## **CURRICULUM VITAE**

The Johns Hopkins University School of Medicine

Justin Charles McArthur, MBBS, MPH, FAAN, FANA

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# DEMOGRAPHIC AND PERSONAL INFORMATION

# **Current Appointments**

University	
1992-present	Joint appointment, Department of Epidemiology, The Johns Hopkins School of Public Health
1996-present	Professor of Neurology, The Johns Hopkins University School of Medicine
2016-present	John W. Griffin Professor of Neurology, The Johns Hopkins University School of Medicine Hospital
1984-present	Neurological Consultant to The Johns Hopkins Hospital AIDS Service
1994-present	Co-Director, Cutaneous Nerve Laboratory, The Johns Hopkins Hospital
2005-present	Joint appointment, Department of Pathology, The Johns Hopkins Hospital
2008-present	Director, Department of Neurology, The Johns Hopkins Hospital
2009-present	Joint appointment, Department of Medicine, The Johns Hopkins Hospital
2008-present	Director, Johns Hopkins/NIMH Center for Novel Therapeutics of HIV-associated Cognitive Disorders
2017-present	Director, Sheikh Khalifa Stroke Institute, The Johns Hopkins Hospital

## Personal Data

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# **Education and Training**

Undergraduate	
1974-1979	M.B., B.S. (HONS) University of London
1974-1979	Guys Hospital Medical School, London, U.K.
1979	House-officer in Surgery, Guys Hospital, London, U.K.
1980	House-officer in Medicine, Lewisham Hospital, London, U.K.
Graduate	
1988	M.P.H., The Johns Hopkins Bloomberg School of Public Health
Postdoctoral	
1980-1982	Residency, Internal Medicine, The Johns Hopkins Hospital
1982-1985	Residency, Neurology, The Johns Hopkins Hospital
1984-1985	Chief Resident in Neurology, The Johns Hopkins Hospital

### **Professional Experience**

1985-1990	Assistant Professor of Neurology, The Johns Hopkins University
985- 99	Co-Director, Multiple Sclerosis Comprehensive Care Clinic, The Johns Hopkins University
1988-1995	Director, Neurology Medical Student Clerkship, The Johns Hopkins University
1990-1996	Associate Professor of Neurology, The Johns Hopkins University
1995-2005	Director, Neurology Residency Program, The Johns Hopkins University
2005-2006	Acting Director, Department of Neurology, The Johns Hopkins University
2006-2008	Interim Director, Department of Neurology, The Johns Hopkins University
2008-present	Director, Department of Neurology, The Johns Hopkins University
2011-2017	Chair, School of Medicine Professorial Promotions Committee, The Johns Hopkins University

# **RESEARCH ACTIVITIES**

## Publications: Peer-reviewed Original Science Research

- I. McArthur JC: Epidemiology of anorexia nervosa. Guys Hospital Gazette, Jan. 1979, 28-32.
- 2. McArthur JC: Complications of a large pharyngeal pouch. J Roy Soc Med 73:829, 1980.
- 3. Yocum R, McArthur JC, et al: Septic arthritis caused by P. acnes. JAMA 248, 1740-41, 1982.
- 4. Roca R, Klein L, Kirby S, McArthur JC, et al: Recognition of dementia among inpatients. Arch Intern Med 144:73-75, 1984.
- 5. Dans PE, Nevin KL, Seidman CE, McArthur JC, Kariya ST. In hospital CPR 25 years later: Why has survival decreased? South Med J 78(10):1174-1178, 1985.
- 6. Johnson RT and McArthur J: AIDS and the brain. Trends in NeuroSciences 9(3):91-94, 1986.
- 7. Cornblath DR, **McArthur JC**, Kennedy PGE, Witte AS, and Griffin J: Inflammatory demyelinating peripheral neuropathies associated with human T-cell lymphotropic virus type III infection. Ann Neurol 21:32-40, 1987.
- 8. Uematsu S, Rosenbaum AE, Delong MR, Citrin CM, Jankel WR, Kumar AJ, **McArthur JC**, Nauta HJ, Sherman J, Narabayashi H: Magnetic resonance-planned thalamotomy followed by X-ray/CT-guided thalamotomy. Acta Neuro Chirurgica Suppl 39:21-24, 1987.
- 9. McArthur JC: Neurologic manifestations of AIDS. Medicine 66:407-437, 1987.
- 10. **McArthur JC**, Cohen BA, Farzadegan H, Cornblath, DR, Selnes OA, Ostrow D, Johnson RT, Phair J, Polk BF: Cerebrospinal fluid abnormalities in homosexual men with and without neuropsychiatric findings. Ann Neurol 23(suppl):S34-S37, 1988.
- 11. Rance NE, McArthur JC, Cornblath DR, Landstrom DL, Griffin JW, Price DL: Gracile tract degeneration in patients with sensory neuropathy and AIDS. Neurology 38:265-271, 1988.
- 12. Cornblath DR, McArthur JC: Predominantly sensory neuropathy in patients with AIDS and AIDS-related complex. Neurology 38:794-796, 1988.
- 13. Margolick JB, **McArthur JC**, Scott ER, McArthur JH, Cohn S, Farzadegan H, Polk BF: Flow cytometric quantitation of T cell phenotypes in cerebrospinal fluid and peripheral blood of homosexual men with and without antibodies to human immunodeficiency virus type I.
  - J Neuroimmunol 20:73-81, 1988.
- LaFrance N, Pearlson GD, Schaerf FW, McArthur JC, Polk BF, Links JM, Bascom MJ, Knowles MD, Galen SS: I-123 IMP-SPECT in HIV-related dementia. Advances in Functional Imaging 1:9-15, 1988.
- 15. Johnson RT, McArthur JC, Narayan O: The neurobiology of human immunodeficiency virus infections. FASEB | 2:2970-2981, 1988.
- 16. **McArthur JC**, Sipos E, Cornblath DR, Welch D, Chupp M, Griffin DE, Johnson RT: Identification of mononuclear cells in CSF of patients with HIV infection. Neurology 39:66-70, 1989.
- 17. Janssen RS, Cornblath DR, Epstein LG, **McArthur JC**, Price RW (American Academy of Neurology AIDS Task Force): Human immunodeficiency virus (HIV) infection and the nervous system. Neurology 39:119-122, 1989.
- 18. **McArthur JC**, Marek K, Pestronk A, McArthur J, Peroutka SJ: Nifedipine in the prophylaxis of classic migraine: A crossover, double-masked, placebo controlled study of headache frequency and side effects. Neurology 39:284-286, 1989.
- 19. McArthur JC, Cohen BA, Selnes OA, Kumar AJ, Cooper K, McArthur JH, Soucy G, Cornblath DR, Chmeil JS, Wang M-C, Starkey DL, Ginzburg H, Ostrow DG, Johnson RT, Phair JP, Polk BF: Low prevalence of neurological and neuropsychological abnormalities in otherwise healthy HIV-1-infected individuals: Results from the Multicenter AIDS Cohort Study. Ann Neurol 26:601-611, 1989.
- 20. **McArthur JC**, Becker PS, Parisi JE, Trapp B, Selnes OA, Cornblath DR, Balakrishnan J, Griffin JW, Price D: Neuropathological changes in early HIV-1 dementia. Ann Neurol 26:681-684, 1989.
- 21. Uematsu S, Delong M, Jankel W, **McArthur J**, Rosenbaum AE, Nauta H, Narabayashi H: Microphysiological recordings at CT gantry site during stereotactic thalamotomy. Stereotactic and Functional Neurosurg 52:183-190, 1989.
- 22. Uematsu S, Delong M, Jankel W, **McArthur J**, Rosenbaum AE, Nauta HY, Narabayashi H: Intraoperative CT-guided microbiopsy of brain lesions and concomitant use of CT air and angiographic studies. Stereotactic and Functional Neurosurg 52:250-261, 1989.
- 23. Miller EN, Selnes OA, McArthur JC, Satz P, Becker JT, Cohen BA, Sheridan K, Machado AM, van Gorp WG, Visscher B: Neuropsychological performance in HIV-1 infected homosexual men: The Multicenter AIDS Cohort Study (MACS). Neurology 40:197-203, 1990.
- 24. Selnes OA, Miller E, **McArthur J**, Gordon B, Munoz A, Sheridan K, Fox R, Saah AJ: HIV-1 infection: No evidence of cognitive decline during the asymptomatic stages. Neurology 40:204-208, 1990.
- 25. Cornblath DR, Griffin DE, Welch D, Griffin JW, **McArthur JC**: Quantitative analysis of endoneurial T-cells in human sural nerve biopsies. J Neuroimmunol 26:113-118, 1990.
- 26. **McArthur JC**, Kumar AJ, Johnson DW, Selnes OA, Becker JT, Herman C, Cohen BA, Saah A. Incidental white matter hyperintensities on magnetic resonance imaging in HIV-1 infection. J AIDS 3:252-259, 1990.
- 27. Van Wielink G, **McArthur JC**, Moench T, Farzadegan H, McArthur JH, Johnson RT, Saah A: Intrathecal synthesis of anti-HIV IgG: Correlation with increasing duration of HIV-1 infection. Neurology 40:816-819, 1990.

- 28. **McArthur JC**, Griffin JW, Cornblath DR, Griffin DE, Tesoriero T, Kuncl R, Gibbs CJ, Farzadegan H, Johnson RT: Steroidresponsive myeloneuropathy in a man dually infected with HIV-1 and HTLV-1. Neurology 40:938-944, 1990.
- 29. Griffin DE, McArthur JC, Cornblath DR: Soluble interleukin-2 receptor and soluble CD8 in serum and cerebrospinal fluid during human immunodeficiency virus-associated neurologic disease. J Neuroimmunol 28:97-109, 1990.
- Brew BJ, Bhalla RB, Paul M, Gallardo H, McArthur JC, Schwartz MK, Price RW. Cerebrospinal fluid neopterin in human immunodeficiency virus type-I infection. Annals of Neurology 28:556-560, 1990.
- 31. Griffin DE, McArthur JC, Cornblath DR. Neopterin and interferon-gamma in serum and cerebrospinal fluid of patients with HIVassociated neurologic disease. Neurology 41:69-74, 1991.
- 32. Sherman ME, Erozan YS, Mann RB, Kumar AJ, **McArthur JC**, Royal W, Uematsu S, Nauta HJW. Stereotactic brain biopsy in the diagnosis of malignant lymphoma. Am J Clin Pathol 95:878-883, 1991.
- 33. Selnes OA, Jacobson L, Machado AM, Becker JT, Wesch J, Miller EN, Visscher B, **McArthur JC**, Multicenter AIDS Cohort Study. Normative data for a brief neuropsychological screening battery. Perceptual and Motor Skills 73:539-550, 1991.
- 34. MacMahon EME, Glass JD, Hayward SD, Mann RB, Becker PS, Charache P, **McArthur JC**, Ambinder RF. Epstein-Barr virus in AIDS-related primary central nervous system lymphoma. Lancet 338:969-73, 1991.
- 35. van Gorp WG, Satz P, Hinkin C, Selnes O, Miller EN, **McArthur J**, Cohen B, Paz D and the Multicenter AIDS Cohort Study. Metacognition in HIV-1 seropositive asymptomatic individuals: self-ratings versus objective neuropsychological performance. J Clin Exp Neurol 13:812-819, 1991.
- 36. Royal W III, Updike M, Selnes OA, Proctor TV, Nance-Sproson L, Solomon L, Vlahov D, **McArthur JC**. HIV-1 infection and nervous system abnormalities among a cohort of intravenous drug users. Neurology 41:1905-1910, 1991.
- 37. Tyor WR, Glass JD, Griffin JW, Becker PS, **McArthur JC**, Bezman L, Griffin DE. Cytokine expression in the brain during the acquired immunodeficiency syndrome. Ann Neurol 31:349-360, 1992.
- 38. Brew BJ, Bhalla RB, Paul M, Sidtis JJ, Keilp JJ, Sadler AE, Gallardo H, **McArthur JC**, Price R. Cerebrospinal fluid beta-2 microglobulin in patients with AIDS dementia complex: an expanded series including response to zidovudine treatment. AIDS 6:461-465, 1992.
- Nuwer MR, Miller EN, Visscher BR, Niedermeyer E, Packwood JW, Carlson LG, Satz P, Jankel W, McArthur JC. Asymptomatic HIV infection does not cause EEG abnormalities: Results from the Multicenter AIDS Cohort Study. Neurology. Neurology 42:1214-1219, 1992.
- 40. Morriss R, Schaerf F, Brandt J, McArthur J, Folstein M. AIDS and multiple sclerosis: neural and mental features. Acta Psychiatr Scand 85:331-336, 1992.
- 41. McArthur JC, Nance-Sproson TE, Griffin DE, Hoover D, Selnes OA, Miller EN, Margolick JB, Cohen BA, Farzadegan H, Saah A, for the Multicenter AIDS Cohort Study. The diagnostic utility of elevation in cerebrospinal fluid β<sub>2</sub>-microglobulin in HIV-1 dementia. Neurology 42:1707-1712, 1992.
- 42. Selnes OA, **McArthur JC**, Royal W, Updike ML, Nance-Sproson T, Concha M, Gordon B, Solomon L. Vlahov D. HIV-1 infection and intravenous drug use: Longitudinal neuropsychological evaluation of asymptomatic subjects. Neurology 42:1924-1930, 1992.
- 43. Mathews VP, Alo PL, Glass JD, Kumar AJ, **McArthur JC**. AIDS-related CNS cryptococcosis radiologic-pathologic correlation. Am J Neuroradiol 13:1477-1486, 1992.
- 44. Dal Pan GJ, McArthur JH, Aylward E, Sel**nes OA, Nan**ce-Sproson TE, Kumar AJ, Mellits ED, **McArthur JC**. Patterns of cerebral atrophy in HIV-1 infected individuals: Results of a quantitative MRI analysis. Neurology 42:2125-2130, 1992.
- 45. Concha M, Graham NMH, Munoz A, Vlahov D, Royal W, Updike M, Nance-Sproson T, Selnes OA, McArthur JC. Effect of chronic substance abuse on the neuropsychological performance of intravenous drug users with a high prevalence of HIV-I seropositivity. Am J Epidemiol 136:1338-1348, 1992.
- 46. MacMahon EM, Glass JD, Hayward SD, Mann RB, Charache P, **McArthur JC**, Ambinder RF. Association of Epstein-Barr virus with primary central nervous system lymphoma in AIDS. AIDS Res Human Retroviruses 8:740-742, 1992.
- 47. Cohen BA, **McArthur JC**, Grohman S, Patterson B, Glass JD. Neurologic prognosis of CMV polyradiculomyelopathy in AIDS. Neurology 43:493-499, 1993.
- 48. Hoover DR, Munoz A, Carey V, Taylor JMG, Van Raden M, Chmiel JS, Bacellar H, Jacobson LP, Kuo V, Saah A, Farzadegan H, Graham N, Margolick J, **McArthur J** et al. Using events from dropouts in nonparametric survival function estimation with application to incubation in AIDS. J Am Stat Assoc 8:37-43, 1993.
- 49. Satz P, Morgenstern H, Miller EN, Selnes OA, **McArthur JC**, Cohen BA, Wesch J, Becker JT, Jacobson L, D'Elia LF, van Gorp W, Visscher B. Low education as a possible risk factor for cognitive abnormalities in HIV-1: Findings from the Multicenter AIDS Cohort Study (MACS). J AIDS 6:503-511, 1993.
- 50. Weiner HL, Mackin GA, Orav EJ, Hafler DA, Dawson DM, LaPierre Y, Herndon R, Lehrich JR, Hauser SL, Turel A, Fisher M, Birnbaum G, **McArthur J**, Butler R, Moore M, Sigsbee B, Safran A, The Northeast Cooperative Multiple Sclerosis Treatment Group. Intermittent cyclophosphamide pulse therapy in progressive multiple sclerosis: Final report of the Northeast Cooperative MS Treatment Group. Neurology 43:910-918, 1993.
- 51. Tyor, WR, Glass JD, Baumrind N, **McArthur JC**, Griffin, JW, Becker PS, Griffin, DE. Cytokine expression in macrophages in HIV-I associated vacuolar myelopathy. Neurology 43:1002-1009, 1993.

- 52. Wesselingh SL, Power C, Glass JD, Tyor WR, **McArthur JC**, Farber JM, Griffin JW, Griffin DE. Intracerebral cytokine messenger RNA expression in acquired immunodeficiency syndrome dementia. Ann Neurol 33:576-582, 1993.
- 53. Armstrong M, **McArthur JC**, Zinreich SJ. Radiographic imaging of sinusitis in HIV infection. Otolaryngol Head Neck Surg 108:36-43, 1993.
- 54. Zhou SYJ, Kingsley LA, Taylor JMG, Chmiel JS, He DY, Hoover DR, Farzadegan H, Margolick J, **McArthur JC**, Phair JP, Chmiel JS, Wesch J, Wolinsky S, Rinaldo CR, Gupta P, Ho M, et al. A method to test for a recent increase in HIV-1 seroconversion incidence results from the Multicenter AIDS Cohort Study (MACS). Statistics in Medicine 12:153-164, 1993.
- 55. Hestad K, McArthur JH, Dal Pan GJ, Selnes OA, Nance-Sproson TE, Aylward E, Mathews VP, **McArthur JC**. Regional brain atrophy in HIV-1 infection: Association with specific neuropsychological test performance. Acta Neurol Scand 88:112-118, 1993.
- 56. Power C, Kong P-A, Crawford TO, Wesselingh S, Glass JD, **McArthur JC**, Trapp BD. Cerebral white-matter changes in acquired immunodeficiency syndrome dementia: Alterations of the blood-brain barrier. Ann Neurol 34:339-350, 1993.
- 57. Aylward EH, Henderer JD, **McArthur JC**, Brettschneider PD, Harris GJ, Barta PE, Pearlson GD. Reduced basal ganglia volume in HIV-1 associated dementia complex: Results from quantitative neuroimaging. Neurology 43:2099-2104, 1993.
- 58. **McArthur JC**, Hoover DR, Bacellar H, Miller EN, Cohen BA, Becker JT, Graham NMH, McArthur JH, Selnes OA, Jacobson LP, Visscher BR, Concha M, Saah S. Dementia in AIDS patients: incidence and risk factors. Neurology 43:2245-2253, 1993.
- 59. Glass JD, Wesselingh SL, Selnes OA, **McArthur JC**. Clinical-neuropathologic correlation in HIV-associated dementia. Neurology 43:2230-2237, 1993.
- 60. Holland NR, Power C, Mathews VP, Glass JD, Forman M, **McArthur JC**. CMV encephalitis in acquired immunodeficiency syndrome (AIDS). Neurology 44:507-514, 1994.
- 61. Harris GJ, Pearlson GD, **McArthur JC**, Zeger S, LaFrance ND. Altered cortical blood flow in HIV-seropositive individuals with and without dementia: a single photon emission computed tomography study. AIDS 8:495-499, 1994.
- 62. Griffin DE, Wesselingh SL, **McArthur JC**. Elevated central nervous system prostaglandins in HIV-associated dementia. Ann Neurol 35:592-597, 1994.
- 63. Royal W III, Selnes OA, Concha M, Nance-Sproson TE, **McArthur JC**. Cerebrospinal fluid HIV-1 p24 antigen levels in HIV-1related dementia. Ann Neurol 36:32-39, 1994.
- 64. Power C, **McArthur JC**, Johnson RT, Griffin DE, Glass JD, Perryman S, Chesebro B. Demented and non-demented patients with AIDS differ in brain-derived human immunodeficiency virus type I envelope sequences. J Virol 68:4643-4649, 1994.
- 65. Bacellar H. Munoz A, Miller EN, Cohen BA, Besley D, Selnes OA, Becker JT, **McArthur JC**. Temporal trends in the incidence of HIV-1 related neurologic diseases: Multicenter AIDS Cohort Study, 1985-1992. Neurology 44:1892-1900, 1994.
- 66. Dal Pan GJ, Glass JD, **McArthur JC**. Clinicopathological correlations of HIV-1-associated vacuolar myelopathy: An autopsy-based case-control study. Neurology 44:2159-2164, 1994.
- 67. Wesselingh SL, Glass JD, **McArthur JC**, Griffin JW, Griffin DE. Cytokine dysregulation in HIV-associated neurological disease. Advances in Neuroimmunology 4:199-206, 1994.
- 68. Everall IP, Glass JD, **McArthur J**, Spargo E, Lantos P. Neuronal density in the superior frontal and temporal gyri does not correlate with the degree of human immunodeficiency virus-associated dementia. Acta Neuropathol 88:538-544, 1994.
- 69. Selnes OA, Galai N, Bacellar H, Miller EN, Becker JT, Wesch J, Van Gorp W, **McArthur JC**. Cognitive performance after progression to AIDS: A longitudinal study from the Multicenter AIDS Cohort Study. Neurology 45:267-275, 1995.
- 70. Silver SA, Arthur RR, Erozan YS, Sherman ME, **McArthur JC**, Uematsu S. Diagnosis of progressive multifocal leukoencephalopathy by stereotactic brain biopsy utilizing immunohistochemistry and the polymerase chain reaction. Acta Cytologica 39:35-44, 1995.
- 71. Barker PB, Lee RR, **McArthur JC**. AIDS dementia complex: evaluation with proton MR spectroscopic imaging. Radiology 195:58-64, 1995.
- 72. Power C, Selnes OA, Grim JA, McArthur JC. The HIV Dementia Scale: A rapid screening test. J AIDS 8:273-278, 1995.
- 73. Concha M, Selnes OA, **McArthur JC**, Nance-Sproson T, Updike ML, Royal W, Solomon L, Vlahov D. Normative data for a brief neuropsychologic test battery in a cohort of injecting drug users. International Journal of Addictions 30:823-841, 1995.
- 74. Aylward EH, Brettschneider PD, **McArthur JC**, Harris GJ, Schlaepfer TE, Henderer JD, Barta PE, Tien AY, Pearlson GD. Magnetic resonance imaging measurement of grey matter volume reductions in HIV-1 dementia. Am J Psychiatry 152:987-994, 1995.
- 75. Hoover DR, Graham NMH, Bacellar H, Murphy R, Visscher B, Anderson R, **McArthur J.** An epidemiological analysis of mycobacterium avium complex disease in homosexual men infected with human immunodeficiency virus type 1. Clin Infect Dis 20:1250-1258, 1995.
- 76. Tyor WR, Wesselingh S, Griffin JW, **McArthur JC**, Griffin DE. A unifying hypothesis of the pathogenesis of HIV-associated dementia complex, vacuolar myelopathy, and sensory neuropathy. J AIDS 9:379-388, 1995.
- 77. Power C, McArthur JC, Johnson RT, Griffin DE, Glass JD, Dewey R, Chesebro B. Distinct HIV-1 env sequences are associated with neurotropism and neurovirulence. Current Topics in Microbiology and Immunology 202:89-104, 1995.
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- 79. Glass JD, Fedor H, Wesselingh SL, McArthur JC. Immunocytochemical quantitation of human immunodeficiency virus in the brain: Correlations with dementia. Ann Neurol 38:755-762, 1995.
- 80. Rho MB, Wesselingh S, Glass JD, McArthur JC, Choi S, Griffin JW, Tyor WR. A potential role for interferon-in the pathogenesis

of HIV-associated dementia. Brain, Behavior, and Immunity 9:366-377, 1995.

81. Asare E, Dunn G, Glass J, **McArthur J**, Luthert P, Lantos P, Everall I. Neuronal pattern correlates with the severity of human immunodeficiency virus-associated dementia complex. Usefulness of spatial pattern analysis in clinicopathological studies. American Journal of Pathology.

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- 83. Wright EJ, Brew BJ, Currie JN, McArthur JC. HIV-induced neurological diseases. Med J Australia 164:414-417, 1996.
- 84. Blum AS, Dal Pan GJ, Feinberg J, Raines C, Mayjo K, Cornblath DR, McArthur JC. Low dose zalcitabine (ddC) related toxic neuropathy: Frequency, natural history, and risk factors. Neurology 46:999-1003, 1996.
- 85. Johnson RT, Glass JD, McArthur JC, Chesebro B. Quantitation of human immunodeficiency virus in brains of demented and nondemented patients with AIDS. Ann Neurol 39:392-395, 1996.
- 86. Takahashi K, Wesseli**ngh SL, Gri**ffin DE, **McArthur JC**, Johnson RT, Glass JD. Localization of HIV-1 in human brain using polymerase chain reaction/*in situ* hybridization and immunocytochemistry. Ann Neurol 39:705-711, 1996.
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- 90. The Dana Consortium on Therapy for HIV Dementia and Related Cognitive Disorders. Clinical confirmation of the American Academy of Neurology algorithm for HIV-I associated cognitive/ motor disorder. Neurology 47:1247-1253, 1996.
- 91. Hsieh S-T, Choi S, **McArthur JC**, Lin W-M, Griffin JW. Epidermal denervation and its effects on keratinocytes and Langerhans cells. J Neurocytol 25:513-524, 1996.
- 92. Adamson DC, Wildemann B, Sasaki M, Glass JD, **McArthur JC**, Christov VI, Dawson TM, Dawson VL. Immunologic nitric oxide synthase: Elevation in severe AIDS dementia and induction by HIV-I coat protein, gp41. Science 274:1917-1921, 1996.
- Stocks EA, McArthur JC, Griffin JW, Mouton PR. An unbiased method for estimation of total epidermal nerve fiber length. J Neurocytol 25:637-644, 1996.
- 94. Davison SE, Aylward EH, **McArthur JC**, Selnes OA, Lyketsos C, Barta PE, Pearlson GD. A quantitative MRI study of the basal ganglia in depression in HIV seropositive men. J Neuro-AIDS 1:29-41, 1996.
- 95. Sacktor NC, Bacellar H, Hoover DR, Nance-Sproson TE, Selnes OA, Miller EN, Dal Pan GJ, Kleeberger C, Brown A, Saah A, **McArthur JC**. Psychomotor slowing in HIV infection: A predictor of dementia, AIDS, and death. J Neurovirol 2:404-410, 1996.
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- 97. Harrison LH, Vaz, B, Taveira DM, Quinn TC, Gibbs CJ, de Souza SH, **McArthur JC**, Schechter M. Myelopathy among Brazilians coinfected with human T-cell lymphotropic virus type I and HIV. Neurology 48:13-18, 1997.
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- 99. Holland NR, Stocks A, Hauer P, Cornblath DR, Griffin JW, McArthur JC. Intraepidermal nerve fiber density in patients with painful sensory neuropathy. Neurology 48:708-711, 1997.
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- 50. Harrison MJG and McArthur JC. Viruses as opportunistic pathogens in the nervous system. In: (in press).
- 51. Griffin JW, **McArthur JC**, and Cornblath DR. Peripheral nerve disease. In: Evans RW (ed). Diagnostic Testing in Neurology, WB Saunders, Inc, Philadelphia, (in press).
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- 2. Johnson RT, Griffin JW, McArthur JC (eds). Current Therapy in Neurologic Disease, Sixth Edition, Mosby, St. Louis, 2002.
- 3. Asbury AK, McKhann G, McDonald WI, Goadsby PJ, **McArthur JC** (eds). Diseases of the Nervous system: Clinical Neuroscience and Therapeutic Principles, 3<sup>rd</sup> edition, Cambridge University Press, Cambridge, UK, 2002.
- 4. Johnson RT, Griffin JW, McArthur JC (eds). Current Therapy in Neurologic Disease, Seventh Edition, Mosby, Philadelphia, 2006.
- 5. Simpson DM, McArthur JC, Dworkin RH. Neuropathic Pain Mechanisms, Diagnosis and Treatment. Oxford University Press, New York, 2012.

### **Teaching Texts**

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- 2. **McArthur J**: Arthritis. Consumer Health Report. October 1983.
- 3. McArthur J: Cancer, a family of disease. Consumer Health Report. April 1984.
- 4. **McArthur J**: Obesity. Consumer Health Report. July 1984.
- 5. McArthur J: Chronic Obstructive Lung Disease: Bronchitis and Emphysema. Consumer Health Report. September 1984.
- 6. **McArthur J**: Outlines for Stroke Management. In: Management guidelines for various disorders and procedures. Johns Hopkins Hospital Department of Medicine. 1984
- 7. McArthur J: Multiple Sclerosis. Johns Hopkins Medical Grand Rounds XI (2), 1984.
- 8. **McArthur J**: Idiopathic facial paralysis. Hospital Medicine 21(2):13-20, 1985.
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- 10. **McArthur J**: Neurological Manifestations of HIV Infection, prepared for The Committee on a National Strategy for AIDS, Institute of Medicine, National Academy of Sciences, March 1986.
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immunodeficiency virus infection. Plasma Ther Transfus Technol 7:521-526, 1986.

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- 13. McArthur J: Central nervous system complications of human immunodeficiency virus. Am J EEG Technol 27:33-49, 1987.
- 14. **McArthur J**: Central nervous system complications of human immunodeficiency virus. Neurology and Neurosurgery Update Series 7(13):1-8, 1987.
- 15. Royal W III, McArthur JC: HIV-associated neurologic disorders, Part I: Noninfectious problems. J Crit Illness 4:24-36, 1989.
- 16. Royal W III, McArthur JC: HIV-associated neurologic disorders, Part 2: Superimposed infectious causes. J Crit Illness 4:30-42, 1989.
- 17. McArthur J. Bell's Palsy: Diagnosis and treatment. Hospital Medicine 26:81-92, 1990.
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- 19. Griffin JW, **McArthur JC**, Cornblath DR: Peripheral nerve and spinal cord disease in human retrovirus infections. Current Opinion in Neurology and Neurosurgery 3:697-703, 1990.
- 20. Budka H, Wiley, CA, Kleihues, P, Artigas J, Asbury AK, Cho, E-S, Cornblath DR, Dal Canto MC, DeGirolami U, Dickson D, Epstein LG, Isiri MM, et al. HIV-associated disease of the nervous system: review of nomenclature and proposal for neuropathology-based terminology. Brain Pathol 1:143-152, 1991.
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- 23. Dal Pan GJ, McArthur JC. Diagnosis and management of sensory neuropathies in HIV infection. AIDS Clinical Care 6:9-16, 1994
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- 25. McArthur JC. HIV-associated dementia. In: Gilman S, Goldstein GW, Waxman SG (eds). Neurobase, v.4.1, La Jolla, CA, 1994.
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- 27. McArthur JC. Neurologic diseases associated with HIV-1 infection. In: Current Opinion in Infectious Diseases 8:74-84, 1995.
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- 31. McArthur JC and Harrison MJG. Cerebral infections in AIDS: Neurosyphilis. Infect Med 14:60, 65-74, 1997.
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- 36. Harrison MJG and McArthur JC. Cerebral infection in AIDS: Coccidioidomycosis, histoplasmosis, and other fungal infections. Infect Med 15: 474-478, 1998.
- 37. McArthur JC. Understanding the measurement of CSF HIV levels. HIV Neurology Newsletter 1:1, 5-8, 1998. Academy of Continuing Education Programs, Beverly Hills, CA.
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- 41. Andrade A, **McArthur JC.** Report from the 7th CROI (San Francisco, February 2000): update on neurological manifestations of HIV infection. Hopkins HIV Report 12:3, 2000.
- 42. **McArthur JC**. Editorial Comment: Neurologic complications in HIV survivors: More vigilance required. The AIDS Reader 11:448-449, 2001.
- 43. McArthur, JC. Report from the 8th CROI: sensory neuropathy in HIV/AIDS. Hopkins HIV Report 13: 2, 2001.
- 44. McArthur, J. Acute neuromyopathy syndrome. Hopkins HIV Report, 14:5, 2002.
- 45. **McArthur JC** (contributing author). The HIV Medicine Self-Directed Study Guide, 2003 Edition, American Academy of HIV Medicine, AAHIVM, 2003

### **Book Reviews**

1. **McArthur JC.** HIV Neurology, Bruce B (ed), Contemporary Neurology Series, Vol 61, Oxford University Press, 2001. Ann Neurol 51:665-6, 2002.

Inventions, Patents, Copyrights

- 1. Murphy JC, Szczepanowski RP, Schneider W, Meyer RA, **McArthur JC**, Polydefkis M. Device for thermal stimulation of small neural fibers. World Intellectual Property Organization, International Publication Number WO 03/040672 A2, 15 May 2003.
- 2. Murinson BB, McArthur JC. Medical Device for Treatment of Ulnar Neuropathy. UlnarGuard ™ (JHU Ref: 4545)
- 3. Nath A, Hoke A, **McArthur JC**. Immunophilin ligand treatment of antiretroviral toxic neuropathy (Provisional application number 60/466,650)

### FUNDING

#### **Extramural Funding**

Current

Dates: 9/1/10 – 4/30/21 NIMH 2 R25 MH080661-09 Translational Research in Neuro-AIDS and Mental Health Annual Direct Costs: \$215,968 PI: NIMH JCM effort: 0.60

Dates: 05/02/12 - 04/30/22 IP30AI094189 The Johns Hopkins Center for AIDS Research (JHU CFAR) The goals of the JHU CFAR are to 1) Enhance integration ar

The goals of the JHU CFAR are to 1) Enhance integration and productivity of JHU HIV/AIDS research by promoting trans-disciplinary innovation and collaboration across disciplines and university divisions; 2) Recruit new investigators into HIV/AIDS research to address the growing need for knowledge in rapidly emerging areas that affect the AIDS epidemic, e.g., co-infections, co-morbidities, substance abuse, and aging; 3) Provide mentoring for the next generation of HIV/AIDS researchers and to recruit underrepresented minority investigators through mentoring and developmental grants; and 4) Mobilize the capacity of JHU to combat the HIV epidemic in Baltimore through engagement, training, outreach and community-based intervention studies. PI: Chaisson

Role: Co-Investigator

Dates: 05/08/17 - 02/28/22 5P30MH075673

Center for Novel Therapeutics for HIV-associated Cognitive Disorders

The goals of the JHU NIMH Center grant are to: 1. to facilitate collaborative research in HIV-related neuroscience 2. To increase resources for HIV-related neuroscience research at JHU 3. To encourage high-risk, innovative developmental research in Neuro-AIDS 4. To use focused medium throughput screening, using in vitro models to identify novel compounds useful for treatment of HIV-associated cognitive dysfunction5. To identify and validate surrogate biomarkers based on proteomics and lipomics. PI: McArthur, Justin

#### Previous

Dates: 6/30/86 - 12/31/2000 NIAID AI - 27668 AIDS Clinical Trial Unit Annual Direct Costs: \$1,271,543 PI John Bartlett JCM Effort: 10%

Dates: 8/1/86-9/30/87 NIAID NO1 AI 32520 The Natural History of Acquired Immunodeficiency Syndrome (AIDS) in Homosexual Men (Neuropsychologic Component) PI: B. Frank Polk JCM Effort 60% Dates: 8/1/86 - 10/31/89 NINDS ROI NS 23936 Peripheral Neuropathies in AIDS Retrovirus Infection PI: David Cornblath ICM Effort: 10%

Dates: 9/30/87 - 9/29/91 NIAID NO1-AI-72634 The Natural History of Acquired Immunodeficiency Syndrome (AIDS) in Homosexual Men (Neuropsychologic Component) (Neuropsychologic Component Director: Justin McArthur) PI: Alfred Saah JCM Effort: 60%

Dates: 7/1/88 - 6/30/93 NINDS P01 NS 26643 Research Centers for AIDS Dementia and Other Retrovirus-Associated Neurological Disorders Annual Direct Costs: \$973,613 (7/1/92-6/30/93) PI: Richard T. Johnson (Project leader: Justin McArthur) JCM Effort: 20%

Dates: 3/1/91 - 2/29/92 American Cyanamid Company Multidose FLT Study Annual Direct Costs: \$189,752 PI: Charles W. Flexner JCM Effort: 1%

Dates: 1/1/91 - 12/31/91 National Multiple Sclerosis Society, Maryland Chapter Multiple Sclerosis Autonomic Control Program Annual Direct Costs: \$11,750 Pl: Justin C. McArthur JCM Effort: 0%

Dates: 7/1/91 - 6/30/94 NCI R01 CA 55529 EBV as a Tumor Marker in AIDS CNS Lymphoma (to identify HIV positive individuals with primary CNS lymphoma and use CSF PCR techniques for diagnosis) Annual Direct Costs: \$141,644 PI: Richard Ambinder JCM Effort: 10%

Dates: 9/30/91 - 3/31/95 NIAID AI-35042 Multicenter AIDS Cohort Study Annual Direct Costs: \$1,663,638 (4/1/94 - 3/31/95) Annual Direct Costs for Dr. McArthur's component: \$131,932 (4/1/94 - 3/31/95) PI: Alfred Saah JCM Effort: 20%

Dates: 4/01/93 - 4/01/94 Hoescht-Roussel Pharmaceuticals, Inc. Pentoxifylline for HIV dementia (Phase I/II study of pentoxifylline-TNF antagonist) Annual Direct Costs: \$88,000 Pl: Justin McArthur Effort: 5% Dates: 7/1/93 - 6/30/98 NINDS NS-26643 Research Centers for AIDS Dementia Annual Direct Costs: \$735,171 (7/1/97 - 6/30/98) PI: Justin C. McArthur JCM Effort: 17%

Dates: 2/1/94 - 6/30/95 Genentech, Inc. Skin Biopsy Project (to develop skin punch biopsy as a quantitative instrument to assess cutaneous innervation in normal individuals) Annual Direct Costs: \$176,491 Pl: Justin McArthur Effort: 10%

Dates: 1/1/94 -6/30/97 Charles A. Dana Foundation Dana Consortium for the Study of AIDS Dementia (to develop a cohort of individuals at high risk for dementia and initiate pilot studies of novel therapeutic agents) Annual Direct Costs: \$157,000 PI: Justin McArthur Effort: 10%

Dates: 11/1/94 - 12/31/95 Peptech, Inc. Phase II Study of Peptide T in HIV-associated Dementia Annual Direct Costs: \$172,357 Co-PI's: Justin McArthur and Ola Selnes JCM Effort: 10%

Dates: 4/1/95 -3/31/99 NIAID NO1-AI-35042 Multicenter AIDS Cohort Study (Neuropsychological Component Director: Justin McArthur; to develop neurological and neuropsychological testing in a natural history study of HIV infection) Annual Direct Costs: \$781,576 (\$61,184 Dr. McArthur's component) PI: Joseph Margolick JCM Effort: 5%

Dates: 10/1/95 - 9/30/96 (A3095) WW Smith Charitable Foundation Epidermal Denervation in HIV-associated Sensory Neuropathy Annual Direct Costs: \$79,091 PI: Justin McArthur JCM Effort: 5%

Dates: 9/1/95 - 2/28/97 02414-19-RG American Foundation for AIDS Research Effects of denervation on HIV and cytokine production in Langerhans cells Annual Direct Costs: \$78,000 PI: Justin McArthur JCM Effort: 5%

Dates: 1/1/96 - 12/31/00 NIAID AI 27668 AIDS Clinical Trial Unit (to develop clinical trials for HIV-associated neurological diseases) Annual Direct Costs: \$1,271,543 Pl: John Bartlett, Charles Flexner JCM Effort: 10%

Dates: 8/1/96 - 1/31/98 Glaxo-Wellcome, Inc. M970362 Randomized, double-blind, placebo-controlled tolerability, safety, and efficacy studies of 1592U89 in HIV dementia: Placebo-controlled phase/Open label phase Annual Direct Costs: \$173,659 Pl: Ned Sacktor JCM effort: no salary support

Dates: 8/3/96 - 4/30/00 NINDS NS-35736 HIV in the brain: Mode of entry, genotype and dementia Annual Direct Costs: \$178,418 PI: Suzanne Gartner JCM effort: 10%

Dates: 8/1/96 - 12/31/00 Roxane Laboratories Roxane HIV Neuropathy Scholars Program Annual Direct Costs: \$50,000 Pl: Justin McArthur JCM Effort: 5%

Dates: 9/1/96 - 8/31/98 Social & Scientific Systems Examination of Cutaneous Innervation in ACTG 291/Substudy ACTG 860 Annual Direct Costs: \$25,600 PI: Justin McArthur JCM effort: no salary support

Dates: 11/22/96 - 12/31/00 Glaxo-Wellcome, Inc. Lamotrigine in the Treatment of Painful HIV-associated Sensory Neuropathy Annual Direct Costs: \$43,500 Pl: Justin McArthur JCM Effort: 5%

Dates: 12/1/96 - 7/31/04 NINDS I POI NS 32228 Neurologic AIDS Research Consortium (to develop a consortium of 16 sites within the AIDS Clinical Trials Group dedicated to HIV neurological clinical trials) Annual Direct Costs: \$12,400 (base contract, additional per patient costs) PI: David Clifford JCM Effort: 5%

Dates: 7/1/97 - 6/30/98 Blaustein Pain Research Committee Epidermal denervation in painful sensory neuropathies Annual Direct Costs \$25,000 Pl: Justin McArthur JCM effort: no salary support

Dates: 7/28/97 - 9/1/98 Glaxo Wellcome, Inc. Relationship of HIV load and CNS immune activation in patients with neurological disease: correlation with CNS penetration of antiretrovirals Annual Direct Costs: \$42,322 Pl: Justin McArthur JCM effort: no salary support

Dates: 2/1/98 - 1/31/2004 NINDS NS36519 Neurocognitive function, viral load and surrogate markers Annual Direct Costs: \$921,674 (Dr. McArthur's projects: Project 2: \$96,414; Core B \$55,662) Pl: Leon Epstein (University of Rochester) Project 2. (McArthur, Pl) will focus on the prognostic significance of CSF HIV levels for neurologic decline, and examine the relationship between HIV levels and markers of immune activation in plasma, CSF and brain. Core B (McArthur, Pl). Assays of HIV load (NASBA) and for markers of immune activation for all three projects will be centralized at Johns Hopkins. JCM effort: 10%

Dates: 3/1/98 - 2/29/00 Genentech, Inc. Epidermal denervation in HIV-associated painful sensory neuropathies. Examination of cutaneous nerve fiber density in participants in ACTG 291. Annual Direct Costs: \$177,750 Pl: Justin McArthur JCM Effort: 5%

Dates: 7/1/98 - 6/30/01 NINDS NS-26643 Research Centers for AIDS Dementia Annual Direct Costs: \$440,328 (7/1/98 - 6/30/99) PI: Justin C. McArthur JCM Effort: 25%

Dates: 4/1/99 - 3/31/2004 NIH/NIAID AI-35042 Multicenter AIDS Cohort Study Annual direct costs: \$1,175,193 (\$70,388 Dr. McArthur's component) PI: Margolick, Joseph JCM effort: 4%

Dates: 4/1/99 - 3/31/2004 NIAID AI-35042 Multicenter AIDS Cohort Study Annual direct costs: \$1,175,193 (\$70,388 Dr. McArthur's component) PI: Joseph Margolick JCM effort: 4%

Dates: 4/30/99 - 4/30/2001 Hind Health Care A double-blind, placebo-controlled study of 5% lidocaine (Lidoderm) gel for painful peripheral neuropathy in HIV infection PI: Justin McArthur JCM Effort: 5%

Dates: 9/28/99 - 5/31/02 NIMH MH-61438 CNS Metabolic Correlates of HIV Dementia by MRS Imaging Annual direct costs: \$264,516 PI: Martin Pomper JCM Effort: 4% Dates: 12/1/2000 - 11/30/01 Vertex Pharmaceuticals VX00-853-105: A Double blind, randomized, placebo-controlled, eight week pharmacokinetic/ pharmacodynamic study of timcodar dimeslyate in healthy volunteers following topic application of capsaicin. Annual direct costs: \$408,027 PI: Justin McArthur JCM Effort: 3%

Dates: 1/10/01 - 1/9/02 NINDS NS-32228 Rates of epidermal regeneration after capsaicin denervation in ddX toxic sensory neuropathy Annual direct costs: \$76,000 PI: Clifford (McArthur, substudy) JCM effort: 3%

Dates: 7/1/01 - 6/30/03 NINDS NS 26643 Research Center for AIDS Dementia Annual direct costs: \$100,000 (supplemental bridging funds) PI: McArthur, Justin JCM effort: 5%

Dates: 9/30/2001-7/31/2006 NINDS NS43011 Immunopathogenesis of HIV Neurological Disorders Dr. McArthur's section: HIV Sensory Neuropathy: Age, Risk Factors, Immunopathology Annual direct costs: \$865,533 \$108,932 (Dr. McArthur's section) PI: Kraiselburd, UPR, (McArthur, JHU) JCM effort: 20%

Dates: 11/26/01 – 4/30/04 RW Johnson Pharmaceutical Institute Topiramate NP-006 A double-blind placebo controlled study to evaluate the effect of Topiramate vs. placebo in a capsaicin nerve injury model Annual direct costs: \$928,791 PI: Polydefkis, Michael JCM effort: 2%

Dates: 3/1/02 - 2/28/03 Baltimore City Health Department Ryan White Title I Primary Care Annual Direct Costs: \$504,696 Pl: John Bartlett JCM Effort: 10%

Dates: 7/19/02 - 5/31/07 NINDS RO1 NS44807 HIV-sensory neuropathies: risk factors, immunopathology Annual direct costs: \$327,740 PI: McArthur, Justin JCM effort: 18%

Dates: 06/01/03-9/30/04 Neurogesx (C107 study) A Randomized, Double-Blind, Controlled Dose Finding Study of NGX-4010 for the Treatment of Painful HIV-Associated Distal Symmetrical Polyneuropathy. Annual direct costs: \$58,400 PI: McArthur, Justin JCM effort: 1% Dates: 6/15/2003 – 5/31/2008 (JCM support through 6/30/2005) R01 DA014098-01A2 Cognitive consequences of endocrine dysfunction in IDU Annual direct costs: \$ 250,000 PI: Dobs, Adrian JCM effort: 5%

Dates: 3/19/2003 - 6/30/2005 C0603 (McArthur, Justin) Biotechnology General Corp (Savient) A double blind, randomized, placebo-controlled, multicenter Phase II clinical trial to study the safety, tolerability, and efficacy of Prosaptide<sup>™</sup> for the relief of neuropathic pain associated with HIV. Annual direct costs: \$106,000 JCM effort: 1%

Dates: 5/21/03 - 05/20/05 NeurogesX A contract for processing skin biopsies to assess cutaneous innervation in a dose finding study of a new drug for HIV-associated neuropathy. Annual direct costs: \$6720 PI: McArthur, Justin JCM effort 1%

Dates: 06/01/03 - 01/31/06 (C107 study) Neurogesx A Randomized, Double-Blind, Controlled Dose Finding Study of NGX-4010 for the Treatment of Painful HIV-Associated Distal Symmetrical Polyneuropathy. Annual direct costs: \$100,156 PI: McArthur, Justin JCM effort: 1%

Dates: 7/1/2003 – 6/30/2007 POI AI 056297 (Nath, Avindra) Immunophilin ligands for HIV dementia and neuropathy Annual direct costs: PI: Nath, Avindra (JCM: PI Project 5) JCM effort: 15%

Dates: 7/07/03 - 4/30/08 NIMH R01 MH067831 Viral/Cell Determinants of HIV Drug Resistance in CNS Annual direct costs: \$250,000 Pl: Gartner, Suzanne JCM effort: 10%

Dates: 7/15/2003 – 12/31/2007 NIAID RO1 AI057007 Tissue and Cell Reservoirs for HIV Annual direct costs: \$188,412 (6 months) PI: Gartner, Suzanne JCM effort: 5%

Dates: 8/1/03 - 7/31/09 NS-32228 Neurologic AIDS Research Consortium Annual Direct Costs: \$35,000 (Leadership Award) PI: Clifford, David) JCM effort: 5% Dates: 3/12/03 – 8/31/10 N01 MH 22005 Long term effects of potent antiretroviral therapy on HIV-induced nervous system disease (CHARTER) Annual Direct Costs: \$262,240 Pl: Grant, Igor; Site Pl: McArthur, Justin JCM Effort: 3%

Dates: 4/1/2004 – 2/29/2009 NINDS RO1 NS49465 Predicting progression of NeuroAIDS Annual Direct Costs: \$404,509 PI: McArthur, Justin JCM Effort: 10%

Dates: 10/1/2005 – 01/31/2011 TR3760-A-3 (Calabresi) National Multiple Sclerosis Society Mechanisms of Neurodegeneration and Neuroprotection in MS Annual Direct Costs: \$846,969 Pl: Peter Calabresi JCM Effort: 1%

Dates: 02/01/06 - 01/31/07 Pfizer A Randomized, Double-Blind, Placebo Controlled, Parallel-Group, Multi-center Trial of Pregabalin versus Placebo in theTreatment of Neuropathic Pain associated with HIV Neuropathy Annual direct costs: \$122,385 Pl: Anita Venkataramana JCM effort: 1%

Dates: 2/5/07 - 11/30/13 NIAID AI 27668 AIDS Clinical Trial Unit (to develop clinical trials for HIV-associated neurological diseases) Annual Direct Costs: \$710,975 PI: Charles Flexner JCM Effort: 5%

Dates: 3/27/07 - 11/30/11 NIDA R01 DA004334 Natural History of HIV Infection in Injection Drug Users (ALIVE) Annual Direct Costs: \$938,016 PI: Kirk JCM Effort: 2.5%

Dates: 4/16/07 - 3/31/10 NIH R25MH080661 Diversity related Neuro-Aids and Mental Health Research Annual Direct Costs: \$173,716 PI: Nath, Avindra JCM Effort: 5%

Dates: 12/01/08 - 12/30/10 111JC101 A Randomized, Rater-Blinded Study to Explore the Effect of Mefloquine in Subjects with Progressive Multifocal Leukoencephalopathy (PML) Annual Direct Costs: \$157,672 PI: Justin McArthur JCM Effort: 1%

Dates: 06/01/10 - 05/31/11 NIMH P30 MH 075673 Supplement Supplement for PET Scanning Annual Direct Costs: \$65,568 PI: McArthur, Justin JCM Effort: 5%

7/1/2010-6/30/2012

Pfizer A0081251 An Open-Label, Extension Safety Trial of Pregabalin in Subjects with Neuropathic Pain Associated with HIV Neuropathy Annual Direct Costs: \$63,200 Pl: McArthur, Justin JCM Effort: 2.5%

Dates: 4/15/08 - 1/31/13 NIDA R01 DA12568 Incidence of HIV Infection in a Cohort of Injection Drug Users Annual Direct Costs: \$461,973 PI: Mehta ICM Effort: 2.5%

Dates: 04/01/09 - 03/31/12 NINDS K23 NS056009-04 Autonomic Function in Obstructive Sleep Apnea PI: Peltier JCM Effort: 5% Annual Direct Costs: \$2,700

Dates: 05/01/10 - 04/30/12 Pfizer A0081244 "A Randomized, Double-Blind, Placebo-Controlled, Parallel-Group, Multicenter trial of Pregabalin Versus Placebo in the Treatment of Neuropathic Pain Associated with HIV Neuropathy" Annual Direct Costs: \$106,646 Pl: McArthur, Justin JCM Effort: 5%

Chase-Braxton Health Services, Inc. Ryan White Part C Early Intervention Services Annual Direct Cost: \$295,816 PI: Keruly JCM Effort: 5%

Dates: 09/01/10 - 06/30/15 NIMH 2 R25 MH080661-04 Translational research in Neuro-AIDS and Mental Health Annual Direct Costs: \$ 216,530 PI: McArthur, Justin JCM Effort: 2.5%

Dates: 09/16/10 - 09/15/15 NIMH N01MH22005 Long Term effects of potent antiretroviral therapy on HIV-induced nervous system disease (CHARTER) Annual Direct Costs: \$110,996 PI: Grant, Igor JCM Effort: 2.5%

Dates: 07/01/10 - 06/30/15 NINDS T32 NS069351-01 Training Clinician Scientist in Neuroinfectious Disease Annual Direct Cost: \$108,620 PI: McArthur, Justin JCM Effort: 5%

Dates: 09/16/12 - 05/31/14 NIMH R03MH095640 Effect of Antiviral CNS Penetration on CSG/Blood Cytokines and Depression in HIV PI: Treisman JCM Effort: 2.5%

Dates: 07/01/11 – 06/30/16 NIMH P30 MH075673 (McArthur) Center for novel therapeutics for HIV-associated cognitive disorders Annual Direct Costs: \$1,173,544 PI: McArthur, Justin JCM effort: 23%

Dates: 5/2/12-4/30/17 NIAID I P30 AI094189 The Johns Hopkins Center for AIDS Research (JHU CFAR) Annual Direct Costs: \$2,362,228 PI: Richard Chaisson JCM effort: 0.60

Dates: 07/01/17-06/30/18 Saudi Arabian Cultural Mission (307512) SACM Fellowship Training Agreement PI: McArthur, Justin

Dates: 09/27/16 – 08/31/18 ID43TW010340-01 Pittsburgh-Stellenbosch University AIDS-comorbidities Training Research Program (Pitt-SW AICoTRP) The overall objective of our proposed training program is to build a critical mass of the next generation of SA HIV-comorbidities researchers who can independently conduct and promote locally relevant research and become successful, independent investigators. PI: Nachega Role: Program Mentor

Dates: 4/8/14-2/28/19 NIMH I R25 MH100711 Project Pipeline Baltimore: A Brain Sciences Program for High School Students Annual Direst Costs: \$99,618 Pl: Amanda Brown JCM effort: 0.12

Dates: 6/1/15-5/31/20 NIMH P 01 MH105280 Intranasal Insulin Therapy for HIV-associated Neurocognitive Disorders Annual Direct Costs: \$1,062,068 Pl: Justin McArthur and Norm Haughey JCM effort: 2.40 Training Grant Participation

Dates: 9/30/92 - 8/31/02 Clinical Training in HIV Pl: Dr. Richard Chaisson

Dates: 7/1/93 to 6/30/04 Neuromuscular Training Grant PI: Daniel Drachman

Dates: 07/01/01 - 6/30/06 Molecular Pathogenesis and AIDS Related CNS Disease Pl: Janice Clements

# **CLINICAL ACTIVITIES**

# Certification

- Medical Licensure, Maryland (D0027666)
- Diplomat in Internal Medicine, American Board of Internal Medicine (1984)
- Diplomat in Neurology, American Board of Neurology and Psychiatry (1986)

# **Clinical (Service) Responsibilities**

- Neurology Service, Attending, one month per year
- Neurology Outpatient clinics, two half days per week

# **EDUCATIONAL ACTIVITIES**

# Teaching

Classroom Instruction

- 1984 Annual participation in Medical Student Neuropathology Course (Director, 1995-2005)
- 1984 Annual Participation in Neurology Clinical Skills Course
- 2008 Faculty, NINDS Course in Clinical Trials
- 2008 ANA Clinical and Translational Research Course Director

Clinical Instruction

- 1988-1995 Director, Neurology Medical Student Clerkship
- 1988-1995 Coordinator, AIDS Neuropsychiatry Rounds (weekly conference)
- 2010 Coordinator, Clinical Neuroscience Seminar (weekly conference)

CME Instruction - Lectures: (selected)

- "Neurology of AIDS." Topics in Clinical Medicine, Johns Hopkins Hospital, May 17, 1986.
- "Neurological complications of AIDS." National Conference for Practitioners, Baltimore, MD, 1986, 1987, 1988.
- "Neuropathies and myelopathies associated with HIV infection." American Academy of Neurology. Peripheral Nerve Course. New York, NY; April 6, 1987.
- "Neuropathies and myelopathies associated with HIV infection." American Academy of Neurology. Peripheral Nerve Course. Cincinnati, OH; April, 1988.
- "Overview of the Neurological Manifestations of HIV Infection." American Academy of Neurology. Neurological Manifestations of AIDS Course, Cincinnati, OH; April, 1988.
- "Overview of the Neurological Manifestations of HIV Infection." American Academy of Neurology. Neurological Manifestations of AIDS Course, Chicago, IL; April, 1989.
- "Retroviruses and Human Disease. Review and Update in Neurobiology for Neurosurgeons and Neurologists." Marine Biological Laboratory, Woods Hole, MA, November 3, 1988.
- "Neurological Manifestations of HIV Infection." AIDS and the Primary Care Practitioner, Baltimore, October 5, 1989.
- "Central Nervous System Disorders in HIV Carriers." Wellcome Foundation International Seminar Series: Neurological Aspects of HIV Infection. Amsterdam, December 2, 1989.
- "Neurological Manifestations of HIV Infection." American Academy of Neurology, Infectious Disease Course. Miami, April 1990.
- "Neurological Manifestations of HIV Infection." AIDS and the Primary Care Practitioner. Baltimore, November 7, 1990.

- "Neurological Complications of HIV Infection." Neurology for the Primary Practitioner. Baltimore, November 17, 1990.
- "Neurologic Manifestations of HIV Disease." Clinical Care of the Patient with HIV Infection, Baltimore, MD, March 21-22, 1991.
- "Neurologic Manifestations of HIV Disease." Clinical Care of the Patient with HIV Infection, Baltimore, MD, March 12-13, 1992.
- "Neurologic Manifestations of HIV Disease." Clinical Care of the Patient with HIV Infection, Baltimore, MD, April 22, 1993.
- "Neurologic Manifestations of HIV Disease." Clinical Care of the Patient with HIV Infection, Baltimore, MD, April 7, 1994.
- "Update on Neurological Aspects of HIV Infection." Jeanes Hospital, Philadelphia, PA, May 11, 1994.
- "Multiple Sclerosis," Saturday Morning Rounds in Medicine. Johns Hopkins Hospital, September 17, 1994.
- "An Approach to Central and Peripheral Neurologic Disease," Management of the HIV-Infected Patient: A Practical Approach for the Primary Care Physician. Center for Bio-medical Communications, Inc. with American Foundation for AIDS Research (AmFAR), New York, March 31, 1995.
- "Management of the Neurological Complications of HIV Infection." Clinical Care of the Patient with HIV Infection. Baltimore, MD, April 6-7, 1995.
- "Neurologic Diseases in HIV." Clinical Care Options for HIV Symposium, Laguna Niguel, CA June 8-11, 1995.
- "Neuropathology of AIDS." Applications of Unbiased Stereology to Neural Systems. Kent Island, MD, October 23-27. 1995.
- "Neurological Manifestations of HIV Infection." American Academy of Neurology, Infections of the Nervous System Course, San Francisco, CA, March 23-30, 1996.
- "An approach to central neurologic disease." Management of the HIV-infected Patient. A Practical Approach for the Primary Care Practitioner. New York, NY, February 16-18, 1996.
- "An approach to peripheral neurologic syndromes." Management of the HIV-infected Patient. A Practical Approach for the Primary Care Practitioner. New York, NY, February 16-18, 1996.
- "Neurologic Manifestations of HIV Disease." Clinical Care of the Patient with HIV Infection, Baltimore, MD, March 21-22, 1996.
- "Neurological Manifestations of HIV Infection." Practical Neurology for the Primary Care Physician, St. Joseph Hospital, Baltimore, MD March 23, 1996
- "Management of Neurological Disorders in HIV Infection." HIV Disease Management Issues: Update 3. Scottsdale, AZ, November I, 1996.
- "HIV Dementia Screening: Rationale, Interpretation, and Intervention." Fairfax Hospital Health System. Fairfax, VA, February 18, 1997.
- "HIV-associated Dementia: Update and Approach to Therapy." AIDS and the Nervous System Course. American Academy of Neurology, April 19, 1997.
- "Neurology Complications of HIV Infection: Dementia, Myelopathy, Peripheral Neuropathy." Infections of the Nervous System II Course, American Academy of Neurology, April 14, 1997.
- "Infections of the Central Nervous System." Specialty Review in Infectious Disease, The National Center for Advanced Medical Education, Chicago, September 21-25, 1997.
- "CNS Complications of HIV Infection." Specialty Review in Infectious Disease, The National Center for Advanced Medical Education, Chicago, September 21-25, 1997.
- "The Brain as a Sanctuary in HIV." HIV and the Brain. A Continuing Education Symposium, Scientific Exchange, Inc. Toronto, September 27, 1997.
- "HIV-associated Neurological Disease." Reading Hospital Medical Center, November 17, 1997.
- "New Approaches to the Management of HIV-related Neurologic Disease." Optimal Management of HIV Disease: Clinical Conference VI. Ft. Lauderdale, FL, March I, 1998.
- "Neurologic Complications pf HIV." 8<sup>th</sup> Annual Clinical Care of the Patient with HIV Infection, Baltimore, MD, March 31, 1998.
- "AIDS 1998 and Advances in Therapy". AIDS and the Nervous System Course. American Academy of Neurology, Minneapolis, MN, April 26, 1998.
- "Introduction to HIV-related Opportunistic Processes." AIDS and the Nervous System Course. American Academy of Neurology, Minneapolis, MN, April 26, 1998.
- "Management of HIV Neuropathy." In: Peripheral Neuropathies in HIV Disease Symposium during 12<sup>th</sup> World AIDS Conference, Geneva, July 2, 1998.
- "Nerve Growth Factor for Treatment of HIV Neuropathy." HIV Speakers Forum. Comprehensive Management of HIV Disease, Boca Raton, FL, October 22-24, 1998.
- "AIDS 1999 and Advances in Therapy. AIDS and the Nervous System Course. American Academy of Neurology, Toronto, Canada, April 1999.
- "Introduction to HIV-related Opportunistic Processes." AIDS and the Nervous System Course. American Academy of Neurology, Toronto, Canada, April 1999.
- "Neurological Complications of HIV Infection. Infections of the Nervous System Course. American Academy of Neurology, Toronto, Canada, April 1999.

- "Management of Neuropathic Pain in AIDS" Annual Meeting of American Society of Pain Management Nurses. Washington, DC, April16, 1999.
- "Central Nervous System Infections." Neurological and Neurosurgical Emergencies: How to Recognize Early Symptoms and Begin Appropriate Workup and Therapy. Johns Hopkins Medicine, Baltimore, June 26, 1999.
- "Progress in the Therapy of Neuro-AIDS" General Clinical Research Center Lecture Series, Johns Hopkins University, Baltimore, July 7, 1999.
- "Neurological Manifestations of AIDS." 17th Annual Symposium on Practical Neurology for the Primary Care Physician. St. Joseph Medical Center, Baltimore, March 25, 2000.
- "AIDS 2000: Epidemiology and Therapy" AIDS and the Nervous System Course, American Academy of Neurology, San Diego, May 5, 2000.
- "AIDS 2001: Epidemiology and Therapy" AIDS and the Nervous System Course, American Academy of Neurology, Philadelphia, May 6, 2001.
- "AIDS 2002: Epidemiology and Therapy" AIDS and the Nervous System Course, American Academy of Neurology, Denver, April 19, 2002.
- "Emerging Neurologic Complications of HIV." 6<sup>th</sup> annual Controversies in the Management of the HIV-infected Patient. Weill Medical College of Cornell University, New York, November 7, 2003.
- "Infections of the Nervous System." 14<sup>th</sup> Annual Neurology for the Primary Practitioner, Baltimore, MD, December 6, 2003.
- Junior Faculty Development Course. American Neurological Association. San Diego, September 25, 2005.
- "Neurological Complications of HIV." 16<sup>th</sup> Annual Neurology for the Primary Care Practitioner and Neurology for the Neurologist. Baltimore, MD, December 17, 2005.
- "Viral Encephalitis in the Modern Era." 33<sup>rd</sup> Annual Barrow Symposium: Advancements in Neuroscience for the Practicing Neurosurgeon and Neurologist. Phoenix, February 28, 2006.
- "Neurological Complications HIV-related Neuropathies." 16<sup>th</sup> Annual Clinical Care of the Patient with HIV Infection. Baltimore, MD, March 14, 2006.
- "An Update on Central Nervous System Infections." 52<sup>nd</sup> Annual Philip A. Tumulty Topics in clinical Medicine. Baltimore, MD May 7, 2006.
- "HIV-associated Sensory Neuropathies", Complications of Immunosuppressives", "Treatment of Neuropathic Pain", "Use of Skin Biopsies", 27<sup>th</sup> Annual Neurology Update Course, Vanderbilt University School of Medicine, Nashville, TN, June 2006.
- "Complexities of Clinical Trials: A Primer for Patients and Physicians." Second International Rare Neuroimmunologic Disorders Symposium, Baltimore, MD July, 22, 2006.
- "HIV-Associated Dementia: Update Epidemiology and Therapeutics." Clinical Grand Rounds at the Welch Center, Baltimore, MD, January 10, 2007.
- "The Neurological Manifestations of HIV: The Third Decade", 2007 Bernard J. Alpers Lecture, Thomas Jefferson University Jefferson Medical College, Department of Neurology, Philadelphia, PA, April 19, 2007.
- Drug Abuse and Risky Behaviors: The Evolving Dynamics of HIV/AIDS, NIDA, Bethesda, MD, May 8-2007
- "An Update on Central Nervous System Infections", 52<sup>nd</sup> Annual Philip A. Tumulty Topics in Clinical Medicine, Johns Hopkins University, Baltimore, MD, May 7, 2007
- "Low-Grade Cognitive Dysfunction", 17<sup>th</sup> Annual Clinical Care of the Patient with HIV Infection, Johns Hopkins University School of Medicine, Department of Medicine, May 22, 2007
- "HIV-associated neurocognitive disorders: do they really exist?" HIV Center for Clinical and Behavioral Studies, NY State Psychiatric Institute and Columbia University, New York, NY, September 13, 2007
- "Neuropathogenesis in HIV-associated neurocognitive disorders: implications for clinical practice." ICAAC Program, New York, NY September 13, 2007
- "Update on HIV-Associated Neurocognitive Disorders." NIAID Grand Rounds, Bethesda, MD, February 29, 2008
- "NeuroAIDS into the 3<sup>rd</sup> Decade". Cornell University Grand Rounds, New York, NY, July 15, 2008
- "Creating Effective Partnerships between Academia and Industry: Questions to Ask", ANA 1st Annual Summer Course for Clinical and Translational Investigators in Neurology and Neuroscience, August 7, 2008
- "HIV-associated neurocognitive disorders ". Neurology Grand Rounds, Hershey, PA, April 3, 2009
- "Neurophysiology of HIV Infection". HAPS Conference, Baltimore, MD, May 24, 2009.
- "What's new in peripheral neuropathies?", 12<sup>th</sup> International Conference Mechanisms and Treatment of Neuropathic Pain, San Francisco, CA, November 20, 2009.
- "HIV-associated neurocognitive disorders: the hidden epidemic?" Longwood Grand Rounds, Boston, MA, March 24, 2010
- "HIV-associated neurocognitive disorders: the hidden epidemic?" Neurology Grand Rounds at Massachusetts General Hospital, Boston, MA, March 25, 2010
- "HIV-associated neurocognitive disorders: the hidden epidemic?" The 25<sup>th</sup> Annual Erwin Levy Lecture, Washington University in St. Louis, MO, March 26, 2010.

- "HIV and the Nervous System: 3 Decades on". Marriott Wardman Park Hotel, 13<sup>th</sup> Annual Clinical Conference for the Ryan White HIV/AIDS Program, Washington, DC, August 24,2010.
- "HIV-Associated Neurocognitive Disorders: the Hidden Epidemic". Neurology Grand Rounds at University of Kentucky, October 12, 2010.
- "Cognitive Disorders in HIV Infection: The Hidden Epidemic", The Sixth Annual Stanley Aronson, MD Visiting Lectureship, Rhode Island Hospital Department of Neurology, Providence, RI, May 17-18, 2011.
- "Cognitive decline and testing". HIV: Emerging challenges in an on-going epidemic, the Royal Society of Medicine in association with the National Institutes of Health, USA and BASHH. London, UK, September 22-23, 2011.
- "Keynote Address". 5th APSA Northeast Regional Meeting. Temple University, Philadelphia, PA, November 19, 2011.
- "Clinical Trials: Academic Translation and Clinical and Translational Science Awards", The Future of Neuroscience Conference: Neutranslation: Neurologists and Neuroscientists Defining the Next Generation of CNS Therapies. At the American Academy of Neurology, New Orleans, LA, April 27, 2012.
- "Development of Biomarkers: Progress and Pitfalls." Biomarkers for NeuroAIDS, University of Nebraska, Omaha, NE, June 5, 2012.
- "An academic perspective on the role of biomarkers and surrogate endpoints in analgesic clinical trials and the development of improved analgesic treatments". Initiative on Methods, Measurement, and Pain Assessment in Clinical Trials, IMMPACT-XV, Westin Georgetown, Washington, DC, June 22-23, 2012.
- "Medical Frontiers & You". Butler Conference of Leaders. M&T Stadium, Baltimore, MD, September 6, 2012.
- "Emerging Concepts in HIV: What Neurologists Need to Know" Yale School of Medicine, November 6, 2013. NINDS Grand Rounds, NIH, Bethesda, MD, June 3, 2014.
- "Changing Therapies for Neurological Disorders," Johns Hopkins Aramco Healthcare Grand Rounds, Saudi Arabia, August 17, 2015.
- "HIV and the Brain: Lessons for Neurology," University of Massachusetts Medical School Grand Rounds, University of Massachusettes Medical School, January 5, 2016.
- "HIV and the Brain: Lessons for Neurology," Partners Neurology Grand Rounds, Longwood Medical Area, Harvard Institutes of Medicine and Brigham and Women's, Massachusettes General Hospital, January 6-7, 2016.
- Temple University Neuroscience Grand Rounds Presenter, Temple University, Pittsburgh, PA, November 4, 2016.
- "The Future of Neurology," Neurology Grand Rounds, SUNY Downstate Medical Center, Brooklyn, New York, May 4, 2018.
- "Emerging Neurological Infections," Longwood Neurology Grand Rounds, Harvard Institutes of Medicine, Boston, MA, December 5, 2018.

# Mentoring (pre- and post-doctoral)

### Advisees/Mentees

- Eric Sipos, Pre-doctoral Research, 1989, Immunocytochemical characterization of CSF cells in HIV infection
- William Marks, Pre-doctoral Researh, 1990, Intracranial mass lesions in AIDS
- Neil Holland, Pre-doctoral Research, 1991, CMV encephalitis in AIDS
- Matthew Beldon, Pre-doctoral Research, 1992, Clinical pathological studies of vacuolar myelopathy
- Bruce McCarthy, Pre-doctoral Research, 1993, Skin biopsy in peripheral nerve disease
- Dyan Hes, Pre-doctoral Research, 1993, Clinical studies of HIV dementia
- Sam Mir, Undergraduate Research, 1994, Immunocytochemistry and tissue sectioning in cutaneous nerve studies
- Kathryn Crystal, Pre-doctoral Research, 1994-95, Stereological quantitation of epidermal nerve fibers
- Femke Bouwman, Pre-doctoral, 1996, Variation in clinical progression of HIV-associated dementia, (Young Investigators Award -International AIDS Conference, Vancouver, 1996), (Gerrit Jan Mulder award for best research of a graduating medical student in Rotterdam 1996)
- Susan Huang, Pre-doctoral, 1996, Natural history of progressive multifocal leukoencephalopathy in AIDS
- Phil Feaser, Pre-doctoral, 1996, Skin biopsy in sensory neuropathy
- David Wolk, Pre-doctoral, 1997, Diagnostic utility of thallium SPECT
- Saptarsi Haldar, Pre-doctoral, 1997, Natural history of progressive multifocal leukoencephalopathy in AIDS
- Elizabeth Childs, Pre-doctoral, 1997, Plasma viral load and CD4 lymphocytes as predictive markers for HIV-associated dementia
- Rachel Shapiro, Pre-doctoral, 1998, Treatment response for HIV associated sensory neuropathy
- Ann Mwirigi, Pre-doctoral, 2001, Treatment trials for HIV sensory neuropathy
- Carolyn McCue, Pre-doctoral, 2001, Medication adherence studies in HIV infection
- Alexandra Cappiello, Pre-doctoral, 2001, Microarray analysis of cutaneous nerves during regeneration
- Amy Towfighi, Pre-doctoral, 2001, Soluble Fas in the cerebrospinal fluid is a potential marker for the severity and prognosis of HIV-associated dementia
- Anne Austin, Pre-doctoral, 2002, Howard Hughes Scholar: A study to evaluate the feasibility of two electronic medication

reminder systems as tools to increase medication adherence in HIV-infected patients receiving highly active antiretroviral therapy

- Jason Lee, Pre-doctoral, 2006, OCT in HIV infection
- Lynn Wachtmann, Predoctoral, 2006, Platelet count as marker of HIV dementia (MPH Capstone project)
- Catherine Christie, Pre-doctoral, 2006, Epidemiological studies in NeuroAIDS (MPH Capstone project)
- Laura E. Baldassari, Pre-doctoral, 2008, A clinical prediction model for progression from HIV-associated minor cognitive-motor disorder to HIV-dementia
- Yuan-Chun Hsiao, Pre-doctoral, 2009-2010, The evaluation matrix metalloproteinase (MMP I and 7) as predictors of incident HIV in a cohort with Advanced HIV infection
- Harlan Michelle, Pre-doctoral, 2012, HIV-associated neurocognitive disorders
- Jana Lowell, Pre-doctoral, 2013, HIV-associated neurocognitive disorders
- Nikki Baumrind, PhD, Post-doctoral Fellowship, 1990-92, of macrophage-mediated damage in HIV CNS infection
- Mauricio Concha, MD, Post-doctoral Fellowship, 1991-92, Neuropsychological performance of HIV infected IDU's
- Christopher Power, MD, Post-doctoral, Fellowship, 1991-93, Clinical and pathological studies of HIV dementia Canadian research funding/NIH funding
- Gerald Dal Pan, MD, Post-doctoral Fellowship, 1992-94, Clinical trials for HIV neuropathy and dementia; Epidemiology of HIVassociated neurological diseases
- Ponni Subbiah, MD, Post-doctoral Fellowship, 1993-94, Stereological quantitation of neuronal numbers in HIV dementia
- Andrew Blum, MD, Ph.D., Post-doctoral Fellowship 1993-94, ddC toxic neuropathy: Risk factors and natural history
- Kazim Sheikh, MBBS, Post-doctoral Fellowship, 1994-, Complement activation in HIV tissue RO1 funding
- Giuseppe Lauria, Post-doctoral, 1997, Skin biopsy in sensory neuropathy, Italian research funding
- David Herman, Post-doctoral, 1998, Correlation between unmyelinated nerve fiber density in skin and sural nerve biopsies, K23 award
- Bindu Rajan, Post-doctoral, 1999, Regeneration of human epidermal nerves after axonal injury
- Michael Polydefkis, Post-doctoral, 1999-2000, Subclinical sensory neuropathy in late onset restless leg syndrome, Regeneration of human epidermal nerves after axonal injury, K23: Human axonal regeneration in diabetic neuropathy 2001-2006
- Henraya Davis, Post-doctoral, 2000-2001, Neuropsychological dysfunction and medical adherence
- Adriana Andrade, Post-doctoral, 2000-2001, Medical adherence in HIV infection (intervention trial), Henry Christian Award Winner, American Foundation for Medical Research, ROI funding
- Lauren Moo, Post-doctoral, 2001-2002, K23 award
- Sanjay Keswani, Post-doctoral, 2001-2003, In vitro model of dideoxynucleoside toxicity, ROI funding
- Kate Cherry, Post-doctoral, 2001, Epidermal nerve fiber density and mitochondrial DNA in fat with didoxynucleoside exposure, Australian research award
- David Newman-Toker, Post-doctoral, 2002-2007, K23: Building a New Model for Diagnosis of ED Dizzy Patients
- Christopher Gibbons, Post-doctoral (PGY4 resident), 2003, Epidermal nerve fiber density changes, K23 award
- Lan Zhou, Post-doctoral (fellow), 2003, Epidermal nerve fiber density in HIV infection
- Donna Hansel, Post-doctoral (Path resident), 2003, Laser microdissection of human epidermal reinnervation
- Anita Venkataramana, Post-doctoral, 2003-2005, CHARTER cohort studies: antiretroviral effects in NeuroAIDS
- Katrin Wetzel Hahn, Post-doctoral, 2003-2005, Pathophysiology of HIV-associated neuropathies in vitro in dorsal root ganglia cultures and in skin biopsies with a special focus on the allele for apolipoprotein 4
- Kevin Biglan, Post-doctoral, 2003-2005, Parkinson's disease teleneurology, K23
- Diane Thomas, Post-doctoral, 2004-, HIV/Diabetic peripheral neuropathies
- Paul Nyquist, Post-doctoral, 2006, Genetic polymorphisms in stroke (K23 to be submitted 2006), ROI award
- Farrah Matteen, Post-doctoral, 2010, PhD Candidate JHU BSPH
- Edward Hammond, Post-doctoral, 2011, PhD Candidate JHU BSPH, R21 award
- Jennifer Lyons, Post-doctoral, 2012, T32 Fellow: Exserohilum infections after epidural steroids
- Kiran Thakur, Post-doctoral, 2012-2014, T32 Fellow: Cerebral Malaria
- Charlene Gamaldo, Faculty, 2017-2019

# **ORGANIZATIONAL ACTIVITIES**

Institutional Administrative Appointments:

- 1988-1993 Committee on Appointments and Promotions, Department of Neurology
- 1988-1993 Scientific Advisory Subcommittee of the Interdisciplinary Committee on NMR
- 1988-1990 HIV Infection Clinical Studies Review Committee

- 1990-1995 Clinical Research Centers Advisory Committee ٠ 1992-1995 Student Promotions Committee 1993 Faculty Compensation Ad Hoc Committee, School of Medicine • 1994 Neuroscience Critical Path Departmental Steering Committee 1995-2005 Joint Committee on House Staff and Postdoctoral Programs 1996-1998 AIDS Malignancies Program Advisory Committee • 1997-1999 Radiology Advisory Committee 1998 Search Committee for Director, Anesthesia and Critical Care Medicine 1998 Search Committee Chairman for Director, Neurologic Critical Care Unit • 1998-present Department of Neurology Executive Leadership Committee . 2000-2005 Professorial Promotions Committee 2000 Search Committee for Chairman, Department of Internal Medicine 2004-present Medical Scientist Training Program Steering Committee (MD-PhD) • 2008-2011 Agenda Committee for the Advisory Board of the Medical Faculty, School of Medicine 2008 Budget Committee, Clinical Practice Association • 2008-2010 **AUPN Executive Committee** . 2008-present Member, Advisory Board of the Medical Faculty Johns Hopkins School of Medicine 2009 Committee on the Promotion of the Academic Clinician 2009 Committee on Clinical Innovator • 2009-2012 Clinical Practice Association Board of Governors 2010-2011 Office of Johns Hopkins Physicians Executive Committee 2010 Clinical Practice Association Budget, Finance & and Planning Committee Chair . 2010 Institute for clinical and Translational Research, Internal Advisory Board Member • 2011 Search Committee, Chief Administrative Officer, Clinical Practice Association 2011 Professorial Promotions Committee . 2012 Professorial Promotions Committee, Chairman 2012 Study Section Reviewer, NIH 2012 Core Faculty, Armstrong Institute for Patient Safety and Quality • 2013 Search Committee, Director of the Department of Medicine 2013 Search Committee, Executive Director, Ambulatory Services 2013 Search Committee, Co-director, Division of Geriatric Psychiatry and Neuropsychiatry 2013 Johns Hopkins Hospital Board of Trustees Quality Improvement Committee 2014 Johns Hopkins School of Medicine Faculty Compensation Taskforce 2014 Search Committee, Director of the Department of Pathology • 2014 Search Committee, President of Johns Hopkins Medicine International 2014 Office of AIDS Research Advisory Council, Department of Health and Human Services 2014 Search Committee, Director, Department of Medicine 2015 Search Committee, Director of Physical Medicine and Rehabilitation 2016 Search Committee, Director, Neurointensive Care Unit • 2016 Search Committee, Chief Nursing Executive, Johns Hopkins Hospital System • 2016 Search Committee, Director, Department of Psychiatry 2016 Strategic Priority Biomedical Discovery and Performance Leadership Committee • 2017 Internal Advisory Committee of the Program Project grant focused on pathologic alpha-synuclein transmission •
- Editorial Board Appointments
  - 1998-2002 The Journal of Neuro-AIDS
  - I997-present Journal of Neurovirology
  - 1998-present Moore HIV Report
  - I 998-2005 The AIDS Reader
  - 2001-2004 Virology
  - 2001-2018 Future Virology
  - 2014-present Seminars in Neurology

Journal Peer Review Activities

- Neurology
- Annals of Neurology
- Journal Neurology, Neurosurgery and Psychiatry
- Journal of Neurology
- Journal of the Neurological Sciences
- AIDS
- Journal of Acquired Immune Deficiency Syndromes
- New England Journal of Medicine
- American Journal of Medicine
- Medicine
- Archives of Neurology
- Pediatrics
- AIDS Research and Human Retroviruses
- Canadian Foundation for AIDS Research
- Science
- Muscle & Nerve

Advisory Committees, Review Groups/Study Sections

- 1985-1988 Professional Advisory Committee, Maryland Chapter National Multiple Sclerosis Society
- I988-1990 AIDS Task Force, American Academy of Neurology
- I 994-1994 AIDS Clinical Drug Development Committee (ACDDC), Food and Drug Administration
- 1986-1999 Neuropsychology Working Group, Multicenter AIDS Cohort Study Chairman (1986-1998)
- 1988-1994 Scientific Advisory Committee, American Foundation for AIDS Research
- 1990-1994 Infectious Disease Task Force, American Academy of Neurology
- 1991-1999 AIDS Clinical Trial Group (ACTG), Neurology Scientific Committee Chairman (1994-96), Vice-Chairman (1992-1994)
- 1992-1998 Scientific Advisory Committee, HIV Neurobehavioral Research Center, University of California, San Diego
- 1995-1997 American Neurological Association. Long-range Planning Committee (Research)
- 2001 Association of University Professors of Neurology Long Range Planning Retreat (March 19, 2001, Chicago)
- 2001 Performance and Safety Monitoring Board, PET and MRI Imaging of Persistent Lyme Encephalopathy (NINDS)
- 2002-2004 American Neurological Association Scientific Program Committee
- 2002-2004 Association of University Professors of Neurology, 2<sup>nd</sup> Vice President
- 2004 United Council for Neurologic Subspecialties Certification Council
- 2004 Study Section, NeuroAIDS Studies, ZNSI SRB-A (15), April 5, 2004
- 2004 American Society for Experimental NeuroTherapeutics (ASENT)
- 2004-2009 External Advisory Committee member, Neurology Training Grant (T32 pending) Univ. of Washington SOM
- 2005-2009 American Neurological Association, Council
- 2008 Scientific Advisory Board, Landenberg Foundation
- 2011 Mentoring Networks to Enhance Diversity, Study Section, 2011/05 ZMH1 ERB-L(03)S
- 2012 ANA Early Career Development Committee
- 2016-2017 ANA Professional Development Committee, Chair
- 2017-2019 American Neurological Association, President Elect
- 2019 American Neurological Association, President

# Professional Societies

- 1983 American Academy of Neurology
- 2003-2006 Career Development Committee
- 2005 Council member
- 1984-2000 Maryland Neurological Society
- 1991 American Neurological Association (Councillor 2005-2008) (President Elect, 2017)
- 1998 International Society for Neurovirology
- 1999 Association for Patient-Oriented Research (founding member)
- 2001 Association of University Professors of Neurology (1<sup>st</sup> Vice-President 2008- )
- 2004 American Society for Experimental NeuroTherapeutics (ASENT)

- 2010 Fellow, American Academy of Neurology
- 2017 Elected Member, Association of American Physicians
- 2020 Elected Member, National Academy of Medicine

# Conference Organizer

Regional

- 1987-1992 Neurology Coordinator, Annual Topics in Medicine Course (Department of Medicine)
- I996 NINDS-sponsored HIV Neurologic Therapies Workshop, June 1996, Baltimore MD
- 1998 Course Director, AIDS and the Nervous System I and II. American Academy of Neurology Annual Meeting, Minneapolis, MN, April 26, 1998
- 1999 Course Director, Neurological and Neurosurgical Emergencies. Johns Hopkins Medicine, Baltimore, June 25-26, 1999
- 2000 Course Director, AIDS and the Nervous System, American Academy of Neurology Annual Meeting, San Diego, May 5, 2000
- 2001 Course Director, AIDS and the Nervous System, American Academy of Neurology Annual Meeting, Philadelphia, May 2001

# Session Chair

Regional

1990 Scientific Program Committee, Neurological & Neuropsychological Complications of HIV Infection • A Satellite Conference Prior to the VI International Conference on AIDS, Monterrey, June 16 - 19, 1990. 1998 International Organizing Committee, Neuroscience of HIV Infection: Basic and Clinical Frontiers, Chicago, IL, June 3-6, 1998 2001 American Academy of HIV Medicine, Core Curriculum Committee Mentor, NINDS/ANA Career Development Symposium, Toronto, Canada, October 2-3, 2004 2004 • 2011 3<sup>rd</sup> Annual Translational and Clinical Research Course for Clinician-Scientists, American Neurological Association, Baltimore, MD, May 4-6, 2011 2017 Session Chair, The Road Less Traveled: Creative Careers off the Beaten Track, ANA Annual Meeting, San • Diego, California, October 16, 2017 International 1989 Co-Chairman, Scientific Program Committee, Neurological & Neuropsychological Complications of HIV Infection. • A Satellite Conference Prior to the V International Conference on AIDS, Quebec City, May 31 - June 3, 1989. 1991 Scientific Program Committee, Neuroscience of HIV Infection: Basic Science and Clinical Frontiers. A Satellite Conference Prior to the VII International conference on AIDS, Padova, Italy, June 12 - 15, 1991. 1991 International Scientific Committee, First International Conference on the Biopsychosocial Aspects of HIV Infection, September 22-25. 1991. 1992 International Scientific Program Committee, VIII International Conference on AIDS/III STD World Conference, Amsterdam, The Netherlands, July 19 - 24, 1992. 1992 Scientific Program Committee, IV International Conference on Neuroscience of HIV Infection: Basic and Clinical Frontiers, Amsterdam, The Netherlands, July 14, 17, 1992. 1993 Scientific Program Committee, Neuroscience of HIV Infection: Basic and Clinical Frontiers 1993, Vienna, Austria, June 2-5, 1993. 1994 International Scientific Committee, Second International Conference on the Biopsychosocial Aspects of HIV Infection, July 7-10. 1998 Program Chairman. Peripheral Neuropathies in HIV Disease Symposium during 12<sup>th</sup> World AIDS Conference, Geneva, July 2, 1998 1999 Course Director, AIDS and the Nervous System I and II. American Academy of Neurology Annual Meeting, Toronto, Canada, April 1999 2000 Scientific Organizing Committee, Neuroscience of HIV Infection, Edinburgh, June 22-25, 2000 2000 Workshop: Correlation between disease progression and astrocyte apoptosis in HIV-associated dementia. Neuroscience of HIV Infection, Edinburgh, June 22-25, 2000 2000 Workshop: HIV dementia persists despite highly active antiretroviral therapy (HAART) Neuroscience of HIV Infection, Edinburgh, June 22-25, 2000 2002 International Scientific Board, Neuroscience of HIV, Dusseldorf, Germany

Consultantships

- 1988-1989 Advisor to World Health Organization ("Neuropsychiatric manifestations of HIV infection"), Geneva, March
  13-17, 1988 and June 1989
- 1988 Advisor to President's Commission on AIDS (AIDS and the Workplace), Indianapolis, May 9
- 1995 Consultant to U.S. Office of AIDS Research, FY 1997 budget plan
- 1995 NIH NINDS Board of Scientific Counselors, Dec 3-5, 1995
- 2006 FDA Special Advisory Committee (Temporary Consultant) Peripheral and Central Nervous System Drugs Advisory Committee - Tysabri, March 7-8
- 2006- Scientific Advisor, Gliamed Inc
- 2008- Scientific Advisor, CNSBio Inc
- 2013 Chair of panel reviewing NeuroAIDS research (extramural) for Office of AIDS Research
- 2017 External Reviewer, Department of Neurology, Massachusetts General Hospital, Harvard Medical School, June 2017

# RECOGNITION

Awards and Honors

- 1977 Charles Forster Cardiology Prize, Guys Hospital.
- 1977 Certificate, Golding-Bird Obstetrics and Gynecology.
- 1978 Spastics Society Prize for Pediatrics.
- 1978 Guys Hospital Annual Dermatology Prize.
- 1979 Honors in Medicine, University of London.
- 1991 Elected American Neurological Association
- I993 Frank Ford Teaching Award (JHU Annual Teaching Award: Department of Neurology)
- I 994 Elected Alpha Omega Alpha
- 1994 Department of Medicine Osler Housestaff Award in recognition of outstanding contributions to Housestaff teaching
- 1996 Department of Medicine Osler Housestaff Award in recognition of outstanding contributions to Housestaff teaching
- 1998 Department of Medicine Osler Housestaff Award in recognition of outstanding contributions to Housestaff teaching
- 1999 Department of Medicine Osler Housestaff Award in recognition of outstanding contributions to Housestaff teaching
- I999 Selected for School of Medicine, Faculty Leadership Development Program
- 2001 Professor's Award for Distinction in Teaching in the Clinical Sciences
- 2002 "Pathogenesis and therapy of HIV-associated neurological diseases." Distinguished Speaker, Department of Medicine Research Seminar Series, University of Texas Health Science Center, San Antonio, March 5, 2002.
- 2002 Finalist ACGME Parker J. Palmer "Courage to Teach" Award
- 2003 Department of Medicine Osler Housestaff Award in recognition of outstanding contributions to Housestaff teaching
- 2010 Diversity Leadership Council (DLC) Diversity Recognition Award, Johns Hopkins University, May 19
- 2012 Super Doctors-Washington, DC-Baltimore-Northern Virginia
- 2012 Patients' Choice Award Winner
- 2007-2018, 2021 America's Top Doctors
- 2013 Mitchell B. Max Award for Neuropathic Pain, American Academy of Neurology, San Diego, CA March 19
- 2014 Miller-Coulson Academy for Clinical Excellence, Johns Hopkins Bayview Medical Center
- 2015 Neurology Core Clerkship Outstanding Educator Award for Outpatient Clinic
- 2016 6<sup>th</sup> Annual Johns Hopkins School of Medicine Neurology Clinical Faculty Brain Award for Excellence in Teaching
- 2016 Diversity Recognition Award, Johns Hopkins Diversity Leadership Council, Diversity, Inclusion, Excellence
- 2017 A.B. Baker Teaching Recognition Award, American Academy of Neurology

Invited Talks, Panels

- "Neurological Complications of AIDS." Grand Rounds, Christiana Hospital, Wilmington, Delaware, November 1985.
- "Neurological Complications of AIDS." Maryland Neurological Society, January 1986.
- "Neurological Complications of AIDS." National Conference of Practitioners, Washington D.C. March 8, 1986

- "AIDS related dementia." Neurology Grand Rounds. Stanford University California, June 18, 1986.
- "Neurological Aspects of HIV Infection." National Board of Occupational Safety and Health Workshop, Stockholm, Sweden, June 1988.
- "Neuropsychiatric Aspects of AIDS." International Conference, London, England, September, 23, 1988.
- "Neurologic Aspects of HIV Infection." Grand Rounds. Naval Hospital, Bethesda, MD. November 16, 1988.
- "Dementia and Related Neurological Complications of AIDS." Basic Approaches to Common Neurological Disorders. Jefferson Medical College, Philadelphia, February 24, 1989.
- "Neurological Complications of HIV Infection." American Academy of Neurosurgeons Annual Meeting, April 1-4, 1989.
- "AIDS-related Dementia." Columbia University School of Law Symposium, Neuropsychological Impairment of HIV Infected Persons: Implications for the Workplace, April 15, 1989.
- "Primary HIV Infection of the Nervous System." Neurological and Neuropsychological Complications of HIV, Quebec City, June 1, 1989.
- "Neurological Manifestations of HIV Infection." University of Maryland Neurology Grand Rounds, November 3, 1989.
- "Neurological Manifestations of HIV Infection." Medical College of Ohio Symposium "The Clinical Care and Management of the HIV-infected Patient." August 9, 1990.
- "Neurological Manifestations of HIV Infection." International Congress on AIDS, Chulabhorn Research Institute, Bangkok, Thailand, December 17, 1990.
- Visiting Professorship and Grand Rounds. Department of Neurology, Hospital of University of Pennsylvania, May 30, 1991.
- "Toxoplasmosis." Neuroscience of HIV Infection: Basic Science and Clinical Frontiers, Padova, Italy, June 12-15, 1991.
- "AIDS and Dementia." Knight Center for Specialized Journalism. Symposium: "The Brain." Baltimore, MD, October 23, 1991.
- "Management of Neurological Complications of HIV Infection" Management of HIV Disease: Current Clinical Concepts. Bethesda, MD, November 22, 1991.
- "HIV Neurologic Disease: Update on Clinical Manifestations and Pathogenesis of HIV Dementia" VIII International Conference on AIDS, Amsterdam, The Netherlands, July 20-24, 1992.
- "HIV Neurologic Disease: Update on Clinical Manifestations and Pathogenesis of HIV Dementia" FDA Developmental Therapeutics Branch Workshop, Portland ME, July 28-August 1, 1992.
- "HIV Dementia: Incidence and Risk Factors." Association for Research in Nervous and Mental Disease. December 3, 1992.
- "HIV Dementia: Ten Years On." Visiting Professor, University of Pennsylvania, May 12, 1994.
- "HIV Dementia: Ten Years On." Grand Rounds, Johns Hopkins Department of Neurology, May 27, 1994.
- "HIV Dementia: Ten Years On." Grand Rounds, University of Massachusetts, Department of Neurology, June 7, 1994.
- "Neurological Manifestations of HIV Infection," Department of Pathology Grand Rounds, Johns Hopkins Hospital, December 22, 1994.
- "Pathogenesis and Treatment of HIV Dementia." Department of Neurology Grand Rounds, Mt. Sinai Hospital, April 12, 1995.
- "Neurological Manifestations of AIDS." Conference on HIV Infection in the Nervous System, NIDA, Phoenix, AZ, June 1995.
- "Diagnosis and Management of Neurological Complications of AIDS." Grand Rounds, Department of Neurology, Johns Hopkins Hospital, September 7, 1995.
- "Neurological Manifestations of HIV Infection." NINDS Weekly Conference, September 8, 1995.
- "AIDS and New Treatment Strategies." American Electroencephalography Society, Washington, DC, September 10, 1995.
- "Neurological Manifestations of HIV Infection." Department of Neurology Grand Rounds, Walter Reed Army Medical Center, September 13, 1995.
- "AIDS and the Nervous System." Department of Neurology Grand Rounds, University of Maryland Medical Center, February 21, 1996.
- "HIV Dementia: Ten Years on." Neuroscience of HIV Infection. Basic Science and Clinical Frontiers. Paris, France, March 6-9, 1996.
- "CNS Manifestations of AIDS and Neurosurgical Intervention." Grand Rounds, Department of Neurosurgery, Johns Hopkins Hospital, April 17, 1996
- "What Have We Learned about Treatment for HIV Dementia?" NINDS/JHU Neurologic Therapies Workshop, June 17-18, Baltimore, MD, 1996.
- "Epidemiology of NeuroAIDS in adults and children." HIV in the Brain: Pathology and Neurobehavioral Consequences, Office of AIDS, National Institute of Mental Health, Washington, DC, September 4-6, 1996.
- "Neurological Manifestations of AIDS." Grand Rounds, Department of Neurology, University of Massachusetts Medical Center, Worcester MA, November 12, 1996.
- "Pain and Symptom Control in AIDS" Professional Development Course. 15th Annual Scientific Meeting of the American Pain Society, Washington, DC November 14, 1996.
- "Neurological Manifestations of HIV Infection." Grand Rounds, Department of Neurology, Mayo Clinic, November 25, 1996.
- "Skin Biopsy in the Evaluation of Sensory Neuropathies." Grand Rounds, Department of Neurology, Johns Hopkins Hospital, December 9, 1996.
- "Neuro-AIDS." 4th Conference on Retroviruses and Opportunistic Infections. Washington, DC, January 25, 1997.
- "Update on AIDS Neurology." Grand Rounds. Department of Neurosurgery, Johns Hopkins Hospital, April 23, 1997.
- "Neurological Manifestations of HIV Infection" Grand Rounds. Department of Neurology. University of California, San Francisco, April 30, 1997.

- "HIV Dementia." Institute of Human Virology, University of Maryland, Baltimore, August 4, 1997.
- "Neurological Manifestations of HIV Infection." Grand Rounds, Department of Medicine, Northwestern University, Chicago, IL, February 13, 1998.
- "CSF Viral Load and Resistance Compartmentalization." Department of Human Retrovirology, AMC, University of Amsterdam, April 14, 1998.
- "Neurological Manifestations of HIV Infection." Department of Human Retrovirology, AMC, University of Amsterdam, April 15, 1998.
- "HIV-associated Sensory Neuropathy." Department of Neurology, AMC, University of Amsterdam, April 17, 1998.
- "Neurological Manifestations of HIV Infection" Topics in Internal Medicine/Medical Grand Rounds, Johns Hopkins University, Baltimore, May 8, 1998.
- "Trial of Recombinant Human Nerve Growth Factor for HIV-associated Sensory Neuropathy." 12<sup>th</sup> World AIDS Conference, Geneva, July 3, 1998.
- "Neurological Manifestations of HIV Infection." Grand Rounds, University of Kentucky, Department of Neurology, September 10, 1998.
- "Neurological Manifestations of AIDS" Department of Neurology, Neuroradiology, and Neurosurgery Grand Rounds, New York Hospital-Cornell Medical Center, February 10, 1999.
- "Management of Neurological Disorders in AIDS." Department of Infectious Diseases Dinner Seminar, University of Alberta, March 11, 1999.
- "HIV-associated Neurological Disease: An Update on Dementia and Sensory Neuropathy." Department of Neurology Grand Rounds, University of Alberta, March 12, 1999.
- "HIV Load and Dementia" NIMH/NINDS Conference: HIV and the Nervous System: Emerging Issues, Washington, DC, April 15, 1999.
- "Neurological Complications of HIV Infection." Department of Neurology Grand Rounds, University of Pennsylvania, Philadelphia, May 6, 1999.
- "Skin biopsy: A Window on Cutaneous Innervation" Strelitz Diabetes Institute, East Virginia Medical School, Norfolk, VA, May 20, 1999.
- "Clinical Features and Pathophysiology of HIV Neurologic Disease." Division of Hematology Grand Rounds, Johns Hopkins University, Baltimore, July 19, 1999.
- "Neurological Manifestations of HIV Infection." Third Brazil Conference-Johns Hopkins University HIV/AIDS, Rio de Janeiro, October 22, 1999.
- "Neurological Manifestations of HIV Infection." Department of Internal Medicine Grand Rounds, Greater Baltimore Medical Center, Baltimore, October 28, 1999.
- "HIV, Dementia, and the Big, Bad Macrophage." Decade of the Brain Plenary Session, American Academy of Neurology, San Diego, May 4, 2000.
- "HIV-related Peripheral Neuropathies and their Treatment." Neuroscience of HIV Infection, Edinburgh, June 22, 2000.
- "HIV-dementia" Royal Alfred University, Melbourne, Australia, October 10, 2000
- "Update on the Neurological Manifestations of AIDS." Royal Alfred University, Melbourne, Australia, October 11, 2000
- "Skin biopsy-A Window on Cutaneous Innervation" Royal Alfred University, Melbourne, Australia, October 11, 2000
- "HIV and the Nervous System. Past, Present, and Future." Ian Thompson Memorial Symposium, Australian Society for HIV Medicine, Melbourne, Australia, October 13, 2000.
- "HIV sensory neuropathy: update on pathogenesis." Grand Rounds, University of Pennsylvania, Center for AIDS Research, January 18, 2001.
- "CNS HIV Infection." Grand Rounds, Johns Hopkins University School of Medicine, Department of Medicine, January 19, 2001.
- "Neurological Manifestations of HIV Infection." New York Academy of Medicine, January 26, 2001.
- "HIV sensory neuropathy: update on pathogenesis." 8th Conference on Retrovirus and Opportunistic Infections Chicago, IL, February 6, 2001.
- "Update on multiple sclerosis." Grand Rounds, Greater Baltimore Medical Center, March 14, 2001.
- "HIV sensory neuropathy: update on pathogenesis." Grand Rounds, Department of Neurology, Emory University School of Medicine, Atlanta, GA, March 16, 2001.
- "HIV dementia: pathophysiology and therapy." VI<sup>th</sup> International Congress of Neuroimmunology, Edinburgh, Scotland, September 6, 2001.
- "Neuro-AIDS: 20 years of progress? Grand Rounds, Department of Medicine, Columbia University, New York, NY, January 9, 2002.
- "Management of common neurological disorders in AIDS" Grand Rounds, Department of Medicine, University of Texas Health Science Center, San Antonio, March 6, 2002.
- "Neuro-AIDS: 20 years of progress?" Grand Rounds, Department of Neurology, Albert Einstein College of Medicine, New York, May 23, 2002.
- "Neuro-AIDS: New frontiers." 10th Neuroscience of HIV Infection/4th International Neurovirology Conference, Dusseldorf, Germany, June 20, 2002
- "Management of neurological problems in AIDS." 24<sup>th</sup> Western Intermountain Neurological Organization Meeting, Salt Lake City, UT, March 21, 2003
- "Skin biopsy: a new window on neuropathies. 24<sup>th</sup> Western Intermountain Neurological Organization Meeting, Salt Lake City, UT, March 22, 2003
- "Management of the neurological complications of HIV/AIDS" Grand Rounds, UMDMJ-New Jersey Medical School Department of Neurology & Neurosciences, Newark, NJ, May 21, 2003
- "Sensory neuropathies and HIV infection: New Challenges." Plenary lecture "Peripheral Nerve Society, Banff, Canada, July 30, 2003.
- "Sensory neuropathies and HIV infection: New Challenges." Neurology Grand Rounds, Johns Hopkins University, September 4, 2003.
- "Acute meningoencephalitis in chronic HIV infection: Putative CNS escape." HIV Molecular and Clinical Science Workshop, Baltimore, September 3, 2003.

- "An overview of neurologic complications of HIV." Neurology Grand Rounds. University of Maryland, Baltimore, October 1, 2003.
- "Resident to fellow." Successful Transitions in Academic Neurology. Association of University Professors of Neurology, 3<sup>rd</sup> Annual Leadership Course, San Francisco, October 18, 2003.
- "Update on Neuro AIDS." Neuroscience Grand Rounds, College of Medicine, University of Vermont, April 1, 2004.
- "Update on the CNS complications of HIV/AIDS." Department of Neurology. Mt. Sinai School of Medicine, New York, NY, November 15, 2004.
- "Building a Career in Clinical Research." American Society for Experimental NeuroTherapeutics, Washington, DC, March 3, 2005.
- "Management of the neurological complications of AIDS." Albert Einstein College of Medicine. Neurology Grand Rounds, New York, May 12, 2005.
- "Update on sensory neuropathies." 13<sup>th</sup> Conference on Retroviruses and Opportunistic Infections. Denver, February 7, 2006.
- "Neurological manifestations of HIV/AIDS" Neurology Grand Rounds, Mercy Medical Center, Baltimore, MD, February 22, 2006.
- "NeuroAIDS and Virology." National Institute of Drug Abuse Conference. NeuroAIDS, Drug Abuse, and Inflammation: Building a Collaborative Research Agenda. Bethesda, MD, March 23, 2006
- "Neurological Complications of HIV Infection: Diagnosis and Therapy." Department of Medicine Grand Rounds, Johns Hopkins University School of Medicine, Baltimore, MD, March 24, 2006.
- "HIV-associated sensory neuropathies: an update." Neurology Grand Rounds, New York University School of Medicine, March 28, 2006.
- "Neurological complications of HIV/AIDS. "Neurology Grand Rounds, Brigham and Women's Hospital, Boston, MA, April 12, 2006.
- "HIV-associated sensory neuropathies: Springtime in Nerveland" Neurology Grand Rounds, Massachusetts General Hospital, Boston, MA, April 13, 2006.
- "Present and Future Challenges in HIV-associated Neurocognitive Disorders: Johns Hopkins University, Welch Center, Baltimore, MD, Jan 10, 2007
- "Viral Encephalitis in the Modern Era" 33<sup>rd</sup> Annual Barrow Symposium, Advancements in Neurosciences for the Practicing Neurosurgeon and Neurologist, Barrow Neurological Institute, Phoenix, AZ Feb 28, 2007.
- "Lecture topic forthcoming" Cephalon-Temple Translational Medicine Colloquium, Philadelphia, PA, March 28, 2007.
- "Lecture topic forthcoming" The Second HIV Infection and the Central Nervous System: Developed and Resource Limited Settings and the Symposium "Evolving Mechanisms of HIV Neuropathogenesis in the HAART era: Domestic and Global Issues. San Servolo-Venice, Italy, April 14-16, 2007.
- "The Neurological Manifestations of HIV: The Third Decade" 2007 Bernard J. Alpers Lecture at Thomas Jefferson University, Philadelphia, PA, April 19, 2007.
- "An Update on Central Nervous System Infections" 52<sup>nd</sup> Annual Philip A. Tumulty Topics in Clinical Medicine, Johns Hopkins University, Baltimore, MD, May 7, 2007.
- "What's new in HIV Sensory Neuropathy?" 10<sup>th</sup> International Conference on the Mechanisms and Treatment of Neuropathic Pain. Salt Lake City, UT, November 2, 2007.
- "Overview of axonal neuropathies: diabetic, HIV, amyloid and chemotherapy" CONCEPPT Meeting, Washington, DC, October 2, 2013.
- "Summary and Changes to the Faculty Promotions Process" Department of Oncology Faculty Meeting, Baltimore, MD, July 10, 2014.
- "Overview and Progress" Johns Hopkins Internship in Brain Sciences Reunion, Baltimore, MD January 10, 2015.
- "Report of the Dean's Taskforce on Faculty Compensation" Johns Hopkins Faculty Senate, Panel of Speakers, Baltimore, MD, February 18, 2015.
- "Translational Neuroscience: Johns Hopkins Neurology" Translational Neuroscience Symposium, Baltimore, MD, February 25, 2015.
- "What are my options if I don't get a K award? Successful Career Pathways at Hopkins" Johns Hopkins Faculty Retreat, Baltimore, MD, March 3, 2015.
- "Professorial Promotion" Johns Hopkins University, Professor's Luncheon, Baltimore, MD, March 5, 2015.
- "HIV and the CNS" Johns Hopkins University, Noon Conference for Neurology Residents, Baltimore, MD, March 13, 2015.
- "How to Integrate Patient Care, Research and Teaching," Keynote Speaker, Collaboration in Health and Medical Research Conference, University of Melbourne, Australia, March 18, 2015.
- "Creating a Globally Recognized Center of Research Collaboration Excellence," Keynote Speaker, Collaboration in Health and Medical Research Conference, University of Melbourne, Australia, March 19, 2015.
- "Creating a Globally Recognized Center of Research Collaboration Excellence," South Australian Health and Medical Research Institute, Adelaide, South Australia, March 27, 2015.
- "HIV Neuropathogenesis," Principles of Neuroimmunology, Johns Hopkins Hospital, April 7, 2015.
- "HIV Neuropathogenesis" Principles in Neuroimmunology, Baltimore, MD, April 9, 2015.
- "How to Be Successful in Academic Neuroscience Keynote Address: Academic Neuroscience in the Modern Era," AAN Conference, Washington, D.C., April 18, 2015.
- "Getting and Staying Funded," Seventh Annual Translational and Clinical Research Course, Mt. Washington Conference Center, July 21, 2015.
- Keynote Speaker Richard T. Johnson Lectureship 14<sup>th</sup> International Symposium on NeuroVirology and 2016 Conference of HIV in the Nervous System, Toronto, Ontario, Canada, October 28, 2016.

- "Top Five Things to Know About Your Brain," A Woman's Journey, Baltimore, Maryland, November 5, 2016.
- "Top Five Things to Know About Your Brain," A Woman's Journey, Palm Beach, Florida, January 26, 2017.
- "Foundation Awards/Fellowship Grants," ANA 9<sup>th</sup> Annual Translational and Clinical Research Course for Clinician Scientists, Chicago, IL, July 25, 2017.
- "Successful Grant Writing," 2017 ANA Annual Meeting and/or Big Science and the Brain Initiative Symposium, San Diego, California, October 17, 2017.
- "The Clinical Picture in a Well-Surpressed Patient (US): from Pathology to Clinical Manifestations," NeuroHIV in the ART Era, National Institute of Health, Bethesda, MD, October 23 and 24, 2017.
- "HIV and the Nervous System," Johns Hopkins University Neuroscience Course, October 26, 2017.
- "Top Five Things to Know About Your Brain," A Woman's Journey, Baltimore, Maryland, November 11, 2017.
- "The Emerging Epidemic of Neurological Disease: a focus on Alzheimer Disease," Columbia University Mailman School of Public Health, New York, NY, February 26, 2018.
- "The Potential for Important Research Contributions by Neurologists," 2018 NINDS R25 Workshop, Bethesda, MD, March 17, 2018.
- "The Future is Now: Neurology Comes of Age as a Therapeutic Discipline," Keynote Speaker, Neurobiology of Disease Seminar, University of Michigan, Ann Arbor, MI, May 30, 2018.
- "Emerging Infections: What Neurologists Should Know," Neurology Grand Rounds, Northwestern University, Feinberg School of Medicine, Chicago, IL, February 18, 2021. (Zoom)
- "Emerging Infections: What Neurologists Should Know," Neurology Grand Rounds, Northwell Health System, Zucker School of Medicine, Hofstra University, Long Island, NY, May 7, 2021. (Zoom).
- "Emerging Neurological Infections" Neurology Grand Rounds, New York University, School of Medicine, New York, NY, January 18, 2022

## Visiting Professorships

- Department of Neurology, Hospital of the University of Pennsylvania May 30, 1991
- Department of Neurology, Hospital of the University of Pennsylvania May 12, 1994
- Department of Neurology, Mt. Sinai School of Medicine April 12, 1995
- Department of Neurology, University of Massachusetts, November 12, 1996
- Department of Neurology, Mayo Clinic, November 25, 1996
- Department of Human Retrovirology, AMC, University of Amsterdam, April 13-17, 1998
- Department of Neurosciences, University of Alberta, March 11-12, 1999.
- Departments of Infectious Disease and Neurology, Royal Alfred University, Melbourne, Australia, October 9-14, 2000
- Department of Neurology, Emory University School of Medicine, Atlanta, GA, March 16, 2000
- Department of Neurology, College of Medicine at the University of Vermont and Neurology Health
- Care Service at Fletcher Allen Health Care, April 1, 2004.
- Department of Neurology, Mayo Clinic, April 6-7, 2009
- Department of Neurology, University of California, San Francisco, Aird Professorship, San Francisco, CA, October 11-13, 2011.