

CURRICULUM VITAE

Name Greer Maréchal Murphy, Jr.

Address P.O. Box 20246
Stanford, CA 94309

Education M.D., School of Medicine, University of California, Davis, 1986.
Ph.D., University of California, Berkeley, 1984 (Neuroanatomy and Biological Anthropology).
B.A., With Distinction, The George Washington University Washington, D. C., 1974 (Psychology).

Honors David A. Mrazek Memorial Award in Psychiatric Pharmacogenomics, American Psychiatric Association, 2019
Fellow, American Society for Addiction Medicine, 2020
Fellow, American Psychiatric Association, 2017
Best Doctors in America, 2013-present.
Knight Fellows Favorite Professor, Stanford University, 2012
Junior Investigator Award, American Association for Geriatric Psychiatry, 1997.
American College of Neuropsychopharmacology Travel Award, 1991.
Resident Research Award, Northern California Psychiatric Society, 1991.
Charles Dana Foundation Neuroscience Fellow, 1988-92.
Alpha Omega Alpha, 1986 (elected in junior year).
Award for Excellence in Psychiatry, University of California, Davis, 1986.
Outstanding Medical Student Award, Central California Psychiatric Association, 1986.
G. Milton Shy Award, American Academy of Neurology, 1983.
Phi Beta Kappa, 1974.

Awards Continuous NIH scientific grant awardee, 1995-2012.

Positions Held

Level 5 Psychiatry and Addiction Medicine, P.C.
Solo Practice of Psychiatry, Geriatric Psychiatry, Addiction
Medicine, Lifestyle Medicine. Palo Alto, CA. 6/22-present

Staff Psychiatrist, Outpatient and Telemedicine,
Department of Veterans Affairs Health Care System, Palo
Alto, CA (MPD 170A). 5/16-10/22.

Staff Psychiatrist, Outpatient, Residential, Partial
Hospitalization, and Telemedicine, Momentum for Health, La
Selva Group, Palo Alto and San Jose, CA. 5/16-11/21.

Professor, Emeritus.
Department of Psychiatry and Behavioral Sciences,
Stanford University School of Medicine,
2/16-present.

Professor, Department of Psychiatry and Behavioral
Sciences, Stanford University School of Medicine,
1/07-1/16 (with tenure).

Associate Professor, Department of Psychiatry and
Behavioral Sciences, Stanford University School of
Medicine, 7/00-12/06 (with tenure).

Assistant Professor, Department of Psychiatry and
Behavioral Sciences, Stanford University School of
Medicine, 8/93-6/00.

Assistant Professor (Acting), Department of Psychiatry and
Behavioral Sciences, Stanford University School of
Medicine. 7/92-7/93.

Geriatric Psychiatry Fellow, Palo Alto VA Medical
Center/Stanford University. 7/91-6/92.

Dana Foundation Neuroscience Fellow
Stanford University School of Medicine, 7/88 – 6/92
Mentor: Lawrence F. Eng, Ph.D.
Area of study: Molecular Neuroscience

Resident, Department of Psychiatry and Behavioral
Sciences, Stanford University School
of Medicine. 7/88-6/91.

Rotating Internship, Stanford University Medical Center.
6/87-6/88.

Postdoctoral Researcher, Department of Pathology
(Neuropathology), School of Medicine, University of
California, Davis. 1/87-5/87.

Research Assistant, Adult Psychiatry Branch, National
Institute of Mental Health. 12/74-7/76.

**Scientific
Review and
Service**

CDIN Study Section, NIH, 2003-2004.

Ad-hoc reviewer, Alzheimer's Association, 1994-present.

Ad-hoc reviewer, Veterans Affairs Medical Research, 1998-
present.

Reviewer, California Alzheimer's Research Program,
1995-2000, 2007.

Ad-hoc member, Medical and Scientific Advisory Board,
Alzheimer's Association, 1995.

Associate Editor, Journal of Alzheimer's Disease, 2005-
2006.

Editorial Board, Journal of Neuroinflammation 2008-present.

Reviewer for *American Journal of Psychiatry*, *Neurology*,
Journal of Neuroscience Research, *Neurochemical
Research*, *Glia*, *Neurodegeneration*, *American Journal of
Pathology*, *Molecular and Chemical Neuropathology*,
Neurobiology of Aging, *Neurobiology of Disease*,
Neuropsychopharmacology, *International Journal of Cancer*,
PNAS, *Archives of General Psychiatry*, *Journal of
Psychiatric Research*, *Biological Psychiatry*, *Journal of
Psychiatric Genetics*, *Journal of Affective Disorders*, *Brain
Research*, *Pharmacogenetics*, *Journal of Neurochemistry*,
American Journal of Medical Genetics, *Clinical Chemistry*,
Journal of Neuroscience, *International Journal of
Neuropsychopharmacology*, *Nicotine and Tobacco
Research*, others

Expert Advisory Panel to NIMH Director: New Research Directions in Geriatric Psychiatry: Pharmacogenetics. 3/03.

NIMH Strategic Planning Committee, Pharmacogenetics of Mood Disorders, 2001.

Expert Panel: Genetics, Response and Cognitive Enhancers. Implications for Alzheimer's Disease. APA/NIMH/NIA Conference, 12/00.

Memberships

American Medical Association
American Psychiatric Association (Fellow)
American Association for Geriatric Psychiatry
American Society for Addiction Medicine (Fellow)

**Professional
Certification**

Diplomate American Board of Psychiatry and Neurology, 1993. Certificate No. 37372 (valid indefinitely).

Certification in Geriatric Psychiatry, American Board of Psychiatry and Neurology, 1994-present, Certificate No. 1118 (currently in compliance with continuous MOC).

Certification in Addiction Medicine, American Board of Preventive Medicine, 2018. Certificate No. 61-0253.

Certification in Lifestyle Medicine, American Board of Lifestyle Medicine, December 2024.

California Medical License G64130 (active)
Maryland Medical License D80443 (active)
District of Columbia Medical License MD043650 (active)
Virginia Medical License 0101259384 (active)
Hawaii Medical License 21231 (active)

County-appointed ECT consultant, Santa Clara County, California 1994-present.

DATA 2000 waiver to prescribe Buprenorphine
Substance Abuse and Mental Health Services
Administration. 2016-present

Patient Care	Level 5 Psychiatry and Addiction Medicine, P.C. Outpatient and Telemedicine Psychiatry, Addiction Medicine, Lifestyle Medicine, Palo Alto, CA, 6/22-present. Outpatient and Telemedicine Psychiatry and Addiction Medicine, Department of Veterans Affairs Health Care System, Palo Alto, CA, 5/16-10/22 Outpatient, Residential, Partial Hospitalization, and Telemedicine Psychiatry and Addiction Medicine, Momentum for Mental Health, 5/16-11/21 Attending Physician, Inpatient Psychiatry (Locked Acute Care Unit, Medical Psychiatry Service, and Geriatric Psychiatry Service), Stanford University Medical Center. 1992-2017. On-call Attending Physician, hospital-wide psychiatry services, including Emergency Department, Stanford University Medical Center. 1992-2017.
Teaching	Directly supervised, on a daily basis, over 200 resident physicians and fellows at Stanford University Medical Center, 1992-2017. Directly supervised, on a daily basis, over 100 Stanford medical students and medical students from other universities in their 3rd and 4th year psychiatry rotations. 1992-2017.
Advanced Procedural Training	Hands-On TMS Training Symposium. Sponsored by TMS Health Solutions, August 16-19, 2018, San Francisco California.

Publications

Tinklenberg, J., Gillin, J. C., Murphy, G. M., Staub, R., Wyatt, R. J. Phenylethylamine in Rhesus Monkeys. American Journal of Psychiatry, 1978, 135, 576-578.

Tinklenberg, J., Gillin, J. C., Murphy, G. M., Staub, R., Wyatt, R. J. Phenylethyl-

amine in Rhesus Monkeys: Interactions with alpha-methyl-para-tyrosine and L-DOPA. American Journal of Psychiatry, 1979, 136, 311-313.

Dill, R. E., Jones, D., Gillin, J. C., and Murphy, G. M. Comparison of Behavioral Effects of Systemic L-Dopa and Intracranial Dopamine in the Mesolimbic Forebrain of Nonhuman Primates. Pharmacology, Biochemistry, and Behavior, 1979, 10, 711-716.

Dowling, G., Diamond, M., Murphy, G. M., Johnson, R. A Morphological Study of Male Rat Cerebral Cortical Asymmetry. Experimental Neurology, 1982, 75, 51-67.

Dolhinow, P., Murphy, G. M. Langur Monkey (*Presbytis entellus*) Development: The First Three Months of Life. Folia Primatologica, 1982, 39, 305-331.

Greer, E. R., Diamond, M. C., Murphy, G. M. Increased Branching of Basal Pyramidal Neurons in the Occipital Cortex of Homozygous Brattleboro Rats in Standard and Enriched Environmental Conditions: A Golgi Study. Experimental Neurology, 1982, 76, 254-262.

Diamond, M. C., Murphy, G. M., Akiyama, K, Johnson, R. Morphologic Hippocampal Asymmetry in Male and Female Rats. Experimental Neurology, 1982, 76, 553-565.

Greer, E. R., Diamond, M. C., Murphy, G. M. Correlation Between Water Intake and Dendritic Branching in Homozygous Brattleboro Rats: A Golgi Study. Experimental Neurology, 1982, 78, 15-25.

Dolhinow, P., Murphy, G. M. Langur Monkey Mother Loss: Profile Analysis with Multivariate Analysis of Variance for Separation Subjects and Controls. Folia Primatologica, 1983, 40, 181-96.

Diamond, M. C, Scheibel, A. B., Murphy, G. M., Harvey, T. On the Brain of a Scientist: Albert Einstein. Experimental Neurology, 1985, 88, 198-204.

Murphy, G. M. Volumetric Asymmetry in the Human Striate Cortex. Experimental Neurology, 1985, 88, 288-302.

Murphy, G. M. The Human Corpus Striatum and Dentate Nucleus. Volumetric Analysis for Hemispheric Asymmetries, Sex Differences, and Aging Changes. Experimental Neurology, 1985, 89, 139-145.

Murphy, G. M. The Human Medial Amygdaloid Nucleus: No Evidence for Sex Difference in Volume. Brain Research, 1986, 365, 321-324.

Murphy, G. M., Inger, P., Mark, K., Lin, J., Morrice, W., Gee, C., Gan, S., Korp, B. Volumetric Asymmetry in the Human Amygdaloid Complex. Journal für Hirnforschung, 1987, 28, 281-289.

Murphy, G. M. Statistical Critique of Assessing Therapist Success. Archives of General Psychiatry, 1987, 44, 195.

Lim, K.O., Zipursky, R.B., Murphy, G.M., Pfefferbaum, A. In vivo Quantification of the Limbic System using MRI: Effects of Normal Aging. Psychiatry Research, 1990, 35, 15-26.

Murphy, G. M., Eng, L. F., Cordell, B., Wang, Y., Ellis, W. G., Meissner L., Tinklenberg, J. Beta Amyloid Precursor Detected in Human Cerebral Cortex. Progress in Neuropsychopharmacology and Biological Psychiatry, 1990, 14, 309-317.

Murphy, G.M., Eng, L.F., Ellis, W.G., Perry, G., Meissner, L., Tinklenberg, J. Antigenic Profile of Plaques and Neurofibrillary Tangles in the Amygdala in Down's Syndrome: A Comparison with Alzheimer's Disease. Brain Research, 1990, 537, 102-108.

Murphy, G.M., Ellis, W.G. The Amygdala in Down's Syndrome and Familial Alzheimer's Disease: Four Clinicopathologic Case Reports. Biological Psychiatry, 1991, 30, 92-106.

Csernansky, J.G., Murphy, G.M., Faustman, W.O. Limbic/Mesolimbic Connections and the Pathogenesis of Schizophrenia. Biological Psychiatry, 1991, 30, 383-400.

Murphy, G.M., Murphy, E., Greenberg, B., Cordell, B., Eng, L., Ellis, W.G., Forno, L., Salamat, S., Gonzalez-DeWhitt, P., Lowery, D., and Tinklenberg, J. Alzheimer's Disease: β -amyloid precursor protein expression in plaques varies among cytoarchitectonic areas of the medial temporal lobe. Neuroscience Letters, 1991, 131, 100-104.

Allen, J.S., Murphy, G.M., Eng, L.F., Stultz, K., Davies, H., Pickford, L., Tinklenberg, J. β -amyloid precursor protein mRNA in mononuclear blood cells in Alzheimer's disease. Neuroscience Letters, 1991, 132, 109-112.

Murphy, G.M., Greenberg, B.D., Ellis, W.G., Forno, L.S., Salamat, S., Gonzalez-DeWhitt, P.A., Lowery, D.E., Tinklenberg, J., Eng, L.F. Alzheimer's disease: Beta amyloid precursor protein expression in the nucleus basalis of Meynert. American Journal of Pathology, 1992, 141, 357-361.

Forno, L.S., Murphy, G.M., Eng, L.F. Lewy bodies in the sympathetic ganglia. Neurodegeneration, 1992, 1, 57-67.

Murphy, G.M., Ellis, W.G., Lee, Y.L., Stultz, K.E., Shrivastava, R., Tinklenberg, J., Eng, L.F. Astrocytic gliosis in the amygdala in Down's syndrome and Alzheimer's disease. In Yu, A. (ed.): *Neuronal-Astrocytic Interactions: Implications for Normal and Pathological CNS Function*. Elsevier, Amsterdam, 1992, 475-483.

Murphy, G.M., Jia, X.-C., Yu, A.C.H., Lee, Y.L., Tinklenberg, J.R., Eng, L.F. Reverse transcription and polymerase chain reaction technique for quantification of mRNA in astrocyte cultures. Journal of Neuroscience Research, 1993, 35, 643-651.

Murphy, G.M., Forno, L.S., Higgins, L., Scardina, J.M., Eng, L.F., Cordell, B. Development of a monoclonal antibody specific for the carboxyl-terminus of β -amyloid 1-42 and its Immunohistochemical Reactivity in Alzheimer's Disease and Related Disorders. American Journal of Pathology 144:1082-1088, 1994.

Zipursky, R, Marsh, L, Lim, K, DeMent, S, Shear, P, Sullivan, E, Murphy, G, Csernansky, J, Pfefferbaum, A. Volumetric MRI assessment of temporal lobe structures in schizophrenia. Biological Psychiatry 35:501-516, 1994.

Irwin, I., DeLanney, L.E., McNeill, T., Chan, P., Lapchak, P., Forno, L., Murphy, G., DiMonte, D., Sandy, M., Langston, J.W. Aging and the Nigrostriatal Dopamine System: a Non-human Primate Study. Neurodegeneration 3:251-265, 1994.

Murphy, G.M., Song, Y.S., Ong, E., Lee, Y.L., Schmidt, K., Bocchini V., Eng, L.F. Leukemia inhibitory factor mRNA is expressed by primary cortical astrocyte cultures but not by an immortalized microglial cell line. Neuroscience Letters 184:48-51, 1995.

Murphy, G.M., Jia, X.-J., Song, Y., Ong, E., Shrivastava, R., Bocchini V., Lee, Y., Eng, L.F. Macrophage Inflammatory Protein 1-alpha Expression in an Immortalized Microglial Cell line and in Cortical Astrocyte Cultures. J Neurosci Res. 40:755-763, 1995.

Eng, L.F., Lee, Y.L., Murphy, G. M., Yu, A.C.H. A RT-PCR Study of Gene Expression in a mechanical injury model. In Yu, A, Eng, LF, Schulman H, Shooter E (eds.). *Gene Expression in the Central Nervous System*. Progress in Brain Research. 105:219-230, 1995.

Murphy, G.M., Tamminga, C.A. Images in Neuroscience: Amyloid Plaques. Am. J. Psychiatry 152:1258, 1995.

Murphy, G.M., Bitting L., Majewska A., Schmidt K., Song, Y.S., Wood C.R. Expression of interleukin-11 and its encoding mRNA by glioblastoma cells. Neuroscience Letters 196:153-156, 1995.

Murphy, G.M., Lee, Y.L., Jia, X.-J., Yu, A.C.H., Majewska, A.K., Song, Y.S., Eng, L.F. Tumor necrosis factor alpha and basic fibroblast growth factor decrease glial fibrillary acidic protein and its encoding mRNA in astrocyte cultures and glioblastoma cells. J. Neurochemistry 65:2716-2724, 1995.

Murphy, G.M. Cognitive Impairment. In Sheikh, J. (ed.) *Treating the Elderly*. Jossey-Bass, San Francisco, 1996, pp. 163-194.

Bitting L., Naidu A. Cordell, B., Murphy, G.M. β -amyloid peptide secretion by a microglial cell line is induced by β -amyloid-(25-35) and lipopolysaccharide. Journal of Biological Chemistry 271:16084-16089, 1996.

Higgins, L.S., Murphy, G.M., Forno, L.S. Catalano R. Cordell, B. β -amyloid and p3 peptides have different immunohistochemical profiles in Alzheimer's Disease Brain. American Journal of Pathology 149:585-596, 1996

Murphy GM, Forno LS, Ellis WG, Nochlin D, Levy-Lahad E, Poorkaj P, Bird TD, Jiang Z, Cordell B. Antibodies to presenilin proteins detect neurofibrillary tangles in Alzheimer's disease. American Journal of Pathology 149:1839-1846, 1996.

Murphy, G.M., Yang, L., Yesavage, J., Tinklenberg, J.R. Rate of Cognitive Decline in Alzheimer's Disease is not Affected by the Alpha-1-antichymotrypsin A allele or the CYP2D6 B mutant. Neuroscience Letters 217:200-202, 1996

Higaki, J., Murphy, G.M., Cordell, B. Inhibition of β -amyloid formation by haloperidol: a possible mechanism in reduced frequency of Alzheimer's Disease pathology in schizophrenia. J Neurochemistry 68:333-336, 1997.

Murphy, G.M. New Developments in the Treatment of Dementia. In Dunner, D. (ed.) *Current Psychiatric Therapy II*. W.B. Saunders, Philadelphia, 1997, 621-626.

Murphy G.M., Taylor J., Tinklenberg J.R., Yesavage J.A. The apolipoprotein ϵ 4 allele is associated with increased behavioral disturbance in Alzheimer's disease. Am J Geriatric Psychiatry 5:88-89, 1997.

Murphy GM, Taylor J, Kraemer HC. Yesavage J, Tinklenberg JR. No association between apolipoprotein E ϵ 4 allele and rate of decline in Alzheimer's disease. American Journal of Psychiatry 154:603-608, 1997.

Murphy, G.M., Sullivan, E.V., Gallagher-Thompson, D., Thompson, L.W., van Duijn, C.M., Forno, L.S., Ellis, W.G., Jagust, W.J., Yesavage, J., Tinklenberg, J.R. No Association between the Alpha 1-antichymotrypsin A allele and Alzheimer's disease. Neurology 48:1313-1316, 1997.

Murphy, G.M., Cordell B. Biology of Alzheimer's Disease. In Nemeroff, C., Schatzberg, A. (eds.), Textbook of Psychopharmacology, 2nd edition. American Psychiatric Press, Washington, D.C, 1998, 629-647.

Murphy G.M, Lim K.O., Wieneke M, Ellis WG, Forno LS, Hoff AL, Nordahl T. No neuropathologic evidence for an increased frequency of Alzheimer's disease among elderly schizophrenics. Biological Psychiatry 43:205-209, 1998

Murphy, G.M., Yang, L, Cordell B. Macrophage Colony Stimulating Factor Augments β -Amyloid-Induced Interleukin-1, Interleukin-6, and Nitric Oxide Production by Microglial Cells. Journal of Biological Chemistry 273:20967-20971, 1998.

O'Hara R, Yesavage J, Kraemer H, Mauricio M, Friedman LF, Murphy, GM. The APOE ϵ 4 allele is associated with decline on delayed recall performance in community dwelling elderly adults. Journal of the American Geriatrics Society 46:1493-1498, 1998.

Cordell B, Yang L, Naidu A, Bales K, Paul S, Murphy GM. Cytokine communication between neurons and glia and the pathogenesis of Alzheimer's disease. In Patterson P, Kordon C, Christen Y (eds.), Neuro-immune Interactions in Neurologic and Psychiatric Disorders. Springer, Berlin, 1999, 35-46.

Mauricio M, O'Hara R, Yesavage JA, Friedman L, Kraemer HC, Van de Water M, Murphy GM. A longitudinal study of apolipoprotein E genotype and depressive symptoms in community-dwelling older adults. The American Journal of Geriatric Psychiatry 8:196-2000, 2000.

Dodel RC, Du Y, Bales K, Gao F, Eastwood B, Glazier B, Zimmer R, Cordell B, Dolores Gallagher-Thompson D, Thompson LW, Tinklenberg JR, Pfefferbaum A, Sullivan EV, Yesavage J, Gasser T, Farlow M, Murphy GM, Paul SM. The alpha-2 macroglobulin pentanucleotide polymorphism and the risk for sporadic Alzheimer's disease. Neurology 54:438-442, 2000.

Kahle P, Jakowec M, Petzinger GM, Di Monte D, Silverberg GD, Yesavage JA, Tinklenberg JR, Shooter EM, Murphy GM. Combined assessment of tau and neuronal thread protein in Alzheimer's disease cerebrospinal fluid. Neurology 54:1498-1504, 2000.

Murphy GM, Zhao F, Yang L, Cordell, B. Expression of the macrophage colony stimulating factor receptor is increased in the APP^{V717F} transgenic mouse model of Alzheimer's disease. American Journal of Pathology 157:895-904, 2000.

Murphy, GM. Inflammation and the pathophysiology of Alzheimer's disease. Dialogues in Clinical Neuroscience 2:233-239, 2000.

Lue LF, Rydel R, Yang LB, Hampel H, Murphy GM, Brachova L, Yan SD, Walker D, Shen Y, Rogers J. Inflammatory repertoire of Alzheimer's disease and nondemented elderly microglia *in vitro*. Glia 35:72-79, 2001.

Murphy GM, Claassen JD, DeVoss JJ, Pascoe N, Taylor J, Tinklenberg JR, Yesavage JA. Rate of Cognitive Decline in Alzheimer's Disease is Accelerated by the Interleukin-1alpha-889 *1 allele. Neurology 56:1595-7, 2001.

Kadotani H, Kadotani T, Young T, Peppard PE, Finn L, Colrain IM, Murphy GM, Mignot E. Association between apolipoprotein E epsilon4 and sleep-disordered breathing in adults. JAMA 285(22):2888-90, 2001 Jun 13.

Mitrasinovic OM, Perez G, Zhao F, Lee YL, Poon C, Murphy GM. Overexpression of macrophage colony stimulating factor receptor on microglial cells induces an inflammatory response. Journal of Biological Chemistry 276(32):30142-9, 2001.

Suzuki, J., Shen, W., Nelson, B., Patel, S., Veerkamp, J., Selwood, S., Murphy, G., Reaven, E., Kraemer, F. Absence of Cardiac Lipid Accumulation in Transgenic Mice with Heart-Specific, Conditional Overexpression of Hormone-Sensitive Lipase. American Journal of Physiology: Endocrinology and Metabolism 281(4):E857-66, 2001.

Murphy GM, Pollock B, Kirshner BA, Pascoe N, Cheuk W, Mulsant B, Reynolds C. CYP2D6 Genotyping with Oligonucleotide Microarrays and Nortriptyline Concentrations in Geriatric Depression. Neuropsychopharmacology 25:737-43, 2001.

Gallagher-Thompson D, O'Hara R, Simmons A, Kraemer H, Murphy GM. The Apolipoprotein E ε4 Allele Affects the Relationship between Stress and Depression in Caregivers of Alzheimer's Disease Patients. Journal of Geriatric Psychiatry and Neurology 14(3):115-19, 2001.

Claassen, J., Pascoe, N., Schatzberg, A., Murphy, G.M. Rapid Detection of the C-1496G Polymorphism in the CYP2D6 *2 Allele. Clinical Chemistry 47:2153-5, 2001.

Vincent, VAM, Selwood SP, Murphy, GM. Macrophage colony stimulating factor and Amyloid Beta Induce Cytokine and Nitric Oxide Production in Hippocampal Organotypic Cultures. Neurobiology of Aging 23:349-362, 2002.

Suzuki, J., Shen, W.-J., Nelson, B.D., Selwood, S.P., Murphy, G.M., Kanehara, H., Takahashi, S., Oida, K., Miyamori, I., Kraemer, F.B. Cardiac gene expression profile and lipid accumulation in response to starvation. American Journal of Physiology Endocrinol Metab 283:E94-E102, 2002.

Dalma, D, Murphy, GM. Single base pair polymorphisms and their characterization with oligonucleotide microarrays. Psychiatric Genetics 12:97-107, 2002.

Mitrasinovic, O, Murphy, GM. Accelerated Phagocytosis of Amyloid- β by Mouse and Human Microglia Overexpressing the M-CSF Receptor. Journal of Biological Chemistry 277:29889-29896, 2002.

Vincent VAM, DeVoss JJ, Ryan HS, Murphy GM. Analysis of neuronal gene expression with laser capture microdissection. Journal of Neuroscience Research 69:578-586, 2002.

Vincent, V.A.M., Robinson, C.C., Simsek, D., Murphy, G.M. Macrophage colony stimulating factor prevents NMDA-induced neuronal death in hippocampal organotypic cultures. Journal of Neurochemistry 82:1388-1397, 2002

Schatzberg, A, Kremer, C, Rodrigues H, Murphy, GM. Double-blind, randomized comparison of Mirtazapine and Paroxetine in Elderly Depressed Patients. American Journal of Geriatric Psychiatry 10:541-550, 2002.

Tamminga C, Nemeroff CB, Blakely RD, Carter CS, Davis KL, Dingledine R, GormanJ, Grigoriadis D, Henderson D, Innis R, Killen J, Langhren TP, McDonald WM, Murphy,GM, Paul SM, Rudorfer M, Sausville E, Schatzberg A, Scolnick E, Suppes T. Developing novel treatments for mood disorders: Accelerating Discovery. NIMH Strategic Plan for Mood Disorders Committee. Biological Psychiatry 52:589-609, 2002.

Mitrasinovic, O., Vincent, V., Simsek, D., Murphy, G.M. Macrophage colony stimulating factor promotes microglial phagocytosis. Neuroscience Letters 344:185-188, 2003

Mitrasinovic, O.M., Murphy, G.M. Microglial overexpression of the M-CSF receptor augments phagocytosis of opsonized A β . Neurobiology of Aging 24:807-815, 2003.

Murphy, GM, Kremer, C, Rodrigues H, Schatzberg, A. The Apolipoprotein E ϵ 4 Allele is a Pharmacogenetic Marker for Antidepressant Efficacy in Cognitively Intact Elderly Patients with Major Depression. Biological Psychiatry 54:665-673, 2003.

Murphy, GM, Kremer, C, Rodrigues H, Schatzberg, A. Pharmacogenetics of Antidepressant Medication Intolerance. American Journal of Psychiatry 160:1830-1835, 2003.

Athwal, H., Murphy, G.M., Chun, S. Amiodarone-Induced Delirium. Am J Geriatr Psychiatry 11:696-697, 2003

Yesavage, JA, Friedman, L, Kraemer H, Tinklenberg JR, Salehi A, Noda A, Taylor JL, O'Hara R, Murphy, GM. Sleep/Wake Disruption in Alzheimer's disease: APOE status and longitudinal course. J Geriatric Psychiatry Neurology 17:20-24, 2004.

Yesavage JA, Sheikh J, Noda A, Murphy G, O'Hara R, Hierholzer R, Battista M, Ashford JW, Kraemer HC, Tinklenberg J. Use of a VA pharmacy database to screen for areas at high risk for disease: Parkinson's disease and exposure to pesticides. J Geriatr Psychiatry Neurol 17:36-8, 2004.

Malhotra, A., Murphy, G.M., Kennedy J. Pharmacogenetics of Psychotropic Drug Response (review) American Journal of Psychiatry 161:780-96, 2004

Mitrasinovic O, Robinson, C, Tenen, DG, Lee YL, Poon, C, Murphy, G.M. Biolistic expression of the macrophage colony stimulating factor receptor in organotypic cultures induces an inflammatory response. Journal of Neuroscience Research 77:420-429, 2004.

Murphy, G.M., Hollander, S.B., Rodrigues, H.E., Kremer, C., Schatzberg, A. Effects of the serotonin transporter promoter polymorphism on mirtazapine and paroxetine efficacy and side effects in geriatric major depression. Archives of General Psychiatry 61:1163-9, 2004.

Wisor, J., Edgar, D., Yesavage, J., Ryan, S., McCormick, C.M., Lapustea, N., Murphy, G.M. Sleep and circadian abnormalities in a transgenic mouse model of Alzheimer's Disease. Neuroscience 131:375-382, 2005.

Murphy, GM, Saravanapavan, P. Cytokines and Neurodegeneration. In: Cytokines and the CNS, Second Edition, edited by R.M. Ransohoff and Etty N. Benveniste. CRC Press, Boca Raton, FL, 2005, pp. 163-191.

Mitrasinovic, O., Grattan, A., Robinson, C, Lapustea, N., Poon, C., Ryan, H., Phong, C, Murphy, GM. Microglia Overexpressing the Macrophage-Colony Stimulating Factor Receptor are Neuroprotective in a Microglial-Hippocampal Organotypic Co-Culture System. Journal of Neuroscience 25:4442-51, 2005.

O'Hara R, Schroder CM, Kraemer HC, Kryla N, Cao C, Miller E, Schatzberg AF, Yesavage JA, Murphy GM. Nocturnal sleep apnea/hypopnea is associated with lower memory performance in APOE epsilon4 carriers. Neurology. 65:642-4, 2005.

Yesavage JA, Sheikh J, Noda A, Murphy G, O'hara R, Hierholzer R, Battista M, Ashford JW, Schneider B, Hoblyn J, Kraemer HC, Tinklenberg J. Spatial test for agricultural pesticide "blow-in" effect on prevalence of Parkinson's disease. J Geriatr Psychiatry Neurol. 19:32-5, 2006.

Killen J, Fortmann S, Murphy, GM, Hayward C, Arredondo, C, Crompt, D, Celio, M, Abe, L, Wang, Y, Schatzberg, A. Extended Treatment with Bupropion SR for Cigarette Smoking Cessation. Journal of Consulting and Clinical Psychology. 74:286-94, 2006.

Murphy, G.M. Application of Microarray Technology in Psychotropic Drug Trials. Journal of Psychopharmacology. 20(4 Suppl):72-8, 2006

Chuu, J., Taylor, J.L., Tinklenberg, J., Noda, A., Yesavage, J., Murphy, G.M. The Brain-Derived Neurotrophic Factor Val66Met Polymorphism and Rate of Decline in Alzheimer's Disease. Journal of Alzheimer's Disease 9:43-49, 2006

O'Hara, R., Sommer, B., Way, N., Kraemer, H.C., Taylor, J., Murphy, G.M. Slower speed-of-processing of cognitive tasks is associated with presence of the apolipoprotein epsilon4 allele. Journal of Psychiatric Research. Jan 22, 2007

Saravanapavan, P, Murphy, GM. Cerebral inflammation and Alzheimer's dementia. In: Research Progress in Alzheimer's Disease and Dementia, vol. 2, edited by Miao-Kun Sun. Nova Science Publishers, New York, NY, 2007, pp. 57-96.

Faison WE, Schultz SK, Aerssens J, Alvidrez J, Anand R, Farrer LA, Jarvik L, Manly J, McRae T, Murphy GM Jr, Olin JT, Regier D, Sano M, Mintzer JE. Potential ethnic modifiers in the assessment and treatment of Alzheimer's disease: challenges for the future. Int Psychogeriatr. 19:539-58, 2007.

Wisor, J. P., Striz, M., DeVoss, J., Murphy, G.M., Edgar, D.M., O'Hara, B.F. A Novel Quantitative Trait Locus on Mouse Chromosome 18, "era1," Modifies the Entrainment of Circadian Rhythms. Sleep 10:1255-63, 2007.

Killen J, Fortmann S, Schatzberg AF, Arredondo, C Murphy GM, Hayward C, Celio M, Crompt D, Fong D, Pandurangi M. Extended cognitive behavior therapy for cigarette smoking cessation. Addiction 103:1381-90, 2008.

Selwood, S.P., Parvathy, S., Cordell, B., Ryan, H.S., Oshidari, F., Vincent, V., Yesavage, J., Lazzeroni, L, Murphy, G.M. Gene expression profile of the PDAPP mouse model for Alzheimer's Disease with and without Apolipoprotein E. Neurobiology of Aging 30:574-90, 2009.

Parvathy S, Rajadas, J, Ryan H, Vaziri S, Anderson L, Murphy GM. A β beta peptide conformation determines uptake and interleukin-1 α expression by primary microglial cells. Neurobiology of Aging 30:1792-1804, 2009.

Adamson MM, Landy KM, Duong S, Fox-Bosetti S, Ashford JW, Murphy GM, Weiner M, Taylor JL. Apolipoprotein E epsilon 4 influences on episodic recall and brain structures in aging pilots. Neurobiol Aging 31(6):1059-63, 2010.

Sarginson JE, Lazzeroni LC, Ryan HS, Schatzberg AF, Murphy GM. FKBP5 polymorphisms and antidepressant response in geriatric depression. Am J Med Genet B Neuropsychiatr Genet. 153B(2):554-60, 2010.

Killen J, Fortmann S, Murphy GM, Hayward C, Fong D, Lowenthal K, Bryston SW, Killen DT, Schatzberg, A. Failure to improve cigarette smoking abstinence with transdermal selegiline + cognitive behavior therapy. Addiction 105:1660-8, 2010.

Sarginson JE, Lazzeroni LC, Ryan HS, Schatzberg AF, Murphy GM. MDR1 polymorphisms and antidepressant response in geriatric depression. Pharmacogenetics and Genomics 20(8):467-75, 2010.

Taylor JL, Kennedy Q, Adamson MM, Lazzeroni LC, Noda A, Murphy GM, Yesavage JA. Influences of APOE ϵ 4 and expertise on performance of older pilots. Psychol Aging. Jun;26(2):480-7, 2011.

Yesavage JA, Jo B, Adamson MM, Kennedy Q, Noda A, Hernandez B, Zeitzer JM, Friedman LF, Fairchild K, Scanlon BK, Murphy GM Jr, Taylor JL. Initial cognitive performance predicts longitudinal aviator performance. J Gerontol B Psychol Sci Soc Sci. 66(4):444-53, 2011.

Kennedy Q, Taylor JL, Noda A, Adamson M, Murphy GM Jr, Zeitzer JM, Yesavage JA. The roles of COMT val158met status and aviation expertise in flight simulator performance and cognitive ability. Behav Genet. 41(5):700-8, 2011.

Sarginson JE, Killen, J, Lazzeroni LC, Fortmann S, Ryan HS, Schatzberg AF, Murphy GM. Markers in the 15q24 Nicotinic Receptor Subunit Gene Cluster (CHRNA5-A3-B4) Predict Severity of Nicotine Addiction and Response to Smoking Cessation Therapy. Am J Med Genet B Neuropsychiatr Genet. 156B: 275-84, 2011

Murphy, G.M. Pharmacogenetics of Late Life Depression. In Lavretsky, H., Sajatovic, M. Reynolds C.F., *Late Life Mood Disorders*, Oxford University Press, 2013

Murphy GM, Sarginson JE, Ryan HS, O'Hara R, Schatzberg A, Lazzeroni L. BDNF and CREB1 genetic variants interact to affect antidepressant treatment outcomes in geriatric depression. Pharmacogenetics and Genomics. 2013 Jun;23(6):301-13

Schatzberg A, Keller J, Tennakoon L, Lembke A, Williams G, Kraemer F, Sarginson J, Lazzeroni L, Murphy GM. HPA Axis Genetic Variation, Cortisol, and Psychosis in Major Depression. Molecular Psychiatry 19:220-227, 2014.

Taylor JL, Scanlon BK, Farrell M, Hernandez B, Adamson MM, Ashford JW, Noda A, Murphy GM Jr, Weiner MW. APOE-epsilon4 and aging of medial temporal lobe gray matter in healthy adults older than 50 years. Neurobiol Aging. 35(11):2479-85, 2014.

Ray A, Tennakoon L, Keller J, Sarginson JE, Ryan HS, Murphy GM, Lazzeroni LC, Trivedi MH, Kocsis JH, DeBattista C, Schatzberg AF. ABCB1 (MDR1) predicts remission on P-gp substrates in chronic depression. Pharmacogenomics J 15(4):332-339, 2015.

Schatzberg AF, DeBattista C, Lazzeroni LC, Etkin A, Murphy GM Jr, Williams LM. ABCB1 Genetic Effects on Antidepressant Outcomes: A Report From the iSPOT-D Trial. Am J Psychiatry. 172(8):751-9, 2015.

Sarginson J, Killen J, Lazzeroni L, Fortmann S, Ryan H, Schatzberg A, Murphy G. Response to Transdermal Selegiline Smoking Cessation Therapy and Markers in the 15q24 Chromosomal Region. Nicotine and Tobacco Research. 17(9):1126-33, 2015.

Keller J, Gomez R, Williams G, Lembke A, Lazzeroni L, Murphy GM Jr, Schatzberg AF. HPA axis in major depression: cortisol, clinical symptomatology and genetic variation predict cognition. Mol Psychiatry. 22(4):527-536, 2017.

Davis, E. G., Keller, J., Hallmayer, J., Pankow, H. R., Murphy, G. M., Gotlib, I. H., Schatzberg, A. F. Corticotropin-releasing factor 1 receptor haplotype and cognitive features of major depression. Translational Psychiatry 8(1):5. 2018.

Selected Abstracts

Murphy, G.M., Tinklenberg, J.R, Eng, L.F. β -amyloid Precursor Detected in Human Cerebral Cortex. Biological Psychiatry, 1989, 25, 4A.

Murphy, G. M., Forno, L.S., Eng, L.F. How Useful is Ubiquitin Immunocytochemistry for Identification of Lewy bodies in the Amygdala-parahippocampal region? Journal of Neuropathology and Experimental Neurology, 1990, 49, 279.

Ellis, W.G., Murphy, G. M., Eng, L.F. Antigenic Profile and Anatomic Distribution of Plaques and Tangles in the Amygdala in Down's Syndrome and Alzheimer's Disease. Journal of Neuropathology and Experimental Neurology, 1990, 49, 306.

Murphy, G., Murphy, E., Greenberg, B., Ellis, W., Forno, L., Salamat, S., Gonzalez-DeWhitt, P., Lowery, D., Tinklenberg, J., Eng, L. Anatomic Distribution of β -Amyloid Precursor Protein in the Amygdalo-Hippocampal System. Journal of Neuropathology and Experimental Neurology, 1991, 50, 313.

Forno, L.S., Murphy, G., Eng, L.F. Immunocytochemistry of Lewy Bodies in the Sympathetic Ganglia. Journal of Neuropathology and Experimental Neurology, 1991, 50, 318.

Zipursky, R.B., Lim, K.O., Marsh, L., DeMent, S., Murphy, G.M., Pfefferbaum, A. Volumetric MRI Assessment of Temporal Lobe Morphology in Schizophrenic patients with Widespread Gray Matter Volume Deficits. Biological Psychiatry 31:124A-125A, 1992.

Murphy, G.M., Forno, L.S., DeLanney, L.E., Greenberg, B., Langston, J.W. Beta amyloid deposition in squirrel monkeys. Society for Neuroscience Abstracts, 18:733, 1992.

Murphy, G.M., Lee, Y.L., Jia, X.-J., Yu, A.C.H., Majewska, A.K., Song, Y.S., Eng, L.F. Tumor necrosis factor alpha and basic fibroblast growth factor decrease glial fibrillary acidic protein and its encoding mRNA in astrocyte cultures and glioblastoma cells. Society for Neuroscience Abstracts 21:303, 1995.

Murphy, G.M., Higgins, L., Forno, L.S. Catalano R. Cordell, B. Amyloid p3 immunoreactivity in Alzheimer's Disease brain. Journal of Neuropathology and Experimental Neurology, 55:650, 1996.

Kahle, P., Murphy, G., Yesavage, J., Tinklenberg, J., Shooter E. Microtubule-Associated Protein Tau and AD7C-Neural Thread Protein Are Elevated in Cerebrospinal Fluid of Alzheimer's Disease Patients: Influence of Genetic Risk Factors. Society for Neuroscience Abstracts 24:1219, 1998.

Du, Y., Dodel, R.C., Bales, K.R., Gao, F., Eastwood, B., Glazier, B., Zimmer, R., Evans, R.M., Hecke, A., Gallagher-Thompson, D., Thompson, L.W., Tinklenberg, J.R., Pfefferbaum, A., Sullivan, E.V., Yesavage, J., Gasser, T., Farlow, M.R., Murphy, G.M., Paul, S.M. Alpha-2-Macroglobulin and the Risk for Developing Sporadic Alzheimer's Disease. American Academy of Neurology 51st Annual Meeting Program. Neurology, 52(6) supplement 2: A250-251, 1999.

Vincent, V.A., Selwood, S.P., Murphy, G. M. Regulation of β -amyloid induced cytokine and chemokine expression in rat organotypic hippocampal cultures by macrophage colony stimulating factor. Neurobiology of Aging 2000; 21:S49.

Mitrasinovic, O., Perez, G., Zhao, F., Poon, C., Murphy, G.M. Accelerated phagocytosis of beta amyloid by microglia overexpressing the M-CSF receptor. Society for Neuroscience Abstracts 2001.

Wallace, M.E., Murphy, G.M., Schatzberg, A.F., Palmer, T.D., Lyons, D.M. Cell proliferation in hippocampal slice cultures. Society for Neuroscience Abstracts 2001.

Kabbaj, M., Evans, S., Selwood, S.P., Watson, S.J., Murphy, G.M., Akil, H. Individual differences in the effect of social defeat on hippocampal gene expression: a microarray study in rats. Society for Neuroscience Abstracts 2001.

Murphy, G.M. Pharmacogenetics of the Antidepressant Response. Journal of Affective Disorders 2002; 68:86-87.

Mitrasinovic, O.M., Rhee, J., Grattan, A., Poon, C., Perez, G.V., Murphy, G.M., Jr. Amyloid beta phagocytosis, neuroprotection, and signal transduction by microglia overexpressing the macrophage colony stimulating factor receptor. Society for Neuroscience Abstracts 2002.

Her, S., Lindley, S.E., Cao, Y., Selwood, S.P., Schatzberg, A.F., Murphy, G.M. Glucocorticoid regulation of gene expression in hippocampal CA3 and dentate gyrus. Society for Neuroscience Abstracts 2002.

Lindley, S.E., Her, S., Cao, Y., Selwood, S., Schatzberg, A.F., Murphy, G.M., Lyons, D.M. Glucocorticoid regulation of gene-expression in the medial prefrontal cortex and striatum. Society for Neuroscience Abstracts 2002.

Mitrasinovic, O.M., Grattan A.D., Poon, C., Murphy, G.M. Microglial Activation and Phagocytosis is mediated by M-CSF Autocrine and Paracrine Effects and by Tyrosine Kinase Signal Transduction. Molecular Biology of the Cell 2002; 13a:68.

Mitrasinovic O.M., Poon, C., Grattan, A., Rhee, J., Lapustea, N. Murphy, G.M. Macrophage colony stimulating factor is essential for microglial amyloid beta phagocytosis and neuroprotection. Society for Neuroscience Abstracts, 2003.

Murphy, G. M., Hollander S.B, Rodrigues, H., Schatzberg, A. Pharmacogenetics of the Antidepressant Medication Response in the Elderly. Society for Neuroscience Abstracts, 2003.

Mitrasinovic, O.M., Lapustea N, Poon C., Murphy, G.M. Signaling pathways mediating M-CSF receptor induction of microglial cytokine expression, phagocytosis, and neuroprotection. Molecular Biology of the Cell, Supplement 14.

Murphy, G.M. Pharmacogenetics in geriatric major depression. International Journal of Neuropsychopharmacology 7 (Suppl 1):S66, 2004.

Mitrasinovic, O.M. Lapustea N., Poon C., Chen A.J., Murphy, G.M. Accelerated clearance of Amyloid-A β by M-CSF activated microglia is accompanied by activation of Src Tyrosine Kinase. Neurobiology of Aging Supplement 25 32: 5534, 2004.

Murphy, GM, Jr., Mitrasinovic O.M., Sullivan, P.M. Microarray Comparison Of gene expression in the hippocampus of aged ApoE3 and E4 transgenic mice. Neurobiology of Aging. Supplement 25 S2: S316, 2004.

Chuu, J., Pollock, B.G., Kirshner, M.A., Mulsant, B.H., Reynolds, C.F. III, Murphy, G.M. The MDR1 C3435T variant but not CYP2D6 genotype affects nortriptyline-induced orthostatic hypotension in geriatric patients. Society for Neuroscience Abstracts, 2004.

Mitrasinovic, O., Lapustea, C., Phong, C., Chen, A., Poon, C., and Murphy, G.M. Microglial clearance of amyloid-beta is regulated by the Src tyrosine kinase. Society for Neuroscience Abstracts, 2004.

Murphy GM. Prediction of Antidepressant Drug Response in Geriatric Depression. Biological Psychiatry 61:105S, 2007.

Murphy GM. ABCB1 Genetic Variation and Clinical Outcomes in the International Study to Predict Optimized Treatment for Depression (iSPOT-D). Biological Psychiatry 75:23S-24S, 2014

Selected Presentations

Tinklenberg, J.R., Cordell, B., Eng, L.F., Murphy, G.M., Davies, H.D., Yesavage, J.A. Antibodies to Alternative Forms of A4 Amyloid Proteins and their Implications for Alzheimer's disease. Poster presentation at the 27th annual meeting of the American College of Neuropsychopharmacology, San Juan, Puerto Rico, December 11-16, 1988.

Murphy, G.M., Tinklenberg, J.R, Eng, L.F. β -amyloid Precursor Detected in Human Cerebral Cortex. Paper presentation at 44th annual meeting of the Society for Biological Psychiatry, San Francisco, CA, May 4-8, 1989.

Murphy, G.M., Eng, L.F., Ellis, W.G., Meissner, L.C., Tinklenberg, J.R. Antigenic Profile of Plaques and Neurofibrillary Tangles in the Amygdala in Down's Syndrome. Poster presentation at the 28th annual meeting of the American College of Neuropsychopharmacology, Maui, Hawaii, December 10-15, 1989.

Murphy, G. M., Forno, L.S., Eng, L.F. How Useful is Ubiquitin Immunocytochemistry for Identification of Lewy bodies in the Amygdala-parahippocampal region? Poster presentation at the 66th annual meeting of the American Association of Neuropathologists, San Francisco, CA, June 14-17, 1990.

Ellis, W.G., Murphy, G. M., Eng, L.F. Antigenic Profile and Anatomic Distribution of Plaques and Tangles in the Amygdala in Down's Syndrome and Alzheimer's Disease. Poster presentation at the 66th annual meeting of the American Association of Neuropathologists, San Francisco, CA, June 14-17, 1990.

Murphy, G.M., Allen, J.S., Pickford, L., Murphy, E., Eng, L., Greenberg, B., Gonzalez-DeWhitt, P., Lowery, D., Stultz, K., Forno, L., Davies, H., Pfefferbaum, A., Tinklenberg, J. Alzheimer's Disease: β -amyloid Gene Expression in Leukocytes and the Amygdalo-hippocampal system. Poster presentation at the 29th annual meeting of the American College of Neuropsychopharmacology, San Juan, Puerto Rico, December 10-14, 1990.

Murphy, G.M, Ellis, W.G., Forno, L.S., Srivastava, R., Tinklenberg, J., Eng, L.F. Anatomic Distribution of Astrocytosis in the Medial Temporal Lobe Memory System in Alzheimer's Disease and Down's Syndrome. Platform presentation at Neuronal-Astrocytic Interactions: Pathologic Implications. Stanford Centennial Symposium, Hong Kong, July 10-14, 1991.

Tinklenberg, J., Murphy, G.M., Greenberg, B., Ellis, W., Forno, L., Eng, L.F. Anatomic Variation in Processing of the β -amyloid precursor protein to the β -amyloid peptide in Alzheimer's disease. Poster presentation at the 30th annual meeting of the American College of Neuropsychopharmacology, San Juan, Puerto Rico, December 9-14, 1991.

Murphy, G.M., Pickford, L., Allen, J.S., Stultz, K., Davies, H., Tinklenberg, J., Eng, L.F. Alzheimer's disease: Amyloid Gene Expression in Leukocytes. Poster presentation at the 30th annual meeting of the American College of Neuropsychopharmacology, San Juan, Puerto Rico, December 9-14, 1991.

Zipursky, R.B., Lim, K.O., Marsh, L., DeMent, S., Murphy, G.M., Pfefferbaum, A. Volumetric MRI Assessment of Temporal Lobe Morphology in Schizophrenic patients with Widespread Gray Matter Volume Deficits. Poster presentation at 47th annual meeting of the Society for Biological Psychiatry, Washington, D.C., April 29-May 3, 1992.

Murphy, G.M., Forno, L.S., DeLanney, L.E., Greenberg, B., Langston, J.W. β -amyloid deposition in squirrel monkeys. Poster presentation at Society for Neuroscience meeting, Anaheim, CA, October 27, 1992.

Murphy, Greer M. Jr, Jia, X-C., Yu, A.C.H., Lee, Y.L., Eng, L.F., Tinklenberg, J.R. Reverse transcription and polymerase chain reaction technique for quantification of mRNA in primary astrocyte cultures. Poster presentation at Annual Meeting of American College of Neuropsychopharmacology, Honolulu, HI, December 13-17, 1993.

Murphy, Greer M. Jr., Jia, Xiao-Chi, Ong, Elisa, Bocchini, Virginia, Eng, Lawrence F., Tinklenberg, Jared R. Regulation of macrophage inflammatory protein 1 alpha mRNA and leukemia inhibitory factor mRNA in an immortalized microglial cell line and in primary astrocyte cultures. Poster presentation at Annual Meeting of American College of Neuropsychopharmacology, Honolulu, HI, December 13-17, 1993.

Murphy, Greer M. Jr., Forno, Lysia S., Higgins, Linda, Scardina, Jan Marian, Eng, Lawrence F., Cordell, Barbara. Development of a monoclonal antibody specific for the carboxyl-terminus of β -amyloid and its immunohistochemical reactivity in Alzheimer's disease and related disorders. Poster presentation at Annual Meeting of American College of Neuropsychopharmacology, Honolulu, HI, December 13-17, 1993.

Murphy, G.M., Lee, Y.L., Jia, X.-J., Majewska, A.C.H., Song, A.K., Eng, L.F. Tumor Necrosis Factor- α Decreases Glial Fibrillary Acidic Protein and Its Encoding mRNA in Primary Astrocyte Cultures and Astrocytoma Cells. Poster presentation at Annual Meeting of American College of Neuropsychopharmacology, Honolulu, HI, December 13-17, 1993.

Murphy, G.M., Lee, Y.L., Jia, X.-J., Yu, A.C.H., Majewska, A.K., Song, Y.S., Eng, L.F. Tumor necrosis factor alpha and basic fibroblast growth factor decrease glial fibrillary acidic protein and its encoding mRNA in astrocyte cultures and glioblastoma cells. Poster presentation at Annual Meeting of Society for Neuroscience, San Diego, CA, November 12, 1995.

Murphy, G.M., Lee, Y.L., Jia, X.-J., Yu, A.C.H., Majewska, A.K., Song, Y.S., Eng, L.F. Tumor necrosis factor alpha and basic fibroblast growth factor decrease glial fibrillary acidic protein and its encoding mRNA in astrocyte cultures and glioblastoma cells. Platform presentation at NIH Workshop on cytokines and neurodegenerative diseases. La Jolla, CA, November 10, 1995.

Murphy, G.M., Higgins, L., Forno, L.S. Catalano R. Cordell, B. Amyloid p3 immunoreactivity in Alzheimer's Disease brain. Platform presentation at 72nd Annual Meeting of the American Association of Neuropathologists, Vancouver, B.C., June 15, 1996.

Murphy, G.M. Do antipsychotics modify the risk of Alzheimer's Disease in schizophrenia? Junior Investigator Award Presentation, 10th Annual Meeting of the American Association for Geriatric Psychiatry, Orlando, FL, March 4, 1997.

Murphy, G.M. New therapeutic approaches to Alzheimer's disease from neurobiological research. Platform presentation at 37th Annual Meeting of the NIMH New Clinical Drug Evaluation Unit Program Meeting, Boca Raton, FL, May 28, 1997.

Eng, D.L., Murphy, G.M., Shih, C., Wu, J., Eng, L.F. Mouse microglial cell line BV-2 lacks functional electrogenic glutamate uptake transporters. Poster presentation at Twenty-ninth annual meeting of the American Society for Neurochemistry, Denver, CO, March 7-11, 1998.

Murphy, G.M. Recent Advances in Alzheimer's Disease from Basic Neurobiological Research. Platform presentation at annual meeting of the West Coast College of Biological Psychiatry, Palo Alto, CA, April 3-5, 1998.

Murphy, GM. Basic and Clinical Research at the Stanford/VA Aging Clinical Research Center. Presentation to NIMH director and program staff at Center Directors meeting, Bethesda, MD, June 17-18, 1998.

Kahle P, Murphy GM, Shooter E. Comparative Study of Tau, AD7C-NTP, and APOE in Alzheimer's Disease: An Independent Study. 6th International Conference on Alzheimer's Disease and Related Disorders, Amsterdam, July, 1998.

Murphy, G.M. The Role of Inflammation in Alzheimer's Disease. Platform presentation at annual meeting of the West Coast College of Biological Psychiatry, Tuscon, AZ, April 9-11, 1999.

Murphy, GM. Basic and Clinical Research at the Stanford/VA Aging Clinical Research Center. Presentation to NIMH director and program staff at Center Directors meeting, Bethesda, MD, June 29-30, 1999.

Murphy, GM. Inflammation and Pathophysiology of Alzheimer's Disease. Platform presentation at Brain Aging and Alzheimer's Disease: New Directions for Research, XIII Bio-Clinical Interface Conference, Rouffach, France, October 13-15, 1999.

Murphy, GM, Zhao, F, Yang, L, Cordell, B. Expression of the macrophage colony stimulating factor receptor is increased in the APP^{V717F} transgenic mouse model of Alzheimer's disease. Poster presentation at Annual Meeting of American College of Neuropsychopharmacology, Acapulco, Mexico, December 12-16, 1999.

Murphy, GM. Hippocampal Slice Cultures, Microglia, and Alzheimer's Disease. Panel presentation at 33rd Winter Conference on Brain Research, Breckenridge, CO, January 23-28, 2000.

Selwood, S.P., Vincent, V.A., Murphy, G.M.. Quantification of Cytokine mRNA in Organotypic Rat Hippocampal Cultures with Real-Time RT-PCR. Poster presentation at Neuroinflammation in Alzheimer's Disease conference, Washington, D.C., July 7-8, 2000.

Vincent, V.A., Selwood, S.P., Murphy, G.M. Regulation of β -amyloid induced cytokine and chemokine expression in rat organotypic hippocampal cultures by macrophage colony stimulating factor. Poster presentation at World Alzheimer's Disease Congress (Pivotal Research), Washington, D.C., July 9-13, 2000.

Murphy, G.M., Schatzberg, A.F. Pharmacogenetics of mirtazapine and paroxetine in the treatment of geriatric major depression. "Hot Topics" presentation at Annual Meeting of the American College of Neuro-psychopharmacology, San Juan, Puerto Rico, December, 10-14, 2000.

Murphy, G.M. CYP2D6 Genotyping with Oligonucleotide Microarrays Predicts Nortriptyline Levels in Geriatric Depression. Presentation at session on "Advances in Genomics and Microarray Technology: Relevance to Psychiatric Disorders". Annual Meeting of the American College of Neuro-psychopharmacology, San Juan, Puerto Rico, December, 10-14, 2000.

Murphy, G.M. Pharmacogenetics of the Antidepressant Response. Grand Rounds, Massachusetts Mental Health Center, Harvard Medical School, January 19, 2001.

Selwood, S., Vincent, V., Murphy, G.M. Genome wide expression in a transgenic mouse model for Alzheimer Disease. 4th Annual Affymetrix User Group Meeting, April 30-May 1, 2001, San Diego, CA.

Murphy, G.M. DNA Microarray Technology and the Treatment of Depression. Presentation at symposium "Advances in the Treatment of Geriatric Depression", American Psychiatric Association annual meeting, New Orleans, LA, May 6, 2001.

Murphy, G.M. Pharmacogenetics of Antidepressant Therapy in the Elderly. NIMH New Clinical Drug Evaluation Unit (NCDEU) annual meeting, Phoenix, Arizona, May 28-31, 2001.

Vincent, V., DeVoss, J., Murphy, G.M. Quantitative RT-PCR of Laser Captured Microdissected neurons from the mouse hippocampus. Platform presentation at "Laser Capture Microdissection and Macromolecular Analysis of Normal Development and Pathology," NIH, Bethesda, MD, July 17-18, 2001.

Wisor, J., Edgar, D., Yesavage, J., Murphy, G.M. Reduced compensatory response to sleep deprivation in a transgenic mouse model of Alzheimer's disease. Poster presentation at Neurobiology of Aging Conference, San Diego, November 8-9, 2001.

Robinson, C., McCarthy, J., Vincent, V., Cordell, B., Murphy, G.M. Biolistic expression of presenilin augments neuronal apoptosis in organotypic hippocampal explants. Poster presentation at Neurobiology of Aging Conference, San Diego, November 8-9, 2001.

Mitrasinovic, O.M., Zhao, F., and Murphy, G.M. Microglia overexpressing the M-CSF receptor are neuroprotective. Poster presentation at Neurobiology of Aging Conference, San Diego, November 8-9, 2001.

Mitrasinovic, O., Perez, G., Zhao, F., Poon, C., Murphy, G.M. Accelerated phagocytosis of beta amyloid by microglia overexpressing the M-CSF receptor. Presentation at Society for Neuroscience Annual Meeting, San Diego, November 10-15, 2001.

Murphy, G.M., Kremer, C., Rodrigues, H., Schatzberg, A. Genetic variation at the CYP2D6 locus and antidepressant adverse events: effects of the *41 promoter variant. Poster presentation at the Annual Meeting of the American College of Neuropsychopharmacology, Waikaloa Village, Hawaii, December, 9-13, 2001.

Murphy, G.M., Kremer, C., Rodrigues, H., Schatzberg, A. Effects of Genetic Variation at the 5HT 2A Receptor Locus on Paroxetine and Mirtazapine Side Effects in Geriatric Major Depression. Poster presentation at the Annual Meeting of the American College of Neuropsychopharmacology, Waikaloa Village, Hawaii, December, 9-13, 2001.

Mitrasinovic OM, Perez GV, Poon C, Rhee J, Grattan A, Murphy G.M. Distinct Phenotype of Microglia overexpressing *c-fms* gene product in Alzheimer's Disease. Poster presentation at Keystone Symposium "Genotype to Phenotype: Focus on Disease". February 19-24, 2002, Santa Fe, New Mexico.

Murphy, G.M. Pharmacogenetics of the Antidepressant Response. Presentation at the symposium, "Predictors of Response to Antidepressant Drugs." International Society for Affective Disorders Meeting, Taormina, Italy, March 10, 2002.

Murphy, G.M., Kremer C., Rodrigues H., Schatzberg, A. Pharmacogenetics of Mirtazapine and Paroxetine in the Treatment of Geriatric Major Depression. Presentation at First Pharmacogenetics in Psychiatry Meeting, New, New York, April 12, 2002.

Murphy, G.M. Pharmacogenetics in Geriatric Depression. Presentation at symposium, "The Aging Brain and Vulnerability to Depression." American Psychiatric Association 155th Annual Meeting, Philadelphia, Pennsylvania, May 19, 2002.

Fava, M., Schatzberg, A.F., Kremer, C., Murphy, G.M., Rodrigues H., Falk M. Mirtazapine versus paroxetine in elderly patients with anxious depression. Poster presentation at the European College of Neuropsychopharmacology meeting, Barcelona, Spain, October 5-9, 2002.

Murphy, G.M., Hollander, S.B., Rodrigues, H., Schatzberg, A. Effects of the serotonin transporter promoter polymorphism on paroxetine and mirtazapine efficacy and side effects in geriatric major depression. Poster Presentation at 41st Annual meeting of the American College of Neuropsychopharmacology, San Juan, Puerto Rico, December 8-12, 2002.

Wisor, J., Edgar, D.M., Yesavage, J., Ryan, H.S., Murphy, G.M. Reduced compensatory response to sleep deprivation in a transgenic mouse model for Alzheimer's disease. Poster Presentation at 41st Annual meeting of the American College of Neuropsychopharmacology, San Juan, Puerto Rico, December 8-12, 2002.

Murphy, G.M. Antidepressant Pharmacogenetics. Presentation at "Pharmacogenetics in Psychiatry" Study Group, 41st Annual meeting of the American College of Neuropsychopharmacology, San Juan, Puerto Rico, December 8-12, 2002.

Mitrasinovic, O.M., Grattan A.D., Poon, C., Murphy, G.M. Microglial Activation and Phagocytosis is mediated by M-CSF Autocrine and Paracrine Effects and by Tyrosine Kinase Signal Transduction. Poster presentation at 42nd American Society for Cell Biology Annual Meeting, December 14-18, 2002, San Francisco, CA

Murphy, G.M., Hollander, S.B., Rodrigues, H., Schatzberg, A. Effects of the serotonin transporter promoter polymorphism on paroxetine and mirtazapine efficacy and side effects in geriatric major depression. Platform Presentation at 2nd Annual Pharmacogenetics in Psychiatry Meeting, New York, NY, April 11-12, 2003.

Murphy, G.M. Pharmacogenetics of the Antidepressant Response. Presentation at the 58th Annual convention of the Society of Biological Psychiatry, San Francisco, CA, May 15-17, 2003.

Mitrasinovic O.M., Poon, C., Grattan, A., Rhee, J., Lapustea, N. Murphy, G.M. Macrophage colony stimulating factor is essential for microglial amyloid beta phagocytosis and neuroprotection. Society of Neuroscience, 33rd Annual Meeting, November 8-12, 2003. New Orleans, LA, USA.

Murphy, G. M., Hollander S.B, Rodrigues, H., Schatzberg, A. Pharmacogenetics of the Antidepressant Medication Response in the Elderly. Presentation at Annual Meeting of the Society for Neuroscience, New Orleans, LA, November 8-12, 2003.

Murphy, G.M. Novel pharmacogenetic predictors in geriatric depression. Platform Presentation at 3rd Annual Pharmacogenetics in Psychiatry Meeting, New York, NY, April 16-17, 2004.

Murphy, G.M. Pharmacogenetics in Geriatric Major Depression. XXIVth CINP Congress, Paris, France, June 20-24, 2004.

Mitrasinovic, O.M., Lapustea N, Poon C., Murphy, G.M. Signaling pathways mediating M-CSF receptor induction of microglial cytokine expression, phagocytosis, and neuroprotection. Poster presentation at the 43rd Annual Meeting of the American Society for Cell Biology, December 13-17, 2003, San Francisco, CA, USA.

Mitrasinovic, O.M. Lapustea N., Poon C., Chen A.J., Murphy G.M. Accelerated clearance of Amyloid- β by M-CSF activated microglia is accompanied by

activation of Src Tyrosine Kinase. Poster presentation at the 9th International Conference on Alzheimer's Disease and Related Disorders, July 17-22, 2004, Philadelphia, Pennsylvania.

Murphy, GM, Jr., Mitrasinovic O.M., Sullivan, O.M. Microarray Comparison Of gene expression in the hippocampus of aged ApoE3 and E4 transgenic mice. Poster presentation at the 9th International Conference on Alzheimer's Disease and Related Disorders, July 17-22, 2004, Philadelphia, Pennsylvania.

J. Chuu, B. G. Pollock, M. A. Kirshner, B. H. Mulsant, C. F. Reynolds, III, G. M. Murphy, Jr. The MDR1 C3435T variant but not CYP2D6 genotype affects nortriptyline-induced orthostatic hypotension in geriatric patients. Poster Presentation at the 34th Annual Meeting of the Society for Neuroscience, San Diego, CA, October 23-27, 2004.

Mitrasinovic O., Lapustea N., Phong, C., Chen, A., Poon C., and Murphy, G.M. Jr. Microglial clearance of amyloid-beta is regulated by the Src tyrosine kinase. Poster Presentation at the 34th Annual Meeting of the Society for Neuroscience, San Diego, CA, October 23-27, 2004.

Murphy, G.M. Pharmacogenetics. Presentation at the 42nd Annual Meeting of the American College of Psychiatrists, La Jolla, CA, February 23-27, 2005.

Murphy, G.M. Pharmacogenetics in the Treatment of Major Depression. Presentation at 8th Annual Meeting of the College of Psychiatric and Neurologic Pharmacists, San Diego, CA, March 10-12, 2005.

Murphy, G.M. Pharmacogenetics Update. Stanford Psychopharmacology Symposium, Stanford, CA. March 20, 2005.

Murphy, G.M. Pharmacogenetic Predictors in Geriatric Major Depression. Grand Rounds presentation, Department of Psychiatry, Hillside Hospital, Long Island Jewish Medical Center, Great Neck, NY. March 23, 2005.

Murphy, G., Killen, J., Chuu, J., Wang, Y., Fortmann, S. Schatzberg, A.F. Pharmacogenetic Predictors of Smoking Cessation. Fourth Annual Pharmacogenetics in Psychiatry Meeting, New York, NY, April 15-16, 2005.

Murphy, G.M. Pharmacokinetic and Pharmacodynamic Genetic Predictors of Antidepressant Tolerability and Efficacy. NIMH New Clinical Drug Evaluation Unit Meeting, Boca Raton, FL, June 7, 2005.

Mitrasinovic O., Ryan, H., Poon C., Murphy G.M. *Src* Tyrosine Kinase Signaling Regulates Microglial Protection of Neurons from Excitotoxicity. Alzheimer's Association International Conference on Prevention of Dementia. Washington, D.C., June 18-21, 2005.

Mitrasinovic O., Chen A., Ryan H., Phong, C., Poon, C., Murphy, G.M. $Il-1\alpha$ and M-CSF: Neurotoxic or Neuroprotective Markers in Alzheimer's Disease? Alzheimer's Association International Conference on Prevention of Dementia. Washington, D.C, June 18-21, 2005.

Murphy, G.M. Application of microarray technology in psychotropic drug trials. Presentation at 8th IMCPP Conference: "Clinical Pharmacology in Psychiatry: The Genomic Interface". Worcester College, Oxford University, Oxford, UK September 25-28, 2005.

Murphy, G.M. Antidepressant Pharmacogenetics in the Elderly. Presentation at Panel "Arriving Soon to a Clinic Near You: Personalized Psychopharmacology, Using Genes to Predict Drug Response", 2006 Winter Conference on Brain Research, Steamboat Springs, CO, January 21-27, 2006.

Mitrasinovic, O.M., Rajadas, J., Poon, C., Ryan, H., Murphy, G. M. Modulation of $A\beta$ clearance and microglial chemotaxis in NMDA-neuronal injury model by a *Src*/RAGE Mechanism. Poster presentation at Keystone symposium "Alzheimer's Disease: Genes, Cellular Pathways and Therapies", February 21 - 26, 2006, Breckenridge, Colorado.

Murphy, G.M. DNA Predictors of Treatment Outcomes in Geriatric Depression. Presentation at Panel "Biomarkers and Predictors of Treatment Outcomes in Geriatric Depression", Annual Meeting of the American Association for Geriatric Psychiatry, San Juan, Puerto Rico, March 10-13, 2006.

Murphy, G.M. Macrophages in Alzheimer's Disease. Presentation at the Inflammation Research Association symposium "The Macrophage Lineage as a Mediator of Remodeling Diseases", East Brunswick, NJ, March 17, 2006.

Adamson, M.M., Noda, A., Murphy, G.M., Weiner, M., Taylor, J. Brain and Cognitive Relationships in Older Pilots Genetically at Risk for Alzheimer's Disease. Poster presentation at Cognitive Aging Conference, Atlanta, GA, April 20-23, 2006.

Murphy, G.M. Prediction of Antidepressant Drug Response in Geriatric Depression. Presentation at the 62nd Annual Convention of the Society of Biological Psychiatry, San Diego, CA, May 17-19, 2007.

Murphy, G., Killen, J., Lazzeroni, L., Fortmann, S., Schatzberg, A.. Pharmacogenetic Predictors of Smoking Cessation. California Tobacco-Related Disease Research Program Biennial Conference. Sacramento, CA, October 8-9, 2007.

Sarginson, J., Killen, J., Fortmann, S., Lazzeroni, L., Schatzberg, A., Murphy, G. Pharmacogenetic markers for cholinergic effects on smoking cessation. Poster presentation at the 57th Annual Meeting of the American Society for Human Genetics. San Diego, CA, October 23-27, 2007.

Parvathy, S., Rajadas, J., Ryan, H.S., Vaziri, S., Berger, T., Murphy, G.M. A β peptide conformation dependent interleukin-1 α (IL-1 α) expression and uptake by microglial cells. Poster Presentation at Society for Neuroscience Annual Meeting, San Diego, CA, November 4, 2007.

Murphy, G.M. Prediction of Antidepressant Drug Response in Geriatric Depression. Presentation at the 48th Annual NCDEU Meeting, Phoenix, AZ, May 27-30, 2008.

J. Sarginson, L. Lazzeroni, H. S. Ryan, A. F. Schatzberg, G. M. Murphy. Prediction of Antidepressant Drug Response in Geriatric Depression. Poster presentation at the 58th Annual Meeting of the American Society for Human Genetics. Philadelphia, PA, November 11-15, 2008.

Murphy, G.M., Parvathy, S., Wang, G., Ryan, H., Vaziri, S. Genome-wide expression analysis of Alzheimer's disease model transgenic mice fed a high cholesterol diet. Poster Presentation at Society for Neuroscience Annual Meeting, Washington, D.C., November 17, 2008.

Murphy, G.M. Clinical Pharmacogenetic Tests in Psychiatry: Practical Applications. Presentation at Neuroscience Teaching Day Workshop "A Genetics Primer for Geriatric Psychiatry: Beginning the Era of Personalized Medicine". Annual Meeting of the American Association for Geriatric Psychiatry, Honolulu, HI, March 5, 2009.

Sarginson, J., Killen, J., Lazzeroni, L., Fortmann, S., Schatzberg, A., Murphy, G.M. Pharmacogenetic markers for cholinergic effects on nicotine addiction and smoking cessation. Poster Presentation at the 59th Annual Meeting of the American Society for Human Genetics. Honolulu HI, October 20-24, 2009.

Murphy, G.M. ABCB1 Genetic Variation and Clinical Outcomes in the International Study to Predict Optimized Treatment for Depression (iSPOT-D). Platform presentation at the 69th Annual Meeting of the Society of Biological Psychiatry. New York, NY, May 8-10, 2014.

Schatzberg, A.F., DeBattista, C., Etkin, A., Murphy, G.M., Williams, L. ABCB1 genetic variants and neurocognitive function predict antidepressant outcomes: A report from iSPOT-D. Poster presentation at 53rd Annual Meeting of the American College of Neuropsychopharmacology. Phoenix, AZ, Dec 7-11, 2014.

Murphy, G.M. Some Observations on Fifteen Years of Pharmacogenetic Research on Antidepressants (with Alan F. Schatzberg). David A. Mrazek Memorial Award Lecture. Presentation at American Psychiatric Association Meeting, San Francisco, CA, May 20, 2019.