*. Volume 3. Edited by E. Knobil, J.D. Neill, & D. Pfaff. Academic Press: San Diego, CA, pp. 779-789.
102. Klein, S.L. & Nelson, R.J. 1999. Social interactions unmask sex differences to humoral immunity in voles. *Animal Behaviour*, 57:603-610. doi:10.1006/anbe.1998.1038. PMID: 10196049.
103. Kriegsfeld, L.J., Demas, G.E., Dawson, T.M., Dawson, V.L., Lee, S. & Nelson, R.J. 1999. Circadian locomotor analysis of male mice lacking the gene for neuronal nitric oxide synthase (nNOS^{-/-}). *Journal of Biological Rhythms*, 14:20-27. doi:10.1177/074873099129000407. PMID: 10036989.
104. Demas, G.E., Moffatt, C.A., Drazen, D.L. & Nelson, R.J. 1999. Castration does not inhibit aggressive behavior in adult male prairie voles (*Microtus ochrogaster*). *Physiology & Behavior*, 66:59-62. doi:10.1016/s0031-9384(98)00268-6. PMID: 10222474.
105. Klein, S.L., Gamble, H.R. & Nelson, R.J. 1999. *Trichinella spiralis* infection alters female odor preferences, but not mate preferences in voles. *Behavioral Ecology and Sociobiology*, 45: 323-329. doi:10.1007/s002650050.
106. Hurn, P.D., Alkayed, N.J., Toung, T.J.K., Traystman, R.J., Crain, B.J., Nelson, R.J. & Korach, K.S. 1999. Female versus male: Injury in experimental stroke. In: *Pharmacology of Cerebral Ischemia*, J. Kriegstein, editor, Medpharm Scientific Publishers, Stuttgart, pp. 379-386.
107. Kriegsfeld, L.J. & Nelson, R.J. 1999. Photoperiod affects the gonadotropin-releasing hormone neuronal system of male prairie voles (*Microtus ochrogaster*). *Neuroendocrinology*, 69:238-244. doi:10.1159/000054424. PMID: 10207275.
108. Young, K.A., Zirkin, B.A. & Nelson, R.J. 1999. Short photoperiods evoke testicular apoptosis in white-footed mice (*Peromyscus leucopus*). *Endocrinology*, 140:3133-3139. doi:10.1210/endo.140.7.6870. PMID: 10385406.
109. Nelson, R.J. & Drazen, D.L. 1999. Melatonin mediates seasonal adjustments in immune function. *Reproduction, Nutrition, Development*, 39:383-398. doi:10.1051/rnd:19990310. PMID: 10420440.
110. Klein, S.L. & Nelson, R.J. 1999. Influence of social factors on immune function and reproduction. *Reviews in Reproduction*. 4:168-178. doi:10.1530/ror.0.0040168. PMID: 10521154.
111. Klein, S.L. & Nelson, R.J. 1999. Activation of the immune-endocrine system with lipopolysaccharide reduces affiliative behaviors in voles. *Behavioral Neuroscience*, 113:1042-1048. doi:10.1037//0735-7044.113.5.1042. PMID: 10571486.
112. Nelson, R.J. & Kriegsfeld, L.J. 1999. Targeting aggression in mice. In *Molecular-Genetic Techniques for Behavioral Neuroscience*. Edited by W.E. Crusio & R. Gerlai. Elsevier: Amsterdam, pp. 357- 367.
113. Demas, G.E., Kriegsfeld, L.J., Poss, K.D., Tonegawa, S. & Nelson, R.J. 1999. Circadian locomotor rhythms in mice with targeted disruption of the gene for the carbon monoxide synthesizing enzyme, heme oxygenase-2. *Biological Rhythm Research*, 30:282-289. doi:10.1076/brhm.30.3.282.3053.
114. Kriegsfeld, L.J., Demas, G.E., Huang, P.L., Burnett, A.L. & Nelson, R.J. 1999. Ejaculatory abnormalities in mice lacking the gene for endothelial nitric oxide synthase (eNOS^{-/-}). *Physiology & Behavior*, 67: 561-566. doi:10.1016/s0031-9384(99)00100-6. PMID: 10549894.
115. Gammie S.G. & Nelson, R.J. 1999. Maternal aggression is reduced in neuronal nitric oxide synthase-deficient mice. *Journal of Neuroscience*, 19: 8027-8035. doi:10.1523/JNEUROSCI.19-18-08027.1999. PMID: 10479702.
116. Demas, G.E., Kriegsfeld, L.J., Blackshaw, S., Huang, P., Gammie, S.C., Nelson, R.J. & Snyder, S.H. 1999. Elimination of aggressive behavior in male mice lacking endothelial nitric oxide synthase. *Journal of Neuroscience*, 19:R30:1-5. doi:10.1523/JNEUROSCI.19-19-j0004.1999. PMID: 10493775

117. Nelson, R.J. & Klein, S.L. 1999. Immune function, mating systems, and seasonal breeding. In: *Reproduction in Context*. Edited by K. Wallen & J.E. Schneider. MIT Press: Cambridge, MA. pp. 219-256.
118. Kriegsfeld, L.J., Drazen, D.L. & Nelson, R.J. 1999. Effects of photoperiod and reproductive responsiveness on pituitary sensitivity to GnRH in male prairie voles (*Microtus ochrogaster*). *General and Comparative Endocrinology*, 116: 221-228. doi:10.1006/gcen.1999.7414. PMID: 10562452.
119. Drazen, D.L., Klein, S.L., Burnett, A.L., Wallach, E.E., Crone, J.K., Huang, P.L. & Nelson, R.J. 1999. Reproductive function in female mice lacking the gene for endothelial nitric oxide synthase. *Nitric Oxide*, 3:366-374. doi:10.1006/niox.1999.0251. PMID: 10534440.
120. Klein, S.L., Gamble, R.H. & Nelson, R.J. 1999. Role of steroid hormones in *Trichinella spiralis* infection among voles. *American Journal of Physiology*, 277: R1362-R1367. doi:10.1152/ajpregu.1999.277.5.R1362. PMID: 10564208.
121. Bilbo, S.D., Klein, S.L., DeVries, A.C. & Nelson, R.J. 1999. Lipopolysaccharide facilitates partner preference behaviors in female prairie voles. *Physiology & Behavior*, 68: 151-156. doi:10.1016/s0031-9384(99)00154-7. PMID: 10627074.
122. Katz, L.F., Ball, G.F. & Nelson, R.J. 1999. Elevated Fos-like immunoreactivity in the brains of postpartum female prairie voles, *Microtus ochrogaster*. *Cell and Tissue Research*, 298: 425-435. doi:10.1007/s004419900123. PMID: 10639733.
123. Drazen, D.L., Klein, S.L., Yellon, S.M. & Nelson, R.J. 2000. *In vitro* melatonin treatment enhances splenocyte proliferation in prairie voles. *Journal of Pineal Research*, 28:34-40. doi:10.1034/j.1600-079x.2000.280105.x. PMID: 10626599.
124. Sawada, M., Alkayed, N.J., Goto, S., Crain, B.J., Traystman, R.J., Shaivitz, A., Nelson, R.J. & Hurn, P.D. 2000. Estrogen receptor antagonist, ICI182,780, exacerbates injury in female mouse. *Journal of Cerebral Blood Flow and Metabolism*, 20:112-118. doi:10.1097/00004647-200001000-00015. PMID: 10616799.
125. Young, K.A., Zirkin, B. & Nelson, R.J. 2000. Testicular regression in response to food restriction and short photoperiod in white-footed mice (*Peromyscus leucopus*) is mediated by apoptosis. *Biology of Reproduction*, 62: 347-354. doi:10.1095/biolreprod62.2.347. PMID: 10642572
126. Gammie, S.G. & Nelson, R.J. 2000. Maternal and mating-induced aggression is associated with elevated citrulline immunoreactivity in the paraventricular nucleus in prairie voles. *Journal of Comparative Neurology*, 418:182-192. doi:10.1002/(SICI)1096-9861(20000306)418:2<182::AID-CNE5>3.0.CO;2-1. PMID: 10701443.
127. Sampei, K., Goto, S., Alkayed, N.J., Crain, B.J., Korach, K.S., Traystman, R.J., Demas, G.E., Nelson, R.J. & Hurn, P.D. 2000. Stroke in estrogen receptor-alpha-deficient mice. *Stroke*, 31:738-743. doi:10.1161/01.str.31.3.738. PMID: 10700513.
128. Nelson, R.J., & Drazen, D.L. 2000. Seasonal changes in stress responses. In: *Encyclopedia of Stress*. Vol.3 Edited by George Fink. Academic Press: New York, pp. 402-408.
129. Drazen, D.L., Kriegsfeld, L.J., Schneider, J.N. & Nelson, R.J. 2000. Leptin, but not immune function, is linked to reproductive responsiveness to photoperiod. *American Journal of Physiology*, 278:R1401-R1407. doi:10.1152/ajpregu.2000.278.6.R1401. PMID: 1084504.
130. Kriegsfeld, L.J., Trasy, A.J. & Nelson, R.J. 2000. Temperature and photoperiod interact to affect reproduction and GnRH synthesis in male prairie voles. *Journal of Neuroendocrinology*, 12:553-558. doi:10.1046/j.1365-2826.2000.00485.x. PMID: 10844584.
131. Nelson, R.J. & Chiavegatto, S. 2000. Aggression in knockout mice. *Institute of Laboratory Animal Resources Journal*, 41:153-162. doi:10.1093/ilar.41.3.153. PMID: 11406707.
132. Wisniewski, A.B. & Nelson, R.J. 2000. Seasonal variation in human functional cerebral lateralization and free testosterone concentrations. *Brain and Cognition*, 43:429-438. PMID: 10857741.

133. Gammie, S.J., Dawson, V.L. & Nelson, R.J. 2000. Influence of nitric oxide on neuroendocrine function and behavior. In: *Nitric Oxide: Biology and Pathobiology* ed. L.J. Ignarro, Academic Press pp 429-452.
134. Kriegsfeld, L.J., Ranalli, N.J., Bober, M.A. & Nelson, R.J. 2000. Photoperiod and temperature interact to affect the GnRH neuronal system of male prairie voles (*Microtus ochrogaster*). *Journal of Biological Rhythms*, 15:306-316. doi:10.1177/074873000129001413. PMID: 10942262.
135. Nelson, R.J. & Drazen, D.L. 2000. Melatonin mediates seasonal changes in immune function. In: A. Conti & GJM Maestroni (Eds), *Neuroimmunomodulation: Perspectives at the New Millennium* (pp 404-415). *New York Academy of Sciences*, New York. doi:10.1111/j.1749-6632.2000.tb05405.x. PMID: 11268368.
136. Gammie, S.C. Huang, P.L. & Nelson, R.J. 2000. Maternal aggression in endothelial nitric oxide-synthase deficient mice. *Hormones and Behavior*, 38:13-20. doi:10.1006/hbeh.2000.1595. PMID: 10924282.
137. Young, K.A. & Nelson, R.J. 2000. Short photoperiods reduce vascular endothelial growth factor in the testes of *Peromyscus leucopus*. *American Journal of Physiology*, 279:R1132-R1137. doi:10.1152/ajpregu.2000.279.3.R1132. PMID: 10956275.
138. Gammie, S.C., Olaghere-da Silva, U.B. & Nelson, R.J. 2000. 3-Bromo-7-Nitroindazole, a neuronal nitric oxide synthase inhibitor, impairs maternal aggression and citrulline immunoreactivity in prairie voles. *Brain Research*, 870:80-86. doi:10.1016/s0006-8993(00)02404-5. PMID: 10869504.
139. Chiavegatto, S., Sun, J., Nelson, R.J. & Schnaar, R.L. 2000. A functional role for complex gangliosides: Motor deficits in GM2/GD2 knockout mice. *Experimental Neurology*, 166:227-234. doi:10.1006/exnr.2000.7504. PMID: 11085888.
140. Bilbo, S.D. & Nelson, R.J. 2001. Behavioral phenotyping of transgenic and knockout animals: A cautionary tale. *Lab Animal*, 30: 24-29. PMID: 11385723.
141. Bilbo, S.D. & Nelson, R.J. 2001. Sex steroid hormones enhance immune function in male and female Siberian hamsters. *American Journal of Physiology* 280:R207-213. doi:10.1152/ajpregu.2001.280.1.R207. PMID: 11124153.
142. Young, K.A., Ball, G.F. & Nelson, R.J. 2001. Photoperiod-induced testicular apoptosis in European starlings (*Sturnus vulgaris*). *Biology of Reproduction*, 64:706-713. doi:10.1095/biolreprod64.2.706. PMID: 1195936.
143. Chiavegatto, S., Dawson, V.L., Mamounas, L.A., Koliatsos, V.E., Dawson, T.M. & Nelson, R.J. 2001. Brain serotonin dysfunction accounts for aggression in male mice lacking neuronal nitric oxide synthase. *Proceedings of the National Academy of Sciences (USA)*, 98:1277-1281. doi:10.1073/pnas.031487198. PMID: 11158630.
144. Kriegsfeld, L.J., Drazen, D.L. & Nelson, R.J. 2001. *In vitro* melatonin treatment enhances cell-mediated immune function in male prairie voles (*Microtus ochrogaster*). *Journal of Pineal Research*. 30:193-198. doi:10.1034/j.1600-079x.2001.300401.x. PMID: 11339507.
145. Kriegsfeld, L.J., Drazen, D.L. & Nelson, R.J. 2001. Circadian organization in male mice lacking the gene for endothelial nitric oxide synthase (eNOS^{-/-}). *Journal of Biological Rhythms*, 16:142-148. doi:10.1177/074873001129001845. PMID: 11302556.
146. Drazen, D.L., Bilu, D., Bilbo, S.D. & Nelson, R.J. 2001. Melatonin enhancement of splenocyte proliferation is attenuated by luzindole, a melatonin receptor antagonist. *American Journal of Physiology*, 280: R1476-R1482. doi:10.1152/ajpregu.2001.280.5.R1476. PMID: 11294771.
147. Gammie, S.C. & Nelson, R.J. 2001. cFOS and pCREB activation and maternal aggression in mice. *Brain Research*, 898:232-241. doi:10.1016/s0006-8993(01)02189-8. PMID: 11306009.
148. Prendergast, B.J., Yellon, S.M., Tran, L.T. & Nelson, R.J. 2001. Photoperiod modulates the inhibitory effect of *in vitro* melatonin on lymphocyte proliferation in female Siberian hamsters.

- Journal of Biological Rhythms*, 16: 224-233. doi:10.1177/074873040101600305. PMID: 11407782.
149. Drazen, D.L., Demas, G.E., & Nelson, R.J. 2001. Leptin effects on immune function and energy balance are photoperiod dependent in Siberian hamsters (*Phodopus sungorus*). *Endocrinology*, 142:2768-2775. doi:10.1210/endo.142.7.8271. PMID: 11415995.
150. Devries, A.C., Nelson, R.J., Traystman, R.J. & Hurn, P.D. 2001. Cognitive and behavioral assessment in experimental stroke research: will it prove useful? *Neuroscience & Biobehavioral Reviews*, 25:325-342. doi:10.1016/s0149-7634(01)00017-3. PMID: 11445138.
151. Young, K.A. Zirkin, B.R. & Nelson, R.J. 2001. Testicular apoptosis is down-regulated during spontaneous recrudescence in white-footed mice (*Peromyscus leucopus*). *Journal of Biological Rhythms* 16:479-488. doi:10.1177/074873001129002150. PMID: 11669421.
152. Nelson, R.J. 2001. Is there a major stress system in the brain? In: *Coping with Challenge: Welfare in Animals Including Humans*. Edited by D.M. Broom. Dahlem Conference Proceedings. Berlin, pp. 111-122.
153. Jasnow, A.M., Drazen, D.L., Huhman, K.L., Nelson, R.J. & Demas, G.E. 2001. Acute and chronic social defeat suppresses humoral immunity of male Syrian hamsters (*Mesocricetus auratus*). *Hormones and Behavior*, 40:428-433. doi:10.1006/hbeh.2001.1708. PMID: 11673916.
154. Nelson, R.J. & Chiavegatto, S. 2001. Molecular bases of aggression. *Trends in Neurosciences*, 24: 713-719. doi:10.1016/s0166-2236(00)01996-2. PMID: 11718876.
155. Prendergast, B.J., Kriegsfeld, L.J. & Nelson, R.J. 2001. Photoperiodic polyphenisms in rodents: Neuroendocrine mechanisms, costs, and functions. *Quarterly Review of Biology*, 76:293-325. doi:10.1086/393989. PMID: 11561508.
156. Prendergast, B.J. & Nelson, R.J. 2001. Spontaneous "regression" of enhanced immune function in a photoperiodic rodent *Peromyscus maniculatus*. *Proceedings of the Royal Society (London) B*. 268:2221-2228. doi:10.1098/rspb.2001.1784. PMID: 11674869.
157. Drazen, D.L. & Nelson, R.J. 2001. Melatonin receptor subtype MT2 (Mel 1b) and not mt1 (Mel 1a) is associated with melatonin-induced enhancement of cell-mediated and humoral immunity. *Neuroendocrinology*, 74:178-184. doi:10.1159/000054684. PMID: 11528219.
158. Drazen, D.L., Bilu, D., Edwards, N. & Nelson, R.J. 2001. Disruption of poly (ADP-ribose) polymerase (PARP) protects against stress-evoked immunocompromise. *Molecular Medicine*, 7:761-766. doi:10.1007/BF03401966. PMID: 11788790.
159. Kriegsfeld, L.J., Ranalli, N.J., Trasy, A.G. & Nelson, R.J. 2001. Food restriction affects the gonadotropin releasing hormone neuronal system of male prairie voles (*Microtus ochrogaster*). *Journal of Neuroendocrinology*, 13:791-798. doi:10.1046/j.1365-2826.2001.00704.x. PMID: 11578529.
160. Young, K.A. & Nelson, R.J. 2001. Mediation of seasonal testicular regression by apoptosis. *Reproduction*, 122:677-685. doi:10.1530/rep.0.1220677. PMID: 11690527.
161. Demas, G.E., Drazen, D.L., Jasnow, A.M., Bartness, T.J. & Nelson, R.J. 2002. Sympathoadrenal system differentially affects photoperiodic changes in humoral immunity of Siberian hamsters (*Phodopus sungorus*). *Journal of Neuroendocrinology*, 14:29-35. doi:10.1046/j.0007-1331.2001.00736.x. PMID: 11903810.
162. Prendergast, B.J., Freeman, D.A., Zucker, I. & Nelson, R.J. 2002. Periodic arousal from hibernation is necessary for initiation of immune responses in ground squirrels. *American Journal of Physiology*, 282:R1054-R1062. doi:10.1152/ajpregu.00562.2001. PMID: 11893609.
163. Prendergast, B.J., Nelson, R.J. & Zucker, I. 2002. Mammalian seasonal rhythms: Behavior and neuroendocrine substrates. In Pfaff, D.W. (Ed), *Hormones, Brain, and Behavior*, Vol. 2 (pp. 93-156). Academic Press: San Diego, CA.
164. Young, K.Y., Berry, M.L., Mahaffey, C.L., Saionz, J.R., Hawes, N.L., Chang, B., Zheng, Q.Y., Smith, R.S., Bronson, R.T., Nelson, R.J. & Simpson, E.M. 2002. Fierce: A new mouse deletion of Nr2e1; violent behaviour and ocular abnormalities are background-dependent. *Behavioural Brain Research*, 132: 145-158. doi:10.1016/s0166-4328(01)00413-2. PMID: 11997145.

165. Bilbo, S.D., Drazen, D.L., Quan, N., He, L. & Nelson, R.J. 2002. Short day lengths attenuate the symptoms of infection in Siberian hamsters. *Proceedings of the Royal Society (London) B*, 269: 447-454. doi:10.1098/rspb.2001.1915. PMID: 11886635.
166. Prendergast, B.J., Wynne-Edwards, K.E., Yellon, S.M. & Nelson, R.J. 2002. Photorefractoriness of immune function in male Siberian hamsters (*Phodopus sungorus*). *Journal of Neuroendocrinology*, 14:318-329. doi:10.1046/j.1365-2826.2002.00781.x. PMID: 11963829.
167. Bilbo, S.D., Dhabhar, F.S., Viswanathan, K., Saul, A., Yellon, S.M. & Nelson, R.J. 2002. Short day lengths augment stress-induced leukocyte trafficking and stress-induced enhancement of skin immune function. *Proceedings of the National Academy of Sciences (USA)*, 99: 4067-4072. doi:10.1073/pnas.062001899. PMID: 11904451
168. Klein, S.L., Bird, B.H., Nelson, R.J. & Glass, G.E. 2002. Environmental and physiological factors associated with Seoul virus infection among urban populations of Norway rats. *Journal of Mammalogy*, 83:478-488. doi:10.1644/1545-1542(2002)083<0478:EAPFAW>2.0.CO;2.
169. Bilbo, S.D. & Nelson, R.J. 2002. Melatonin regulates energy balance and attenuates fever in Siberian hamsters. *Endocrinology*, 143: 2527-2533. doi:10.1210/endo.143.7.8922. PMID: 12072384.
170. Drazen, D.L., Jasnow, A.M., Nelson, R.J. & Demas, G.E. 2002. Exposure to short days, but not short-term melatonin, enhances humoral immunity of male Syrian hamsters (*Mesocricetus auratus*). *Journal of Pineal Research*, 33: 118-124. doi:10.1034/j.1600-079x.2002.02915.x. PMID: 12153446.
171. Van der Ploeg, L.H.T., Martin, W.J., Howard, A., Nargund, R., Austin, C.P., Guan, X., Drisko, J., Cashen, D., Sebhat, I., Patchett, A., Figueroa, D.J., Dilella, A.G., Connolly, B.M., Weinberg, D., Tan, C., Palyha, O., Pong, S-S., MacNeil, T., Rosenblum, C., Vongs, A., Tang, R., Yu, H., Sailer, A., Fong, T.M., Huang, C., Tota, M., Chang, R.S., Stearns, R., Tamvakopoulos, C., Christ, G., Drazen, D.L., Spar, B.D., Nelson, R.J. & MacIntyre, D.E. 2002. A role of melanocortin-4 receptor in sexual function. *Proceedings of the National Academy of Sciences (USA)*, 99:11381-11386. doi:10.1073/pnas.172378699. PMID: 12172010.
172. Nelson, R.J. & Prendergast, B.J. 2002. Comment: Form over function. *Journal of Biological Rhythms*, 17:406-409. doi:10.1177/074873002237134. PMID: 12375617.
173. Prendergast, B.J., Mosinger, B. Jr., Kolattukudy, P. & Nelson, R.J. 2002. Hypothalamic gene expression in reproductively photoresponsive and photorefractory Siberian hamsters. *Proceedings of the National Academy of Sciences (USA)* 99:16291-16296. doi:10.1073/pnas.232490799. PMID: 12456888.
174. Hotchkiss, A.K. & Nelson, R.J. 2002. Melatonin and immune function: Hype or working hypothesis? *Critical Reviews in Immunology*, 22:351-371. doi:10.1615/CritRevImmunol.v22.i5-6.10. PMID: 12803316.
175. Hairston, J.E., Ball, G.F. & Nelson, R.J. 2003. Photoperiodic and temporal influences on chemosensory induction of brain fos expression in female prairie voles. *Journal of Neuroendocrinology*, 15: 161-172. doi:10.1046/j.1365-2826.2003.00963.x. PMID: 12535158.
176. Demas, G.E & Nelson, R.J. 2003. Lack of immunological responsiveness to photoperiod in a tropical rodent, *Peromyscus aztecus hylocetes*. *Journal of Comparative Physiology B*, 173:171-176. doi:10.1007/s00360-002-0325-5. PMID: 12624655
177. Prendergast, B.J., Hotchkiss, A.F., Bilbo, S.D., Kinsey, S.G. & Nelson, R.J. 2003. Photoperiodic adjustments in immune function protect Siberian hamsters from lethal endotoxemia. *Journal of Biological Rhythms*, 18:51-62. doi:10.1177/0748730402239676. PMID: 12568244.
178. Kinsey, S.G., Prendergast, B.J. & Nelson, R.J. 2003. Photoperiod and stress affect wound healing in Siberian hamsters. *Physiology & Behavior*, 78: 205-211. doi:10.1016/s0031-9384(02)00967-8. PMID: 12576117.

179. Demas, G.E., Drazen, D.L. & Nelson, R.J. 2003. Reductions in total body fat decrease humoral immunity. *Proceedings of the Royal Society, London B*, 270:905-911. doi:10.1098/rspb.2003.2341. PMID: 12803904.
180. Bilbo, S.D., Hotchkiss, A.K., Chiavegatto, S. & Nelson, R.J. 2003. Blunted stress responses in delayed type hypersensitivity in mice lacking the neuronal isoform of nitric oxide synthase. *Journal of Neuroimmunology*, 140: 41-48. doi:10.1016/s0165-5728(03)00175-9. PMID: 12864970.
181. Bilbo, S.D., Quan, N., Prendergast, B.J., Bowers, S.L. & Nelson, R.J. 2003. Photoperiod alters the time course of brain cyclooxygenase-2 expression in Siberian hamsters. *Journal of Neuroendocrinology*, 15: 958-964. doi:10.1046/j.1365-2826.2003.01084.x. PMID: 12969240.
182. Demas, G.E., Bartness, T.J., Nelson, R.J. & Drazen, D.L. 2003. Photoperiod modulates the effects of norepinephrine on lymphocyte proliferation in Siberian hamsters. *American Journal of Physiology*, 285: R873-R879. doi:10.1152/ajpregu.00209.2003. PMID: 12959922
183. Bilbo, S.D., Dhabhar, F.S., Viswanathan, Saul, A. & Nelson, R.J. 2003. Photoperiod affects the expression of sex and species differences in leukocyte number and leukocyte trafficking in congeneric hamsters. *Psychoneuroendocrinology*, 28: 1027-1043. doi:10.1016/s0306-4530(02)00122-1. PMID: 14529706.
184. Drazen, D.L., Trasy, A. & Nelson, R.J. 2003. Photoperiod differentially affects energetics of immunity in pregnant and lactating Siberian hamsters (*Phodopus sungorus*). *Canadian Journal of Zoology*, 81:1406-1413. doi:10.1139/z03-120.
185. Bilbo, S.D. & Nelson, R.J. 2003. Sex differences in photoperiodic and stress-induced enhancement of immune function in Siberian hamsters. *Brain, Behavior, and Immunity*, 17: 462-472. doi:10.1016/s0889-1591(03)00063-1. PMID: 14583238.
186. Chiavegatto, S. & Nelson, R.J. 2003. Interaction of nitric oxide and serotonin in aggressive behavior. *Hormones and Behavior*, 44: 233-241. doi:10.1016/j.yhbeh.2003.02.002. PMID: 14609545.
187. Kriegsfeld, L.J., Hotchkiss, A.K., Demas, G.E., Silver, R., Silverman, A-J. & Nelson, R.J. 2003. Brain mast cells are influenced by chemosensory cues associated with estrus induction in female prairie voles (*Microtus ochrogaster*). *Hormones and Behavior*, 44:377-384. doi:10.1016/j.yhbeh.2003.09.001. PMID: 14644631.
188. Prendergast, B.J., Bilbo, S.D. & Nelson, R.J. 2004. Photoperiod controls the induction, retention, and retrieval of antigen-specific immunological memory. *American Journal of Physiology*, 286:R54-R60. doi:10.1152/ajpregu.00381.2003. PMID: 12958060.
189. Prendergast, B.J., Hotchkiss, A.K. & Nelson, R.J. 2003. Photoperiodic regulation of circulating leukocytes in juvenile Siberian hamsters: Mediation by melatonin and testosterone. *Journal of Biological Rhythms*, 18:473-480. doi:10.1177/0748730403258486. PMID: 14667148.
190. Bilbo, S.D. & Nelson, R.J. 2004. Photoperiod influences the effects of exercise and food restriction on an antigen-specific immune response in Siberian hamsters. *Endocrinology*, 145:556-564. doi:10.1210/en.2003-1035. PMID: 14605007.
191. Hotchkiss, A.K., Pyter, L.M., Neigh, G.N. & Nelson, R.J. 2004. Nycthemeral differences in response to restraint stress in CD-1 and C57BL/6J mice. *Physiology & Behavior*, 80:441-447. doi:10.1016/j.physbeh.2003.09.010. PMID: 14741228.
192. Prendergast, B.J., Hotchkiss, A.K., Bilbo, S.D. & Nelson, R.J. 2004. Peripubertal immune challenges attenuate reproductive development in male Siberian hamsters (*Phodopus sungorus*). *Biology of Reproduction*, 70:813-820. doi:10.1095/biolreprod.103.023408. PMID: 14627552.
193. Prendergast, B.J., Bilbo, S.D., Dhabhar, F.S. & Nelson, R.J. 2004. Effects of photoperiod history on immune responses to intermediate day lengths Siberian hamsters (*Phodopus sungorus*). *Journal of Neuroimmunology*, 149: 31-39. doi:10.1016/j.jneuroim.2003.12.006. PMID: 15020062.

194. Prendergast, B.J., Renstrom, R.A. & Nelson, R.J. 2004. Genetic analysis of a seasonal interval timer. *Journal of Biological Rhythms* 19:298-311. doi:10.1177/0748730404266626. PMID: 15245649.
195. Benderlioglu, Z. & Nelson, R.J. 2004. Season of birth and fluctuating asymmetry. *American Journal of Human Biology*, 16:298-310. doi:10.1002/ajhb.20029. PMID: 15101055.
196. Nelson, R.J. 2004. Leptin: The "skinny" on torpor. *American Journal of Physiology*, 287:R6-R7. doi:10.1152/ajpregu.00164.2004. PMID: 15191922.
197. Neigh, G.N., Bilbo, S.D., Hotchkiss, A.K. & Nelson, R.J. 2004. Exogenous pyruvate prevents stress-evoked suppression of mitogen-stimulated proliferation. *Brain, Behavior, and Immunity*: 18:425-33. doi:10.1016/j.bbi.2003.10.001. PMID: 15265535.
198. Benderlioglu, Z., Sciulli, P. & Nelson, R.J. 2004. Fluctuating asymmetry predicts human reactive aggression. *American Journal of Human Biology*, 16:458-469. doi:10.1002/ajhb.20047. PMID: 15214064.
199. Gotti, S., Chiavegatto, S., Sica, M., Viglietti-Panzica, C., Nelson, R.J. & Panzica, G. 2004. Alteration of NO-producing system in the basal forebrain and hypothalamus of Ts65Dn mice: An immunohistochemical and histochemical study of a murine model for Down syndrome. *Neurobiology of Disease*, 16:563-571. doi:10.1016/j.nbd.2004.04.006. PMID: 15262268.
200. Neigh, G.N., Bowers, S.L., Pyter, L.M., Gatien, M.L. & Nelson, R.J. 2004. Pyruvate prevents restraint-induced immunosuppression via alterations in glucocorticoid responses. *Endocrinology*, 145:4309-4319. doi:10.1210/en.2003-1748. PMID: 15178646.
201. Nelson, R.J. 2004. Seasonal immune function and sickness responses. *Trends in Immunology* 25:188-192. doi:10.1016/j.it.2004.02.001. PMID: 15039045.
202. Gatien, M.L., Hotchkiss, A.K., Neigh, G.N., Dhabhar, F. & Nelson, R.J. 2004. Immune and stress responses in C57BL/6 and C3H/HeN mouse strains following photoperiod manipulation. *Neuroendocrinology Letters*, 25:267-272. PMID: 15361815.
203. Nelson, R.J. & Demas, G. E. 2004. Seasonal patterns of stress, disease, and sickness responses. *Current Directions in Psychological Sciences*, 13:198-201. doi:10.1111/j.0963-7214.2004.00307.x.
204. Padgett, D.A., Hotchkiss, A.K., Pyter, L.M., Nelson, R.J., Yang, E., Yeh, P.-E., Litsky, M., Williams, M. & Glaser, R. 2004. Epstein-Barr virus-encoded dUTPase modulates immune function and induces sickness behavior in mice. *Journal of Medical Virology*, 74:442-448. doi:10.1002/jmv.20196. PMID: 15368518.
205. Benderlioglu, Z. & Nelson, R.J. 2004. Digit length ratios predict aggression in women, but not men. *Hormones and Behavior*, 46:558-564. doi:10.1016/j.yhbeh.2004.06.004. PMID: 15555497.
206. Hotchkiss, A.K., Pyter, L.M., Gatien, M.L., Wen, J., Milman, H.A. & Nelson, R.J. 2005. Aggressive behavior increases after termination of chronic sildenafil treatment in mice. *Physiology & Behavior*, 83:683-688. doi:10.1016/j.physbeh.2004.09.005. PMID: 15639152.
207. Wen, J.C., Hotchkiss, A.K., Demas, G.E. & Nelson, R.J. 2004. Photoperiod affects neuronal nitric oxide synthase and aggressive behavior in male Siberian hamsters (*Phodopus sungorus*). *Journal of Neuroendocrinology*, 16:916-921. doi:10.1111/j.1365-2826.2004.01248.x. PMID: 15584932.
208. Pyter, L.M., Hotchkiss, A.K. & Nelson, R.J. 2005. Photoperiod-induced differential expression of angiogenesis genes in testes of adult *Peromyscus leucopus*. *Reproduction*, 129: 201-209. doi:10.1530/rep.1.00448. PMID: 15695614.
209. Prendergast, B.J. & Nelson, R.J. 2005. Affective responses to changes in day length in Siberian hamsters (*Phodopus sungorus*). *Psychoneuroendocrinology*, 30: 438-452. doi:10.1016/j.psyneuen.2004.08.008. PMID: 15721056.

210. Prendergast, B.J., Bilbo, S.D. & Nelson, R.J. 2005. Short day lengths enhance skin immune responses in gonadectomised Siberian hamsters. *Journal of Neuroendocrinology*, 17:18-21. doi:10.1111/j.1365-2826.2005.01273.x. PMID: 15720471.
211. Pyter, L.M., Samuelsson, A.R., Quan, N. & Nelson, R.J. 2005. Photoperiod alters hypothalamic cytokine gene expression and sickness responses following immune challenge in female Siberian hamsters (*Phodopus sungorus*). *Neuroscience*, 131:779-784. doi:10.1016/j.neuroscience.2004.11.046. PMID: 15749332.
212. Pyter, L.M., Neigh, G.N. & Nelson, R.J. 2005. Social environment modulates photoperiodic immune and reproductive responses in adult male white-footed mice (*Peromyscus leucopus*). *American Journal of Physiology*, 288: R891-R896. doi:10.1152/ajpregu.00680.2004. PMID: 15550612.
213. Neigh, G.N., Samuelsson, A.R., Bowers, S.L. & Nelson, R.J. 2005. 3-aminobenzamide prevents restraint-evoked immunocompromise. *Brain, Behavior, and Immunity*, 19:351-356. doi:10.1016/j.bbi.2004.11.001. PMID: 15944075.
214. Gammie, S.C. & Nelson, R.J. 2005. High maternal aggression in dwarf hamsters (*Phodopus campbelli* and *Phodopus sungorus*). *Aggressive Behavior*, 31:294-302. doi:10.1002/ab.20087.
215. Chiavegatto, S., Demas, G.E. & Nelson, R.J. 2005. Nitric oxide and aggression. In: Nelson, R.J. (editor). *Biology of Aggression*. Oxford University Press: New York, pp. 150-162. doi:10.1093/acprof:oso/9780195168761.001.00. PMID:16483891.
216. Neigh, G.N., Bowers, S.L., Korman, B. & Nelson, R.J. 2005. Housing environment alters cell-mediated immune function and corticosterone concentrations. *Animal Welfare*, 14: 249-257.
217. Pyter, L.M., Reader, B.F. & Nelson, R.J. 2005. Short photoperiods impair spatial learning and alter hippocampal dendritic morphology in adult male white-footed mice (*Peromyscus leucopus*). *Journal of Neuroscience*, 25:4521-4526. doi:10.1523/JNEUROSCI.0795-05.2005. PMID: 15872099.
218. Nelson, R.J. 2005. Effects of nitric oxide on the HPA axis and aggression. In: G. Bock & J. Goode (editors). *Molecular Mechanisms Influencing Aggressive Behaviours*. Novartis Foundation Symposium #268. Wiley VCH: Berlin, pp. 147-166. doi:10.1002/0470010703.ch10. PMID: 16206879.
219. Pyter, L.M., Weil, Z.M. & Nelson, R.J. 2005. Latitude affects photoperiod-induced changes in immune response in meadow voles (*Microtus pennsylvanicus*). *Canadian Journal of Zoology*, 83:1271-1278. doi:10.1139/Z05-121.
220. Gatien, M.L., Hotchkiss, A.K., Dhabhar, F.S. & Nelson, R.J. 2005. Skeleton photoperiods alter delayed-type hypersensitivity responses and reproductive function of Siberian hamsters (*Phodopus sungorus*). *Journal of Neuroendocrinology*, 17:733-739. doi:10.1111/j.1365-2826.2005.01371.x. PMID: 16219002.
221. Weil, Z.M., Bowers, S.L., Pyter, L.M. & Nelson, R.J. 2006. Social interactions alter proinflammatory cytokine gene expression and behavior following endotoxin administration. *Brain, Behavior, and Immunity*, 20:72-79. doi:10.1016/j.bbi.2005.05.001. PMID: 15967631.
222. Nelson, R.J., Trainor, B.C., Chiavegatto, S. & Demas, G.E. 2006. Pleiotropic contributions of nitric oxide to aggressive behavior. *Neuroscience and Biobehavioral Reviews*, 30: 346-355. doi:10.1016/j.neurobiorev.2005.02.002. PMID: 16483891.
223. Weil, Z.M., Hotchkiss, A.K., Gatien, M.L., Pieke-Dahl, S. & Nelson, R.J. 2006. Melatonin receptor (MT1) knockout mice display depression-like behaviors and deficits in sensorimotor gating. *Brain Research Bulletin*, 68:425-429. doi:10.1016/j.brainresbull.2005.09.016. PMID: 16459197.
224. Benderlioglu, Z., Eish, J., Weil, Z.M. & Nelson, R.J. 2006. Low temperatures during early development subsequent maternal and reproductive function in adult female mice. *Physiology & Behavior*, 87:416-423. doi:10.1016/j.physbeh.2005.11.001. PMID: 16343561.

225. Pyter, L.M. & Nelson, R.J. 2006. Enduring effects of photoperiod on affective behaviors in Siberian hamsters (*Phodopus sungorus*). *Behavioral Neuroscience*, 120: 125-134. doi:10.1037/0735-7044.120.1.125. PMID: 16492123.
226. Martin, L.B., Ghasper, E.R., Nelson, R.J. & DeVries, A.C. 2006. Prolonged separation delays wound healing in California mice, *Peromyscus californicus*, but not in polygynous white-footed mice, *P. leucopus*. *Physiology & Behavior*, 87: 837-841. doi:10.1016/j.physbeh.2006.01.035. PMID: 16616944.
227. Huang, A.S., Beigneux, A., Weil, Z.M., Kim, P.M., Molliver, M.E., Blackshaw, S., Nelson, R.J., Young, S.G. & Snyder, S.H. 2006. D-aspartate regulates melanocortin formation and function: Behavioral alterations in D-aspartate oxidase deleted mice. *Journal of Neuroscience*, 26:2814-2819. doi:10.1523/JNEUROSCI.5060-05.2006. PMID: 16525061.
228. Weil, Z.M., Pyter, L.M., Martin, L.B. & Nelson, R.J. 2006. Perinatal photoperiod organizes adult immune responses in Siberian hamsters (*Phodopus sungorus*). *American Journal of Physiology*, 290: R1714-R1719. doi:10.1152/ajpregu.00869.2005. PMID: 16410397.
229. Weil, Z.M., Bowers, S.L., Dow, E.R. & Nelson, R.J. 2006. Maternal aggression persists following lipopolysaccharide-induced activation of the immune system. *Physiology & Behavior*, 87:694-699. doi:10.1016/j.physbeh.2006.01.005. PMID: 16490223.
230. Prendergast, B.J., Hotchkiss, A.K., Wen, J., Horton, T.H. & Nelson, R.J. 2006. Refractoriness to short day lengths augments tonic and GnRH-stimulated LH secretion. *Journal of Neuroendocrinology*, 18: 339-348. doi:10.1111/j.1365-2826.2006.01419.x. PMID: 16629832.
231. Weil, Z.M., Huang, A.S., Beigneux, A., Kim, P.M., Molliver, M.E., Blackshaw, S., Young, S.G., Nelson, R.J. & Snyder, S.H. 2006. Behavioural alterations in male mice lacking the gene for D aspartate oxidase. *Behavioural Brain Research*, 171:295-30. doi:10.1016/j.bbr.2006.04.008. PMID: 16725213.
232. Trainor, B.C., Martin, L.B., Greiwe, K.M., Kuhlman, J.R. & Nelson, R.J. 2006. Social and photoperiod effects on reproduction in five species of *Peromyscus*. *General and Comparative Endocrinology*, 148: 252-259. doi:10.1016/j.ygcen.2006.03.006. PMID: 16626709.
233. Pyter, L.M., Trainor, B.C. & Nelson, R.J. 2006. Testosterone and photoperiod interact to affect spatial learning and memory in adult male white-footed mice (*Peromyscus leucopus*). *European Journal of Neuroscience*, 23:3056-3062. doi:10.1111/j.1460-9568.2006.04821.x. PMID: 16819995.
234. Martin, L.B., Weil, Z.M., Kuhlman, J.R. & Nelson, R.J. 2006. Trade-offs within the immune systems of female white-footed mice, *Peromyscus*. *Functional Ecology*, 20:630-636. doi:10.1111/j.1365-2435.2006.01138.x.
235. Trainor, B.C., Greiwe, K.M. & Nelson, R.J. 2006. Individual differences in estrogen receptor alpha in select brain nuclei are associated with individual differences in aggression. *Hormones and Behavior*, 50:338-345. doi:10.1016/j.yhbeh.2006.04.002. PMID: 16753164.
236. Pyter L.M. & Nelson R.J. 2006. Enduring effects of photoperiod on affective behaviors in Siberian hamsters (*Phodopus sungorus*). *Behavioral Neuroscience*. 120: 125-34. doi:10.1037/0735-7044.120.1.125. PMID: 16492123.
237. Weil, Z.M., Martin, L.B., Workman, J.L. & Nelson, R.J. 2006. Immune challenge retards seasonal reproductive regression in rodents: Evidence for terminal investment? *Biology Letters*, 2: 393:396. doi:10.1098/rsbl.2006.0475. PMID: 17148412.
238. Weil, Z.M., Martin, L.B. & Nelson, R.J. 2006. Photoperiod differentially affects immune function and reproduction in collared lemmings (*Dicrostonyx groenlandicus*). *Journal of Biological Rhythms*, 21:384-393. doi:10.1177/0748730406292444. PMID: 16998158.
239. Weil, Z.M., Martin, L.B. & Nelson, R.J. 2006. Interactions among immune, endocrine, and behavioral response to infection. In: Micromammals and Macroparasites: From Evolutionary Ecology to Management. In S. Morand, B. Krasnov, & R. Poulin (Ed.), *Micromammals and*

Macroparasites: From Evolutionary Ecology to Management. (pp. 443-473). Oxfordshire, UK: CABI Publishing.

240. Martin, L.B., Weil, Z.M. & Nelson, R.J. 2006. Refining approaches and diversifying directions in ecoimmunology. *Integrative and Comparative Biology*, 46:1030-1039. doi:10.1093/icb/icl039. PMID: 21672805.
241. Martin, L.B., Navara, K.J., Weil, Z.M., & Nelson, R.J. 2007. Immunological memory is compromised by food restriction in male deer mice, *Peromyscus maniculatus*. *American Journal of Physiology*, 292: R316–R320. doi:10.1152/ajpregu.00386.2006. PMID: 16902185.
242. Weil, Z.M., Workman, J.L. & Nelson, R.J. 2007. Housing condition alters immunological and reproductive responses to day length in Siberian hamsters (*Phodopus sungorus*). *Hormones and Behavior*, 52:261–266. doi:10.1016/j.yhbeh.2007.05.001. PMID: 17583707.
243. DeVries, A.C. & Nelson, R.J. 2007. Behavioral genetics. In *Handbook of Psychophysiology*. Edited by J.T Cacioppo, L.G. Tassinary, & G.G. Berntson. Cambridge University Press: New York, 393-409.
244. Weil, Z.M., Kidder, S.L. & Nelson, R.J. 2007. Photoperiod alters affective responses in collared lemmings. *Behavioural Brain Research*, 179: 305–309. doi:10.1016/j.bbr.2007.02.003. PMID: 17339057.
245. Nelson, R.J. & Martin, L.B. 2007. Seasonal changes in stress responses. In *Encyclopedia of Stress* (2nd Edition). G. Fink (Ed.), San Diego: Academic Press, pp. 427-431.
246. Hotchkiss, A.K. & Nelson, R.J. 2007. An environmental androgen, trenbolone, affects delayed-type hypersensitivity and reproductive tissues in male mice. *Journal of Toxicology and Environmental Health, Part A*, 70:138-140. doi:10.1080/15287390600755091. PMID: 17365574
247. Nelson, R.J. & Trainor, B.C. 2007. Neural mechanisms of aggression. *Nature Reviews Neuroscience*, 8:536-546. doi:10.1038/nrn2174. PMID: 17585306.
248. Trainor, B.C., Workman, J.L., Jessen, R. & Nelson, R.J. 2007. Impaired nitric oxide synthase signaling dissociates social investigation and aggression. *Behavioral Neuroscience*, 121:362-369. doi:10.1037/0735-7044.121.2.362. PMID: 17469926.
249. Martin, L.B., Trainor, B.C., Finy, M.S., & Nelson, R.J. 2007. HPA activity and neotic and anxiety-like behavior vary among *Peromyscus* species. *General and Comparative Endocrinology*, 151:342-350. doi:10.1016/j.ygcen.2007.02.001. PMID: 17368638.
250. Navara, K.J., Trainor, B.C. & Nelson, R.J. 2007. Photoperiod alters macrophage responsiveness, but not expression of Toll-like receptors in Siberian hamsters. *Comparative Biochemistry and Physiology*, 148:354-359. doi:10.1016/j.cbpa.2007.05.019. PMID: 17588795.
251. Pyter, LM, Adelson, J. & Nelson, R.J. 2007. Short days increase hypothalamic-pituitary-adrenal axis responsiveness. *Endocrinology*, 148: 3402-3409. doi:10.1210/en.2006-1432. PMID: 17395702.
252. Trainor, B.C., Lin, S., Finy, M.S., Rowland, M.R. & Nelson, R.J. 2007. Photoperiod reverses the effects of estrogens on male aggression via genomic and nongenomic pathways. *Proceedings of the National Academy of Sciences (USA)*, 104:9840-9845. doi:10.1073/pnas.0701819104. PMID: 17525148.
253. Trainor, B.C., Rowland, M.R. & Nelson, R.J. 2007. Photoperiod affects estrogen receptor alpha, estrogen receptor beta and aggressive behavior. *European Journal of Neuroscience*, 26:207–218. doi:10.1111/j.1460-9568.2007.05654.x. PMID: 17614949.
254. Navara, K. & Nelson, R.J. 2007. The dark side of light at night: Physiological, epidemiological, and ecological consequences. *Journal of Pineal Research*, 4:215-224. doi:10.1111/j.1600-079X.2007.00473.x. PMID: 17803517.
255. Martin, L.B., Weil, Z.M. & Nelson, R.J. 2007. Immune defense and reproductive pace of life in *Peromyscus* mice. *Ecology*, 88:2516–2528. doi:10.1890/07-0060.1. PMID: 18027755.

256. Martin, L.B., Weil, Z.M. & Nelson, R.J. 2008. Seasonal changes in vertebrate immune activity: Mediation by physiological trade-offs. *Philosophical Transactions of the Royal Society of London B: Biological Sciences*, 363:321–339. doi:1098/rstb.2007.2142. PMID: 17638690.
257. Bowers, S.L., Bilbo, S.D., Dhabhar, F.S. & Nelson, R.J. 2008. Stressor-specific alterations in corticosterone and immune responses. *Brain, Behavior, and Immunity*, 22: 105-113. doi:10.1016/j.bbi.2007.07.012. PMID: 17890050.
259. Workman, J.L., Trainor, B.C., Finy, M.S. & Nelson, R.J. 2008. Inhibition of neuronal nitric oxide reduces anxiety-like responses to pair housing. *Behavioural Brain Research*, 18:109–115. doi: 10.1016/j.bbr.2007.08.033. PMID: 17928072.
260. Trainor, B.C., Finy, M.S. & Nelson, R.J. 2008. Paternal aggression in a biparental mouse: Parallels with maternal aggression. *Hormones and Behavior*, 53:200-207. doi:10.1016/j.yhbeh.2007.09.017. PMID: 17991466.
262. Trainor, B.C., Finy, M.S. & Nelson, R.J. 2008. Rapid effects of estradiol on male aggression depend on photoperiod in reproductively non-responsive mice. *Hormones and Behavior*, 53:192-199. doi:10.1016/j.yhbeh.2007.09.016. PMID: 17976598.
263. Zubidat, A.E., Nelson, R.J. & Haim, A.S. 2008. Urinary adrenalin and cortisol secretion patterns of social voles in response to adrenergic blockade under basal conditions. *Physiology and Behavior*, 93:243-249. doi:10.1016/j.physbeh.2007.08.024. PMID: 17910962.
264. Martin, L.M., Weil, Z.M. & Nelson, R.J. 2008. Fever and sickness behavior vary among congeneric rodents. *Functional Ecology*, 22: 68–77. doi:10.1111/j.1365-2435.2007.01347.x.
265. Martin, L.M., Navara, K.J., Bailey, M.T., Hutch, C.R., Powell, N.D., Sheridan, J.F. & Nelson, R.J. 2008. Food restriction compromises immune memory in deer mice (*Peromyscus maniculatus*) by reducing spleen-derived antibody-producing B cell numbers. *Physiological and Biochemical Zoology*, 81:366-372. doi:10.1086/587090. PMID: 18419561.
266. Zala, S.M., Chan, B.K., Bilbo, S.D., Potts, W.K., Nelson, R.J. & Penn, D.J. 2008. Genetic resistance to infection influences a male's sexual attractiveness and modulation of testosterone. *Brain, Behavior, and Immunity*, 22:381-287. doi:10.1016/j.bbi.2007.09.003. PMID: 17945466.
267. Martin, L.M., Weil, Z.M. Kidder, S.L. & Nelson, R.J. 2008. Sex-specific effects of glucose deprivation on cell-mediated immunity and reproduction in Siberian hamsters (*Phodopus sungorus*). *Journal of Comparative Physiology – B*, 178:623-628. doi:10.1007/s00360-008-0253-0. PMID: 18274761.
268. Workman, J.L., Weil, Z.M., Tuthill, C. & Nelson, R.J. 2008. Maternal pinealectomy increases depressive-like responses in Siberian hamster offspring. *Behavioural Brain Research*, 189:387–391. doi:10.1016/j.bbr.2008.011.016. PMID: 18328579.
269. Hotchkiss, A.K. & Nelson, R.J. 2008. Melatonin: An immunomodulatory signal. In: *Melatonin: From Molecules to Therapy*. Edited by S.R. Pandi-Perumal & D.P. Cardinali. Nova Science Publishers, Hauppauge, NY, pp. 227-245.
270. Martin, L.B., Johnson, E.M., Hutch, C.R. & Nelson, R.J. 2008. 6-MBOA affects testis size, but not delayed-type hypersensitivity, in white-footed mice (*Peromyscus leucopus*). *Comparative Physiology and Biochemistry*, 149:181-187. doi:10.1016/j.cbpa.2007.11.006. PMID: 18160321.
271. Weil, Z.M., Norman G., DeVries A.C. & Nelson R.J. 2008. The injured nervous system: A Darwinian perspective. *Progress in Neurobiology*, 86: 48-59. doi:10.1016/j.pneurobio.2008.06.001. PMID: 18602443.
272. Weil, Z.M., Norman, G.J., Barker, J.M., Su, A.J., Nelson, R.J. & DeVries, A.C. 2008. Social isolation potentiates cell death and inflammatory responses after global ischemia. *Molecular Psychiatry*, 13:913-915. doi:10.1038/mp.2008.70. PMID: 18800053.
273. Weil, Z.M., Hotchkiss, M.L., Hotchkiss, A.K. & Nelson R.J. 2008. Photoperiod alters pain responsiveness via changes in pelage characteristics. *Canadian Journal of Zoology*, 86:1212-1216. doi:10.1139/Z08-098.

274. Prendergast, B.J. Nelson, R.J. & Zucker, I. 2009. Mammalian Seasonal Rhythms: Behavior and Neuroendocrine Substrates. In: D.W. Pfaff, A.P. Arnold, S.E. Fahrbach, A.M. Etgen & R.T. Rubin, Editor(s)-in-Chief, *Hormones, Brain and Behavior*, Volume 1. Academic Press, San Diego, Pp. 507-538.
275. Trainor, B.C., Sisk, C.L., & Nelson, R.J. 2009. Hormones and the development and expression of aggressive behavior, In: D.W. Pfaff, A.P. Arnold, S.E. Fahrbach, A.M. Etgen & R.T. Rubin, Editor(s)-in-Chief, *Hormones, Brain and Behavior*, Volume 1. Academic Press, San Diego, Pp. 167-203.
276. Kriegsfeld, L.J. & Nelson, R.J. 2009. Biological Rhythms. In *Handbook of Neuroscience for the Behavioral Sciences*. Edited by J.T. Cacioppo & G.G. Berntson. Wiley & Sons: New York, NY, pp. 56-81.
277. Iscru, E., Serinagaoglu, Y., Schilling, K., Tian, J-B., Bowers-Kidder, S.L., Zhang, R., Morgan, J.I., Devries, A.C., Nelson, R.J., Zhu, M.X. & Oberdick, J. 2009. Sensorimotor enhancement in mouse mutants lacking the Purkinje cell-specific Gi/o modulator, Pcp2(L7). *Molecular and Cellular Neuroscience*, 40: 62-75. doi:10.1016/j.mcn.2008.09.002. PMID: 18930827.
278. Workman, J.L., Bowers, S.L. & Nelson, R.J. 2009. Enrichment and photoperiod interact to affect spatial learning and hippocampal dendritic morphology in white-footed mice (*Peromyscus leucopus*). *European Journal of Neuroscience*, 29:161-170. doi:10.1111/j.1460-9568.2008.06570.x. PMID: 19120443.
279. Navara, K. & Nelson, R.J. 2009. Prenatal environmental influences on the production of sex-specific traits in mammals. *Seminars in Cell and Developmental Biology*, 20:313-319. doi:10.1016/j.semcdb.2008.12.004. PMID: 19135541.
280. Nelson, R.J. & Glickman, S.E. 2009. 2007 Daniel S. Lehrman Lifetime Achievement Award contributions from a pioneer in behavioral endocrinology: Irving Zucker. *Hormones and Behavior*, 55:482-483. doi:10.1016/j.yhbeh.2008.12.006. PMID: 20529699.
281. Weil, Z.M., Norman, G.J., DeVries, A.C., Berntson, G.G. & Nelson, R.J. 2009. Photoperiod alters autonomic regulation of the heart. *Proceedings of the National Academy of Sciences (USA)*, 106:4525-4530. doi:10.1073/pnas.0810973106. PMID: 19246380.
282. Benca, R., Duncan, M.J., Frank, E., McClung, C., Nelson, R.J. & Vicentic, A. 2009. Biological rhythms, higher brain function, and behavior: Gaps, opportunities and challenges. *Behavioral Brain Reviews*, 62:57-70. doi:10.1016/j.brainresrev.2009.09.005. PMID: 19766673.
283. Fonken, L.K., Finy, M.S., Walton, J.C., Weil, Z.M., Workman, J.L., Ross, J & Nelson, R.J. 2009. Influence of light at night on murine anxiety- and depressive-like responses. *Behavioural Brain Research*, 205:349-354. doi:10.1016/j.bbr.2009.07.001. PMID: 19591880.
284. Workman, J.L., Johnson, E., Martin, L.B. & Nelson, R.J. 2009. Butyric acid suppresses palatable food consumption in Siberian hamsters (*Phodopus sungorus*) housed in short, but not long, photoperiods. *Canadian Journal of Zoology*, 86:749-754. doi:10.1139/Z09-068.
285. Weil, Z.M., Norman, G.J., Karelina, K., Morris, J.S., Barker, J.M., Su, A.J., Walton, J.C., Bohinc, S., Nelson, R.J. & DeVries, A.C. 2009. Sleep deprivation attenuates inflammatory responses and ischemic cell death. *Experimental Neurology*, 218:129-136. doi:10.1016/j.expneurol.2009.04.018. PMID: 19409382.
286. Wang, X., Bowers, S.L., Wang, F., Nelson, R.J. & Ma, J. 2009. Cytoplasmic prion protein induces forebrain neurotoxicity. *Biochimica et Biophysica Acta: Molecular Basis of Disease*, 1792:555-563. doi:10.1016/j.bbadis.2009.02.014. PMID: 19281844.
287. Weil, Z.M., Karelina, K., Su, A.J., Barker, J.M., Norman, G.J., Zhang, N., DeVries, A.C., & Nelson, R.J. 2009. Time-of-day determines neuronal damage and mortality after cardiac arrest. *Neurobiology of Disease*, 36:352-360. doi:10.1016/j.nbd.2009.07.032. PMID: 19664712.

288. Zubidat, A.E., Nelson, R.J. & Haim, A. 2009. Photosensitivity to different light intensities in blind and sighted rodents. *Journal of Experimental Biology*, 212:3857-3864. doi:10.1242/jeb.033969. PMID: 19915128.
289. Navara, K.J., Workman, J.L., Oberdick, J. & Nelson, R.J. 2010. Short day lengths skew prenatal sex ratios toward males in Siberian hamsters. *Comparative Biochemistry and Physiology*, 83:127-134. doi:10.1086/648487. PMID: 199338980.
290. Nelson, R.J. 2010. Overview: Photoperiodism in vertebrates. In *Photoperiodism: The Biological Calendar*. Edited by R.J. Nelson, D.L. Denlinger, & D.E. Somers. Oxford University Press, Pp. 365-370. doi:10.1093/aob/mcr215.
291. Demas, G.E., Weil, Z.M. & Nelson, R.J. 2010. Nonreproductive adaptations to photoperiod. In *Photoperiodism: The Biological Calendar*. Edited by R.J. Nelson, D.L. Denlinger, & D.E. Somers. Oxford University Press, Pp. 461-502. doi:10.1093/aob/mcr215.
292. Denlinger, D.L., Somers, D.E. & Nelson, R.J. 2010. Epilogue: Future directions. In *Photoperiodism: The Biological Calendar*. Edited by R.J. Nelson, D.L. Denlinger, & D.E. Somers. Oxford University Press: New York, NY, Pp. 561-566. doi:10.1093/aob/mcr215.
293. Elliott, J.A. & Nelson, R.J. 2010. It's about time: The coupling of biological clocks and veterinary medicine. *The Veterinary Journal*, 185:98-99. doi:10.1016/j.tvjl.2009.07.028. PMID: 19699121.
294. Zubidat, A.E., Nelson, R.J. & Haim, A. 2010. Differential effects of photophase irradiance on metabolic and urinary stress hormone concentrations in 'blind' and sighted rodents. *Chronobiology International*, 27:487-516. doi:10.3109/07420541003678577. PMID: 20524797.
295. Karelina, K., Walton, J.C., Weil, Z.M., Norman, G.J., Nelson, R.J. & DeVries, A.C. 2010. Estrous phase alters social behavior in polygynous, but not monogamous, *Peromyscus*: A role for oxytocin? *Hormones and Behavior*, 58:193-199. doi:10.1016/j.yhbeh.2010.03.002. PMID: 20382149.
296. Bailey, M., Walton, J.C., Dowd, S.E., Weil, Z.M. & Nelson, R.J. 2010. Photoperiod modulates gut bacteria composition in male Siberian hamsters (*Phodopus sungorus*). *Behavior, Brain, and Immunity*, 24: 577-584. doi:10.1016/j.bbi.2009.12.010. PMID: 20045457.
297. Nelson, R.J. 2010. How do we know what we know? Teaching about the scientific process in undergraduate classes. In *Talking about Teaching*. Edited by James Phelan, Columbus, OH, pp. 27-33.
298. Klein, S.L. & Nelson, R.J. 2010. Social behavioral and parasites. In *Encyclopedia of Animal Behavior*. Edited by M. Breed & J. Moore. Academic Press, New York, pp. 216-225.
299. Nelson, R.J. 2010. Hormones and behavior: Basic concepts. In *Encyclopedia of Animal Behavior*. Edited by M. Breed & J. Moore. Academic Press, New York, pp. 97-105.
300. Fonken, L.K., Workman, J.L., Walton, J.C., Weil, Z.M., Morris, J.S., Haim, A., & Nelson, R.J. 2010. Light at night increases body mass by shifting the time of food intake. *Proceedings of the National Academy of Sciences*, 107:18664-18669. doi:10.1073/pnas.1008734107. PMID: 20937863.
301. Workman, J.L., DeWitt, S.J., Fonken, L.K., & Nelson, R.J. 2010. Environmental enrichment enhances delayed-type hypersensitivity in both short- and long-day Siberian hamsters. *Physiology and Behavior*, 99:638-643. doi:10.1016/j.physbeh.2010.01.029. PMID: 20138070.
302. Workman, J.L. & Nelson, R.J. 2011. Potential animal models of seasonal affective disorder. *Neuroscience and Biobehavioral Reviews*, 35:669-679. doi:10.1016/j.neurobiorev.2010.08.005. PMID: 20800614.
303. Zubidat, A.E., Nelson, R.J. & Haim, A. 2010. Photoentrainment in blind and sighted rodent species: Responses to photophase light with different wavelength. *Journal of Experimental Biology*, 213:4213-4222. doi:10.1242/jeb.048629. PMID: 21113002.

304. Bedrosian, T.A., Fonken, L.K., Walton, J.C. & Nelson, R.J. 2010. Chronic exposure to dim light at night suppresses immune responses in Siberian hamsters. *Biology Letters*, 7:468-471. doi:10.1098/rsbl.2010.1108. PMID: 21270021.
305. Bedrosian, T.A., Fonken, L.K., Walton, J.C., Haim, A. & Nelson, R.J. 2010. Dim light at night provokes depression-like behaviors and reduces CA1 dendritic spine density in female hamsters. *Psychoneuroendocrinology*, 36:1062-1069. doi:10.1016/j.psyneuen.2011.01.004. PMID: 21292405.
306. Fonken, L.K., Morris, J.S., & Nelson, R.J. 2011. Early life stress suppresses delayed-type hypersensitivity in short- and long-photoperiods. *Chronobiology International* 28:101-108. doi:10.3109/07420528.2010.538818. PMID: 21231871.
307. Walton, J.C., Chen, Z., Weil, Z.M., Pyter, L.M., Travers, J.B. & Nelson, R.J. 2011. Photoperiod-mediated impairment of long-term potentiation and learning and memory in male white-footed mice. *Neuroscience*, 175:127-132. doi:10.1016/j.neuroscience.2010.12.004. PMID: 21145376.
308. Trainor, B.C. & Nelson, R.J. 2011. Neuroendocrinology of aggression. In: G. Fink, Pfaff, D.W. & Levine, J.E. (editors). *Handbook of Neuroendocrinology*. Elsevier, New York, pp. 509-520. doi.org/10.1016/B978-0-12-375097-6.10022-8.
309. Walton, J.C., Weil, Z.W., & Nelson, R.J. 2011. Influence of photoperiod on hormones, behavior, and immune function. *Frontiers in Neuroendocrinology*, 32:302-319. doi:10.1016/j.yfrne.2010.12.003. PMID: 21156187.
310. Weil, Z.M., Workman, J.L., Karelina, K., & Nelson, R.J. 2011. Short photoperiods alter cannabinoid receptor expression in hypothalamic nuclei related to energy balance. *Neuroscience Letters*, 491:99-103. doi:10.1016/j.neulet.2011.01.013. PMID: 21232581.
311. Fenn, A., Fonken, L.K., & Nelson, R.J. 2011. Sustained melatonin treatment blocks body mass, pelage, reproductive and fever responses to short day lengths in female Siberian hamsters. *Journal of Pineal Research*, 51:180-186. doi:10.1111/j.1600-079X.2011.00874.x. PMID: 21486368.
312. Wohleb, E.S., Hanke, M.L., Corona, A.M., Powell, N.D., Stiner, L., Bailey, M.T., Nelson, R.J., Godbout, J.P., & Sheridan, J.F. 2011. β -Adrenergic receptor antagonism prevents anxiety-like behavior and microglial reactivity induced by repeated social defeat. *Journal of Neuroscience*, 31:6277-6288. doi:10.1523/JNEUROSCI.0450-11.2011. PMID: 21525267.
313. Workman, J.L., Weber, M.D. & Nelson, R.J. 2011. Dietary arginine depletion reduces depressive-like responses in male, but not female mice. *Behavioural Brain Research*, 223:81-87. doi: 10.1016/j.bbr.2011.04.011. PMID: 21515310.
314. Workman, J.L., Fonken, L.K., Gusfa, J., Kassouf, K.M. & Nelson, R.J. 2011. Post-weaning environmental enrichment alters affective responses and interacts with behavioral testing to alter nNOS immunoreactivity. *Pharmacology, Biochemistry & Behavior*, 100:25-42. doi:10.1016/j.pbb.2011.07.008. PMID: 21777607.
315. Fonken, L.K., Xu, X., Weil, Z.M., Chen, G., Sun, Q., Rajagopalan, S. & Nelson, R.J. 2011. Air pollution impairs cognition, provokes depressive-like behaviors and alters hippocampal cytokine expression and morphology. *Molecular Psychiatry*, 16:987-995. doi:10.1038/mp.2011.76. PMID: 21727897.
316. Bedrosian, T.A., Herring, K.L., Weil, Z.M., & Nelson, R.J. 2011. Altered temporal patterns of anxiety in aged and amyloid precursor protein (APP) transgenic mice. *Proceedings of the National Academy of Sciences*, 108:11686-11691. doi:10.1073/pnas.1103098108. PMID: 21709248.
317. Zubidat, A.E., Nelson, R.J., & Haim, A. 2011. Spectral and duration sensitivity to light-at-night in 'blind' and sighted rodent species. *Journal of Experimental Biology*, 214:3206-3217. doi:10.1242/jeb.058883. PMID: 21900468.

318. Workman, J.L., Manny, N., Walton, J.C., & Nelson, R.J. 2011. Short day lengths alter stress and depressive-like responses, and hippocampal morphology in Siberian hamsters. *Hormones and Behavior*, 60:520-528. doi:10.1016/j.yhbeh.2011.07.012. PMID: 21851822.
319. Fonken, L.K. & Nelson, R.J. 2011. Illuminating the deleterious effects of light at night. *F1000 Medicine Reports*, 3:18. doi:10.3410/M3-18. PMID: 21941596.
320. Bedrosian, T.A., Fonken, L.K., Demas, G.E., & Nelson, R.J. 2012. Photoperiod-dependent effects of neuronal nitric oxide synthase inhibition on aggression in Siberian hamsters. *Hormones and Behavior*, 61:176-180. doi:10.1016/j.yhbeh.2011.11.011. PMID: 22197272.
321. Weil, Z.W. & Nelson, R.J. 2012. Neuroendocrine mechanisms of seasonal changes in immune function. In *Ecoimmunology*. Edited by G.E. Demas & R.J. Nelson. Oxford University Press, New York, pp. 297-325.
322. Bedrosian, T.A. & Nelson, R.J. 2012. Neurobiology of human killing. In: *Nonkilling Psychology*. Edited by Joám Evans Pim. Springer Verlag, New York, pp. 23-42.
323. Fonken, L.K., Haim, A., & Nelson, R.J. 2012. Dim light at night increases immune function in Nile grass rats, a diurnal rodent. *Chronobiology International*, 29:26-34. doi:10.3109/07420528.2011.635831. PMID: 22217098.
324. Fonken, L.K., Kitsmiller, E., Smale, L. & Nelson, R.J. 2012. Dim nighttime light impairs cognition and provokes depressive-like responses in a diurnal rodent. *Journal of Biological Rhythms*, 27: 319 - 327. doi:10.1177/0748730412448324. PMID: 22855576.
325. Ashley, N.T., Zhang, N., Weil, Z.M., Magalang, U.J. & Nelson, R.J. 2012. Photoperiod alters duration and intensity of non-rapid eye movement sleep following immune challenge in Siberian hamsters (*Phodopus sungorus*). *Chronobiology International*, 29: 683-692. doi:10.3109/07420528.2012.682682. PMID: 22734569.
326. Walton, J.C., Schilling, K., Nelson, R.J., & Oberdick, J. 2012. Sex-dependent behavioral functions of the Purkinje cell-specific Gai/o binding protein Pcp2(L7). *Cerebellum*, 11:982-1001. doi:10.1007/s12311-012-0268-4. PMID: 22528962.
327. Fonken, L.K., Bedrosian, T.A., Michaels, H., Weil, Z.M., & Nelson, R.J. 2012. Short photoperiods attenuate central responses to an inflammogen. *Brain, Behavior, and Immunity*, 26:617-622. doi:10.1016/j.bbi.2012.01.017. PMID: 22326518.
328. Walton, J.C., Grier, A.J., Weil, Z.M., & Nelson, R.J. 2012. Photoperiod and stress regulation of corticosteroid receptor, brain-derived neurotrophic factor, and glucose transporter GLUT3 mRNA in the hippocampus of Siberian hamsters (*Phodopus sungorus*). *Neuroscience*, 213:106-111. doi:10.1016/j.neuroscience.2012.03.043. PMID: 22521589.
329. Weil, Z.M. & Nelson, R.J. 2012. Seasonality and psychoneuroimmunology. In: *Oxford Handbook of Psychoneuroimmunology*. Edited by S. Segerstrom, Oxford University Press, New York, pp. 291-305.
330. Walton, J.C., Haim, A., Spieldenner, J.M. & Nelson, R.J. 2012. Photoperiod alters fear responses and basolateral amygdala neuronal spine density in white-footed mice (*Peromyscus leucopus*). *Behavioural Brain Research*, 233:345-350. doi:10.1016/j.bbr.2012.05.033. PMID: 22652395.
331. Bedrosian, T.A., Weil, Z.M., & Nelson, R.J. 2012. Chronic citalopram treatment ameliorates depressive behavior associated with light at night. *Behavioral Neuroscience*, 126:654-658. doi:10.1037/a0029699. PMID: 22889310.
332. Walton, J.C., Pyter, L.M., Weil, Z.M. & Nelson, R.J. 2012. Photoperiod mediated changes in olfactory bulb neurogenesis and olfactory behavior in male white-footed mice (*Peromyscus leucopus*). *PLoS ONE*, 7:e42743. doi:10.1371/journal.pone.0042743. PMID: 22912730.
333. Yoon, S.O., Park, D.J., Ryu, J.C., Ozer, H.G., Tep, C., Shin, Y. J., Lim, T.E, Pastorino, L., Kunwar, A.J., Walton, J.C., Nagahara, A.H., Lu, K.P., Nelson, R.J., Tuszyński, M.H., & Huang, K.

2012. JNK3 perpetuates metabolic stress induced by A β peptides. *Neuron*, 75:824-837. doi:10.1016/j.neuron.2012.06.024. PMID: 22958823.
334. Bedrosian, T.A. & Nelson, R.J. 2012. Pro: Alzheimer's disease and circadian dysfunction: chicken or egg? *Alzheimer's Research & Therapy*, 4:25. doi:10.1186/alzrt128. PMID: 22883711
335. Ashley, N.T., Weil, Z.M., & Nelson, R.J. 2012. Inflammation: Mechanisms, costs, and natural variation. *Annual Review of Ecology, Evolution, and Systematics*, 43:385-406. doi:10.1146/annurev-ecolsys-040212-092530.
336. Bedrosian, T.A. & Nelson, R.J. 2013. Sundowning syndrome in aging and dementia: Research in mouse models. *Experimental Neurology*, 243:67-73. DOI:10.1016/J.EXPNEUROL.2012.05.005. PMID: 22627081.
337. Weil Z.M. & Nelson R.J. 2013. Seasonal rhythms in behavior. In *Textbook of Neuroscience in the 21st Century: Basic and Clinical*, Pfaff, D.W. (Ed). Springer: New York, pp. 1795-1810. doi:10.1007/978-1-4614-1997-6_64.
338. Bedrosian, T.A., Weil, Z.M., & Nelson, R.J. 2013. Chronic dim light at night provokes reversible depression-like phenotype: possible role for TNF. *Molecular Psychiatry*, 18: 930-936. doi:10.1038/mp.2012.96. PMID: 22824811.
339. Bedrosian, T.A., Vaughn, C.A., Galan, A., Daye, Ghassan, Weil, Z.M. & Nelson, R.J. 2013. Nocturnal light exposure impairs affective responses in a wavelength-dependent manner. *Journal of Neuroscience*, 33:13081-13087. doi:10.1523/JNEUROSCI.5734-12.2013. PMID: 23926261.
340. Fonken, L.K. & Nelson, R.J. 2013. Dim light at night increases depressive-like responses in male C3H/HeNHsd mice. *Behavioural Brain Research*, 243:74-78. doi:10.1016/j.bbr.2012.12.046. PMID: 23291153.
341. Ashley, N.T., Walton, J.C., Haim, A., Zhang, N., Prince, L.A., Fruchey, A.M., Liberman, R.A., Weil, Z.M., Magalang U.J. & Nelson, R.J. 2013. Sleep deprivation attenuates endotoxin-induced cytokine gene expression independent of day length and circulating cortisol in male Siberian hamsters (*Phodopus sungorus*). *Journal of Experimental Biology*, 216:2581:2586. doi:10.1242/jeb.083832. PMID: 23531821.
342. Bedrosian T.A., Galan A., Vaughn C.A., Weil Z.M., & Nelson R.J. 2013. Light at night alters daily patterns of cortisol and clock proteins in female Siberian hamsters. *Journal of Neuroendocrinology*, 25:590-606. doi:10.1111/jne.12036. PMID: 23489976.
343. Bedrosian T.A., Herring K.L., Walton J.C., Fonken L.K., Weil, Z.M., & Nelson R.J. 2013. Evidence for feedback control of pineal melatonin secretion. *Neuroscience Letters*, 542:123-125. doi:10.1016/j.neulet.2013.03.021. PMID: 23528860.
344. Bedrosian, T.A. & Nelson, R.J. 2013. Influence of the modern light environment on mood. *Molecular Psychiatry*, 18:751-757. doi:10.1038/mp.2013.70. PMID: 23711982.
345. Ikeno T., Weil Z.M., & Nelson R.J. 2013. Photoperiod affects the diurnal rhythm of hippocampal neuronal morphology of Siberian hamsters. *Chronobiology International*, 30:1089-1100. doi:10.3109/07420528.2013.800090. PMID: 23879697.
346. Aubrecht T.G., Weil Z.M., Magalang U., & Nelson R.J. 2013. Dim light at night interacts with intermittent hypoxia to alter cognitive and affective responses. *American Journal of Physiology*, 305: R78-R86. doi:10.1152/ajpregu.00100.2013. PMID: 23657638.
347. Borniger J.C., Weil Z.M., Zhang N., & Nelson R.J. 2013. Dim light at night does not disrupt timing or quality of sleep in mice. *Chronobiology International*, 30: 1016-1023. doi:10.3109/07420528.2013.803196. PMID: 23837748.
348. Fonken, L.K., Aubrecht, T.G., Meléndez-Fernández, O.H., Weil, Z.M., & Nelson, R.J. 2013. Dim light at night disrupts molecular circadian rhythms and increases body weight. *Journal of Biological Rhythms*, 28:262-271. doi:10.1177/0748730413493862. PMID: 23929553.
349. Bedrosian, T.A., Aubrecht, T.G., Kaugars, K.E., Weil, Z.M., & Nelson, R.J. 2013. Artificial light at night alters delayed-type hypersensitivity reaction in response to acute stress in Siberian

- hamsters. *Brain, Behavior, and Immunity*, 34: 39-42. doi:10.1016/j.bbi.2013.05.009. PMID: 23743259.
350. Walton, J.C., Chen, Z., Travers, J.B. & Nelson, R.J. 2013. Exogenous melatonin reproduces the effects of short day lengths on hippocampal function in male white-footed mice, *Peromyscus leucopus*. *Neuroscience*, 248: 403-413. doi:10.1016/j.neuroscience.2013.06.020. PMID: 23806713.
351. Fonken, L.K., Lieberman, R.A., Weil, Z.M., & Nelson, R.J. 2013. Dim light at night exaggerates weight gain and inflammation associated with a high-fat diet in male mice. *Endocrinology*, 154:3817-3825. doi:10.1210/en.2013-1121. PMID: 23861373.
352. Fonken, L.K., Weil, Z.M. & Nelson, R.J. 2013. Dark nights reverse metabolic disruption caused by dim light at night. *Obesity*, 21:1159-1164. doi:10.1002/oby.20108. PMID: 23666854.
353. Bedrosian TA, Vaughn CA, Weil ZM, Nelson, R.J. 2013. Behaviour of laboratory mice is altered by light pollution within the housing environment. *Animal Welfare*, 22: 483-487. doi:10.7120/09627286.22.4.483.
354. Fonken, L.K., Weil, Z.M., & Nelson, R.J. 2013. Mice exposed to dim light at night exaggerate inflammatory responses to lipopolysaccharide. *Brain, Behavior and Immunity*, 34: 159-163. doi:10.1016/j.bbi.2013.08.011. PMID: 24012645.
355. Morris, J.S., Weil, Z.M., & Nelson, R.J. 2013. Sexual experience and testosterone during adolescence alter adult neuronal morphology and behavior. *Hormones and Behavior*, 64:454-460. doi:10.1016/j.yhbeh.2013.08.001. PMID: 23954393.
356. Walton, J.C., Balakrishnan, S., Weil, Z.M., Snyder, S.H. & Nelson, R.J. 2013. Neuronal nitric oxide synthase and NADPH oxidase interact to affect cognitive, affective, and social behaviors in mice. *Behavioural Brain Research*, 256: 320-327. doi:10.1016/j.bbr.2013.08.003. PMID: 23948215.
357. Fonken L.K., Meléndez- Fernández, O.H., Weil Z.M., & Nelson, R.J. 2014. Exercise attenuates the metabolic effects of dim light at night. *Physiology & Behavior*, 124:33-36. doi:10.1016/j.physbeh.2013.10.022. PMID: 24184414.
358. Morris, J.S., Weil, Z.M. & Nelson, R.J. 2014. Early sexual experience alters voluntary alcohol intake in adulthood. *Neuroscience Letters*, 563:129-133. doi:10.1016/j.neulet.2014.01.035. PMID: 24486889.
359. Nelson, A.C., Cauceglia, A.W., Merkle, S.D., Youngson, N.A., Oler, A.J., Nelson, R.J., Cairns, B.R., Whitelaw, E., & Potts, W.K. 2014. Reintroducing domesticated wild mice to sociality induces adaptive transgenerational effects on MUP expression. *Proceedings of the National Academy of Sciences*, 110:19848-19853. doi:10.1073/pnas.1310427110. PMID: 24248373.
360. Bedrosian, T.A & Nelson, R.J. 2014. Nitric oxide and serotonin interactions in aggression. *Current Topics in Behavioral Neuroscience*, 17:131-142. doi:10.1007/7854_2013_273. PMID: 24368618.
361. Ikeno, T., Weil, Z.M. & Nelson, R.J. 2014. Dim light at night disrupts the short-day response in Siberian hamsters. *Comparative and General Endocrinology*, 197:56-64. doi:10.1016/j.ygcen.2013.12.005. PMID: 24362257.
362. Borniger, J.C., McHenry, Z.D., Abi Salloum, B.A, & Nelson, R.J. 2014. Exposure to dim light at night during early development increases adult anxiety-like responses. *Physiology & Behavior*, 133:99-106. doi:10.1016/j.physbeh.2014.05.012. PMID: 24857721.
363. Aubrecht, T.A., Weil, Z.M. & Nelson, R.J. 2014. Melatonin treatment during early life interacts with stress to alter neuronal morphology and provoke depressive-like responses. *Behavioural Brain Research*, 263:90-97. doi:10.1016/j.bbr.2014.01.025. PMID: 24486255.
364. Ikeno, T., Weil, Z.M. & Nelson, R.J. 2014. Timing of light pulses and photoperiod on the diurnal rhythm of hippocampal neuronal morphology of Siberian hamsters. *Neuroscience*, 270:69-75. doi:10.1016/j.neuroscience.2013.04.002. PMID: 24726983.

365. Walton, J.C., Aubrecht, T.G., Weil, Z.M., Leuner, B., & Nelson, R.J. 2014. Photoperiodic regulation of hippocampal neurogenesis in adult male white-footed mice (*Peromyscus leucopus*). *European Journal of Neuroscience*, 40: 2674-2679. doi:10.1111/ejn.12626. PMID: 24893623.
366. Borniger, J.C., Maurya, S.K., Periasamy, M., & Nelson, R.J. 2014. Acute dim light at night increases body mass, alters metabolism, and shifts core body temperature circadian rhythms. *Chronobiology International*, 31: 917-925. doi:10.3109/07420528.2014.926911. PMID: 24933325.
367. Aubrecht, T.A., Weil, Z.M. & Nelson, R.J. 2014. Dim light at night interferes with the development of the short-day phenotype and impairs cell-mediated immunity in Siberian hamsters (*Phodopus sungorus*). *Journal of Experimental Zoology A*, 321:450-456. doi:10.1002/jez.1877. PMID: 24962267.
368. Fonken, L.K. & Nelson, R.J. 2014. The effects of light at night on circadian clocks and metabolism. *Endocrine Reviews*, 35:648-670. 10.1210/er.2013-1051. PMID: 24673196
369. Aubrecht, T.G., Weil, Z.M., Ariza, M.E., Williams, M., Reader, J., Glaser, B., Sheridan, R., & Nelson, R.J. 2014. Epstein-Barr virus (EBV)-encoded dUTPase and chronic restraint induce impaired learning and memory and sickness responses. *Physiology & Behavior*, 137:18-24. doi:10.1016/j.physbeh.2014.07.001. PMID: 25034413.
370. Aubrecht, T.G., Abi Salloum, B.A., B., Ariza, M.E., Williams, M., Reader, B., Glaser, R., Sheridan, J. & Nelson, R.J. 2014. Restraint induces sickness responses independent of injection with Epstein-Barr virus (EBV)-encoded dUTPase. *Journal of Behavioral and Brain Science*, 4:491-505. doi:10.4236/jbbs.2014.411049.
371. Liu, C., Fonken, L.F., Wang, A., Maiseyeu, A., Bai, Y., Wang, T.-Y., Maurya, S. Ko, A-Y., Periasamy, M., Dvonch, T., Morishita, M., Brook, R.D., Harkema, J., Ying, Z., Mukherjee, B., Sun, Q., Nelson, R.J. & Rajagopalan, S. 2014. Central IKK β inhibition prevents air pollution mediated peripheral inflammation and exaggeration of type II diabetes. *Particle and Fibre Toxicology*, 11:53. doi:10.1186/s12989-014-0053-5. PMID: 25358444.
372. Ikeno, T. & Nelson, R.J. 2015. Acute melatonin treatment alters dendritic morphology and circadian clock gene expression in the hippocampus of Siberian hamsters. *Hippocampus*, 25: 142-148. doi:10.1002/hipo.22358. PMID: 25160468.
373. Weil, Z.M., Borniger, J.C., Cisse, Y.M., Abi Salloum, B.A., & Nelson, R.J. 2015. Neuroendocrine control of photoperiodic changes in immune function. *Frontiers in Neuroendocrinology*, 37:108-118. doi:10.1016/j.yfrne.2014.10.001. PMID: 25456047.
374. Borniger, J.C., Gaudier-Diaz, M.M., Zhang, N., Nelson, R.J. & DeVries, A.C. 2015. Cytotoxic chemotherapy increases sleep and sleep fragmentation in non-tumor-bearing mice. *Behavior, Brain and Immunity*, 47:218-227. doi:10.1016/j.bbi.2014.11.001. PMID: 25449581
375. Aubrecht, T.A., Jenkins, R., Magalang, U. & Nelson, R.J. 2015. Influence of gonadal hormones on the behavioral effects of intermittent hypoxia in mice. *American Journal of Physiology*, 308: R489-99. doi:10.1152/ajpregu.00379.2014. PMID: 25552660.
376. Aubrecht, T.A., Jenkins, R. & Nelson, R.J. 2015. Dim light at night increases body mass of female mice. *Chronobiology International*, 32:557-560. doi:10.3109/07420528.2014.986682. PMID: 25431079.
377. Lambert, K.G., Nelson, R.J., Jovanovic, T., & Cerda, M. 2015. Brains in the city: Neurobiological effects of urbanization. *Neuroscience & Biobehavioral Reviews*, 58:107-122. doi:10.1016/j.neubiorev.2015.04.007. PMID: 25936504.
378. Hogan, M.K., Kovalycsik, T., Sun, Q., Rajagopalan, S. & Nelson, R.J. 2015. Combined effects of exposure to dim light at night and fine particulate matter on C3H/HeNHsd mice. *Behavioural Brain Research*, 294: 81-88. doi:10.1016/j.bbr.2015.07.033. PMID: 26235330.
379. Stevenson, T.J., Visser, M.E., Arnold, W., Barrett, P., Biello, S., Dawson, A., Denlinger, D., Dominoni, D., Ebling, F., Elton, S., Evans, N., Ferguson, H., Foster, R.G., Hau, M., Haydon, D.T., Hazlerigg, D., Heideman, P., Hopcraft, J.G.C., Jonsson, N.N., Kronfeld-Schor, N., Kumar, V.,

- Lincoln, G., MacLeod, R., Martin, S., Martinez-Bakker, M., Nelson, R.J., Reed, T., Robinson, J., Rock, D., Schwartz, W., Steffan-Dewenter, I., Tauber, E., Thackeray, S.J., Umstatter, C., Yoshimura, T., & Helm, B. 2015. The impact of disrupted seasonal biology on One Health: Humans to ecosystems. *Proceedings of the Royal Society B*, 282: 14-53. doi:10.1098/rspb.2015.1453. PMID: 26468242.
380. Aubrecht, T.G., Weil, Z.M., Abi Salloum, B., Ariza, B.E., Williams, M., Reader, B., Glaser, R., Sheridan, J. & Nelson, R.J. 2015. Chronic physical stress does not interact with Epstein-Barr virus (EBV)-encoded dUTPase to alter the sickness response. *Journal of Behavioral and Brain Sciences*, 5:513-523. doi:10.4236/jbbs.2015.511049. PMID: 27175311.
381. Bedrosian, T.A., Fonken, L.K., & Nelson, R.J. 2016. Endocrine effects of circadian disruption. *Annual Review of Physiology*, 78:109-131. doi:10.1146/annurev-physiol-0211150105102. PMID: 26208951.
382. Fonken, L.K. & Nelson, R.J. 2016. Effects of light exposure at night during development. *Current Opinion in Behavioral Sciences*, 7:33-39. doi:10.1016/J.COBEHA.2015.10.008.
383. Fonken, L.K., Gaudet, A., Gaier, K.R., Nelson, R.J., & Popovich, P.G. 2016. microRNA-155 deletion reduces anxiety- and depressive-like responses in mice. *Psychoneuroendocrinology*, 63: 362-369. doi:10.1016/j.psyneuen.2015.10.019. PMID: 26555429.
384. Dominoni DM, Borniger JC, Nelson RJ. 2016. Light at night, clocks and health: From humans to wild organisms. *Biology Letters*, 12: 20160015. doi:10.1098/rsbl.2016.0015. PMID: 26888917.
385. Gaudet, A., Fonken, Gushchina, L., L.K., Aubrecht, T.A., Maura, S.K., Periasamy, M., Nelson, R.J., & Popovich, P.G. 2016. microRNA-155 deletion prevents diet-induced obesity in mice. *Scientific Reports*, 6:22862; doi:10.1038/srep22862.
386. Borniger, J.C., Cisse, Y.M., Cantemir-Stone, C.Z., Bolon, B., Nelson, R.J., & Marsh, C.B. 2016. Behavioral abnormalities in mice lacking mesenchyme-specific *Pten*. *Behavioral Brain Research*, 304:80-85. doi:10.1016/j.bbr.2016.02.016. PMID: 26876012.
387. Trainor, B.C., Sisk, C.L. & Nelson, R.J. 2017. Hormones and the Development and Expression of Aggressive Behavior. In *Hormones, Brain, and Behavior* 3rd Ed. Pfaff, D.W and Joëls, M. (editors-in-chief). Elsevier, New York, 167-205. doi:10.1016/B978-008088783-8.00005-X.
388. Stevenson, T.J., Prendergast, B.J. & Nelson, R.J. 2017. Mammalian seasonal rhythms: Behavior and neuroendocrine substrates. In *Hormones, Brain, and Behavior* 3rd Ed, Pfaff, D.W and Joëls, M. (Editors-in-Chief) Elsevier, New York, 371-398
389. Weil Z.M. & Nelson R.J. 2016. Seasonal rhythms in behavior. In *Textbook of Neuroscience in the 21st Century: Basic and Clinical*, Second edition. Pfaff, D.W. (Ed). Springer: New York, pp. 2183-2199.
390. Borniger, J.C., Ding, H., Williams, M., Tweedle, M.F., Knopp, M.V., Maurya, S.K., Periasamy, M., Weil, Z.M., & Nelson, R.J. 2016. Photoperiod affects organ specific glucose metabolism in male Siberian hamsters (*Phodopus sungorus*). *Journal of Clinical and Molecular Endocrinology* 1:2:07. doi:10.21767/2572-5432.10007.
391. Gygli, P.E., Chang, J.C., Gokozan, H.N., Catacutan, F.P., Schmidt, T.A., Kaya1, B., Goksell, M., Baig, F.S., Chen, S., Griveau, A., Michowski, W., Wong, M., Palanichamy, M., Sicinski, P., Nelson, R.J., Czeisler, C., & Otero, J.J. 2016. Cyclin A2 promotes DNA repair in the brain during both development and aging. *Aging*, 8: 11540-11570. doi:10.18632/aging.100990. PMID: 27425845.
392. Borniger, J.C., Teplitsky, S., Gnyawali, S., Nelson, R.J., & Rink, C. 2016. Photoperiodic regulations of cerebral blood flow in white-footed mice (*Peromyscus leucopus*). *eNeuro*. 3: ENEURO: 0058-16.2016. doi:10.1523/ENEURO.0058-16.2016. PMID: 27570829.
393. Cisse, Y.M. & Nelson, R.J. 2016. Consequences of circadian dysregulation on metabolism. *ChronoPhysiology and Therapy*, 6:55-63. doi:10.2147/CPT.S100363.

394. Cisse, Y.M., Peng, J. & Nelson, R.J. 2016. Dim light at night prior to adolescence increases adult anxiety-like behaviors. *Chronobiology International*, 33:1473-1480. doi:10.1080/07420528.2016.1221418. PMID: 27592634.
395. Borniger, J.C., Cisse, Y.M., Nelson, R.J., & Martin, L.B. 2017. Seasonal variation in stress responses. In *Neuroendocrinology and Endocrinology*. G. Fink (Ed). Elsevier, New York, pp. 411-419.
396. Bedrosian, T.A. & Nelson, R.J. 2017. Timing of light exposure affects mood and brain circuits. *Translational Psychiatry*, 7: e1017. doi:10.1038/tp.2016.262. PMID: 28140399.
397. Borniger J.C. & Nelson, R.J. 2017. Photoperiodic regulation of behavior: *Peromyscus* as a model system. *Seminars in Cell & Developmental Biology*, 61:82-91. doi:10.1016/j.semcdb.2016.06.015. PMID: 27346738.
398. Borniger, J.C., Walker, W.H., Gaudier-Diaz, M.M., Stegman, C., Zhang, N., Hollyfield, J.L., Nelson, R.J. & DeVries, A.C. 2017. Time-of-day dictates transcriptional inflammatory responses to cytotoxic chemotherapy. *Scientific Reports*, 7:1-11. doi:10.1038/srep41220. PMID: 28117419.
399. Y.M. Cisse, K.L. Russart, R.J. Nelson. 2017. Parental exposure to dim light at night prior to mating alters offspring adaptive immunity. *Scientific Reports*, 31: 1-10. doi:10.1038/srep45497. PMID: 28361901.
400. Lunn, R.M., Blask, D.E., Coogan, A.N., Figueiro, M.G., Gorman, M.R., Hall, J.E., Hansen, J., Nelson, R.J., Panda, S., Smolensky, M.H., Stevens, R.G., Turek, F.W., Vermeulen, R., Carreón, T., Caruso, C.C., Lawson, C.C., Thayer, K.A., Twery, M.J., Ewens, A.D., Garner, S.C., Schwingl, P.J. & Boyd, W.A., 2017. Health consequences of electric lighting practices in the modern world: A report on the National Toxicology Program's workshop on shift work at night, artificial light at night, and circadian disruption. *Science of the Total Environment*, 607:1073-1084. doi:10.1016/j.scitotenv.2017.07.056. PMID: 28724246.
401. Borniger, J.C., Cisse, Y.M., Surbhi, & Nelson, R.J. 2017. Reciprocal regulation of circadian rhythms and immune function. *Current Sleep Medicine Reports*, 3:93-103. doi:10.1007/s40675-017-0070-7.
402. Cisse, Y.M., Russart, K.L.G. & Nelson, R.J. 2017. Depressive-like behavior is elevated among offspring of parents exposed to dim light at night prior to mating. *Psychoneuroendocrinology*, 83: 182-186. doi:10.1016/j.psyneuen.2017.06.004. PMID: 28644985.
403. Cisse, Y.M., Borniger, J.C. & Nelson, R.J. 2018. Hormones, circadian rhythms and mental health. In: *Oxford Handbook on Evolutionary Psychology and Behavioral Endocrinology*. L. Welling, T.K. Shackelford, (Eds.) Oxford University Press: New York.
404. Borniger, J.C., Don, R.F., Zhang, N., Boyd, R.T. & Nelson, R.J. 2017. Enduring effects of perinatal nicotine exposure on murine sleep in adulthood. *American Journal of Physiology*, 313:R280-R289. doi:10.1152/ajpregu.00156.2017. PMID: 28637659.
405. Cisse, Y.M., Peng, J., & Nelson, R.J. 2017. Effects of dim light at night on food intake and body mass in developing mice. *Frontiers in Neuroscience*, 294:1-8. doi:10.3389/fnins.2017.00294. PMID: 28603481.
406. Bedrosian, T.A. & Nelson, R.J. 2018. Biology of human aggression. In: *International Handbook on Aggression*. J.L. Ireland, P. Birch P., Ireland (Eds). Routledge, London, pp.
407. Gaudet, A.D., Fonken, L.K., Watkins, L.R., Nelson, R.J. & Popovich, P.G. 2018. MicroRNAs: Roles in regulating neuroinflammation. *Neuroscientist*, 24:221-245. doi:10.1177/1073858417721150. PMID: 28737113.
408. Surbhi and Nelson, R.J. 2017. Melatonin and aging. In: *Pineal Gland: Research Advances and Clinical Challenges*. A. Catala, (editor), Nova Biomedical: New York, NY, pp. 205-254. ISBN: 978-1-53612-147-6
409. Nelson, R.J. & DeVries, A.C. 2017. Medical hypothesis: Light at night is a factor worth considering in critical care units. *Advances in Integrative Medicine*, 4:115-120. doi:10.1016/j.aimed.2017.12.001. PMID: 34094846.

410. Cisse, Y.M., Borniger, J.C., Lemanski, E., Walker, W.H., & Nelson, R.J. 2018. Time-restricted feeding alters the innate immune response to bacterial endotoxin. *Journal of Immunology*, 200:681-687. doi:10.4049/jimmunol.1701136. PMID: 29203514.
411. Russart, L.G.K., Huk, D., Nelson, R.J. & Kirschner, L.S. 2018. Elevated aggressive behavior in male mice with thyroid-specific Prkar1a and global Epac1 gene deletion. *Hormones and Behavior*, 98:121-129. doi:10.1016/j.yhbeh.2017.12.012. PMID: 29289659.
412. Jarczok, M.N., Koenig, J., Aguilar-Raab, C., Kaess, M., Ditzen, B., Nelson, R.J., Hall, M., Thayer, J.F., & Fischer, J.E. 2018. The heart's rhythm 'n' blues: Sex differences in circadian variation patterns of vagal activity vary by depressive symptoms in predominantly healthy employees. *Chronobiology International*, 15:1-14. doi:10.1080/07420528.2018.1239.499. PMID: 29543518.
413. Borniger, J.C., Walker, W. H., Surbhi, Emmer, K.M., Zhang, N., Zalenski, A.A., Muscarella, S.L., Fitzgerald, J.A., Smith, A.N., Braam, C., Tial, T., Magalang, U., Lustberg, M.B., Nelson, R.J., & DeVries, A.C. 2018. A role for hypocretin/orexin in metabolic dysfunction in a mouse model of non-metastatic breast cancer. *Cell Metabolism*, 27:1-12. doi:10.1016/j.cmet.2018.04.021. PMID: 29805100.
414. Borniger, J.C., Don, R.F., Boyd, R.T. & Nelson, R.J. 2018. Do cigarettes have long lasting effects on children's sleep? *Frontiers for Young Minds*, 6:7. doi:10.3389/frym.2018.00007
415. Nelson, R.J. & Chbeir, S. 2018. Dark matters: Effects of light at night on metabolism. *Proceedings of the Nutrition Society*, 11:1-7. doi:10.1017/S0029665118000198. PMID: 29747703.
416. Emmer, KM, Russart, KLG, Walker, WH, Nelson, RJ, & DeVries, AC. 2018. Effects of light at night on laboratory animals and solutions to light pollution in vivaria. *Behavioral Neuroscience*, 132:302-214. doi:10.1037/bne0000252. PMID: 29952608.
417. Mason, I.C., Boubekri, M. Figueiro, M.G., Hasler, B.P., Hattar, S., Hill, S.G., Nelson, R.J., Sharkey, K.M., Wright, K.P., Boyd, W.A, Brown, M.K., Laposky, A., Twery, M.J., & Zee, P.C. 2018. Circadian Health and Light: A report on the National Heart, Lung, and Blood Institute's workshop. *Journal of Biological Rhythms*, 33: 451-457. doi:10.1177/0748730418789506. PMID: 30033850.
418. Russart KLG, Nelson RJ. Artificial light at night alters behavior in laboratory and wild animals. 2018. *Journal of Experimental Zoology. Part a, Ecological and Integrative Physiology*, 329:401-408. doi:10.1002/jez.2173. PMID 29806740.
419. Surbhi, Borninger, J.C., Russart, K.L.G., Zhang, N., Magalang, M. & Nelson, R.J. 2018. miR-155 deletion modulates lipopolysaccharide-induced sleep in female mice. *Chronobiology International*, 36:188-202. doi:10.1080/07420528.2018.1525617. PMID: 30299169.
420. Dominoni, D.M. & Nelson, R.J. 2018. Artificial light at night as an environmental pollutant: An integrative approach across taxa, biological functions, and scientific disciplines. *Journal of Experimental Zoology A*, 329:8-9. doi:10.1002/jez.2241. PMID: 30371014.
421. Surbhi, Schatz, K.C., Kyne, R.F., Nelson, R.J. & Paul, M.J. 2019. Photoperiod regulates hypothalamic miR-155 gene expression in female, but not male, Siberian hamsters (*Phodopus sungorus*). *Behavioral Neuroscience* 133:240-246. doi:10.1037/bne0000296. PMID: 30742456.
422. Russart, K.L.G. & Nelson, R.J. 2019. Hormones and behavior: Basic concepts. In *Encyclopedia of Animal Behavior*. Second Edition, Edited by MD Breed and J. Moore. Pp.97-105. Elsevier Major Works, Oxford, UK.
423. Czeisler, C., Silva, T.M., Fair, S.R., Liu, J., Tupall, S., Kaya, B., Cowgill, A., Mahajan, S., Wang, Y., Blisset, A., Göksel, M., Borniger, J.C., Zhang, N., Fernandes-Junior, S.A., Catacutan, F., Alves, M.J., Nelson, R.J., Sundaresan, V., Rekling, J., Takakura, A.C., Moreira, T.S., & Otero, J.J. 2019. PHOX2B-derived astrocytes regulate chemosensory control of breathing and sleep homeostasis. *Journal of Physiology*, 597:2225-2251. doi:10.1113/JP277082. PMID: 30707772.

424. Fonken, L.K., Bedrosian, T.A., Zhang, N., Weil, Z.M., DeVries, A.C., & Nelson, R.J. 2019. Effects of light at night on cardiac arrest outcome. *Experimental Neurology*, 317:100-109. doi:10.1016/j.expneurol.2019.02.008
425. Rao, X., Asico, L.D., Zanos, P., Mahabeleshwar, G.H., Gangwar, R.S., Xia, C., Duan L., Cisse, Y-M., Rengasamy, P., Jose, P.A., Gould, T.D., Nelson, R.J., Biswal, S., Chen, L.-C., Zhong, J., & Rajagopalan, S. 2019. Alpha2B-adrenergic receptor overexpression in the brain potentiates air pollution-induced behavior and blood pressure changes. *Toxicological Sciences*, 169:95-107. doi:10.1093/toxsci/kfz025. PMID: 30812033.
426. Gu, Y., Shu, Y., Corona, A.W., Xu, K., Yi, A.F., Chen, S., Luo, M., Flanagan, J.G., Tremblay, M.L., Landreth, G.E., Nelson, R.J., Silver, J., & Shen, Y. 2019. Alzheimer's disease progression is dependent on neuronal receptor PTP σ . *bioRxiv* 079806. doi:10.1101/079806.
427. Russart, K.L.G., Chbeir, S., Nelson, R.J. & Magalang, U. 2019. Light at night exacerbates metabolic dysfunction in a polygenic mouse model of type 2 diabetes mellitus. *Life Sciences*, 34: 116574. doi:10.1016/j.lfs.2019.116574. PMID: 31207311.
428. Yin, W., Borniger, J.C., Wang, X., Maguire, S.M., Munselle, M.L., Bezner, K.S., Tesfamariam, H.M., Garcia, A.N., Hofmann, H., Nelson, R.J., Gore, A. 2019. Estradiol treatment improves biological rhythms in a preclinical rat model of menopause. *Neurobiology of Aging*, 83:1-10. doi:10.1016/j.neurobiolaging.2019.08.029. PMID: 31585360.
429. Walker, W.H., Meléndez-Fernández, O.H., & Nelson, R.J. 2019. Prior exposure to dim light at night impairs dermal wound healing in female C57BL/6 mice. *Archives of Dermatological Research*, 311:573-576. doi:10.1007/s00403-019-01935-8. PMID: 31144020.
430. Walker, W.H., Meléndez-Fernández, O.H., Nelson, R.J. & Reiter, R.J. 2019. Global climate change and stable photoperiods: A mismatch that jeopardizes animal fitness. *Ecology and Evolution*, 9:10044-10054. doi:10.1002/ece3.5537. PMID: 31534712.
431. Walker, W.H., Borniger, J.C., Gaudier-Diaz, M.M., Meléndez-Fernández, O.H., Pascoe, J., DeVries, A.C., & Nelson, R.J. 2020. Acute exposure to dim light at night is sufficient to induce neurological changes and depressive-like behavior. *Molecular Psychiatry*, 25:1080-1093. doi:10.1038/s41380-019-0430-4. PMID: 31138889.
432. Walker, W.H., Walton, J.C., DeVries, A.C., & Nelson, R.J. 2020. Circadian rhythm disruption and mental health. *Translational Psychiatry*, 10:28 doi:10.1038/s41398-020-0694-0. PMID: 32066704.
433. Walker, W.C., Bumgarner, J.R., Nelson, R.J. & DeVries, A.C. 2020. Transcardial perfusion is not required to accurately measure cytokines within the brain. *Journal of Neuroscience Methods*, 334:108601. doi:10.1016/j.jneumeth.2020.108601. PMID: 31981570.
434. Cissé, Y.M., Russart, K.L.G., & Nelson, R.J. 2020. Exposure to dim light at night prior to conception attenuates offspring sickness responses. *Frontiers in Immunology*, 155:e0231140. doi: 10.1371/journal.pone.0231140. PMID: 32302341.
435. Bumgarner, J.R., Walker, W.H., Liu, J.A., Walton, J.C. & Nelson, R.J. 2020. Dim light at night exposure induces cold hyperalgesia and mechanical allodynia in male mice. *Neuroscience*, 434:111-119. doi:10.1016/j.neuroscience.2020.03.022. PMID: 32201267.
436. Weil, Z.M., Fonken, L.K., Walker, W.H., Bumgarner, J.R., Liu, J.A., Meléndez-Fernández, O.H., Zhang, N., DeVries, A.C. & Nelson, R.J. 2020. Dim light at night exacerbates stroke outcome. *European Journal of Neuroscience*, 52:4139-4146. doi:10.1111/ejn.14915. PMID: 32691462.
437. Walker II, W.H., Bumgarner, J.R., Walton, J.C., Liu, J.A., Meléndez-Fernández, O.H., DeVries, A.C. & Nelson, R.J. 2020. Light pollution and cancer. *International Journal of Molecular Sciences*. 21(24), 9360. doi:10.3390/ijms21249360. PMID: 33302582.
438. Walton, J.C., Walker II, W.H., Bumgarner, J.R., Meléndez-Fernández, O.H., Liu, J.A., Hughes, H.L., Kaper, A.L. & Nelson, R.J. 2021. Circadian variation in efficacy of medications. *Clinical Pharmacology & Therapeutics*, 109: 1457-1488. doi:10.1002/cpt.2073. PMID: 33025623.

439. Walker II, W.H., Walton, J.C. & Nelson, R.J. 2021. Disrupted circadian rhythms and mental health. In *Handbook of Clinical Neurology*. 179:259-270. Aminoff, M.J., Boller, F., & Swaab, D.F. (eds). Elsevier, Amsterdam. doi:10.1016/B978-0-12-819975-6.00016-9. PMID: 34225967.
440. Bumgarner, J.R. & Nelson, R.J. 2021. Light at night and disrupted circadian rhythms alter physiology and behavior. *Integrative and Comparative Biology*, 61:1160-1169. doi:10.1093/icb/icab017. PMID: 33787878.
441. Walton, W.C., Bumgarner, J.R. & Nelson, R.J. 2021. Sex differences in circadian rhythms. In *Sex Differences*, edited by S.M. Breedlove and C. Jordan. Cold Spring Harbor Press. doi:10.1101/cshperspect.a039107. PMID: 35101914.
442. Nelson, R.J. 2021. Inaugural editorial. *Journal of Experimental Zoology, A*, 335:385. doi:10.1002/jez.2455. PMID: 33844474.
443. Nelson, R.J., Bumgarner, J.R., Walker, W.H. & DeVries, A.C. 2021. Time-of-day as a critical biological variable. *Neuroscience and Biobehavioral Reviews*, 127:740-746. doi:10.1016/j.neubiorev.2021.05.017. PMID: 34052279
444. Liu, J.A., Walton, J.C., DeVries, A.C., Nelson, R.J. 2021. Disruptions to circadian rhythms and thrombolytic therapy during ischemic stroke intervention. *Frontiers in Neuroscience*, 15:662. doi:10.3389/fnins.2021.675732. PMID: 34177452.
445. Bumgarner, J.R. & Nelson, R.J. 2021. Implications of disrupted circadian rhythms on pain. *Journal of Psychiatry and Brain Science*, 6:e210014. doi:10.20900/jpbs.20210014
446. Weil Z.M. & Nelson R.J. 2021. Seasonal rhythms in behavior. In *Textbook of Neuroscience in the 21st Century: Basic and Clinical*, Third edition. Pfaff, D.W. (Ed). Springer: New York.
447. Meléndez-Fernández, O.H., J.A., Walton, J.C., DeVries, A.C., & Nelson, R.J., 2021. Disrupted circadian rhythms and cardiac function. *Biomolecules* 11: 883. doi:10.3390/biom11060883
448. Bumgarner, J.R., Walker, W.H., & Nelson, R.J. 2021. Circadian rhythms of the pain system. *Neuroscience and Biobehavioral Reviews*, 129:296-306. doi:10.1016/j.neubiorev.2021.08.004. PMID: 34375675.
449. Walker, W.H., Bumgarner, J.R., Becker-Krail, D.D., May, L.E., Liu, J.A., & Nelson, R.J. 2021. Light at night disrupts biological clocks, calendars, and immune function. *Seminars in Immunopathology*. doi:10.1007/s00281-021-00899-0. PMID: 34731290.
450. Walker II, W.H., Kaper, A.L., Meléndez-Fernández, O.H., Bumgarner, J.R., Liu, J.A., Walton, P.R., DeVries, A.C., & Nelson, R.J. 2021. Time-restricted feeding alters the efficiency of mammary tumor growth. *Chronobiology International*, 39:535-546. doi:10.1080/07420528.2021.2011306 PMID: 34894935.
451. Nelson, R.J. 2022. Introduction to Special Issue Honoring David Crews. *Journal of Experimental Zoology A*. doi:10.1002/jez.2545. PMID: 34894113.
452. Walker II, W.H., Kvadas, R.M., May, L.E., Liu, J.A., Bumgarner, J.R., Walton, J.C., DeVries, A.C., Dauchy, R.T., Blask, D.E., Nelson, R.J. 2021. Artificial light at night reduces anxiety-like behavior in female mice with exacerbated mammary tumor growth. *Cancers*, 13:4860. doi:10.3390/cancers13194860. PMID: 34638343.
453. Walker II, W.H., Spowls, S.A., Bumgarner, J.R., Liu, J.A., Meléndez-Fernández, O.H., Walton, J.C., Lockman, P.R., DeVries, A.C., & Nelson, R.J. 2022. Circadian influences on chemotherapy efficacy in a mouse model of brain metastases of breast cancer. *Frontiers in Oncology*, 11:752331. doi:10.3389/fonc.2021.752331. PMID: 34956876.
454. Lee, A., Mason, M.L., Lin, T., Kumar, S.B., Kowdley, D., Leung, J.H., Muhanna, D, Sun, Y., Ortega-Anaya, M.J., Yu, L., Fitzgerald, J., DeVries, A.C., Nelson, R.J., Weil, Z.M., Jimenez-flores, R., Parquette, J.R., Ziouzenkova, O. 2022. Amino acid nanofibers improve glycemia and confer cognitive therapeutic efficacy to bound insulin. *Pharmaceutics*, 14(1):81. doi:10.3390/pharmaceutics14010081. PMID: 35056977.

455. Bumgarner, J.R. & Nelson, R.J. 2022. Open-source analysis and visualization of segmented vasculature datasets with VesselVio. *Cell Reports Methods*, 2:100189. doi:10.21203/rs.3.rs-608609/v1. PMID: 35497491.
456. Walker II, W.H., Kaper, A.L., Meléndez-Fernández, O.H., Bumgarner, J.R., Liu, J.A., Walton, J.C., DeVries, A.C., & Nelson, R.J. 2022. Time-restricted feeding alters the efficiency of mammary tumor growth. *Frontiers in Oncology*. doi:10.1080/07420528.2021.2011306. PMID: 34894935.
457. Liu, J.A., Meléndez-Fernández, O.H., Bumgarner, J.R., and Nelson, R.J. 2022. Effects of light pollution on photoperiod-driven seasonality. *Hormones and Behavior*, 141:105150. <https://doi.org/10.1016/j.yhbeh.2022.105150> PMID: 35304351.
458. Becker-Krail, D.D., Walker II, W.H., & Nelson, R.J. 2022. The ventral tegmental area and nucleus accumbens as circadian oscillators: Implications for drug abuse and substance use disorders. *Frontiers in Physiology: Chronobiology*, DOI: 10.3389/fphys.2022.886704 PMID: 35574492.
459. Nelson, R.J., Bumgarner, J.R., Liu, J.A., Love, J., Meléndez-Fernández, O.H., Becker-Krail, D., Walker II, W.H., Walton, J.C., DeVries, A.C., & Prendergast, B.J. 2022. Time of day as a critical variable in biology. *BMC Biology*, 20:142. DOI: 10.1186/s12915-022-01333-z PMID: 35705939.
460. Miller-Crews, I., Nelson, R.J. & Gore, A.C. 2002. David Crews. In *Biographical History of Behavioral Neuroendocrinology*. R.J. Nelson and Z.M. Weil (editors). Springer Nature. pp. 349-358.
461. Walker II, W.H., Meléndez-Fernández, O.H., Becker-Krail, D.D., & Nelson, R.J. 2023. Biological clocks and immune function. In *Neuroendocrine-Immune System Interactions*. JP Kongsman and TM Reyes (Eds). doi.org/10.1007/978-3-031-21358-8_11
462. Nelson, R.J. 2023. Frank A. Beach. In *Biographical History of Behavioral Neuroendocrinology*. R.J. Nelson and Z.M. Weil (editors). Springer Nature. pp. 43-39.
463. Nelson, R.J. & Weil, Z.M. 2023. Arnold Berthold. In *Biographical History of Behavioral Neuroendocrinology*. R.J. Nelson and Z.M. Weil (editors). Springer Nature. pp. 1-5.
464. Nelson, R.J., Sachs, B.D., & Zucker, I. 2023. Julian M. Davidson. In *Biographical History of Behavioral Neuroendocrinology*. R.J. Nelson and Z.M. Weil (editors). Springer Nature. 135-140.
465. Fonken, L.K & Nelson, R.J. 2023. Introduction to circadian rhythms. In *Biological Implications of Circadian Disruption: A Health Challenge in the Modern World*. (LK Fonken & RJ Nelson, eds). Cambridge University Press: Cambridge UK. (In press).
466. Bumgarner, J.R., Becker-Krail, D.D., White, R.C., & Nelson, R.J. 2023. Machine learning and deep learning frameworks for the automated analysis of pain and opioid withdrawal behaviors. *Frontiers in Neuroscience*, 16:953182. DOI: 10.3389/fnins.2022.953182 PMID: 36225736
467. Walker, W.H., Liu, J.A. & Nelson, R.J. 2023. Disruptions of circadian rhythms and sleep/wake cycles in neurologic disorders. In: *Sleep and Clocks in Aging and Longevity*. ed. Anita Jagota. Springer Nature, Berlin, pp 461-480. doi: 10.1007/978-3-031-22468-3_22.
468. Liu, J.A., Walton, J.C., Bumgarner, J.R., Walker, W.H., Meléndez-Fernández, O.H., DeVries, A.C., & Nelson, R.J. 2022. Chronic exposure to dim light at night disrupts immune function and decreases longevity in aged female mice. *Chronobiology International*, 39:1674-1683. doi: 10.1080/07420528.2022.2135442. PMID: 36268694.
469. Bumgarner JR, McCray E, & Nelson RJ. 2023. The disruptive relationship among circadian rhythms, pain, and opioids. *Frontiers in Neuroscience*, 17:1109480. PMID: PMC9975345 doi: 10.3389/fnins.2023.1109480.
470. Meléndez-Fernández OH, Liu J, & Nelson RJ. 2023. Disrupted circadian rhythms by light at night alters hormonal rhythms and metabolism. *International Journal of Molecular Sciences*, 24:3392. PMID: PMC9963929.

471. Meléndez-Fernández OH, Liu J, & Nelson RJ. 2023. Hypothalamic control of circadian homeostasis and hormone regulation. *Scholarly Community Encyclopedia*. <https://encyclopedia.pub/entry/41744>
472. Bumgarner JR, Walker II WH, Quintana, D.D., White, R.C, Richmond, A.A., Meléndez-Fernández OH, Liu JA, Becker-Krail, DD, Walton JC, Simpkins, JW, DeVries AC, & Nelson, RJ. 2023. Acute exposure to light at night alters hippocampal vascular structure in mice. *iScience*, 26: 106996. doi: 10.1016/j.isci.2023.106996 PMID: 37534143.
473. Meléndez-Fernández, OH, Walton, JC, DeVries, AC, & Nelson RJ. 2023. The role of daylight exposure on body mass in male mice. *Physiology & Behavior*, 266:114186. doi: 10.1016/j.physbeh.2023.114186. PMID: 37028499.
474. Davis, L.K, Bumgarner, J.R., Nelson, R.J. & Fonken, L.K. 2023. Health effects of disrupted circadian rhythms by artificial light at night. *Policy Insights from the Brain and Behavioral Sciences*, 10:229-236. doi: 10.1177/23727322231193967. PMID:
475. Walton, J.C. & Nelson, R.J. 2023. Therapeutic aspects of circadian rhythms. *Biomolecules*, 13(8): 1169. doi: 10.3390/biom13081169 PMID: 37627234
476. Kisamore, C.O., Elliott, B.D., DeVries, A.C. Nelson, R.J. & Walker WH. 2023. Chronotherapeutics for solid tumors. *Pharmaceutics*, 15:2023. doi: 10.3390/pharmaceutics15082023 PMID: 37631237.
477. Moore-Ede M., Blask DE, Cain SW, Heitmann A, & Nelson RJ. 2023. Lights should support circadian rhythms: Evidence-based scientific consensus. *Frontiers in Photonics* :4. doi.org/10.3389/fphot.2023.1272934. PMID:
478. Walker, W.H., Liu, J.A., Meléndez-Fernández, O.H., May, L.E., Kisamore, C.L., Brundage, K.M., Nelson, R.J., & DeVries, A.C. 2024. Social enrichment alters the response of brain leukocytes to chemotherapy and tumor development in aged mice. *Heliyon* (In press).
479. Walton, JC, Walker II, WW, Nelson, RJ, & DeVries, AC. 2024. Time of day bias for biological sampling in studies of mammary cancer. *Scientific Reports* (In press).
480. Meléndez-Fernández, OH, Walker II, WW, Liu, JA, Walton, JC, Chantler, PD, DeVries, AC and Nelson, RJ. 2024. Chronic exposure to artificial light at night dampens rhythms in locomotor activity, metabolism, and sleep in female mice. *International Journal of Molecular Sciences* (Under review).
481. Liu JA, Walker II WH, Meléndez-Fernández OH, Bumgarner JR, Zhang Z, Walton JC, Meares, GP, DeVries AC, & Nelson, RJ. 2024. Dim light at night shifts microglia to a pro-inflammatory state after cerebral ischemia, altering brain-immune interaction and stroke outcome in mice. *Scientific Reports* (Under review).
482. Lucas, R.J., Allen, A., Brainard, G. Brown, T., Dauchy, R.T., Didikoglu, A., Do, M.T., Gaskill, B., Hattar, S., Hawkins, P., Hut, R.A., McDowell, R., Nelson, R.J., Prins, J-B., Schmidt, T.M., Takahashi, J.S., Verma, V., Vöikar, V., Wells, S., & Peirson, S.N. 2024. Recommendations for measuring and standardizing light for laboratory mammals to improve welfare and the reproducibility in animal research. *PLoS Biology* (In press).
483. Hosseini, S. N., Walton, J.C., Sheikh, A.I., Kreidler, N. & Nelson, R.J. 2024. An architectural solution to a biological problem: A systematic review of lighting designs in healthcare environments. *Building and Environment* (Under review).
484. Liu JA, Walker WH II, DeVries AC, & Nelson RJ. 2024. Acute exposure to dim light at night changes immune cell transcriptome profiles in the brain (in preparation).
485. Liu JA, Walker WH II, DeVries AC, Nelson RJ. 2024. Single cell RNA-sequencing reveals circadian differences in immune cells in the brain following exposure to light at night after ischemic stroke (in preparation).
486. Liu JA, Walker WH II, Meléndez-Fernández OH, Bumgarner JR, Walton JC, Zhang N, DeVries AC, Nelson RJ. 2024. Blocking blue wavelengths ameliorates infarct and behavioral deficits exacerbated by dim light at night (in preparation).

487. Liu JA, Bumgarner JR, Walton JC, Walker WH II, Meléndez-Fernández OH, DeVries AC, Nelson RJ. 2024. Circadian disruption by exposure to chronic phase advances alters vasculature and increases cognitive dementia-like impairments in aged mice (In preparation).

BOOKS

Nelson, R.J. 1995. *An Introduction to Behavioral Endocrinology*. Sinauer Associates: Sunderland, MA.

Nelson, R.J. 1996. *Psico-endocrinología: Las Bases Hormonales de la Conducta*. Ariel: Barcelona.

Nelson, R.J. 2000. *An Introduction to Behavioral Endocrinology*. Second Edition. Sinauer Associates: Sunderland, MA.

Nelson, R.J., Demas, G.E., Klein, S.L. & Kriegsfeld, L.J. 2002. *Seasonal Patterns of Stress, Immune Function, and Disease*. Cambridge University Press: New York, NY.

Gallagher, M. & Nelson, R.J. (Editors). 2003. *Biological Psychology, Volume 3; Handbook of Psychology*. Wiley & Sons, New York.

Nelson, R.J. (Editor). 2005. *Biology of Aggression*. Oxford University Press, New York.

Nelson, R.J. 2005. *An Introduction to Behavioral Endocrinology*. Third Edition. Sinauer Associates: Sunderland, MA.

DeVries, A.C. & Nelson, R.J. (Editors). 2008. *Current Directions in Psychology: Biopsychology*. Prentice-Hall, American Psychological Society. Boston, MA.

Nelson, R.J. Denlinger, D.L. & Somers, D.E. (Editors). 2010. *Photoperiodism: The Biological Calendar*. Oxford University Press, New York.

Nelson, R.J. 2011. *An Introduction to Behavioral Endocrinology*. Fourth Edition. Sinauer Associates: Sunderland, MA.

Demas, G.E. & Nelson, R.J. (Editors). 2012. *Ecoimmunology*. Oxford University Press, New York.

Nelson, R.J. & Mizumori, S.J.Y. (Editors). 2013. *Behavioral Neuroscience, Volume 3; Handbook of Psychology*. Second Edition. Wiley & Sons, New York.

Nelson, R.J. & Kriegsfeld, L.J. 2017. *An Introduction to Behavioral Endocrinology*. Fifth Edition. Sinauer Associates, An imprint of Oxford University Press: Sunderland, MA.

Nelson, R.J. 2019. (Hormones and Behavior section editor). *Encyclopedia of Animal Behavior*. Second Edition. Elsevier Major Reference Works, Oxford, UK.

Nelson, R.J. & Kriegsfeld, L.J. 2022. *An Introduction to Behavioral Endocrinology*. Sixth Edition. Sinauer Associates, An imprint of Oxford University Press: Sunderland, MA.

Nelson, R.J. (Editor-in-Chief). 2023. *The Oxford Encyclopedia of Neuroendocrine and Autonomic Systems*. Oxford University Press, Oxford, UK.

Nelson, R.J. & Weil, Z.M. (Editors). 2023. *Biographical History of Behavioral Neuroendocrinology*. Springer Nature, New York.

Fonken, L.F. & Nelson, R.J. (Editors). 2023. *Biological Implications of Circadian Disruption: A Modern Health Challenge*. Cambridge University Press, Cambridge, UK.

BOOK REVIEWS

Nelson, R.J. & DeVries, A.C. 1992. The development and integration of behaviour: Essays in honour of Robert Hinde. *Journal of Nervous and Mental Disease*, 180:739-740.

Nelson, R.J. 1995. The chosen primate: Human nature and cultural diversity. *Journal of Nervous and Mental Disease*, 183:491.

Nelson, R.J. 2006. Introduction to psychoneuroimmunology. *Physiology and Behavior*, 87:219.

Nelson, R.J. 2006. Hormones and social behavior. *Bioscience*, 56, 2-4.

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Department of Biology, Hiram College, Hiram, OH.

1987. Department of Physiology & Neurobiology, University of Connecticut, Storrs, CT.
Department of Biological Sciences, University of Cincinnati, Cincinnati, OH.

1988. Department of Biological Sciences, Life Sciences Section, University of Delaware, Newark, DE.
Department of Population Dynamics, Johns Hopkins School of Hygiene, Baltimore, MD.

1989. Department of Psychology, Indiana University, Bloomington, IN.
Department of Physiology, Northwestern University, Evanston, IL.
1990. Department of Psychology, Yale University, New Haven, CT.
Department of Psychiatry, SUNY, Stony Brook, NY.
Department of Urology, Johns Hopkins Hospital, Baltimore, MD.
1991. Department of Psychology, University of California, Santa Barbara, CA.
Department of Psychology, University of Pennsylvania, Philadelphia, PA.
Department of Zoology, University of Maryland, College Park, MD.
Department of Psychology, University of Maryland, Catonsville, MD.
Department of Psychology, Villanova University, Villanova, PA.
1992. Department of Psychology, University of California, Berkeley, CA.
Department of Integrative Biology, University of California, Berkeley, CA.
National Institute on Aging, Bethesda, MD.
Workshop Speaker, Biennial Meeting of the Society for Research on Biological Rhythms, Amelia Island, FL.
1993. Department of Neuroscience & Anatomy, Pennsylvania State University College of Medicine, Hershey, PA
National Aeronautical and Space Administration, Goddard Space Flight Center, Greenbelt, MD.
Department of Oncology, Johns Hopkins Hospital, Baltimore, MD.
1994. Department of Psychology, University of Maryland, Catonsville, MD.
1995. Symposium: Biological Bases of Sex Behavior. American Psychological Association Annual Meeting. New York, NY.
Invited Address. American Psychological Association Annual Meeting. New York, NY.
Sponsor, Northeast Sleep Society Annual Meeting, Baltimore, MD.
Biological Sciences Program, National Science Foundation, Arlington, VA.
Department of Psychology, Concordia University, Montreal, Quebec.
Population Center, School of Hygiene and Public Health, Johns Hopkins University, Baltimore, MD.
1996. Invited speaker: International Conference on Hormones, Brain, and Behaviour. Turin, Italy.
Department of Biology and Biological Timing Center, University of Virginia, Charlottesville, VA.
Symposium speaker: Society of Integrative and Comparative Biology, Albuquerque, NM.
Invited speaker: American Behavioral Genetics Annual meeting, Pittsburgh, PA.
Invited speaker: Biology and Sociology of Violence meeting, Valencia, Spain.
NIH Director's Colloquium Series, National Institutes of Health, Bethesda, MD.
Jackson Laboratory, Bar Harbor, ME.
Invited Speaker: Program Director Seminar Series. National Science Foundation, Arlington, VA.
NIMH Neuroscience Workshop on Use of Transgenics in Neuroscience, Washington, DC.
1997. Department of Neuroscience, University of Michigan, Ann Arbor, MI.
Department of Biology, Johns Hopkins University, Baltimore, MD.
Animal Behavior Program, University of California, Davis, CA.

Neuroendocrine-Immune Workshop, NICHD, Bethesda, MD.
Department of Integrative Biology, University of California, Berkeley, CA.
Department of Zoology, University of Maryland, College Park, MD.
Department of Neurology, Johns Hopkins University, Baltimore, MD.
Mid-Atlantic Reproductive Biology Meeting, Georgetown University, Washington, DC.
Department of Comparative Medicine, Johns Hopkins University, Baltimore, MD
Cold Spring Harbor Course on Mouse Behavioral Analyses, Cold Spring Harbor, NY.
Department of Psychiatry, Johns Hopkins University, Baltimore, MD.

1998. Gordon Conference on Melatonin, Los Angeles, CA.
Department of Zoology, North Carolina State University, Raleigh, NC
Department of Biology, University of South Carolina, SC
Symposium Speaker, American Veterinary Medical Association Annual Meeting,
Baltimore, MD.
Center for Integrative Studies in Animal Behavior, Indiana University, Bloomington, IN.
Wilmer Eye Institute, Johns Hopkins University, Baltimore, MD.
Faculty Speaker in NIH-Sponsored Workshop on Psychoneuroimmunology, Kansas
City, MO.
Department of Biological Sciences, Lehigh University, Lehigh, PA.
Conference on Environmental Toxicity Meeting, Rochester University, Invited Speaker.
Keynote Speaker: Society for the Study of Behavioural Phenotypes, 5th International
Symposium. Johns Hopkins University, Baltimore, MD
Symposium Speaker and Chair, Society for Neuroscience Annual Meeting, Los Angeles, CA.
1999. Department of Toxicology, Johns Hopkins University, Baltimore, MD.
Department of Psychology, University of Wisconsin, Madison, WI.
Department of Zoology, University of Wisconsin, Madison, WI.
Department of Neurobiology, Northwestern University, Evanston, IL.
Symposium on Emotions, Rutgers University, New Brunswick, NJ.
Workshop Speaker, Behavior in the Mouse. NIH, Bethesda, MD.
Symposium Speaker, International Conference on Pineal Gland, Tours, France
Symposium Speaker, International Conference on Psychoneuroimmunology, Lucano, CH.
Department of Immunology and Molecular Microbiology, Johns Hopkins University,
Baltimore, MD.
Department of Psychology, Ohio State University, Columbus, OH.
Department of Neuroscience, Ohio State University, Columbus, OH.
Department of Reproductive Pharmacology, Merck Pharmaceutical Research Campus,
Rahway, NJ.
2000. Department of Neuroscience, Pennsylvania State University School of Medicine, Hershey,
PA.
Symposium Speaker, Biennial Conference for the Society for the Study of Biological
Rhythms, Amelia Island, FL.
Department of Neuroscience, Ohio State University, Columbus, OH.
Symposium Chair, Society for Neuroscience Meeting, New Orleans, LA
2001. Department of Neuroscience, Michigan State University, East Lansing, MI.
Department of Zoology, Michigan State University, East Lansing, MI.
Department of EEB, Princeton University, Princeton, NJ.
Department of Pharmacology, Ohio State University, Columbus, OH.
Department of Ecology & Evolutionary Biology, Ohio State University, Columbus, OH.

Symposium Speaker, FASEB Annual Meeting, Orlando, FL
Department of Psychology, Wright State University, Dayton, OH.

2002. Department of Biology, University of Utah, Salt Lake City, UT.
Graduate Group in Ecology, University of Utah, Salt Lake City, UT.
Department of Neuroscience, University of Cincinnati, Cincinnati, OH.
ALPCO/Buhlmann Distinguished Lectureship; 2002 Meeting of the Society for Light Treatment and Biological Rhythms, San Diego, CA.
Department of Psychology, University of Chicago, Chicago, IL.
Neuroscience Institute, University of Vienna, Vienna, Austria.
Zoology Department, University of Vienna, Vienna, Austria.
Department of Biology, Murray State University, Murray, KY.
2003. UK Genetics Society, University of Warwick, UK
World Congress of Chronobiology, Sapporo, Japan
Department of Biology, Animal Behavior Group, University of California, Davis, CA.
Department of Psychology, University of California, Berkeley, CA.
Canadian College of Neuropsychopharmacology, Montreal, QB.
Department of Behavioral Neuroscience, Oregon Health Sciences University, Portland, OR.
Workshop Speaker, Charles River Workshop on Reproduction, Boston, MA.
Symposium Speaker, Society for Behavioral Neuroendocrinology, Cincinnati, OH.
2004. Department of Integrative Biology, University of Texas, Austin, TX.
Institute of Reproductive Biology, University of Texas, Austin, TX.
Workshop Speaker, National Academies of Science, Washington DC
Novartis Foundation, London, UK
Royal Society of London, London, UK
International Colloquium on the Brain and Aggression, Rhodes, Greece
Department of Psychology, Bowling Green State University, Bowling Green, OH
2005. Winter College, Ohio State University, Ft Meyers, FL.
Department of Oral Biology, Ohio State University, Columbus, OH.
Departments of Psychology and Neuroscience, Michigan State University, East Lansing, MI.
Department of Biology, Kent State University, Kent, OH.
Department of Psychology, Oberlin College, Oberlin, OH.
Division of Biological Sciences, Ohio State University, Columbus, OH
2006. Symposium Speaker, Society for Behavioral Neuroendocrinology, Pittsburgh, PA
Symposium Chair, Society for Behavioral Neuroendocrinology, Pittsburgh, PA
Brain and Cognition, Barcelona, Spain
Department of Biology, Tufts University, Medford, MA.
Central Ohio Society for Bipolar Disorder, Columbus, OH
Department of Biology, College of Wooster, Wooster, OH
Featured Speaker, Bennett Society, Ohio State, Columbus, OH
2007. Symposium Speaker, American Psychiatric Association Annual Meeting, San Diego, CA.
Keynote Speaker, Animal Behaviour Society Annual Meeting, Burlington, VT
Symposium Chair, Society for Behavioral Neuroendocrinology Annual Meeting, Asilomar, CA.

Workshop Speaker, Society for Behavioral Neuroendocrinology Annual Meeting, Asilomar, CA.

National Science Foundation, Integrative and Organismal Systems, Arlington, VA.

Invited Speaker, Institute of Wildlife Ecology. University of Veterinary Medicine, Vienna, Austria

2008. Colloquium Speaker, University of Massachusetts
Seminar Speaker, University of California, Berkeley
Symposium Speaker, American Association for Geriatric Psychiatry Annual Meeting, Orlando, FL
Colloquium Speaker, University of Rochester
Workshop Speaker, NIMH Workshop on Biological Rhythms and Behavior, Bethesda, MD
Seminar Speaker, Nationwide Children's Hospital, Columbus, OH
Colloquium Speaker, University of British Columbia, Vancouver, BC.
Symposium Speaker, Scientists Center for Animal Welfare Winter Conference, San Antonio, TX
Colloquium Speaker, Department of Neuroscience, Ohio State University, Columbus, OH.
2009. Colloquium Speaker, Vanderbilt University
Symposium Speaker, American Psychiatric Association Annual Meeting, Honolulu, HI (cancelled by OSU Departmental administrators)
Seminar Speaker, Department of Neuroscience, Ohio State University
Symposium Speaker, XI. Congress of the European Biological Rhythms Society, Strasbourg, France.
Symposium Speaker, Third International Congress of Applied Chronobiology and Chronomedicine. Haifa, Israel.
Symposium Chair, Third International Congress of Applied Chronobiology and Chronomedicine. Haifa, Israel.
Keynote Speaker, Central Ohio Regional Undergraduate Neuroscience Meeting, Ohio Wesleyan University. Delaware, OH
Distinguished Lecture, Ohio State University
Colloquium Speaker, University of Illinois
2010. Symposium Speaker, American Psychiatric Association Annual Meeting, New Orleans, LA.
Keynote Speaker, Inaugural Symposium of Biological Clocks, UCSD Center for Chronobiology, UC San Diego.
Keynote Speaker, Israeli Center for Chronobiology
Colloquium Speaker, Texas A&M University
Colloquium Speaker, Yale University
Workshop Speaker, Ellison Medical Foundation, Palo Alto, CA
Seminar Speaker, Johnson & Johnson Research, La Jolla, CA
Grand Rounds Speaker, Department of Pulmonary Medicine, Ohio State
2011. Colloquium Speaker, Department of Pharmacology & Toxicology, Wright State University.
Colloquium Speaker, Department of Physiology, Emory University.
Symposium Speaker, Ohio State Sleep Meeting.
Colloquium Speaker, Center for Obesity Research, University of Alabama, Birmingham.
Colloquium Speaker, Department of Zoology, Miami University.
TED speaker, COSI, Columbus, OH
Grand Rounds, Department of Neurology, Ohio State University

2012. Keynote speaker, University of Luxembourg, Luxembourg.
 Symposium Chair and speaker, Society for Behavioral Neuroendocrinology, Madison, WI
 Symposium speaker, Biological Psychiatry Association Annual Meeting, Philadelphia, PA
 Colloquium Speaker, Duke University
 Colloquium Speaker, University of Memphis
 Grand Rounds, Department of Psychiatry, Ohio State University
2013. Colloquium Speaker, Institute for Behavioral Medicine Research, Ohio State University.
 Keynote Speaker, Kent State University Neuroscience Symposium.
 Workshop Speaker, Society for Behavioral Neuroendocrinology, Atlanta, GA
 Workshop Speaker, Clinical Relevance of Circadian Rhythms, Lorentz Center, Leiden Netherlands
 Symposium Chair and Speaker, Midwest Biological Rhythms Meeting, Michigan State University
 Keynote Speaker, Seasonality and Health, Glasgow, Scotland.
 Colloquium Speaker, Columbia University, New York, NY
 Seminar Speaker, Barnard College, New York, NY
2014. Workshop Speaker, University of Toronto, School of Public Health, Toronto, ON.
 Workshop Speaker, Brain and Heart Workshop, Ohio State University, Brain and Spine Institute.
 Symposium Speaker, International Behavioral Neuroscience Society, Las Vegas, NV.
 Colloquium Speaker, Case Western Reserve University, Cleveland, OH
 Colloquium Speaker, University of California, Berkeley.
 Seminar Speaker, University of California, Berkeley.
 Seminar Speaker, College of Wooster, Wooster, OH.
 Colloquium Speaker, University of Houston, Houston TX.
 Speaker, Ground Rounds, Endocrinology Division, Ohio State Medical Center
 Speaker, Ground Rounds, Pulmonary Medicine Division, Ohio State Medical Center
 Featured Speaker, National Science Writers Meeting.
 Speaker, Grand Rounds, Endocrinology and Neuroscience, University of Chicago.
2015. Howard Bern Lecturer, Society for Integrative and Comparative Biology, W.Palm Beach, FL.
 Colloquium Speaker, Department of Biology, North Dakota State University, Fargo.
 Seminar Speaker, Ohio University, College of Osteopathic Medicine, Athens, OH.
 Symposium Speaker, FASEB Research Conference, Lisbon, Portugal.
 Keynote Speaker, North American Society for Comparative Endocrinology, Ottawa, Canada.
 Featured Speaker, Society for Behavioral Neuroendocrinology, Asilomar, CA
 Keynote Speaker, Central Ohio Regional Undergraduate Neuroscience Meeting, Ohio State University. Columbus, OH.
2016. Seminar speaker, University of Cincinnati.
 Workshop speaker, NIEHS workshop, Research Triangle Park, NC.
 Seminar speaker, University of California, Davis.
 Seminar speaker, Florida Atlantic University.
 Speaker, Global Brain Health and Performance Summit, Columbus, OH.
 Seminar speaker, University of Southern California, Los Angeles, CA.
 Featured speaker, Society for Behavioral Neuroendocrinology, Montreal, ON

- Seminar speaker, University of Oklahoma Medical Center.
2017. Seminar speaker, Case Western Reserve University, Cleveland, OH.
 Workshop speaker, NSF, Arlington, VA.
 Seminar speaker, College of Dentistry, Ohio State University, Columbus, OH.
 Distinguished Scientist Lecture, University of Buffalo, Buffalo, NY.
 Seminar speaker, San Diego State University, San Diego, CA.
2018. Seminar speaker, Virginia Commonwealth University, Richmond, VA.
 Seminar speaker, University of Tennessee, Knoxville, TN.
 Seminar speaker, West Virginia University, Morgantown, WV.
 Symposium speaker, Society for Behavioral Neuroendocrinology Annual Meeting, Toronto, Ontario, CA.
 Symposium speaker, International Society for Psychoneuroendocrinology Annual Meeting, Irvine, CA.
 Seminar speaker, Virginia Tech University, Blacksburg, VA.
 Seminar speaker, University of Michigan, Ann Arbor, MI.
2019. Seminar speaker, University of North Texas, Ft. Worth, TX.
 Seminar speaker, West Virginia University, Morgantown, WV.
 Grand rounds, Neurosurgery, West Virginia University, Morgantown, WV.
 Seminar speaker, Tulane University, New Orleans, LA.
 Seminar speaker, University of Illinois, Urbana/Champagne, IL.
 Seminar speaker, Marquette University, Milwaukee, WI.
 Seminar speaker, University of Texas, Austin, TX.
2020. Seminar speaker, Notre Dame, South Bend, IN.
 Neil Miller Lecturer, American Psychological Association, Washington, DC.
2021. Seminar speaker, Sleep Medicine, West Virginia University, Morgantown, WV.
 Seminar speaker, Pacific Northwest Research Institute, Seattle, WA.
 University of Texas, San Antonio Health Science Center, San Antonio, TX. (cancelled)
 Colloquium speaker, Fresno State University
2022. Seminar speaker, Neurocritical Care/Department of Neurology, West Virginia University.
 Grand Rounds, Department of Neurology, West Virginia University
2023. Workshop speaker, Cook County Parks, Chicago, IL
 Workshop speaker, University of Manchester, Manchester, UK
 Seminar speaker, University of Manchester, Manchester, UK
 Keynote speaker, International Psychiatry and Addiction meeting, Paris, France.
 Symposium speaker, Sleep 2023, Indianapolis, IN.

GRANTS

1986-1988. BRSR grant RR07041. "Behavioral endocrinology of seasonal reproduction (\$15,000).

1987-1997. NICHD grant R01 HD 22201. "Environment, reproduction, and behavior in rodents." Total costs: \$2,767,150.

1988-1990. BRSG grant RR 07041. "Demonstration of photoperiodic responsiveness in nonphotoperiodic rodents" (\$11,000).

1988-1990. Sloan Foundation Grant. "Population cycles in rodents" (\$20,000).

1988-1990. BRSG grant RR 07041. "Etiology of tumorigenesis in response to environmental factors." (\$14,000).

1988-1989. NINCDS Small Instrumental Grant Program (\$13,516).

1992-1995. NCI grant CA 58168. "Conditioned immune function and cancer risk" (\$100,000 TDC).

1990-2001. NICHD grant P30 HD 06268. "Hopkins Population Center". (Center Associate) (\$1,980,115).

1992-2002. NIMH grant T32 MH 15330. "Interdisciplinary training in psychiatry and neuroscience". (Preceptor) (\$180,577).

1996-1997. NSF grant IBN 96-38301. "Animal Behavior Program" (\$50,353).

1997-2000. NSF grant IBN 97-23420. "Photoperiodic effects on immune function." Total costs: \$233,559.

2000-2004. NSF grant IBN 00-08454. "Photoperiodic effects on immune function." Total costs: \$358,831.

1998-2004. NIMH grant MH 57760. "Role of neuronal nitric oxide synthase in aggression." Total costs: \$809,977.

1997-2003. NIH program project grant, "Mechanisms of Regulation of Cerebral Blood Flow". Project PI and Core Director. Total costs= \$6,122,807. Biobehavioral core annual direct costs = \$55,000.

1997-2007. NIMH grant R01 MH 57535. "Environment, reproduction, and behavior in rodents." Total costs (2002-2007): \$1,733,125.

2002-2005. Seed grant, "Photoperiodic effects on wound healing". Project PI and Core Director. Total costs= \$25,000.

2003-2008. NIMH grant R01 MH 66144. "Photoperiod, melatonin, and sickness behaviors". Total costs = \$1,184,000.

2004-2009. NSF grant IOS 04-16897. "Photoperiodic effects on immune function." Accomplishment Based Renewal. Total costs: \$600,020. (No cost extension).

2008-2012. NSF grant IOS-08-38098 . "Perinatal Photoperiodic Programming of Adult Immune Function". Total costs: \$427,059.

2008-2013. NIH grant R01 MH 57535. "Photoperiod, Brain, and Behavior" (title change from: Environment, Reproduction, and Behavior in Rodents). Total costs (2008-2013): \$1,652,313.

2006-2010. US-Israel Binational Science Foundation. GRT00004322. "Light-induced immune dysfunction". Total costs = \$247,222.

2010-2015. NINDS grant P30NS0457558. "Neuroscience Center Phenotyping Core." Core Director. Total costs: \$3,740,000. (Core budget= \$100,000/year).

2008-2013, NINR R01NR10806 ; NIH/NINR, PI= A.C. DeVries; CoI = RJ Nelson: Title: Psychosocial Influences on Nociception. Total costs = \$1,652,000.

2011-2016, NIMH grant R01MH046801. "Repeated social defeat and prolonged anxiety". PI=John Sheridan, CoI=RJ Nelson. Total costs= \$1,835,544. Effort =5%.

2010-2015, NIAAD grant R01AI. "Stress effects on virus protein induced inflammation and sickness behavior; PI=Ronald Glaser, CoI-RJ Nelson. Total costs: \$2,356,941 (\$3,546,401); Effort=10%.

2011-2016, NSF grant IOS 11-2011-2016. "Effects of light at night on immune function". PI= RJ Nelson. Total costs=\$750,000. Effort = 15%. (no cost extension)

2015-2018, NIH grant ES015146-05. "Air pollution and hypertension: vascular mechanisms". PI= Rajagopalan, S; CoI=RJ Nelson. Total costs= \$224,000. Effort = 10%.

2014-2017, NSF grant IOS13-54612. "Circadian clock hierarch and cognition." PI= Obrietan, J.; CoI=Nelson, RJ. Total Costs=\$600,000. Effort 5%.

2015-2017, NIH grant R21CA191846. "The effects of chemotherapy on sleep". PI = Nelson, RJ. Total Costs=\$368,000. Effort 10%.

2016-2018, NIH grant R21CA202745. "Dim light at night alters pancreatic cell signaling and predisposes to pancreatic adenocarcinoma". PI=Nelson, RJ. Total Costs=\$349,000. Effort 10%.

2015-2018, Ohio State University Discovery Theme Award for Chronic Brain Injuries. Faculty Lead= Nelson, RJ. Total costs = \$50 million. Effort 15%.

2014-2019, NIH grant MH103361. R01 MH10336. "Hippocampal cellular rhythms". PI=K. Obrietan; CoI=RJ Nelson. Total Costs=\$1,320,000. Effort =10%.

2015-2020, NIH grant NS092388 "Adverse consequences of light at night for cerebral ischemia". PI = Nelson, RJ; PI =DeVries AC) Total Costs =\$1,987,815. Effort =20%.

2020-2021, NIH grant NS092388 "Administrative supplement for Alzheimer's related research: Adverse consequences of light at night for cerebral ischemia". PI = Nelson, RJ; PI =DeVries AC) Total Costs = \$375,250. Effort =10%.

2021-2023, NIH grant R21AT011238 "Effects of light at night and disrupted circadian rhythms on pain. PI = Nelson, RJ. Total Costs =\$368,000. Effort=15%.

2023-2025, NIH grant R21CA276027 “Mechanism underlying sleep disruption by mammary tumors. PI = Nelson, R.J. Total costs =\$213,180. Effort=15%.

2023-2028, NSF grant 2242771 “RII Track 1: West Virginia Network for Functional Neuroscience and Transcriptomics (WV-NFNT). Co-PI = Nelson R.J. Total costs =\$20,000,000. Effort = 15%.

PATENTS

1. Bedrosian TA, Weil ZM, & Nelson R.J. Light at night and depression. U.S. Provisional Patent Application No. 61/585,453; Filed January 11, 2012.
2. Bedrosian TA, Weil ZM, & Nelson R.J. Dim light at night provokes depression-like behaviors and reduces ca1 dendritic spine density in female hamsters. U.S. Provisional Patent Application No. 61/585,461; Filed January 11, 2012.
3. Rezai, A., Weil, Z.M. & Nelson, R.J. Neuromodulation of the sympathetic nervous system to treat circadian dysfunction, sleep/wake cycle and sleep disorders. U.S. Provisional Patent Application No. OSU-020974 filed in September 2012.
4. Rezai, A., Nelson, R.J., & Weil, ZM. Systems and methods for treating post-traumatic stress disorder. US patent #10076666. Issued 18 September 2018.
5. Rezai, A., Nelson, R.J., & Weil, ZM. Systems for treating post-traumatic stress disorder. US patent #10065037. Issued 18 September 2018.

RESEARCH INTERESTS

Integrative and Systems Neuroscience	Behavioral Neuroendocrinology
Seasonal Behavior	Psychoneuroimmunology
Neuroendocrinology	Comparative Immunity
Biological Clocks	Cytokines and Behavior
Aggression	Behavioral Effects of Gene Manipulations

GRADUATE STUDENTS AND POSTDOCTORAL TRAINEES

Terminal Master Degrees:

Sharon Willoughby, Stacy Bennett, Wenjun Ruan, Joyce Hairston, Steven Kinsey, Michelle Gatien.

Doctoral Degrees:

Joan Blom, PhD, 1992; Currently: Associate Professor of Psychology, University of Modena, Italy
Ruiquin Wan (co-advisor), PhD, 1993: Currently: Senior Research Scientist, National Institute on Aging, NIH, Baltimore

Christopher Moffatt, PhD, 1994: Currently: Professor of Biology, San Francisco State University
Gregory Demas, PhD, 1998; Currently: Professor and Chair of Biology, Indiana University

Sabra Klein, PhD, 1998; Currently: Professor of Molecular Microbiology and Immunology, Johns Hopkins, School of Public Health

Amy Wisniewski, PhD, 1999; Currently: Professor of Pediatric Urology, University of Oklahoma College of Medicine

Lance Kriegsfeld, PhD, 1999; Currently: Professor of Psychology and Neuroscience, UC Berkeley

Kelly Young, PhD, (Biochemistry) 2000; Currently: Professor of Biology, Cal State Long Beach

Deborah Drazen, PhD, 2001; JD, 2010; Currently: Senior Patent Counsel, Johnson & Johnson, New York, NY

Staci Bilbo, PhD, 2003; Currently: Professor of Psychology and Neuroscience, Duke University

Gretchen Neigh, PhD, 2004; Currently: Associate Professor of Neurobiology, Virginia Commonwealth University

Leah Pyter, PhD, 2006; Currently: Associate Professor of Psychiatry, Ohio State University Wexner Medical Center

Zachary Weil, PhD, 2008; Currently: Associate Professor of Neuroscience, West Virginia University

Joanna Workman, PhD, 2010; Currently: Assistant Professor of Psychology, University of Albany

Abed Zubidat (co-advisor), PhD, 2012; Currently: Research Scientist, University of Haifa

Tracy Bedrosian, PhD, 2013; Currently: Senior Research Scientist, Nationwide Children's Hospital

James Walton, PhD, 2013; Currently: Research Assistant Professor, West Virginia University

Laura Fonken, PhD, 2013; Currently: Assistant Professor, University of Texas

John Morris, PhD, 2013; Currently: Postdoctoral Fellow, University of Chicago

Taryn Aubrecht, PhD, 2014. Currently: Program Officer, NIH.

Jeremy Borniger, PhD, 2017. Currently: Assistant Professor, Cold Spring Harbor Labs

Yasmine Cisse, PhD, 2017. Currently: Postdoctoral Fellow, University of Maryland

Jennifer Liu, PhD, 2022. Currently: Postdoctoral Fellow, Johns Hopkins

O. Hecmarie Meléndez-Fernández, PhD, 2023. Currently: Research Staff, Eli Lilly

Jacob Bumgarner, PhD, 2023. Currently: Staff Scientist, Bristol Myers Squibb

Seyedeh Nazli Hosseini, Current grad student.

Claire Kisamore, Current grad student.

Brittany Elliott, Current grad student (co-advisor).

Postdoctoral Fellows:

Denise Frank, PhD; 1988-1990; Currently: Research Associate Professor, University of Arizona Medical Center.

Stephen Gammie, PhD, 1998-2001; Currently: Professor of Zoology; University of Wisconsin.

Silvana Chiavegatto, PhD, 1999-2001; Currently: Associate Professor of Neuroscience; University of Sao Paulo.

Brian Prendergast, PhD, 1999-2003; Currently: Professor of Psychology; University of Chicago.

Andrew Hotchkiss, PhD, 2001-2004; Currently: Research Scientist, EPA, Research Triangle Park.

Lynn Martin, PhD, 2004-2007; Currently: Professor of Molecular Medicine, University of South Florida.

Brian Trainor, PhD, 2004-2007; Currently: Professor of Psychology, University of California, Davis.

Kristen Navara, PhD, 2005-2007; Currently: Professor of Poultry Science, University of Georgia.

Noah Ashley, PhD, 2010-2012; Currently: Professor of Biology, University of Western Kentucky.

Tomoko Ikeno, PhD, 2012-2014; Currently: Research Assistant Professor, University of Tokyo.

Matthew Hogan, DVM, 2013-2015; Currently: Staff Veterinarian, Harvard University.

Kathryn Russart, PhD, 2016-2018; Currently: Assistant Professor, Minnesota State University.

Surbhi Gahlot, PhD 2016-2018; Currently: Assistant Instructor, UT Southwestern.

Souhad Chbeir, PhD 2016-2018; Currently, Psychotherapist, Stanford University.

Darius Becker-Krail, PhD; Currently, Associate Medical Writer, Mozarc Medical

William Walker, PhD; Currently, Postdoctoral Fellow, West Virginia University

COURSES TAUGHT AT JOHNS HOPKINS UNIVERSITY

Mechanisms of Animal Behavior (200.146)
Behavioral Endocrinology (200.344)
Comparative Animal Behavior (471.421)
Introduction to Psychology (466.103; 200.101)
Biopsychology Area Seminar (200.650)
Behavioral Ecology (200.644)
Sociobiology (200.646)
Biological Rhythms and Behavior (200.634)
Systems Neuroscience (080.205)
Topics in Behavioral Biology (290.120)

COURSES TAUGHT AT OHIO STATE UNIVERSITY

Research Seminar for Psychobiology & Behavioral Neuroscience (Psy 811)
Behavioral Endocrinology (Psy 644)
Biology of Aggression (HON 596)
Biological Clocks and Behavior (Neuro 4623)
Neuroendocrinology Seminar (Psy 811.08)
Advanced Comparative Psychology (Psy 804)
Neuroscience Seminar (NS 727)
Neuroscience of Biological Clocks (Neuros 4623)
Behavioral Endocrinology (Neuro 5644)

Committees (Department):

Psychobiology Colloquium Series Committee, (Faculty Advisor)
Promotion & Tenure Reading Committee
Ethics Committee
Psychobiology Faculty Search Committee
Research Advisory Committee
New Lab Building Consultancy
Speakers Committee (Chair)
Health Psychology Eminent Scholar Search Committee
Strategy Committee
Area Coordinator
Diversity Committee (Chair)
Diversity, Recruitment, and Retention Committee (Chair)

Committees (College/University):

Institutional Animal Care and Use Committee
Neuroscience Graduate Studies Committee
Neuroscience Graduate Studies Program, Co-Director
Neurobiotechnology Committee
Carnegie Initiative on the Doctorate Committee
Neuroscience minor, OSU Consortia of Arts and Sciences Colleges
Neuroscience major, OSU Consortia of Arts and Sciences Colleges, Chair
Advisory Board, Comprehensive Training Grant in Oral and Craniofacial Sciences, College of Dentistry
Advisory Board, Training Grant in the Neurosciences
Neuroscience Chair Search Committee
Academic Senate: University Research Committee
Arts and Sciences College Leadership Committee
Medical Scientist Program (MSP) Steering Committee (COM)
Promotion and Tenure, College of Behavioral and Social Sciences
Distinguished Scholar Selection Committee
Task Force on Biological and Life Sciences
Admission Committee (MD/PhD subcommittee), Ohio State College of Medicine
Graduate School PhD Completion Project
Life Sciences Steering Committee
College of Medicine Funds Flow Task Force
Recruitment of Women Leaders in the College of Medicine Task Force
Search Committee, Dean, College of Medicine
Search Committee, Dean of Education, College of Medicine
Search Committee, Faculty Leader, FAME, College of Medicine
Presidential AAAS Fellows Committee, College of Medicine
Honorary Degree Nomination Committee, Ohio State University
Search Committee, Chair, Oral Biology, College of Dentistry
Search Committee, Chair, Department of Neurological Surgery, Wexner Medical Center, OSU
Search Committee, University President, The Ohio State University.
Selection Committee, Ohio State Distinguished Professor
Committee for Improved Recruitment and Contracting, Wexner Medical Center, OSU

Committees (College/University):

Neuroscience Graduate Program Committee, Chair
Neuroscience Graduate Program, Director
Neuroscience major, WVU Advisory Committee
Internal Advisory Board, Training Grant in Stroke
Pharmaceutical Sciences Chair Search Committee
Research Operational Action Team, Co-Chair
Rockefeller Neuroscience Institute Strategic Planning Executive Committee
Basic Science Chair Committee
Biomedical Sciences Program Leader Committee
Rockefeller Neuroscience Institute Construction Committee
WVU Neurosurgery Chair Search Committee
WVU Behavioral Health and Psychiatry Chair Search Committee
WVU Health Science Center Endowed Chair Review Committee

Committees (National):

National Academies of Science Committee for Animal Welfare Guidelines for the National Institutes of Health
National Academies International Workshop on Development of Science-Based Guidelines for Enrichment
NIH ICFN-3 Panel Member.
National Science Foundation, Behavioral Neuroscience Center Site Visit Panel (Chair)
National Science Foundation, Animal Behavior Panelist
Advisory Committee, Reproductive Diversity Training Grant, Indiana University (2006-11)
NIH BRS Study Section, 2005-2007.
NIH Neuroscience Blueprint Study Section for Conte Centers 2006-2009.
NIH Neurogenetics and Neurogenomics Study Section, 2007-2009.
NIH Novel Genetic Tools to Study Brain Function Study Section, 2007-2008.
Evaluation Committee: The Animal Behavior Graduate Group, University of California, Davis, 2008-2009.
NIH Workshop on Biological Clocks and Rhythms in Mental Health, 2008 (Co-Chair)
Evaluation Committee, 2010: Neuroscience Undergraduate Major review. Ohio Wesleyan University.
Evaluation Committee, 2010: Biology graduate program, Kent State University.
Evaluation Committee, 2011-2023: External reviewer of the Center for the Integrative Study of Animal Behavior (CISAB) at Indiana University.
Evaluation Committee, 2012: external reviewer of the Biology Department, University of Kentucky.
NIMH Review Panel: National Cooperative Drug Discovery/Development Groups, 2012.
National Science Foundation, Modulation 2 Proposal Review Panel Member, 2012-2013.
NIMH RDoC Workshop: member, circadian rhythm and sleep section, 2012.
Evaluation Committee, 2013: External reviewer of the Center for the Integrative Study of Animal Behavior (CISAB) at Indiana University.
Evaluation Committee, 2013: External reviewer of the Psychology Department, University of Massachusetts.
Alan T. Waterman Award Committee, NSF, 2014-2017.
National Science Foundation, Biology Directorate Advisory Committee, 2014-2018.