

Joshua William Miller, Ph.D.

- Curriculum Vitae -

Work Address and Contact Information

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Date and Place of Birth:

May 19, 1964; Washington, DC; United States Citizen

Education:

Ph.D.	1993	Nutrition	Tufts University, Medford, MA <u>Thesis Title:</u> "The Pathogenesis of Homocysteinemia due to B Vitamin Deficiencies"
M.S.	1990	Nutrition	Tufts University, Medford, MA
B.A.	1986	Chemistry/Psychology	Swarthmore College, Swarthmore, PA

Professional Positions:

2012-present	Professor and Chair (July 2013) Department of Nutritional Sciences Rutgers University New Brunswick, NJ
2012-2016	Visiting Professor Department of Medical Pathology & Laboratory Medicine University of California Davis School of Medicine Davis and Sacramento, CA
2011-2012	Professor (tenured) Department of Medical Pathology & Laboratory Medicine University of California Davis School of Medicine Davis and Sacramento, CA
2008-2011	Associate Professor In Residence Department of Medical Pathology & Laboratory Medicine University of California Davis School of Medicine Davis and Sacramento, CA
2004-2008	Associate Adjunct Professor Department of Medical Pathology & Laboratory Medicine University of California Davis School of Medicine Davis and Sacramento, CA

Professional Positions (cont.):

1997-2004	Assistant Adjunct Professor Department of Medical Pathology & Laboratory Medicine University of California Davis School of Medicine Davis and Sacramento, CA
1995-1997	Neurobehavioral Sciences Post-Doctoral Trainee Department of Pharmacology Duke University Medical Center Durham, NC
1993-1995	Research Associate Vitamin Bioavailability and Neuroscience Labs USDA Human Nutrition Research Center Boston, MA
1989-1993	Research Assistant, Vitamin Bioavailability Lab USDA Human Nutrition Research Center Boston, MA
1989 (summer)	Research Assistant, Mineral Bioavailability Lab USDA Human Nutrition Research Center Boston, MA

Awards:

2004	American Cancer Society "Research Scholar" Award
1997-1999	UC Davis Clinical Nutrition Research Unit "Young Investigator" Award
1992	American Institute of Nutrition Graduate Student Award

Educational Memberships and Activities:

2012-present	Department of Nutritional Sciences, Rutgers University
2016-present	Instructor of Record 11:709:255: Nutrition and Health
2015	Co-Instructor 11:709:255: Nutrition and Health
2013-present	Instructor of Record 11:709:481: Seminar in Nutrition
2012-present	Nutritional Sciences Graduate Program, Rutgers University
2014-present	Thesis Advisor: 1 Masters Student
2013-present	Instructor of Record 16:709:601: Nutritional Sciences Seminar
2013-2017	Thesis Advisor: 2 Doctoral Students (both graduated in 2017)
2008-2012	Graduate Group in Comparative Pathology, UC Davis
2008-2011	Faculty Advisor: 1 Doctoral Student
2007-2012	Masters in Public Health Program, UC Davis
2008-2010	Faculty Advisor: 4 Masters Students (2 graduated in 2009, 2 in 2010)
2002-2012	Program in International Nutrition, UC Davis
2004-2012	Executive Committee
1999-2014	Graduate Group in Nutritional Biology, UC Davis
2010-2012	Instructor of Record NUB298: Advanced Nutrition III
2009-2011	Co-Instructor NUB298: Advanced Nutrition I
2009-2012	Lecturer NUT252: One-Carbon Metabolism Nutrients and Development
2008-2012	Curriculum Committee

Educational Memberships and Activities (cont.):

1999-2014	Graduate Group in Nutritional Biology, UC Davis (cont.)
2008-2011	Lecturer NUT104: Folate, B12, DNA, Epigenetics and Toxicology
2001-2012	Preliminary Exam Committee (Chair: 2003-2007)
1999-2014	Thesis Advisor: 6 Doctoral Students (2 graduated in 2006, 1 in 2011, 1 in 2013, 2 in 2014); Thesis Committee Member: 5 Doctoral Students (5 graduated in 2000, 2003, 2007, and 2008 [2])
1999-2009	Lecturer NUT201: Folate, Vitamin B12, and Homocysteine
1997-2012	School of Medicine, UC Davis
2002-2012	Lecturer Metabolism, Endocrinology, Reproduction and Nutrition (MERN): Nutrition and Aging
2001-2008	Faculty Facilitator: Application of Medical Principles

Patent:

“Assay for Vitamin B12 Absorption and Method of Making Labeled Vitamin B12”,
 Patent Number: 8,202,507, Authors: Peter Anderson, PhD, Stephen Dueker, PhD, Joshua Miller, Ralph Green, John Rot, Colleen Carkeet, Bruce A. Buchholz

Professional Intramural and Extramural Activities:

2017-present	Chair-Elect, Association of Nutrition Departments and Programs (ANDP)
2016-present	Chair, Chairs Council, School of Environmental and Biological Sciences, Rutgers University
2015-present	Associate Editor, <u>Nutrition Reviews</u>
2015	Member, Expert Panel, Identifying Research Needs for Assessing Safe Use of High Intakes of Folic Acid – National Toxicology Program, NIH, Bethesda, MD (May 11-12)
2015	Panel Discussion Leader, The Role of Nutrition in Dementia Prevention and Management – New York Academy of Sciences (March 26-27)
2014-2016	Chair, Folic Acid, Vitamin B12, and One-Carbon Metabolism – FASEB Summer Research Conference (2016)
2013-present	Member, NIEHS Center for Environmental Exposures and Disease at the Environmental and Occupational Health Sciences Institute, Rutgers University
2012-2014	Co-Chair, Folic Acid, Vitamin B12, and One-Carbon Metabolism – FASEB Summer Research Conference (2014)
2011-present	Member, Vitamin B12 Working Group on Biomarkers of Nutrition for Development (BOND), Eunice Kennedy Shriver National Institute of Child Health and Human Development
2011-2012	Laboratory Director, CTSC Clinical Research Center, UC Davis
2009-2010	Acting Chair, Advisory Research Committee, Dept. of Medical Pathology and Laboratory Medicine, UC Davis
2008	Member, Working Group on Vitamin B12 Fortification, Second Technical Workshop on Wheat Flour Fortification, Stone Mountain, GA
2007-present	Member, American Society for Nutrition
2006-2012	Legislative Ambassador, California Division, American Cancer Society
2005-present	Medical Advisory Board, Diabetes Action Research and Education Foundation
2001-2012	Director, Serum/Plasma/DNA Bank, UC Davis Alzheimer’s Disease Center
1999	Member, Working Group on Folic Acid Analysis and Sufficiency for Reproductive Outcomes, March of Dimes, White Plains, NY
1998-2002	Contributing Editor, <u>Nutrition Reviews</u>
1998-present	Manuscript and Grant Proposal Reviewer (see below)

Publications:***Peer-Reviewed Papers***

1. Bell IR, Edman J, Miller J, Hebben N, Linn RT, Ray D, Kayne HL. Relationship of normal serum vitamin B12 and folate levels to cognitive test performance in subtypes of geriatric depression. *Journal of Geriatric Psychiatry and Neurology* 3:98-105, 1990. PMID: 2206265
2. Selhub J, Miller JW. The pathogenesis of homocysteinemia: interruption of the coordinate regulation by S-adenosylmethionine of the remethylation and transsulfuration of homocysteine. *American Journal of Clinical Nutrition* 55:131-138, 1992. (Selected as an "outstanding paper of the year" by the USDA Agricultural Research Service, 1993.) PMID: 1728812
3. Miller JW, Ribaya-Mercado JD, Russell RM, Shepard DC, Morrow FD, Cochary EF, Sadowski JA, Gershoff SN, Selhub J. Effect of vitamin B6 deficiency on fasting plasma homocysteine concentrations. *American Journal of Clinical Nutrition* 55:1154-1160, 1992. PMID: 1595588
4. Miller JW, Nadeau MR, Smith J, Smith D, Selhub J. Folate-deficiency-induced homocysteinemia in rats: disruption of S-adenosylmethionine's co-ordinate regulation of homocysteine metabolism. *Biochemical Journal* 298:415-419, 1994. PMID: 8135750; PMCID: PMC1137956
5. Miller JW, Nadeau MR, Smith D, Selhub J. Vitamin B6 deficiency vs folate deficiency: comparison of responses to methionine loading in rats. *American Journal of Clinical Nutrition* 59:1033-1039, 1994. PMID: 8172087
6. Kim Y-I, Miller JW, da Costa KA, Nadeau MR, Smith D, Selhub J, Zeisel SH, Mason JB. Severe folate deficiency causes secondary depletion of choline and phosphocholine in rat liver. *Journal of Nutrition* 124(11):2197-2203, 1994. PMID: 7965204
7. Bostom AG, Shemin D, Lapane KL, Miller JW, Sutherland P, Nadeau M, Seyoum E, Hartman W, Prior R, Wilson PW, Selhub J. Hyperhomocysteinemia and traditional cardiovascular disease risk factors in end-stage renal disease patients on dialysis: a case-control study. *Atherosclerosis* 114:93-103, 1995. PMID: 7605381
8. Bell IR, Amend D, Kaszniak AW, Schwartz GE, Peterson JM, Stini WA, Miller JW, Selhub J. Trait shyness in the elderly: evidence for an association with Parkinson's disease in family members and biochemical correlates. *Journal of Geriatric Psychiatry & Neurology* 8:16-22, 1995. PMID: 7710641
9. Gospe SM, Gietzen DW, Summers PJ, Lunetta JM, Miller JW, Selhub J, Ellis WG, Clifford AJ. Behavioral and neurochemical changes in folate-deficient mice. *Physiology and Behavior* 58:935-941, 1995. PMID: 8577891
10. Miller JW, Selhub J, Joseph JA. Oxidative damage caused by free radicals produced during catecholamine autoxidation: protective effects of O-methylation and melatonin. *Free Radical Biology and Medicine* 21:241-249, 1996. PMID: 8818640
11. Freneau RT, Valez-Faircloth M, Miller JW, Henzi VA, Cohen SM, Nadler JV, Shafqat S, Blakely RD, Domin B. A novel nonopioid action of enkephalins: competitive inhibition of the mammalian brain high affinity L-proline transporter. *Molecular Pharmacology* 49:1033-1041, 1996. PMID: 8649341

Peer-Reviewed Papers (cont.)

12. Kim Y-I, Pogribny IP, Basnakian AG, Miller JW, Selhub J, James SJ, Mason JB. Folate deficiency in the rat induces DNA strand breaks and hypomethylation within the p53 tumor suppressor gene. *American Journal of Clinical Nutrition* 65:46-52, 1997. PMID: 8988912
13. Miller JW, Shukitt-Hale B, Villalobos R, Nadeau MR, Selhub J, Joseph JA. Effect of L-dopa and the catechol-O-methyltransferase inhibitor Ro 41-0960 on sulfur amino acid metabolites in rats. *Clinical Neuropharmacology* 20:55-66, 1997. PMID: 9037574
14. Daly D, Miller JW, Nadeau MR, Selhub J. The effect of L-dopa administration and folate deficiency on plasma homocysteine concentrations in rats. *Journal of Nutritional Biochemistry* 8:634-640, 1997. PMID: None
15. Galli A, Jayanthi LD, Ramsey S, Miller JW, Freneau RT, DeFelice LJ. L-Proline and L-pipecolate induce enkephalin-sensitive currents in HEK-293 cells transfected with the high affinity mammalian brain L-proline transporter. *Journal of Neuroscience* 19:6290-6297, 1999. PMID: 10414958
16. Dueker SR, Lin Y, Jones AD, Mercer R, Fabbro E, Miller JW, Green R, Clifford AJ. Determination of blood folate using acid extraction and internally standardized GCMS detection. *Analytical Biochemistry* 283:266-275, 2000. PMID: 10906248
17. Gielchinsky Y, Elstein D, Green R, Miller JW, Elstein Y, Algur N, Lahad A, Shinar E, Abrahamov A, Zimran A. High prevalence of low serum vitamin B12 in a multi-ethnic Israeli population. *British Journal of Haematology* 115:707-709, 2001. PMID: 11736958
18. Miller JW, Green R, Mungas DM, Reed BR, Jagust WJ. Homocysteine, vitamin B6, and vascular disease in AD patients. *Neurology* 58:1471-1475, 2002. PMID: 12034781
19. Miller JW, Ramos MI, Garrod MG, Flynn MA, Green R. Transcobalamin II G775C polymorphism and indices of vitamin B12 status in healthy older adults. *Blood* 100:718-720, 2002. PMID: 12091374
20. Rogers LM, Boy E, Miller JW, Green R, Rodriguez M, Chew F, Allen LH. Predictors of cobalamin deficiency in Guatemalan school children: diet, *Helicobacter pylori* or bacterial overgrowth? *Journal of Pediatric Gastroenterology and Nutrition* 36:27-36, 2003. PMID: 12499993
21. Rogers LM, Boy E, Miller JW, Green R, Allen LH. High prevalence of cobalamin deficiency in Guatemalan school children: association with elevated serum methylmalonic acid and plasma homocysteine, and low plasma holotranscobalamin II concentrations. *American Journal of Clinical Nutrition* 77:433-440, 2003. PMID: 12540405
22. Aisen PS, Egelko S, Andrews H, Diaz-Arrastia R, Weiner M, DeCarli C, Jagust W, Miller JW, Green R, Bell K, Sano M. A pilot study of vitamins to lower plasma homocysteine levels in Alzheimer disease. *American Journal of Geriatric Psychiatry* 11:246-249, 2003. PMID: 12611755
23. Whitmer RA, Haan MN, Miller JW, Yaffe K. Hormone replacement therapy and cognitive performance: the role of homocysteine. *Journal of Gerontology: A Biological Sciences and Medical Sciences* 58:M324-M330, 2003. PMID: 12663696
24. Miller JW, Selhub J, Nadeau M, Thomas CA, Feldman RG, Wolf PA. Effect of L-Dopa on plasma homocysteine in PD patients: relationship to B vitamin status. *Neurology* 60:1125-1129, 2003. PMID: 12682318

Peer-Reviewed Papers (cont.)

25. Miller JW, Green R, Ramos MI, Allen LH, Mungas DM, Jagust WJ, Haan MN. Homocysteine and cognitive function in the Sacramento Area Latino Study on Aging (SALSA). *American Journal of Clinical Nutrition* 78:441-447, 2003. PMID: 12936927
26. Campbell AK, Miller JW, Green R, Haan MN, Allen LH. Plasma vitamin B-12 concentrations in an elderly Latino population are predicted by serum gastrin concentrations and crystalline vitamin B-12 intake. *Journal of Nutrition* 133:2770-2776, 2003. PMID: 12949363
27. Esfandiari F, Green R, Cotterman RF, Pogribny IP, James SJ, Miller JW. Methyl deficiency causes reduction of the methyl-CpG-binding protein, MeCP2, in preneoplastic rat liver. *Carcinogenesis* 24:1935-1940, 2003. PMID: 12949043
28. Luchsinger JA, Tang M-X, Shea S, Miller J, Green R, Mayeux R. Plasma homocysteine levels and risk of Alzheimer's disease. *Neurology* 62:1972-1976, 2004. PMID: 15184599
29. Lin Y, Dueker SR, Follett JR, Fadel JG, Arjomand A, Schneider PD, Miller JW, Green R, Buchholz BA, Vogel JS, Phair RD, Clifford AJ. Quantitation of in vivo human folate metabolism. *American Journal of Clinical Nutrition* 80:680-691, 2004. PMID: 15321809
30. Ramos MI, Allen LH, Haan MN, Green R, Miller JW. Plasma folate concentrations are associated with depressive symptoms in elderly Latina women despite folic acid fortification. *American Journal of Clinical Nutrition* 80:1024-1028, 2004. PMID: 15447915
31. Torres CL, Miller JW, Rogers QR. Determination of free and total cyst(e)ine in plasma of dogs and cats. *Veterinary Clinical Pathology* 33:228-233, 2004. PMID: 15570560
32. Campbell AK, Jagust WJ, Mungas DM, Miller JW, Green R, Haan MN, Allen LH. Low erythrocyte folate, but not plasma vitamin B-12 or homocysteine, is associated with dementia in elderly Latinos. *Journal of Nutrition, Health & Aging* 9:39-43, 2005. PMID: 15750664
33. Green R, Miller JW. Vitamin B12 deficiency is the dominant nutritional cause of hyperhomocysteinemia in a folic acid-fortified population. *Clinical Chemistry and Laboratory Medicine* 43:1048-1051, 2005. PMID: 16197296
34. Ramos MI, Allen LH, Mungas DM, Jagust WJ, Haan MN, Green R, Miller JW. Low folate status is associated with impaired cognitive function and dementia in the Sacramento Area Latino Study on Aging. *American Journal of Clinical Nutrition* 82:1346-1352, 2005. PMID: 16332669
35. Miller JW, Garrod MG, Rockwood AL, Kushnir MM, Allen LH, Haan MN, Green R. Measurement of total vitamin B12 and holotranscobalamin, singly and in combination, in screening for metabolic vitamin B12 deficiency. *Clinical Chemistry* 52:278-285, 2006. PMID: 16384886
36. Carkeet C, Dueker SR, Lango J, Buchholz BA, Miller JW, Green R, Hammock B, Roth JR, Anderson PJ. Human vitamin B12 absorption measurement by accelerator mass spectrometry using specifically labeled ¹⁴C-cobalamin. *Proceedings of the National Academy of Sciences* 103:5649-5649, 2006. PMID: 16585531; PMCID: PMC1458635
37. Luchsinger JA, Tang MX, Miller J, Green R, Mehta, PD, Mayeux R. Relation of plasma homocysteine to plasma amyloid beta levels. *Neurochemistry Research* 32:775-781, 2007. PMID: 17191133

Peer-Reviewed Papers (cont.)

38. Luchsinger JA, Tang MX, Miller J, Green R, Mayeux R. Relation of higher folate intake to lower risk of Alzheimer disease in the elderly. *Archives of Neurology* 64:86-92, 2007. PMID: 17210813
39. Haan MN, Miller JW, Aiello AE, Whitmer RA, Jagust WJ, Mungas DM, Allen LH, Green R. Homocysteine, B vitamins and incidence of dementia and cognitive impairment: results from the Sacramento Area Latino Study on Aging. *American Journal of Clinical Nutrition* 85:511-517, 2007. PMID: 17284751; PMCID: PMC1892349
40. Garrod MG, Green R, Allen LH, Mungas DM, Jagust WJ, Haan MN, Miller JW. Fraction of total plasma vitamin B12 bound to transcobalamin correlates with cognitive function in elderly Latinos with depressive symptoms. *Clinical Chemistry* 54:1210-1217, 2008. PMID: 18451312; PMCID: PMC2752269
41. Miller JW, Garrod MG, Allen LH, Haan MN, Green R. Metabolic evidence of vitamin B12 deficiency, including high homocysteine and methylmalonic acid and low holotranscobalamin, is more pronounced in older adults with elevated plasma folate. *American Journal of Clinical Nutrition* 90:1586-1592, 2009. PMID: 19726595; PMCID: PMC2777470
42. Reitz C, Tang M-X, Miller J, Green R, Luchsinger JA. Plasma homocysteine and risk of mild cognitive impairment. *Dementia and Geriatric Cognitive Disorders* 27:11-17, 2009. PMID: 19088473; PMCID: PMC2698462
43. Garrod MG, Allen LH, Haan MN, Green R, Miller JW. Transcobalamin C677G genotype modifies the association between vitamin B12 and homocysteine in older Hispanics. *European Journal of Clinical Nutrition* 64:503-509, 2010. PMID: 20216556; PMCID: PMC2864787
44. Mungas D, Beckett L, Harvey D, Tomaszewski Farias S, Reed B, Carmichael O, Olichney J, Miller J, DeCarli C. Heterogeneity of cognitive trajectories in diverse older persons. *Psychology and Aging* 25:606-619, 2010. PMID: 20677882; PMCID: PMC2943999
45. Cheung ATW, Miller JW, Craig SM, To PL, Lin X, Samarron SL, Chen PCY, Zwerdling T, Wun T, Li C-S, Green R. Comparison of real-time microvascular abnormalities in pediatric and adult sickle cell anemia patients. *American Journal of Hematology* 85:899-901, 2010. PMID: 20872552; PMCID: PMC2964448
46. Gelfand JM, Cree BAC, McElroy J, Oksenberg J, Green R, Mowry EM, Miller JW, Hauser SL, Green AJ. Vitamin D in African-Americans with multiple sclerosis. *Neurology* 76:1824-1830, 2011. PMID: 21606454; PMCID: PMC3100123
47. Carmichael OT, Mungas D, Beckett L, Harvey D, Farias ST, Reed BR, Olichney J, Miller J, DeCarli C. MRI predictors of cognitive change in a diverse and carefully characterized population. *Neurobiology of Aging* 33:83-95, 2012. PMID: 20359776; PMCID: PMC2909327
48. Bettcher BM, Wilhelm R, Rigby T, Green R, Miller JW, Racine CA, Yaffe K, Miller BL, Kramer JH. C-reactive protein is related to memory and medial temporal brain volume in older adults. *Brain, Behavior, and Immunity* 26:103-108, 2012. PMID: 21843630; PMCID: PMC3221922
49. Jeon CY, Haan MN, Cheng C, Clayton ER, Mayeda ER, Miller JW, Aiello AE. *Helicobacter pylori* infection is associated with increased rate of diabetes. *Diabetes Care* 35:520-525, 2012. PMID: 22279028; PMCID: PMC3322696

Peer-Reviewed Papers (cont.)

- 49a. Jeon CY, Haan MN, Cheng C, Clayton ER, Mayeda ER, Miller JW, Aiello AE. Response to Comment on: Jeon et al. *Helicobacter pylori* Infection Is Associated With an Increased Rate of Diabetes. *Diabetes Care* 2012;35:520-525. *Diabetes Care* 35:e54, 2012.
- 49b. Jeon CY, Haan MN, Cheng C, Clayton ER, Mayeda ER, Miller JW, Aiello AE. Response to Comment on: Jeon et al. *Helicobacter pylori* Infection Is Associated With an Increased Rate of Diabetes. *Diabetes Care* 2012;35:520-525. *Diabetes Care* 35:e56, 2012.
50. Cheung ATW, Miller JW, Miguelino MG, To WJ, Li J, Lin X, Chen PC, Samarron SL, Wun T, Zwerdling T, Green R. Exchange transfusion therapy and its effects on real-time microcirculation in pediatric sickle cell anemia patients: an intravital microscopy study. *Journal of Pediatric Hematology and Oncology* 34:169-174, 2012. PMID: 22278200; PMCID: PMC3311696
51. Shahab-Ferdows S, Anaya-Loyola MA, Vergara-Castañeda H, Rosado JL, Keyes WR, Newman JW, Miller JW, Allen LH. Vitamin B-12 supplementation of rural Mexican women changes biochemical vitamin B-12 status indicators but does not affect hematology or a bone turnover marker. *Journal of Nutrition* 142:1881-1887, 2012. PMID: 22915298
52. Zschäbitz S, Cheng TYD, Neuhouser ML, Zheng Y, Ray RM, Miller JW, Song X, Bailey LB, Maneval DR, Beresford SAA, Lane D, Shikany JM, Ulrich CM. B vitamin intakes and incidence of colorectal cancer: Results from the Women's Health Initiative Observational Study cohort. *American Journal of Clinical Nutrition* 97:332-343, 2013. PMID: 23255571; PMCID: PMC3545682
53. Miller JW, Beresford SAA, Neuhouser ML, Cheng TYD, Song X, Brown EC, Zheng Y, Rodriguez B, Green R, Ulrich CM. Homocysteine, cysteine and risk of incident colorectal cancer in the Women's Health Initiative Observational Cohort. *American Journal of Clinical Nutrition* 97:827-834, 2013. PMID: 23426034; PMCID: PMC3607656
54. Toriola AT, Cheng TD, Neuhouser ML, Wener MH, Zheng Y, Brown E, Miller JW, Song X, Beresford SA, Gunter MJ, Caudill MA, Ulrich CM. Biomarkers of inflammation are associated with colorectal cancer risk in women but are not suitable as early detection markers. *International Journal of Cancer* 132:2648-2658, 2013. PMID: 23161620; PMCID: PMC3609926
55. Greibe E, Miller JW, Foutouhi SH, Green R, Nexø E. Metformin increases liver accumulation of vitamin B12 – an experimental study in rats. *Biochimie* 95:1062-1065, 2013. PMID: 23402786
56. Bettcher BM, Walsh CM, Watson C, Miller JW, Green R, Patel N, Miller B, Yaffe K, Kramer JH. Body mass and white matter integrity: the influence of vascular and inflammatory markers. *PLoS One* 8:e77741, 2013. PMID: 24147070; PMCID: PMC3797689
57. Bae S, Ulrich CM, Bailey LB, Malysheva O, Brown EC, Neuhouser ML, Cheng TY, Miller JW, Zheng Y, Xiao L, Hou L, Song X, Buck K, Beresford SA, Caudill MA. Impact of folic acid fortification on global DNA methylation and one-carbon biomarkers in the Women's Health Initiative Observational Study cohort. *Epigenetics* 9:396-403, 2014. PMID: 24300587; PMCID: PMC4053458

Peer-Reviewed Papers (cont.)

58. Abbenhardt C, Miller JW, Song X, Brown EC, Cheng TY, Wener MH, Zheng Y, Toriola AT, Neuhouser ML, Beresford SA, Makar KW, Bailey LB, Maneval DR, Green R, Manson JE, Van Horn L, Ulrich CM. Biomarkers of one-carbon metabolism are associated with biomarkers of inflammation in women. *Journal of Nutrition* 144:714-721, 2014. PMID: 24647390; PMCID: PMC3985828
59. Hine B, Boggs I, Green R, Miller JW, Hovey RC, Humphrey R, Wheeler TT. Transcobalamin derived from bovine milk stimulates apical uptake of vitamin B12 into human intestinal epithelial cells. *Journal of Cellular Biochemistry* 115:1948-54, 2014. PMID: 24913691
60. Bettcher BM, Watson CL, Walsh CM, Neuhaus J, Miller JW, Green R, Patel N, Dutt S, Busovaca E, Rosen H, Yaffe K, Miller BL, Kramer JH, Interleukin-6, age, and corpus callosum integrity. *PLoS One* 9:e106521, 2014. PMID: 25188448; PMCID: PMC4154691
61. Bae S, Ulrich CM, Neuhouser ML, Malysheva O, Bailey LB, Xiao L, Brown EC, Cushing-Haugen KL, Zheng Y, Cheng TY, Miller JW, Green R, Lane DS, Beresford SA, Caudill MA. Plasma choline metabolites and colorectal cancer risk in the Women's Health Initiative Observational Study. *Cancer Research* 74:7442-52, 2014. PMID: 25336191; PMCID: PMC4268282
62. Fedosov SN, Brito A, Miller JW, Green R, Allen LH. Combined indicator of vitamin B12 status: modification for missing biomarkers and folate status and recommendations for revised cut-points. *Clinical Chemistry and Laboratory Medicine* 53:1215-25, 2015. PMID: 25720072
63. Neuhouser ML, Cheng T-YD, Beresford AA, Brown E, Song X, Miller JW, Zheng Y, Thomson CA, Shikany JM, Vitolins MZ, Rohan T, Green R, Ulrich CM. Red blood cell folate and plasma folate are not associated with risk of incident colorectal cancer in the Women's Health Initiative observational study. *International Journal of Cancer* 137:930-9, 2015. PMID: 25643945; PMCID: PMC4478092
64. Cheng TD, Makar KW, Neuhouser ML, Miller JW, Song X, Brown EC, Beresford SA, Zheng Y, Poole EM, Galbraith RL, Duggan DJ, Habermann N, Bailey LB, Maneval DR, Caudill MA, Toriola AT, Green R, Ulrich CM. Folate-mediated one-carbon metabolism genes and interactions with nutritional factors on colorectal cancer risk: Women's Health Initiative Observational Study. *Cancer* 121(20):3684-91, 2015. PMID: 26108676; PMCID: PMC4592375
65. Frazier DT, Bettcher BM, Dutt S, Patel N, Mungas D, Miller J, Green R, Kramer JH. The relationship between insulin-resistance processing speed and specific executive function profiles in neurologically-intact older adults. *Journal of the International Neuropsychological Society* 21(8):622-8, 2015. PMID: 26272269; PMCID: PMC4764989
66. Miller JW, Harvey DJ, Beckett LA, Green R, Farias S, Reed BR, Olichney JM, Mungas DM, DeCarli C. Vitamin D status and rates of cognitive decline in a multi-ethnic cohort of older adults. *JAMA Neurology* 72(11):1295-303, 2015. PMID: 26366714; PMCID: PMC5023277
- 66a. Miller JW, Green R, DeCarli C. 25-Hydroxyvitamin D in patients with cognitive decline-reply. *JAMA Neurology* 73(3):358, 2016. PMID: 26751272; PMCID: PMC5024784
67. Nathanielsz PW, Yan J, Green R, Nijland M, Miller JW, Wu G, McDonald TJ, Caudill MA. Maternal obesity disrupts the methionine cycle in baboon pregnancy. *Physiological Reports* 3(11). pii: e12564, 2015. PMID: 26537341; PMCID: PMC4673623

Peer-Reviewed Papers (cont.)

68. Brito A, Verdugo R, Hertrampf E, Miller JW, Green R, Fedosov SN, Shahab-Ferdows S, Sanchez H, Albala C, Castillo, JL, Matamala JM, Uauy R, Allen LH. Vitamin B-12 treatment of asymptomatic, deficient, elderly Chileans improves conductivity in myelinated peripheral nerves, but high serum folate impairs B-12 status response assessed by the combined indicator of vitamin B-12 status. *American Journal of Clinical Nutrition* 103:250-7, 2016. PMID: 26607937

68a. Brito A, Fedosov SN, Miller JW, Green R, Uauy R, Allen LH. Reply to LR Solomon. *American Journal of Clinical Nutrition* 103:1379, 2016. PMID: 27140535
69. Aleliunas RE, Aljaadi AM, Laher I, Glier MB, Green TJ, Murphy M, Miller JW, Devlin AM. Folic acid supplementation of female mice, with or without vitamin B-12, before and during pregnancy and lactation programs adiposity and vascular health in adult male offspring. *Journal of Nutrition* 146:688-96, 2016. PMID: 26962174
70. Brito A, Grapov D, Fahrman J, Harvey D, Green R, Miller JW, Fedosov SN, Shahab-Ferdows S, Hampel D, Pedersen TL, Fiehn O, Newman JW, Uauy R, Allen LH. The human serum metabolome of vitamin B-12 deficiency and repletion, and associations with neurological function in elderly adults. *Journal of Nutrition* 2017 (in press).

Peer-Reviewed Papers – Alzheimer’s Disease Genetics Consortium*

*Dr. Miller is a member of the Alzheimer’s Disease Genetics Consortium

1. Jun G, Naj AC, Beecham GW, ... Alzheimer’s Disease Genetics Consortium*, ... Younkin SG. Meta-analysis confirms CR1, CLU, and PICALM as Alzheimer disease risk loci and reveals interactions with APOE genotypes. *Archives of Neurology* 67:1473-1484, 2010. PMID: 20697030; PMCID: PMC3048805
2. Naj AC, Jun G, Beecham GW, ... Miller JW, ... Schellenberg GD. Common variants at MS4A4/MS4A6E, CD2AP, CD33 and EPHA1 are associated with late-onset Alzheimer's disease. *Nature Genetics* 43:436-441, 2011. PMID: 21460841; PMCID: PMC3090745
3. Coppola G, Chinnathambi S, Lee JJ, ... Alzheimer's Disease Genetics Consortium*, ... Geschwind DH. Evidence for a role of the rare p.A152T variant in MAPT in increasing the risk for FTD-spectrum and Alzheimer's diseases. *Human Molecular Genetics* 21:3500-3512, 2012. PMID: 22556362; PMCID: PMC3392107
4. Zou F, Chai HS, Younkin CS, ... Alzheimer’s Disease Genetics Consortium*, ... Ertekin-Taner N. Brain expression genome-wide association study (eGWAS) identifies human disease-associated variants. *PLoS Genetics* 8:e1002707, 2012. PMID: 22685416; PMCID: PMC3369937
5. Allen M, Zou F, Chai HS, ... Alzheimer’s Disease Genetics Consortium*, ... Ertekin-Taner N. Novel late-onset Alzheimer’s disease loci variants associate with brain gene expression. *Neurology* 79:221-228, 2012. PMID: 22722634; PMCID: PMC3398432
6. Jun G, Vardarajan BN, Buross J, ... Alzheimer’s Disease Genetics Consortium*, ... Farrer LA. Comprehensive search for Alzheimer disease susceptibility loci in the APOE region. *Archives of Neurology* 69:1270-1279, 2012. PMID: 22869155; PMCID: PMC3579659
7. Whitcomb DC, Larusch J, Krasinskas AM, ... Alzheimer’s Disease Genetics Consortium*, ... Devlin B. Common genetic variants in the CLDN2 and PRSS1-PRSS2 loci alter risk for alcohol-related and sporadic pancreatitis. *Nature Genetics* 44:1349-1354, 2012. PMID: 23143602; PMCID: PMC3510344
8. Holton P, Ryten M, Nalls M, ... Alzheimer's Disease Genetics Consortium*, ... Guerreiro R. Initial assessment of the pathogenic mechanisms of the recently identified Alzheimer risk Loci. *Annals of Human Genetics*. 77:85-105, 2013. PMID: 23360175; PMCID: PMC3578142
9. Cruchaga C, Kauwe JS, Harari O, ... Alzheimer Disease Genetic Consortium (ADGC)*, ... Goate AM. GWAS of cerebrospinal fluid tau levels identifies risk variants for Alzheimer's disease. *Neuron* 78:256-268, 2013. PMID: 23562540; PMCID: PMC3664945
10. Miyashita A, Koike A, Jun G, ... Alzheimer Disease Genetics Consortium*, ... Kuwano R. SORL1 is genetically associated with late-onset Alzheimer's disease in Japanese, Koreans and Caucasians. *PLoS One* 8:e58618, 2013. PMID: 23565137; PMCID: PMC3614978
11. Reitz C, Jun G, Naj A, ... Mayeux R, Alzheimer Disease Genetics Consortium*. Variants in the ATP-binding cassette transporter (ABCA7), apolipoprotein E ϵ 4, and the risk of late-onset Alzheimer disease in African Americans. *JAMA* 309:1483-1492, 2013. PMID: 23571587; PMCID: PMC3667653

Peer-Reviewed Papers – Alzheimer’s Disease Genetics Consortium* (cont.)

12. Lambert JC, Ibrahim-Verbaas CA, Harold D, ... Alzheimer Disease Genetics Consortium*, ... Amouyel P. Meta-analysis of 74,046 individuals identifies 11 new susceptibility loci for Alzheimer’s disease. *Nature Genetics* 45:1452-1458, 2013. PMID: 24162737; PMCID: PMC3896259
13. Ridge PG, Mukherjee S, Crane PK, Kauwe JS, Alzheimer’s Disease Genetics Consortium*. Alzheimer's disease: analyzing the missing heritability. *PLoS One* 8:e79771, 2013. PMID: 24244562; PMCID: PMC3820606
14. Gallagher MD, Suh E, Grossman M, ... Miller J, ... Chen-Plotkin AS. TMEM106B is a genetic modifier of frontotemporal lobar degeneration with C9orf72 hexanucleotide repeat expansions. *Acta Neuropathologica* 127:407-18, 2014. PMID: 24442578; PMCID: PMC4003885
15. Naj AC, Jun G, Reitz C, ... Alzheimer Disease Genetics Consortium*... Miller JW, ... Yu L. Effects of multiple genetic loci on age at onset in late-onset Alzheimer disease: a genome-wide association study. *JAMA Neurology* 71:1394-1404, 2014. PMID: 25199842; PMCID: PMC4314944
16. Wang LS, Naj AC, Graham RR, ... Alzheimer Disease Genetics Consortium* ... Miller JW, ... Yu L. Rarity of the Alzheimer disease-protective APP A673T variant in the United States. *JAMA Neurology* 72:209-216, 2015. PMID: 25531812; PMCID: PMC4324097
17. Chen JA, Wang Q, Davis-Turak J, Li Y, Karydas AM, Hsu SC, Sears RL, Chatzopoulou D, Huang AY, Wojta KJ, Klein E, Lee J, Beekly DL, Boxer A, Faber KM, Haase CM, Miller J, Poon WW, Rosen A, Rosen H, Sapozhnikova A, Shapira J, Varpetian A, Foroud TM, Levenson RW, Levey AI, Kukull WA, Mendez MF, Ringman J, Chui H, Cotman C, DeCarli C, Miller BL, Geschwind DH, Coppola G. A multiancestral genome-wide exome array study of Alzheimer disease, frontotemporal dementia, and progressive supranuclear palsy. *JAMA Neurology* 72:414-422, 2015. PMID: 25706306; PMCID: PMC4397175
18. Mukherjee S, Walter S, Kauwe JS, ... Alzheimer Disease Genetics Consortium*. Genetically predicted body mass index and Alzheimer's disease-related phenotypes in three large samples: Mendelian randomization analyses. *Alzheimers & Dementia* 11:1439-1451, 2015. PMID: 26079416; PMCID: PMC4676945
19. Ostergaard SD, Mukherjee S, Sharp SJ, ... Alzheimer Disease Genetics Consortium* ... Scott RA. Associations between potentially modifiable risk factors and Alzheimer disease: A Mendelian randomization study. *PLoS Medicine* 12(6):e1001841, 2015. PMID: 26079503; PMCID: PMC4469461
20. Ghani M, Reitz C, Cheng R, ... Alzheimer Disease Genetics Consortium*. Association of long runs of homozygosity with Alzheimer disease among African American individuals. *JAMA Neurology* 72:1313-1323, 2015. PMID: 26366463; PMCID: PMC4641052
21. Jun G, Ibrahim-Verbaas CA, Vronskaya M, ... Miller JW, ... Farrar LA. A novel Alzheimer disease locus located near the gene encoding tau protein. *Molecular Psychiatry* 21(1):108-117, 2016. PMID: 25778476; PMCID: PMC4573764
22. Ridge PG, Hoyt KB, Boehme K, Mukherjee S, Crane PK, Haines JL, Mayeux R, Farrar LA, Pericak-Vance MA, Schellenberg GD, Kauwe JS; Alzheimer's Disease Genetics Consortium (ADGC)*. Assessment of the genetic variance of late-onset Alzheimer's disease. *Neurobiology of Aging* 41:200.e13-20, 2016. PMID: 27036079; PMCID: PMC4948179

Peer-Reviewed Papers – Alzheimer’s Disease Genetics Consortium* (cont.)

23. Karch CM, Ezerskiy LA, Bertelsen S; Alzheimer’s Disease Genetics Consortium (ADGC)*, Goate AM. Alzheimer's disease risk polymorphisms regulate gene expression in the ZCWPW1 and the CELF1 loci. PLoS One 2016;11(2):e0148717. PMID: 26919393; PMCID: PMC4769299
24. Adams PM, Albert MS, Albin RL, ... Alzheimer’s Disease Genetics Consortium (ADGC)*. Assessment of the genetic variance of late-onset Alzheimer's disease. Neurobiology of Aging 41:200.e13-20, 2016. PMID: 27036079; PMCID: PMC4948179
25. Jun GR, Chung J, Mez J, ... Alzheimer’s Disease Genetics Consortium (ADGC)*, ... Farrer LA. Transethnic genome-wide scan identifies novel Alzheimer's disease loci. Alzheimers & Dementia pii:S1552-5260(17)30003-1, 2017. PMID: 28183528
26. Sims R, van der Lee SJ, Naj AC, ... Miller JW, ... Schellenberg GD. Rare coding variants in PLCG2, ABI3, and TREM2 implicate microglial-mediated innate immunity in Alzheimer's disease. Nature Genetics 2017 (in press). PMID: 28714976

Reviews, Book Chapters, Editorials

1. Rosenberg IH, Miller JW. Nutritional factors in physical and cognitive functions of elderly people. *American Journal of Clinical Nutrition* 55:1237S-1243S, 1992. PMID: 1590263
2. Mason JB, Miller JW. The effects of vitamins B12, B6, and folate on blood homocysteine levels. *Annals of the New York Academy of Sciences* 669:197-204, 1992. PMID: 1444025
3. Selhub J, Miller JW. Regulation of plasma homocysteine concentration by nutrients and drugs. In: Mato JM, Caballero A, eds. *Methionine Metabolism: Molecular Mechanisms and Clinical Implications*. Madrid: Consejo Superior de Investigaciones Científicas, pp 85-98, 1994.
4. Miller JW, Kleven DT, Domin BA, Fremeau RT. Cloned sodium (and chloride)-dependent high affinity transporters for GABA, glycine, proline, betaine, taurine, and creatine. In: Reith MEA, ed. *Neurotransmitter Transporters: Structure, Function, and Regulation*. Totowa, NJ: Humana Press, pp 101-150, 1996.
5. Green R, Miller JW. Folate deficiency beyond megaloblastic anemia: hyperhomocysteinemia and other manifestations of dysfunctional folate metabolism. *Seminars in Hematology* 36:47-64, 1999. PMID: 9930568
6. Miller JW. Homocysteine and Alzheimer's disease. *Nutrition Reviews* 57:126-129, 1999. PMID: 10228350
7. Selhub J, Bagley LC, Miller J, Rosenberg IH. B vitamins, homocysteine, and neurocognitive function in the elderly. *American Journal of Clinical Nutrition* 71(suppl):614S-620S, 2000. PMID: 10681269
8. Miller JW. Vitamin E and memory: is it vascular protection? *Nutrition Reviews* 58:109-111, 2000. PMID: 10835900
9. Miller JW. Homocysteine, Alzheimer's disease, and cognitive function. *Nutrition* 16:675-677, 2000. PMID: 10906594
10. Miller JW, Rogers LM, Rucker RB. Pantothenic acid. In: Bowman BA, Russell RM, eds. *Present Knowledge in Nutrition*, 8th ed. Washington, DC: ILSI Press, pp 253-260, 2001.
11. Miller JW. Does lowering plasma homocysteine reduce vascular disease risk? *Nutrition Reviews* 59:242-244, 2001. PMID: 11475450
12. Miller JW. Vitamin B12 deficiency, tumor necrosis factor- α , and epidermal growth factor: a novel function for vitamin B12? *Nutrition Reviews* 60:142-144, 2002. PMID: 12030277
13. Miller JW. Homocysteine, folate deficiency, and Parkinson's disease. *Nutrition Reviews* 60:410-413, 2002. PMID: 12521146
14. Miller JW. Folate, cognition, and depression in the era of folic acid fortification. *Journal of Food Science: Sensory and Nutritive Quality of Food* 69:61-64, 2004. PMID: None
15. Miller JW. Homocysteine. In: Caballero B, Allen LH, Prentice A, eds. *Encyclopedia of Nutrition*, 2nd ed. Oxford, England: Elsevier, pp 462-468, 2005.
16. Miller JW, Rogers LM, Rucker RB. Pantothenic acid. In: Bowman BA, Russell RM, eds. *Present Knowledge in Nutrition*, 9th ed. Washington, DC: ILSI Press, pp 327-339, 2006.

Reviews, Book Chapters, and Editorials (cont.)

17. Cardiff RD, Gregg JP, Miller JW, Axelrod DE, Borowsky AD. Histopathology as a predictive biomarker: strengths and limitations. *Journal of Nutrition* 136:2673S-2675S, 2006. PMID: 16988145
18. Miller JW. Assessing the association between vitamin B12 status and cognitive function in older adults. *American Journal of Clinical Nutrition* 84:1259-1260, 2006. PMID: 17158405
19. Green R, Miller JW. Vitamin B12. In: Zempleni J, Rucker RB, McCormick DB, Suttie JW, eds. *Handbook of Vitamins*, 4th Edition. Boca Raton, FL: CRC Press, pp 413-457, 2007.
20. Miller JW, Borowsky AD, Marple TC, McGoldrick ET, Dillard-Telm L, Young LJT, Green R. Folate, DNA methylation, and breast tumorigenesis. *Nutrition Reviews* 66(Suppl. 1):S59-S64, 2008. PMID: 18673493; PMCID: PMC4033312
21. Hagerman RJ, Hall DA, Coffey S, Leehey M, Bourgeois J, Gould J, Zhang L, Seritan A, Berry-Kravis E, Olichney J, Miller JW, Fong AL, Carpenter R, Bodine C, Gane LW, Rainin E, Hagerman H, Hagerman PJ. Treatment of fragile X-associated tremor ataxia syndrome (FXTAS) and related neurological problems. *Clinical Interventions in Aging* 3:251-262, 2008. PMID: 18686748; PMCID: PMC2546470
22. Luchsinger JA, Tang MX, Miller J, Green R, Mayeux R. Higher folate intake is related to lower risk of Alzheimer's disease in the elderly. *J Nutr Health Aging* 12:648-650, 2008. PMID: 18953463; PMCID: PMC2727706
23. Miller JW. Vitamin D and cognitive function in older adults: are we concerned about vitamin D-mentia? *Neurology* 74:13-15, 2010. PMID: 19940269
24. Miller JW. Folic acid fortification. In: Herrmann W, Obeid R, eds. *Vitamins in the Prevention of Human Diseases*. Berlin: De Gruyter, pp 273-293, 2011.
25. Johnson MA, Dwyer JT, Jensen GL, Miller JW, Speakman JR, Starke-Reed P, Volpi E. Challenges and new opportunities for clinical nutrition interventions in the aged. *Journal of Nutrition* 141:535-541, 2011. PMID: 21270372; PMCID: PMC3138222
26. Miller JW. Homocysteine, B vitamins, and cognitive function. In: Kanarek R, Lieberman H, eds. *Diet, Brain, and Behavior*. Boca Raton, FL: CRC Press, Taylor and Francis, pp 189-213, 2012.
27. Miller JW, Rucker RB. Pantothenic acid. In: Bowman BA, Russell RM, eds. *Present Knowledge in Nutrition*, 10th ed. Ames, IA: ILSI - Wiley-Blackwell, pp 611-636, 2012.
28. Caudill MA, Miller JW, Gregory JF, Shane B. Folate, choline, vitamin B12 and vitamin B6. In: Stipanuk MH, Caudill MA, eds. *Biochemical, Physiological and Molecular Aspects of Human Nutrition*, 3rd ed. Maryland Heights, MO: Elsevier, pp 565-609, 2013.
29. Miller JW. Homocysteine. In: Caballero B, ed. *Encyclopedia of Human Nutrition*, 3rd ed, Volume 2. Waltham, MA: Academic Press, pp 424-430, 2013.
30. Miller JW. Folic Acid. In: Caballero B, ed. *Encyclopedia of Human Nutrition*, 3rd ed, Volume 2. Waltham, MA: Academic Press, pp 262-269, 2013.
31. Miller JW, Ulrich CM. Folic acid and cancer – where are we today? *Lancet* 381:974-976, 2013. PMID: 23352551

Reviews, Book Chapters, and Editorials (cont.)

32. Ulrich CM, Miller JW. Editorial. *Molecular Nutrition and Food Research* 57:561, 2013. PMID: 23554053
33. Green R, Miller JW. Vitamin B12. In: Zempleni J, Suttie JW, Gregory JF, Stover PJ, eds. *Handbook of Vitamins*, 5th Edition. Boca Raton, FL: CRC Press, pp 447-489, 2014.
34. Miller JW. The *MTHFR* C677T/c.665C>T polymorphism and malaria: a selective advantage? *Human Mutation* 35:v, 2014.
35. McCaddon A, Miller JW. Assessing the association between homocysteine and cognition: reflections on Bradford Hill, meta-analyses and causality. *Nutrition Reviews* 73:723-35, 2015. PMID: 26293664
36. Fukagawa NK, D'Anci KE, Donovan S, Miller JW, Starke-Reed P, Worden A. Celebrating 75 years of *Nutrition Reviews*. *Nutrition Reviews* 75(1):1, 2017. PMID: 27974595
37. McCaddon A, Miller JW. Vitamin B12 in neurology and aging. In: Obeid R, ed. *Vitamin B12: Advances and Insights*. Boca Raton, FL: CRC Press, pp 151-177, 2017.
38. Weaver CM, Miller JW. Challenges in conducting clinical nutrition research. *Nutrition Reviews* 75:491-99, 2017. PMID: 28605476
39. Green R, Allen LH, Bjørke Mosen A-L, Brito A, Gueant J-L, Miller JW, Molloy AM, Nexø E, Stabler S, Toh B-H, Ueland PM, Yajnick C. Vitamin B12 deficiency. *Nature Reviews Disease Primers* 3:17054, 2017. PMID: 28660890

Guest Editor – Journal

Special Issue: Folate and Health. Ulrich CM, Miller JW, eds. *Molecular Nutrition and Food Research* 57:561-734, 2013. (Accompanying Editorial – PMID: 23554053)

Abstracts

1. Miller JW, Ribaya-Mercado JD, Russell RM, Shepard DC, Morrow FD, Cochary EF, Selhub J, Rosenberg IH. Total homocysteine in fasting plasma is not a good indicator of B6 deficiency. *FASEB Journal* 5(4):A557, 1991.
2. Miller JW, Nadeau MR, Smith J, Smith D, Selhub J. Homocysteinemia: a consequence of disrupting S-adenosylmethionine's regulation of homocysteine metabolism. *FASEB Journal* 6(4):A1215, 1992.
3. Miller JW, Nadeau MR, Smith J, Smith D, Selhub J. Folate deficiency vs vitamin B6 deficiency: comparison of responses to methionine loading. *FASEB Journal* 7(4):A745, 1993.
4. Daly D, Miller J, Brattstrom L, Selhub J. The oral methionine load test: a mechanistic view. *FASEB Journal* 7(4):A745, 1993.
5. Daly D, Miller JW, Nadeau MR, Selhub J. The effect of acute L-dopa administration on plasma homocysteine levels in folate replete and deplete rats. *FASEB Journal* 8(5):A920, 1994.
6. Kim YI, Miller JW, da Costa KA, Nadeau M, Selhub J, Zeisel SH, Mason JB. Secondary depletion of hepatic choline by severe folate deficiency: possible implications for carcinogenesis. *Proceedings of the American Association for Cancer Research* 35:A104, 1994.
7. Miller JW, Villalobos-Molina R, Jimenez ND, Selhub J, Joseph JA. Effect of 3,4-dihydroxyphenylalanine on regional concentrations of S-adenosylmethionine in rat brain. *Society for Neuroscience Abstracts* 20(1):414, 1994.
8. Miller JW, Joseph JA, Selhub J. The pro-oxidant nature of the catecholamines L-dopa and dopamine is negated by O-methylation. *FASEB Journal* 9(3):A125, 1995.
9. Selhub J, Miller JW, Barlow-Walden LR, Reiter RJ, Joseph JA. Melatonin synthesis is significantly increased in rats treated with L-dopa. *FASEB Journal* 9(3):A378, 1995.
10. Kim YI, Pogribny I, Miller JW, Selhub J, James SJ, Mason JB. Folate deficiency causes DNA strand breaks within the p53 gene in rat liver. *Proceedings of the American Association for Cancer Research* 36:115, 1995.
11. Miller JW, Selhub J, Joseph JA. The oxidative natures of dopamine and L-dopa and the effect of O-methylation. *Society for Neuroscience Abstracts* 21(3):2002, 1995.
12. Miller JW, Renick SE, Fremeau RT. The mammalian brain-specific, high-affinity, L-proline transporter: identification of cysteine residues important for transport. *Society for Neuroscience Abstracts* 22(1):366, 1996.
13. Miller JW, Thomas CA, Nadeau MR, Brattstrom L, Feldman RG, Wolf PA, Selhub J. Effect of L-dopa administration on blood homocysteine concentration in Parkinson's Patients. *FASEB Journal* 11(3):A234, 1997.
14. Miller JW, Modjarrad K, Fremeau RT. Transport properties of the high-affinity L-proline transporter (PROT) determined in membrane vesicles prepared from HEK cells stably transfected with rPROT cDNA. *Society for Neuroscience Abstracts* 23(1):135, 1997.

Abstracts (cont.)

15. Miller JW, Green R, Allen LH, Mungas DM, Haan MN. Homocysteine correlates with cognitive function in the Sacramento Area Latino Study of Aging (SALSA). *FASEB Journal* 13(4):A374, 1999.
16. Miller JW, Green R, Herbert VD, Flynn MA. Oral vitamin B12 supplementation decreases homocysteine in healthy elderly people with suboptimal vitamin B12 status. *FASEB Journal* 13(4):A936, 1999.
17. Medina MV, Miller JW, Keen CL, Green R. A method to distinguish reduced from oxidized homocysteine in plasma. *FASEB Journal* 13(4):A228, 1999.
18. Cheung ATW, Miller JW, Green R, Larkin EC, Jacobsen DW, Yeun JY. Microvascular abnormalities and homocysteine levels in hemodialysis patients. *FASEB Journal* 13(4):A228, 1999.
19. Medina MV, Miller JW, Green R, Keen CL, Wun T. Elevated plasma homocysteine in adults with sickle cell disease relates to folate status, even in the absence of folate deficiency. *Blood* 94(10)(Part 1 of 2):197a, 1999.
20. Miller JW, Green R, Herbert VD, Flynn MA. Holotranscobalamin II is a reliable indicator of improved vitamin B12 status in healthy elderly people with suboptimal B12 status following oral B12 supplements. *Blood* 94(10)(Part 2 of 2):17b, 1999; and *FASEB Journal* 14(4):A292, 2000.
21. Miller JW, Green R, Allen LH, Mungas DM, Haan MN. Homocysteine and cognitive function in the Sacramento Area Latino Study on Aging (SALSA): correlations with specific cognitive domains. *FASEB Journal* 14(4):A256, 2000.
22. Ramos MI, Miller JW, Haan MN. Folate and depression in the Sacramento Area Latino Study on Aging (SALSA). *FASEB Journal* 14(4):A244, 2000.
23. Medina MV, Miller JW, Green R, Prada NM, Aoki TT, Keen CL. Elevated plasma homocysteine concentrations persist in patients with insulin-dependent diabetes mellitus (IDDM) despite food folate fortification. *FASEB Journal* 14(4):A735, 2000.
24. Clifford AJ, Dueker SR, Lin Y, Jones AD, Mercer RS, Miller JW, Green R. A comparison of methods for the determination of whole blood folate. *FASEB Journal* 14(4):A243, 2000.
25. Miller JW, Green R, Allen LH, Mungas DM, Haan MN. Homocysteine and cognitive function in the Sacramento-Area Latino Study on Aging (SALSA). *Neurobiology of Aging* 21(S1):204, 2000.
26. Miller JW, Green R, Jagust WJ. Homocysteine, vitamin B6, and Alzheimer's disease. *FASEB Journal* 15(4):A59, 2001.
27. Esfandiari F, Miller JW, Green R, Pogribny IP, James SJ. Overexpression of the methylated DNA binding protein, MBD2, in livers from a folate- and methionine-deficient rat cancer model. *FASEB Journal* 15(4):A284, 2001.
28. Medina MV, Miller JW, Green R, Reynolds RM, Kaysen GA, Keen CL, Wun TW. Elevated homocysteine in adult sickle cell disease patients. *FASEB Journal* 15(4):A612, 2001.

Abstracts (cont.)

29. Green R, Miller JW, Chae SL, Ramanujam S, Cheung ATW. Effect of methionine-induced hyperhomocysteinemia on microvascular diameter and blood flow velocity in healthy adults. Abstract Book of the 3rd International Conference on Homocysteine metabolism, p81, 2001.
30. Miller JW, Green R, Mungas DM, Reed BR, Jagust WJ. Is hyperhomocysteinemia in Alzheimer's disease simply a marker for vascular disease? Abstract Book of the 3rd International Conference on Homocysteine metabolism, p127, 2001.
31. Haan MN, Gonzalez HM, Mungas DM, Miller JW, Jagust WJ. Diabetes and neurocognitive functioning in older Mexican Americans. *Journal of the American College of Nutrition* 20:567, 2001.
32. Miller JW, Green R, Allen LH, Mungas DM, Jagust WJ, Haan MN. Homocysteine, Alzheimer's Disease and Cognitive Function. *Journal of the American College of Nutrition* 20:567, 2001.
33. Green R, Miller JW, Chae SL, Ramanujam S, Duong P, Cheung ATW. Methionine-induced hyperhomocysteinemia affects microvascular diameter, blood flow velocity and shear stress in healthy adults. *Blood* 98(11):249a, 2001.
34. Wun T, Medina M, Thio T, Ramanujam S, Gosselin R, Gresens C, Rangaswami A, Franklin P, Cheung ATW, Kaysen G, Miller JW, Green R. Homocysteine and vascular inflammation in patients with sickle cell disease. *Blood* 98(11):19b, 2001.
35. Miller JW, Ramos MI, Garrod MG, Flynn MA, Green R. The common G775C polymorphism in transcobalamin II (TC II) influences indices of vitamin B12 status in healthy older adults. *FASEB Journal* 16(4):A265-A266, 2002.
36. Esfandiari F, Miller JW, Green R, Cotterman RF, Pogribny IP, James SJ. Hepatic methyl-CpG-binding protein 2 (MeCP2) is reduced in rats fed a tumorigenic methyl-deficient diet. *FASEB Journal* 16(4):A264, 2002.
37. Medina MV, Reynolds RM, Erickson KL, Green R, Miller JW. Acute inflammatory response to lipopolysaccharide induces transient hyperhomocysteinemia in mice. *FASEB Journal* 16(4):A593, 2002.
38. Esfandiari F, Green R, Cotterman RF, Pogribny IP, James SJ, Miller JW. Reciprocal changes in hepatic expression of methyl-CpG-binding proteins in rats fed a methyl-deficient diet. *Proceedings of the American Association for Cancer Research* 43:1125, 2002.
39. Esfandiari F, Cotterman RF, Green R, Miller JW. Reduced hepatic MeCP2 protein level in preneoplastic methyl-deficient rats is associated with reduced Sin3a and p53 protein levels. *Journal of Nutrition* 132(11S):3554S, 2002.
40. Miller JW, Ramos MI, Green R, Allen LH, Haan MN. Low plasma folate remains associated with depressive symptoms in elderly Latina women despite folic acid fortification. *FASEB Journal* 17(5):A1149-A1150, 2003.
41. Ramos MI, Miller JW, Green R, Mungas DM, Allen LH, Haan MN. Vitamin B6 status correlates with cognitive function scores in elderly Latino men. *FASEB Journal* 17(5):A1150, 2003.

Abstracts (cont.)

42. Esfandiari F, Cotterman RF, Green R, Miller JW. Reduced methyl-CpG-binding protein 2 (MeCP2) in methyl deficient rat liver is associated with altered expression of MeCP2 mRNA splice variants. *FASEB Journal* 17(5):A672, 2003.
43. Campbell AKL, Miller JW, Green R, Haan MN, Allen LH. Oral vitamin B12 supplements normalize plasma B12 and homocysteine, but have an insignificant effect on functional outcomes, in Latino elderly with marginal B12 status. *FASEB Journal* 17(5):A718, 2003.
44. Miller JW, Green R, Ghandi M, Gallay B, Huang C, Perez R. Pretransplant homocysteine and cysteine levels as predictors of renal allograft outcome. *Journal of Inherited Metabolic Disorders* 26(suppl 1):7, 2003.
45. Green R, Miller JW, Allen LH, Haan MN. Vitamin B12 and holotranscobalamin II as determinants of homocysteine in the era of folic acid fortification. *Journal of Inherited Metabolic Disorders* 26(suppl 1):31, 2003.
46. Miller JW, Medina MV, Wun T, Green R. Plasma pyridoxal-5'-phosphate is inversely correlated with VCAM levels in adult sickle cell disease patients. *FASEB Journal* 18(4):138.22, 2004.
47. Garrod MG, Miller JW, Allen LH, Haan MN, Green R. Renal insufficiency is associated with elevated plasma holotranscobalamin II in the elderly. *FASEB Journal* 18(4):138.16, 2004.
48. Miller JW, Ramos MI, Green R, Mungas DM, Jagust WJ, Allen LH, Haan MN. Folate, independent of homocysteine, is inversely associated with cognitive dysfunction and dementia in Latino elderly: a report from the Sacramento Area Latino Study on Aging. *NeuroBiology of Aging* 25(S2):385, 2004.
49. Garrod MG, Calvert CC, Maas J, Heller MC, Carkeet C, Dueker SR, Buchholz BA, Green R, Miller JW. In vivo enrichment of beef muscle and liver with 14C-vitamin B12 for use in human bioavailability studies. *FASEB Journal* 19(4):A52, 2005.
50. Carkeet C, Anderson P, Buchholz BA, Green R, Miller J, Dueker SR. Microscale microbial synthesis of 14C- or 13C-cyanocobalamin for use in human and animal studies. *FASEB Journal* 19(4):A53, 2005.
51. Miller JW, Medina MV, Samarron SL, Green R. Hyperhomocysteinemia is associated with elevated soluble vascular cell adhesion molecule 1 (VCAM-1) in type 1 and type 2 diabetes. *FASEB Journal* 19(4):A71, 2005.
52. Miller JW, Borowsky AD, McGoldrick ET, Green R. Methyl deficiency slows the proliferation of breast tumors in FVB polyomavirus middle T (PyV-mT) transgenic mice. *FASEB Journal* 19(4):A219, 2005.
53. Clifford AJ, Fadel JG, Miller JW, Green R. Effect of folate relevant polymorphisms on in vivo human folate metabolism. *FASEB Journal* 19(4):A420-421, 2005.
54. Miller JW, Ramos MI, Green R, Eberling JL, Wu C, Haan MN, Jagust WJ. Vitamin B6 correlates with cerebral metabolic rate, as determined by fluorodeoxyglucose positron emission tomography (FDG-PET), in cognitively impaired elderly Latinos. *FASEB Journal* 19(4):A421, 2005.

Abstracts (cont.)

55. Cheung A, Ramanujam S, Barbosa M, Asfour V, Duong P, Medina M, Miller J. Correlation between whole blood viscosity (WBV) and microvascular abnormalities in type-2 diabetes mellitus (T2DM) patients. *FASEB Journal* 19(4):A727, 2005.
56. Miller JW, Cotterman RF, Green R. Induction of metallothionein 1A expression in Hep3B cells transfected with MeCP2 siRNA. *FASEB Journal* 19(4):A1045-A1046, 2005.
57. Miller JW, Ramos MI, Green R. Homocysteine and folate are associated with different domains of cognitive function in older adults. *Haematologica Reports* 1:4, 2005.
58. Green R, Medina MV, Samarron SL, Miller JW. Homocysteine is directly correlated with soluble vascular cell adhesion molecule 1 (VCAM-1) in type 1 and type 2 diabetes. *Haematologica Reports* 1:22, 2005.
59. Rhodes GH, Lee M-Y, Miller JW, Green R. Sustained reduction of serum homocysteine by naked plasmid DNA gene delivery of cystathionine beta-synthase. *Haematologica Reports* 1:28, 2005.
60. Miller JW, Dueker SR, Carkeet C, Anderson P, Buchholz BA, Green R. Measurement of vitamin B12 absorption in a human subject using ¹⁴C-B12. *Experimental Biology Meeting Abstracts. FASEB Journal* 20:529.1, 2006.
61. Garrod MG, Grant RW, Allen LH, Haan MN, Green R, Miller JW. The ratio of holotranscobalamin to total B12: associations with transcobalamin genotype, methylmalonic acid, and homocysteine. *Experimental Biology Meeting Abstracts. FASEB Journal* 20:529.3, 2006.
62. Garrod MG, Green R, Allen LH, Mungas DM, Jagust WJ, Haan MN, Miller JW. The ratio of holotranscobalamin to total B12 is associated with cognitive impairment in elderly Latinos with elevated depression scores. *Experimental Biology Meeting Abstracts. FASEB Journal* 21:350.4, 2007.
63. Miller JW, Green R, Allen LH, Jagust WJ, Mungas DM, Haan MN. Evidence that associations between homocysteine, B vitamins, and cognitive function persist in a folic acid fortified population. *Clinical Chemistry and Laboratory Medicine* 45:A29-A30, 2007.
64. Green R, Miller JW, Garrod MG, Allen LH, Haan MN. Assessment of vitamin B12 status and its genetic determinants as risk factors for hyperhomocysteinemia in a folic acid fortified population. *Clinical Chemistry and Laboratory Medicine* 45:A12, 2007.
65. Lee K-S, Garrod MG, Allen LH, Haan MN, Green R, Miller JW. The gastric intrinsic factor polymorphism, A68G, modifies the association between the transcobalamin polymorphism, C776G, and vitamin B12 status. *Experimental Biology Meeting Abstracts. FASEB Journal* 22:296.6, 2008.
66. Garrod MG, Johnson HA, Calvert CC, Allen LH, Green R, Miller JW. Model to estimate in vivo enrichment of beef muscle and liver with ¹⁴C-vitamin B12 (¹⁴C-B12). *Experimental Biology Meeting Abstracts. FASEB Journal* 22:865.5, 2008.
67. Dewey KG, Yang Z, Miller JW, Adu-Afarwuah S, Lartey A, Brown KH, Briend A, Zlotkin S. Vitamin B6 status in Ghanaian infants. *Experimental Biology Meeting Abstracts. FASEB Journal* 22:873.2, 2008.

Abstracts (cont.)

68. Marple TC, Miller JW, Green R, Borowsky AD. Mouse model of DCIS progression in invasive carcinoma: effects of dietary folate and 5-aza-2'-deoxycytidine. In: Proceedings of the 100th Annual Meeting of the American Association for Cancer Research; 2009 Apr 18-22; Denver, CO. Philadelphia (PA): AACR; 2009. Abstract nr 3373.
69. Green R, Lee K-S, Sutter S, Allen LH, Buchholz B, Dueker SR, Miller JW. Evidence that physiological doses of vitamin B12 are metabolized or degraded in the gastrointestinal tract: implications for vitamin B12 bioavailability and fortification. Experimental Biology Meeting Abstracts. FASEB J 23:335.6, 2009.
70. Lee K-S, Lobo RC, Her C, Young S, Green R, Miller JW. Diverse effects of DNMT1 inhibition and MBD2 knockdown on gene expression in Hep3B and HepG2 cells. Experimental Biology Meeting Abstracts. FASEB Journal 23:925.5, 2009.
71. Lobo RC, Lee K-S, Green R, Miller JW. Inhibition of DNMT1 with 5-aza-2'-deoxycytidine induces expression of tumor antigens (GAGE, MAGE, PAGE, and CT45) in MCF7 cells. Experimental Biology Meeting Abstracts. FASEB Journal 23:925.4, 2009.
72. Miller JW, Garrod MG, Allen LH, Haan MN, Green R. Elevated plasma folate in older adults is associated with more pronounced evidence of vitamin B12 deficiency, including high homocysteine and methylmalonic acid and low holotranscobalamin. Experimental Biology Meeting Abstracts. FASEB Journal 23:335.5, 2009.
73. Green R, Miller JW, Lee K-S, Sutter S, Allen LH, Buchholz BA, Dueker S. Oral administration of carbon-14 labeled cyanocobalamin (14C-Cbl) reveals variable degradation of vitamin B12 in the gastrointestinal tract that impacts vitamin B12 absorption and status. Blood (ASH Annual Meeting Abstracts) 114:3018, 2009.
74. Garrod MG, Miller JW, Calvert CC, Buchholz BA, Green R, Johnson HA, Allen LH. *In vivo* enrichment of chicken eggs with 14C-B12 for determining vitamin B12 bioavailability in humans. FASEB Journal 24:915.12, 2010.
75. Carmichael OT, Mungas D, Beckett L, Harvey D, Farias ST, Reed B, Olichney J, Miller J, DeCarli C. Value added by MRI for predicting clinical conversion to dementia in a heterogeneous community cohort. Alzheimer's & Dementia 6(Suppl):S16-S17, 2010.
76. Miller JW, Beresford SA, Brown EC, Cheng D, Green R, Neuhouser ML, Rodriguez B, Zheng Y, Ulrich CM. Homocysteine, cysteine and risk of incident colorectal cancer in the Women's Health Initiative observational cohort. FASEB Journal 25:214.8, 2011.
77. Miller JW, Green R, Wilhelm R, Songster C, Green AJ. Vitamin B12 is inversely correlated with latency of multifocal visual evoked potential in healthy older adults. FASEB Journal 25:97.2, 2011.
78. Cheng T-YD, Neuhouser ML, Zheng Y, Ray RM, Miller JW, Song X, Bailey LB, Maneval DR, Beresford SA, Ulrich CM. One-carbon metabolism-related nutrients and colorectal cancer risk in the Women's Health Initiative Observational Cohort Study: Are the associations modified by folic-acid fortification period and alcohol intake? FASEB Journal 25:214.5, 2011.
79. Garrod MG, Miller JW, Green R, Buchholz BA, Calvert CC, Allen LH. Percent bioavailability of vitamin B12 from eggs is inversely proportional to egg total B12 consumed. FASEB Journal 25:31.5, 2011.

Abstracts (cont.)

80. Lee JS, Harvey D, Carmichael O, Mungas D, Reed B, Olichney J, Kaur B, Miller J, DeCarli C. Androgen-Estrogen balance, SHBG, and cognitive trajectories in older men and women. American Academy of Neurology Meeting Abstracts IN1-1.007, 2011.
81. Miller JW, Marple TC, Choi S-W, Green R, Borowsky AD. 5-Aza-2'-deoxycytidine accelerates pre-cancer-to-cancer transition in a mouse model of breast cancer. In: Proceedings of the DOD Breast Cancer Research Program Era of Hope Meeting, Orlando, FL, P6-20, 2011.
82. Lobo RC, Boucher DL, Chen JQ, Green R, Miller JW, Borowsky AD. Epigenetic mechanisms of folate nutrition in breast cancer. In: Proceedings of the DOD Breast Cancer Research Program Era of Hope Meeting, Orlando, FL, P11-8, 2011.
83. Green R, Miller JW. New insights into cobalamin absorption and metabolism using accelerator mass spectrometry. *Clinical Chemistry and Laboratory Medicine* 50:A6, 2012.
84. Bettcher BM, Watson C, Green R, Miller JW, Racine CA, Wilhelm R, Miller BL, Kramer JH. Inflammation is related to white matter integrity and executive function in healthy older adults. International Neuropsychological Society 40th Annual Meeting Abstract Book, pp 143-144, 2012.
85. Miszewski S, Green R, Miller JW. Expression of tumor suppressor genes in diet-induced liver injury: a model of the control of gene expression by gene-specific CpG island methylation. *FASEB Journal* 26:116.2, 2012.
86. To WJ, Miller JW, Miguelino MG, Li J, Lin X, Chen P, Green R, Cheung ATW. Exchange transfusion therapy and its effects on real-time microcirculation in pediatric sickle cell anemia patients. *FASEB Journal* 26:832.8, 2012.
87. Bettcher BM, Watson C, Green R, Miller JW, Racine CA, Wilhelm R, Miller BL, Kramer JH. Inflammation is related to corpus callosum integrity and executive functions in healthy older adults. *Neurology* 78(suppl 1):P02.056, 2012.
88. Green R, Miller JW, Samarron SL, Lin X, Cheung AT, Wun T. Monocyte chemotactic protein-1 is associated with microvascular abnormalities and serum ferritin concentrations in sickle cell disease patients. *Blood (ASH Annual Meeting Abstracts)* 120:3255, 2012.
89. Bae S, Caudill MA, Bailey LB, Malysheva O, Miller JW, Brown EC, Neuhouser ML, Maneval D, Cheng T-YD, Hou L, Beresford SAA, Song X, Zheng Y, Buck K, Ulrich CM. Relationship between leukocyte global DNA methylation and RBC folate in the Women's Health Initiative Observational Study (WHI-OS). *FASEB Journal* 27:1077.16, 2013.
90. Miller JW, Green R, Lin X, Bettcher BM, Wilhelm R, Racine CA, Yaffe K, Miller BL, Kramer JH. Plasma homocysteine is directly correlated with white matter hyperintensity and lateral ventricular volume, and inversely correlated with regional brain volumes in folic acid fortified, cognitively intact older adults. *FASEB Journal* 27:246.5, 2013.
91. Samarron SL, Green R, Miller JW, Lin X, Cheung AT, Zwerdling T, Wun T. Homocysteine and microvascular abnormalities in sickle cell disease. *Journal of Inherited Metabolic Disease* 36(suppl 1): S26-S27, 2013.

Abstracts (cont.)

92. Miller JW, Green R, Lin X, Bettcher BM, Wilhelm R, Racine CA, Yaffe K, Miller BL, Kramer JH. Plasma homocysteine is directly correlated with lateral ventricular volume, and inversely correlated with regional brain volumes in folic acid fortified, cognitively intact older adults: a canary in the coal mine? *Journal of Inherited Metabolic Disease* 36(suppl 1):S5, 2013.
93. Miszewski S, Berryhill GE, Green R, Borowsky AD, Miller JW, Hovey RC. Folate deficiency affects mammary gland development in pre- and peri-pubescent mice. *FASEB Journal* 28:827.12, 2014.
94. Samarron SL, Green R, Miller JW, Lin X, Wun T, Cheung AT. Homocysteine is associated with microvascular abnormalities in sickle cell disease. *FASEB Journal* 28:827.13, 2014.
95. Brito A, Miller JW, Fedosov SN, Shahab-Ferdows S, Sanchez H, Albala C, Uauy R, Allen LH. Low vitamin B12 status and less response to vitamin B12 treatment in Chilean B12-deficient elderly with high serum folate. *FASEB Journal* 28:135.8, 2014.
96. Bae S, Ulrich CM, Neuhauser ML, Malysheva O, Bailey LB, Xiao L, Brown EC, Zheng Y, Cheng T-YD, Miller JW, Lane D, Beresford SA, Caudill MA. Relationship between plasma choline metabolites and risk of colorectal cancer in the Women's Health Initiative Observational Study. *FASEB Journal* 28:370.5, 2014.
97. Miszewski SG, Berryhill GE, Green R, Borowsky AD, Miller JW, Hovey RC. Effects of folic acid deficiency on the murine mammary gland. *FASEB Journal* 29:919.10, 2015.
98. Aljaadi A, Aleliunas R, Glier M, Green T, Miller J, Devlin A. Maternal folic acid/vitamin B12 imbalance programs hepatic gene expression in female offspring. *FASEB Journal* 29:919.13, 2015.
99. Brito A, Miller JW, Green R, Fedosov SN, Harvey D, Shahab-Ferdows S, Verdugo R, Sanchez H, Albala C, Uauy R, Allen LH. Effect of vitamin B12 supplementation on B12 status and neurophysiological function in older Chileans analyzed by the combined indicator of B12 status. *FASEB Journal* 29:28.8, 2015.
100. Miller JW, Harvey DJ, Green R, Reed BR, Olichney JM, Mungas D, DeCarli DS. Vitamin D status predicts rates of cognitive decline in a multi-ethnic cohort of older adults. *FASEB Journal* 29:253.2, 2015.
101. Wang Y, Miller JW, Shapses SA. The influence of dietary fat and vitamin D on adiposity and vitamin D metabolism in older female mice. *FASEB J* 30:1163.15, 2016.
102. Wang Y, Shapses SA, Bello NT, Miller JW. Effects of dietary vitamin D deficiency and high fat feeding on adiposity, food intake, and cortical serotonin in mature mice. *FASEB J* 31:643.27, 2017.
103. Murphy MA, Breslin PAS, Miller JW. The MTHFR 677TT variant is associated with impaired acute blood pressure response to sodium ingestion. *FASEB J* 31:802.30, 2017.
104. Rittmann M, Miller JW, Gow A. Folic acid and riboflavin deficiencies in murine macrophage RAW cells reduce LPS-induced nitric oxide production. *FASEB J* 31:802.22, 2017.

Research Support:

Active

Joshua W. Miller, PI 2/29/16-ongoing
 EOHSI/NIEHS CEED Pilot Grant \$15,000
Title: Towards a mechanism for increased blood pressure associated with reduced methylenetetrahydrofolate reductase function
Description: The goal of this project is to determine the impact of the MTHFR 677TT genotype and beet juice supplements on forearm hyperemia responses at the biochemical and physiological level.
Role: PI

Joshua W. Miller, PI 7/1/15-6/30/18
 Rutgers-New Brunswick Chancellor's Office \$305,000
Title: The Rutgers One Nutrition Initiative: A Pathway to Prominence
Description: The goals of this initiative are to promote interdisciplinary, collaborative, and translational research at Rutgers, to refine and develop interdisciplinary curricula in nutritional science that serve the undergraduate, graduate, and professional education needs of the 21st century, and promote and increase the visibility of nutritional science at Rutgers.
Role: PI

Joshua W. Miller (Ranjana Poddar, PI) 5/1/14-4/30/19
 NIH 1 R01 NS083914 \$1,321,252
Title: Molecular basis of hyperhomocysteinemia induced brain injury in ischemic stroke
Description: The objectives of this project are to examine the molecular basis of homocysteine induced neuronal injury and to evaluate the long-term progression of ischemic brain damage and neurological deficits in hyperhomocysteinemic animals.
Role: Co-Investigator

Completed within the last 5 years (2012-2017)

Joshua W. Miller (Charles DeCarli, PI) 7/1/11-6/30/16
 NIH 2 P30 AG010129-21 \$6,989,039
Title: UC Davis Alzheimer's Disease Core Center
Description: This is a renewal application for the UC Davis Alzheimer's Disease Core Center (ADCC). The theme of this Center addresses how various risk and protective conditions differentially affect cognitive trajectories in older adults.
Role: Co-Investigator

Joshua W, Miller, PI 8/1/12-7/31/14
 California Breast Cancer Research Program IDEA Award \$149,944
Title: Maternal Folic Acid Intake, Mammary Development, and Cancer
Description: The goal of this project is to determine if *in utero* and post-natal exposure to excess folic acid affects the development of the mammary gland and subsequent susceptibility to tumorigenesis in a mouse model of breast cancer.
Role: PI

Joshua W. Miller, PI 6/1/13-3/31/14
 EOHSI/NIEHS CEED Pilot Grant \$20,000
Title: The Gut Microbiome and Vitamin B12 Degradation in the Gastrointestinal Tract
Description: The goal of this project is to assess urinary and plasma metabolomic profiles associated with vitamin B12 degradation products observed in urine of humans dosed with carbon-14 labeled vitamin B12
Role: PI

Completed within the last 5 years (2012-2017) (cont.)

Joshua W. Miller (Cornelia M. Ulrich, PI) 4/9/08-1/31/14
NIH 1 R01 CA120523-01A1 \$3,077,415
Title: A Prospective Study of Colorectal Cancer: One-Carbon Metabolism and Inflammation
Description: The goal of this project is to evaluate the associations of genetic variability and biomarkers in folate-mediated one-carbon metabolism and inflammatory pathways with colorectal cancer etiology in women participating in the Women's Health Initiative.
Role: Co-Investigator

Joshua W. Miller (Mary N. Haan, PI) 7/1/09-6/30/13
NIH R01 AG012975-12A2 \$5,458,156
Title: Epidemiology of Functional Status in Elderly Hispanics
Description: The goal of this project is to evaluate the long-term effects of metabolic and vascular risk factors on cognition, function, and mortality in older Mexican-Americans.
Role: Co-Investigator

Joshua W. Miller (Ralph Green, PI) 4/15/07-4/14/12
NIH 1 R01 HL083276-01A2 \$1,453,607
Title: Vitamin B6, Vascular Dysfunction and Adhesion Molecules in Sickle Cell Disease
Description: The goal of this project is to determine if vitamin B6 supplements in adult and pediatric sickle cell disease patients will reduce levels of circulating adhesion molecules and improve microvascular morphology.
Role: Co-Investigator

Invited Talks and Seminars:

1. "Homocysteine, B Vitamins, and Cognitive Function in Aging and Age-Related Neurodegenerative Disorders." Jean Meyer USDA Human Nutrition Research Center on Aging at Tufts University, Boston, MA, May 15, 2000.
2. "Folic Acid, Vitamin B12, and Neural Tube Defects." Shriner's Hospital, Sacramento, CA, Feb. 14, 2001.
3. "Homocysteine, B Vitamins, and Cognitive Function in Aging and Age-Related Neurodegenerative Disorders." UC Berkeley Department of Nutrition, Berkeley, CA, Feb. 21, 2001.
4. "Homocysteine and Cardiovascular Disease." 13th Mid-Valley Cardiovascular Symposium, Modesto, CA, June 2, 2001.
5. "Homocysteine, Alzheimer's Disease, and Cognitive Function." American College of Nutrition Annual Meeting and Symposium on Advances in Clinical Nutrition, Orlando, FL, Oct. 4, 2001.
6. "B Vitamins and Cognitive Function: Population-Based Studies." Nutrition Week 2002, San Diego, CA, Feb. 25, 2002.
7. "Homocysteine Metabolism and Chronic Disease." Functional Foods for Health Program, 11th Annual Conference, University of Illinois at Urban-Champaign, May 13, 2002.
8. "Methyl Deficiency, Methyl-CpG-Binding Proteins and Hepatic Tumorigenesis." Memorial University, St. John's, Newfoundland, Canada, Sept. 9, 2002.
9. "Homocysteine, B Vitamins, and Cognitive Function in Aging and Age-Related Neurodegenerative Disorders." University of Florida Department of Food Science and Human Nutrition, Gainesville, FL, Oct. 24, 2002.
10. "Methyl Deficiency, Epigenetics, and Hepatic Tumorigenesis." Fred Hutchinson Cancer Research Center, Seattle, WA, July 9, 2003.
11. "Folate, Cognition, and Depression in the Era of Folic Acid Fortification." 12th World Congress of Food Science and Technology, Chicago, IL, July 17, 2003.
12. "Nutritional Genomics." Sacramento Regional Life Sciences Summit, Sacramento, CA, March 4, 2004.
13. "Folate, Vitamin B12, and Vitamin B6: Beyond Homocysteine." Brigham Young University, Provo, UT, March 12, 2004.
14. "Nutritional Genomics." 6th Annual Napa Conference for Environmental Health Scientists, Napa, CA, August 30, 2004.
15. "Homocysteine, B Vitamins, and Cognitive Function in Aging and Neurodegenerative Disease", Symposium on Metabolomic and Proteomic Advances in Nutrition Research, University of British Columbia, Vancouver, British Columbia, April 21, 2005.
16. "Epigenetics, Nutrition, and Cancer", American Cancer Society - Placer County Unit, Volunteer and Recognition Dinner, Oct. 20, 2005.

Invited Talks and Seminars (cont.):

17. "Synthesis of 14C-B12 for Assessment of Vitamin B12 Absorption, Turnover, and Bioavailability in Humans", FASEB Summer Research Conference on Folic Acid, Vitamin B12, and One-Carbon Metabolism, Indian Wells, CA, Aug. 9, 2006.
18. "Epigenetics, Nutrition, and Cancer", American Cancer Society – Research Promotion Training, Newark, CA, May 21, 2007.
19. "Evidence that Associations Between Homocysteine, B Vitamins, and Cognitive Function Persist in a Folic Acid Fortified Population", 6th Conference on Homocysteine Metabolism and World Congress on Hyperhomocysteinemia, Saarbruecken, Germany, June 7, 2007.
20. "Synthesis of 14C-B12 for Assessment of Vitamin B12 Absorption and Bioavailability in Humans", Gordon Research Conference on Vitamin B12 and Corphins, University of New England, Biddeford, ME, July 3, 2007.
21. "Folate, DNA Methylation Machinery, and Breast Tumorigenesis", NIH Symposium on Diet, Epigenetic Events, and Cancer Prevention, Gaithersburg, MD, Sept. 27, 2007.
22. "Folate, DNA Methylation, and Breast Cancer", UC Davis Inaugural Breast Cancer Research Symposium, Sacramento, CA, Oct. 25, 2007.
23. "Perspectives of a 'Pay If...' Researcher", American Cancer Society Campaign for Research Assembly, Los Angeles, CA, Jan. 26, 2008.
24. "Perspectives of a 'Pay If...' Researcher", American Cancer Society Past Officer's Directors Meeting, Los Angeles, CA, June 18, 2008.
25. "B Vitamins, Homocysteine, and Cognitive Function in the Era of Folic Acid Fortification", FASEB Summer Research Conference on Folic Acid, Vitamin B12, and One-Carbon Metabolism, Lucca, Italy, Aug. 15, 2008.
26. "Dichotomous Effects of DNMT1 and MBD2 Inhibition on Gene Expression in Two Liver Cancer Cell Lines", UC Davis Cancer Center Symposium, Sacramento, CA, Sept. 26, 2008.
27. "Inhibition of DNA Methyltransferase 1 in Human MCF7 Cells and in Mouse Intraepithelial Neoplasia Outgrowths: Potential Implications for Treatment of Breast Cancer", UC Davis 2nd Annual Breast Cancer Research Symposium, Sacramento, CA, Oct. 30, 2008.
28. "Physiological Doses of Cyanocobalamin are Modified or Degraded in the Gastrointestinal Tract", Gordon Research Conference on Vitamin B12 and Corphins, Magdalen College, Oxford, UK, Aug. 4, 2009.
29. "Folic Acid and Cancer", Breast Cancer Network of Strength, Davis, CA, Oct. 12, 2009.
30. "After a Decade of Folic Acid Fortification: To B12 or Not to B12, That is the Question", Lerner Research Institute, Cleveland Clinic, Cleveland, OH, Dec. 3, 2009.
31. "Controversies in Meeting Micronutrient Needs: Does Folic Acid Impair Vitamin B12 Status in Older Adults?", Symposium: Aging 2010 - Challenges and New Opportunities for Clinical Nutrition Interventions in the Aged, Experimental Biology 2010, Anaheim, CA, April 24, 2010.
32. "Does it Matter to Your Aging Brain What You Eat?", American Society for Nutrition Conference on Advances and Controversies in Clinical Nutrition, San Francisco, CA, Feb. 27, 2011

Invited Talks and Seminars (cont.):

33. "Going Beyond Your Research: Advocating for Cancer Research and Legislation", UC Davis Cancer Center Symposium, Sacramento, CA, May 12, 2011.
34. "Evidence that Vitamin B12 is Metabolized or Degraded in the Gastrointestinal Tract: Implications for Vitamin B12 Bioavailability and Fortification", NIH Symposium on Applications of Accelerator Mass Spectrometry in Biomedical and Clinical Research, Bethesda, MD, June 22, 2011.
35. "The Link Between B Vitamins, Homocysteine, and Cognitive Function in the Elderly" Council for Responsible Nutrition Day of Science, Rancho Palo Verdes, CA, Oct. 19, 2011.
36. "After a Decade of Folic Acid Fortification: To B12 or Not to B12, That is the Question", Department of Nutritional Sciences, Rutgers University, New Brunswick, NJ, Nov. 29, 2011.
37. "Vitamin D and Cognitive Function in Older Adults: Are We Concerned About D-mentia?" Symposium: Nutritional Prevention of Cognitive Decline, Experimental Biology 2012, San Diego, CA, April 25, 2012.
38. "Vitamin B6 Status and Risk of Colorectal Cancer in the Women's Health Initiative Observational Cohort", FASEB Summer Research Conference on Folic Acid, Vitamin B12, and One-Carbon Metabolism, Kolymbari, Crete, Greece, July 25, 2012.
39. "Vitamin B12, Homocysteine, and Cognitive Function in the Era of Folic Acid Fortification", Vitamin B12 Symposium, Nancy, France, Sept. 22, 2012.
40. "B Vitamins, Homocysteine and Trajectories of Cognitive Change in Older Adults", Department of Nutritional Sciences, Rutgers University, New Brunswick, NJ, Oct. 25, 2012.
41. "After 15 Years of Fortification, Are We Getting Too Much Folic Acid?", Environmental and Occupational Health Sciences Institute, Rutgers University, Piscataway, NJ, Jan. 24, 2013.
42. "Plasma Homocysteine is Directly Correlated with Lateral Ventricular Volume, and Inversely Correlated with Regional Brain Volumes in Folic Acid Fortified, Cognitively Intact Older Adults: A Canary in the Coal Mine?", 9th International Conference on Homocysteine and One-Carbon Metabolism, Trinity College, Dublin, Ireland, Sept. 10, 2013.
43. "B Vitamins, Homocysteine and Trajectories of Cognitive Change in Older Adults", NIH Office of Dietary Supplements, Rockville, MD, Jan. 15, 2014.
44. "B Vitamins, Homocysteine, and One-Carbon Metabolism", Columbia University, New York, NY, Jan. 31, 2014.
45. "Folic Acid Fortification: Progress and Challenges", FASEB Summer Research Conference on Folic Acid, Vitamin B12, and One-Carbon Metabolism, Steamboat Springs, CO, Aug. 3, 2014.
46. "Folic acid, A Single Nucleotide Polymorphism, & Neural Tube Defects' Impact on Public Health Policy: An Illustration of Integrative Nutrition", 1st Annual Nutrition Symposium – *The Positive Impact of Today's Nutrition on Tomorrow's Society: Current Perspectives from the Clinical, Public Health, Food Science, Pharmaceutical and Legal Sectors*, Robert Wood University Hospital, New Brunswick, NJ, March 10, 2015.

Invited Talks and Seminars (cont.):

47. "Population-based Assessment of Vitamin B12 Status in the Era of Folic Acid Fortification", 10th International Conference One-Carbon Metabolism, Vitamins B and Homocysteine, Nancy, France, July 10, 2015.
48. "To B12 or Not To B12, That is the Question", Department of Microbiology, Biochemistry & Molecular Genetics, International Center for Public Health, Rutgers New Jersey Medical School, Newark, NJ, Nov. 17, 2015.
49. "Role of Micronutrients (B Vitamins and Vitamin D) in Cognitive Impairment and Dementia/Alzheimer's Disease", Rutgers – Robert Wood Johnson Medical School, Piscataway, NJ, Jan. 28, 2016.
50. "Role of Micronutrients (B Vitamins and Vitamin D) in Cognitive Impairment and Dementia/Alzheimer's Disease", Alzheimer's New Jersey Education and Research Conference: New Directions in Research and Care, Somerset, NJ, April 15, 2016.
51. "Micronutrients, Cognitive Impairment, and Dementia/Alzheimer's Disease", University of British Columbia, Child and Family Research Institute, Vancouver, Canada, May 26, 2016.
52. "Can Vitamins Prevent Age-Related Cognitive Decline?" Parker at Stonegate Assisted Living Residence, Highland Park, NJ, November 11, 2016.
53. "Studies on the Influence of Folic Acid, Riboflavin, and the Methylenetetrahydrofolate Reductase (MTHFR) C677T Polymorphism on Nitric Oxide Production and Blood Pressure", 11th International Conference on Homocysteine & One-Carbon Metabolism, Aarhus University, Aarhus, Denmark, May 18, 2017.
54. "Lessons Learned from the Impact on Select Nutrients of Concern: Metformin and PPIs and B12", Symposium - *Micronutrient Status: Modifying Factors – Drugs, Chronic Disease, and Surgery*, Columbia University College of Physicians and Surgeons, New York, NY, June 17, 2017.
55. "Homocysteine, B Vitamins and Vitamin D in Age-Related Cognitive Decline", Dept. of Neurology Grand Rounds, University of California-Davis Medical Center and School of Medicine, Sacramento, CA, June 29, 2017.
56. "Can Vitamins Prevent Age-Related Cognitive Decline?", Community Engagement Seminar, University of California-Davis Alzheimer's Disease Center, Sacramento, CA, June 29, 2017.

Manuscript Reviews (1998-Present):

Nutrition Journals (#)

Advances in Nutrition (3)
 American Journal of Clinical Nutrition (55)
 Amino Acids (3)
 British Journal of Nutrition (8)
 Clinical Nutrition ESPEN (1)
 Encyclopedia of Dietary Supplements (1)
 European Journal of Clinical Nutrition (3)
 Food and Nutrition Bulletin (1)
 Genes and Nutrition (1)
 Journal of Nutrition (31)
 Journal of Nutrition for the Elderly (2)
 Journal of Nutritional Biochemistry (1)
 Journal of Nutrition, Health, and Aging (4)
 Journal of Nutrition in Gerontology and Geriatrics (1)
 Journal of Nutrition and Metabolism (1)
 Molecular Nutrition and Food Research (5)
 Nutrients (3)
 Nutrition (2)
 Nutrition and Metabolism (1)
 Nutrition Journal (1)
 Nutrition, Metabolism, and Cardiovascular Diseases (1)
 Nutrition Research (1)
 Nutrition Research Reviews (1)
 Nutrition Reviews (4)
 Nutritional Neuroscience (2)

Neurology Journals (#)

Acta Neurologica Scandinavica (1)
 Alzheimer's & Dementia (3)
 Alzheimer's Disease and Associated Disorders (7)
 Archives of General Psychiatry (1)
 Behavioral Brain Research (1)
 Biological Psychiatry (2)
 Brain Research (2)
 CNS Spectrums (1)
 European Journal of Neurology (1)
 Experimental Neurology (1)
 International Journal of Geriatric Psychiatry (1)
 Journal of Alzheimer's Disease (5)
 Journal of Neurological Sciences (2)
 Journal of Neurology (1)
 Journal of Neuroscience Research (1)
 Lancet Neurology (1)
 Movement Disorders (5)
 Neurobiology of Aging (5)
 Neurodegenerative Diseases (1)
 Neurology (40)
 Neuroscience Letters (3)
 Progress in Neurobiology (1)

Other Journals (#)

American Journal of Epidemiology (1)
 American Journal of Hematology (1)
 American Journal of Medicine (1)
 American Journal of Physiology (1)
 Animal: An International Journal of Animal Bioscience (1)
 Annals of Internal Medicine (1)
 Annals of the NY Academy of Sciences (1)
 Archives of Biochemistry and Biophysics (1)
 Archives of Diseases in Childhood (1)
 Arteriosclerosis, Thrombosis, and Vascular Biology (2)
 Arthritis Research and Therapy (1)
 Arthritis and Rheumatism (1)
 Biochimie (2)
 Biofactors (1)
 Biological Research for Nursing (1)
 Blood (8)
 British Journal of Cancer (1)
 Canadian Medical Association Journal (1)
 Cancer Epidemiology, Biomarkers, and Prevention (1)
 Cancer Research (1)
 Carcinogenesis (5)
 Chemico-Biological Interactions (1)
 Clinica Chimica Acta (3)
 Clinical Chemistry (1)
 Clinical Chemistry & Laboratory Medicine (4)
 Clinical Medicine and Research (1)
 Clinical Medicine Insights: Case Reports (1)
 Experimental Biology and Medicine (3)
 Experimental Gerontology (2)
 FASEB Journal (3)
 FEBS Journal (1)
 Human Mutation (1)
 International Journal of Medical Sciences (1)
 Journal of Biological Chemistry (4)
 Journal of Gerontology: Medical Sciences (1)
 Journal of the National Cancer Institute (1)
 Journal of Pharmacology and Experimental Therapeutics (1)
 Journal of Physiology (1)
 Journal of Translational Medicine (1)
 Lancet (1)
 Life Sciences (2)
 Metabolism (1)
 Molecular and Cellular Biochemistry (1)
 New England Journal of Medicine (1)
 Pan American Journal of Public Health (1)
 PLOS One (3)
 Proc. of the Indian National Sci Academy (1)
 SpringerPlus (3)
 Trends in Molecular Medicine (1)

Grant Reviews - Organization (years)

Alzheimer's Association (2004, 2007, 2008, 2013, 2016)
Alzheimer's Society – UK (2017)
American Cancer Society (2010)
Breast Cancer Research Campaign (2012)
California Agricultural Research Initiative (2006)
Canadian Diabetes Association (2003)
Diabetes Action, Research, and Education Foundation (2005-2013, 2016)
Genesis Oncology Trust (2004)
Health Research Board (Ireland) (2011)
Hospital for Sick Children Foundation (2004)
National Sciences and Engineering Research Council of Canada (2009, 2016)
NIH NHLBI Program Project Review Panel (2011)
NIH Special Emphasis Panel for Population Sciences and Epidemiology IRG (2014)
NIH Oncological Sciences Fellowship Review Panel Ad Hoc Mail Reviewer (2015)
Thrasher Research Fund (2011)
United States Department of Agriculture (2002)

External Thesis Committee Member or Reviewer

Theresa H. Schroder – University of British Columbia (Canada) Doctoral Thesis (2017)
Lesley Ann Plumptre – University of Toronto (Canada) Doctoral Thesis (2016)
Grace Cham – Cook University (Australia) Honours Student Literature Review and Thesis (2016)
Rene Lee Jacobs – Memorial University of Newfoundland (Canada) Doctoral Thesis (2002)