

Curriculum Vitae
The Johns Hopkins University School of Medicine

DEMOGRAPHIC INFORMATION

Current Appointments:

- 1999-05 Assistant Professor of Neurology, Johns Hopkins University, Baltimore, Maryland
- 1999- Staff Neurologist, Johns Hopkins Hospital, Baltimore, Maryland
- 2001- Staff Pathologist, Johns Hopkins Hospital, Baltimore, Maryland
- 2001- Assistant Director, Neuromuscular Histopathology Lab., Johns Hopkins Hospital, Baltimore, Maryland
- 2002-05 Assistant Professor of Neuroscience, Johns Hopkins University, Baltimore, Maryland
- 2005-09 Associate Professor of Neurology and Neuroscience, Johns Hopkins University, Baltimore, Maryland
- 2005- Director, Neuromuscular Division, Department of Neurology, Johns Hopkins Hospital, Baltimore, Maryland
- 2006- Director, Neuromuscular Medicine Fellowship Program, Department of Neurology, Johns Hopkins Hospital, Baltimore, Maryland
- 2009- Professor of Neurology and Neuroscience, Johns Hopkins University,

Personal Data:

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Education:

i) Medical School

1982-1988 Doctor of Medicine, Faculty of Medicine, Hacettepe University, Ankara, Turkey

ii) Graduate School

- 1988-1989 PhD Program on Neurobiology, University of Illinois at Champaign-Urbana, Illinois (transferred to Case Western Reserve University)
- 1989-1994 Doctor of Philosophy, Department of Neurosciences, Case Western Reserve University, Cleveland, Ohio; Thesis Advisor: Jerry Silver Ph.D.

iii) Residencies/Fellowship

- 1990-1992 Internal Medicine Residency, MetroHealth St. Luke's Hospital, Cleveland, Ohio
- 1994-1997 Neurology Residency, Johns Hopkins University School of Medicine, Baltimore, Maryland
- 1997-1999 Neuromuscular Fellowship, University of Calgary, Department of Clinical Neurosciences, Calgary, Alberta, Canada

iv) Other professional training

- 2005-2006 Graduate Certificate Program in “Leadership and Management in the Life Sciences” Johns Hopkins University, School of Professional Studies in Business and Education, Baltimore, Maryland
- 2010 Johns Hopkins University Leadership Development Program

Previous Professional Experience:

- 1992-4 Staff Physician, St. Luke's Hospital Emergency Physicians Inc., Cleveland, Ohio
- 1998-9 Staff Neurologist, Southern Alberta HIV Clinic, Calgary, Alberta, Canada

RESEARCH ACTIVITIES

Publications

(i) Peer-reviewed Original Research Articles:

1. Höke, A., Canning, D.R., Malemud, C.J. and Silver, J. (1994) “Regional Differences in Reactive Gliosis Induced by Substrate-Bound β -Amyloid” *Experimental Neurology* Vol: 130, pp: 56-66
2. Höke, A. (1994) “Astrocyte Proteoglycans in a Model of Reactive Gliosis” *Doctoral Thesis*, Case Western Reserve University, Cleveland, OH.
3. McKeon, R.J., Höke, A. And Silver, J. (1995) “Injury-Induced Proteoglycans Inhibit the Potential for Laminin-Mediated Axon Growth on Astrocytic Scars” *Experimental Neurology* Vol: 136, pp: 32-43
4. Canning, D.R., Höke, A., Malemud, C.J. and Silver, J. (1996) “A Potent Inhibitor of Neurite Outgrowth that Predominates in the Extracellular Matrix of Astrocytes” *International Journal of Developmental Neuroscience*. Vol: 14(3), pp: 153-175
5. Levy, D., Höke, A. and Zochodne, D.W. (1999) “Local Expression of Inducible Nitric Oxide Synthase in an Animal Model of Neuropathic Pain” *Neuroscience Letters* Vol: 260, pp: 207-9
6. Zochodne, D.W., Verge, V.M.K., Cheng, C., Höke, A., Jolley, C., Thomsen, K., Rubin, I. and Lauritzen, M. (2000) “Nitric Oxide Synthase Activity and Expression in Experimental Diabetic Neuropathy” *J Neuropathol Exp Neurol*, Vol: 59, pp:798-807
7. Levy, D., Tal, M., Höke, A. and Zochodne, D.W. (2000) “Transient Action of the Endothelial Constitutive Nitric Oxide Synthase (ecNOS) Mediates the Development of Thermal Hypersensitivity Following Nerve Injury” *European Journal of Neuroscience*, Vol: 12, pp:2323-32
8. Höke, A., Cheng, C. and Zochodne, D.W. (2000) “Expression of Glial Cell Line-Derived Neurotrophic Factor Family of Growth Factors in Peripheral Nerve Injury in Rats” *Neuroreport* Vol: 11(8), pp:1651-4.

9. Sezen, S., **Höke, A.**, Burnett, A.L., and Snyder, S.H. (2001) "Immunophilin Ligand FK506 is Neuroprotective for Penile Innervation" **Nature Medicine**, Vol 7 (10), pp:1073-4
10. **Höke, A.**, Sun, H.S., Gordon, T. and Zochodne, D.W. (2001) "Denervated Peripheral Nerve Trunks Become Ischemic: The Impact of Chronic Denervation on Vasa Nervorum" **Experimental Neurology**, Vol: 172, pp: 398-406
11. **Höke, A.**, Gordon, T., Zochodne, D.W. and Sulaiman, A., (2002) "Lack of Glial cell line-Derived Neurotrophic Factor upregulation correlates with impaired regeneration after long-term denervation" **Experimental Neurology**, Vol: 173, pp: 77-85
12. Luo, Y., Cai, J., Ginis, I., Sun, Y., Lee, S., Yu, S.X., **Höke, A.** and Rao, M. (2003) "Designing, testing and validating a focused stem cell microarray for characterization of neural stem cells and progenitor cells", **Stem Cells**, Vol: 21 (5), pp: 575-587
13. Keswani, S., Polley, M., Pardo, C., McArthur, J.C., Griffin, J.W. and **Höke, A.** (2003) "Schwann cell chemokine receptors mediate HIV-1 gp120 toxicity to sensory neurons" **Annals of Neurology**, Vol: 54, pp: 287-96
14. **Höke, A.**, Ho, T., Crawford, T. LeBel, C., Hilt, D. and Griffin, J.W. (2003) "Glial Cell Line-Derived Neurotrophic Factor Alters Axon-Schwann Cell Units and Promotes Myelination in Unmyelinated Nerve Fibers", **Journal of Neuroscience** Vol: 23, pp: 561-7
15. Keswani, S., Chander, B., Hasan, C., McArthur, J.C., Griffin, J.W. and **Höke, A.** (2003) "FK506 is neuroprotective in a model of Antiretroviral Toxic Neuropathy", **Annals of Neurology**, Vol: 53, pp: 57-64
16. Keswani, S., Leitz, G.J. and **Höke, A.** (2004) "Erythropoietin is neuroprotective in models of HIV sensory neuropathy" **Neuroscience Letters**, Vol: 371(2), pp: 102-5
17. Heine, W., Conant, K., Griffin, J.W., and **Höke, A.** (2004) "Transplanted neural stem cells promote axonal regeneration through chronically denervated peripheral nerves", **Exp Neurol**, Vol: 189 (2), pp: 231-240
18. Kennedy, J.M., **Höke, A.**, Johnston, J.B., Zochodne, D.W., and Power, C. (2004) "Peripheral neuropathy in FIV infection: evidence of axonal injury", **AIDS**, Vol: 18, pp: 1241-50
19. Keswani, S. Rosenberg, B., and **Höke, A.**, (2004) "The use of GAP-43 mRNA quantification in high throughput screening of putative neuroprotective agents in dorsal root ganglion cultures", **Journal of Neuroscience Methods**, Vol: 136 (2), pp: 193-5
20. Keswani, S., Buldanlioglu, U., Fischer, A., Reed, N., Polley, M., Liang, H., Zhoi, C., Jack, C., Leitz, G.J. and **Höke, A.** (2004) "A novel endogenous erythropoietin mediated pathway prevents axonal degeneration" **Annals of Neurology**, Vol: 56(6), pp: 815-26
21. Ginis, I., Luo, Y., Miura, T., Theis, S., Brandenburg, R., Gerecht-Nir, S., Amit, M., **Höke, A.**, Carpenter, M., Itskovitz-Eldor, J. and Rao, M.S. (2004) "Differences between human and mouse embryonic stem cells", **Developmental Biology**, Vol: 21 (5), pp: 575-87

22. Cai, H., Lin, X., Xie, C., Laird, F.M., Lai, C., Wen, H., Chiang, H-C., Shim, H., **Höke, A.**, Price, D.L., and Wong, P.C. (2005) "Motor coordination and learning deficits, increased anxiety, and susceptibility to oxidative stress in mice lacking ALS2", **Journal of Neuroscience**, Vol: 25(33), pp: 7567-74
23. Allaf, M., **Höke, A.**, and Burnett, A.L. (2005) "Erythropoietin promotes the recovery of erectile function following cavernous nerve injury", **Journal of Urology**, Vol: 174(5), pp: 2060-4
24. Mi, R., Luo, Y., Cai, J., Limke, T. L., Rao, M. S., and **Höke, A.** (2005) "Immortalized neural stem cells differ from non-immortalized cortical neurospheres and cerebellar granule cell progenitors ", **Exp Neurol**, Vol: 194(2), pp: 301-19
25. Bolaños-Meade, J., Zhou, L., **Höke, A.**, Corse, A., Vogelsang, G and Wagner, K.R. (2005) "Hydroxychloroquine Causes A Severe Vacuolar Myopathy in a Patient with Chronic Graft-Versus-Host Disease" **American Journal of Hematology**, Vol: 78(4), pp: 306-9
26. Zhou, Z., **Höke, A.**, Cornblath, D.R., Griffin J.W., and Polydefkis, M. (2005) "APOE epsilon4 is not a susceptibility gene in idiopathic or diabetic sensory neuropathy" **Neurology**, Vol: 64(1), pp: 139-41.
27. Keswani, S.C., Jack, C., Zhou, C. and **Höke, A.** (2006) "Establishment of a rodent model of HIV-associated sensory neuropathy", **J Neurosci**, Vol: 26(40), pp: 10299-304
28. Melli, G., Jack, C., Lambrinos, G.L., Ringkamp, M. and **Höke, A.** (2006) "Erythropoietin protects sensory axons against paclitaxel-induced distal degeneration", **Neurobiol Dis**, Vol: 24(3), pp: 525-30
29. **Höke, A.**, Redett, R., Hameed, H., Jari, R., Zhou, C., Li, Z.b., Griffin, J.W., and Brushart, T.M. (2006) "Schwann cells express motor and sensory phenotypes that regulate axon regeneration", **J Neurosci** Vol: 26(38), pp: 9646-55
30. Deshpande D.M., Kim Y.S., Martinez T., Carmen J., Dike S., Shats I., Rubin L.L., Drummond J., Krishnan C., **Höke A.**, Maragakis N., Shefner J., Rothstein J.D., Kerr D.A. (2006) "Recovery from paralysis in adult rats using embryonic stem cells", **Annals of Neurology**, Vol: 60(1), pp: 32-44
31. Pettersen, J.A., Jones, G., Worthington, C., Krentz, H.B., Keppler, O.T., **Höke, A.**, Gill, J. and Power, C. (2006) "Sensory neuropathy in human immunodeficiency virus/acquired immunodeficiency syndrome patients: Protease inhibitor-mediated neurotoxicity", **Annals of Neurology**, Vol: 59(5), pp: 816-24
32. Melli, G., Keswani, S.C., Fischer, A., Chen, W., and **Höke, A.** (2006) "Spatially distinct and functionally independent mechanisms of axonal degeneration in a model of HIV-associated sensory neuropathy", **Brain**, Vol: 129(5), pp: 1330-8
33. Zhu Y., Antony J.M., Martinez J.A., Glerum D.M., Brussee V., **Höke A.**, Zochodne D. and Power C. (2007) "Didanosine causes sensory neuropathy in an HIV/AIDS animal model: impaired mitochondrial and neurotrophic factor gene expression", **Brain**. Vol: 130(8), pp: 2011-23

34. Chew, S.Y., Mi, R., **Höke, A.**, and Leong, K. (2007) "Aligned Protein-Polymer Composite Fibers Enhance Nerve Regeneration: A Potential Tissue-Engineering Platform", **Advanced Functional Materials**, Vol:17, pp:1288-1296
35. Chen, W., Mi, R., Haughey, N., Oz, M. and **Höke, A.** (2007) "Immortalization and characterization of a nociceptive dorsal root ganglion sensory neuronal line", **JPNS**, Vol:12(2), pp:121-130
36. Mi, R., Chen, W. and **Höke, A.** (2007) "Pleiotrophin is a neurotrophic factor for motor neurons", **PNAS**, Vol: 104(11), pp: 4664-9
37. Valentine H, Chen Y, Guo H, McCormick J, Wu Y, Sezen SF, **Höke A**, Burnett AL, Steiner JP (2007) "Neuroimmunophilin Ligands Protect Cavernous Nerves after Crush Injury in the Rat: New Experimental Paradigms", **Eur Urol**, Vol:51(6), pp:1724-31
38. Laird, F., Farah, M., Ackerley, S., **Höke, A.**, Maragakis, N.J., Rothstein, J.D., Griffin, J.W., Price, D., Lee, M., Wong, P. (2008) "Motor neuron disease occurring in a mutant dynactin mouse model is characterized by defects in vesicular trafficking", **J. Neurosci** Vol: 28(9), pp: 1997-2005
39. Chandran, J.S., Lin, X., Zapata, A., **Höke, A.**, Shimoji, M., Moore, S.O., Galloway, M.P., Laird, F.M., Wong, P.C., Price, D.L., Bailey, K.R., Crawley, J.N., Shippenberg, T., Cai. H. (2008) "Progressive behavioral deficits in DJ-1-deficient mice are associated with normal nigrostriatal function", **Neurobiol Dis** Vol: 29(3), pp: 505-514
40. Milward, E., Kim, K.J., Szklarczyk, A., Nguyen, T., Melli, G., Nayak, M., Deshpande, D., Fitzsimmons, C., **Höke, A.**, Kerr, D., Griffin, J.W., Calabresi, P.A., Conant, K. (2008) "Cleavage of myelin associated glycoprotein by matrix metalloproteinases", **J Neuroimmunol** Vol: 193(1-2), pp: 140-8
41. Cheepudomwit, T., Guzelsu, E., Zhou, C., Griffin, J.W. and **Höke, A.** (2008) "Comparison of cytokine expression profile during Wallerian degeneration of myelinated and unmyelinated peripheral axons", **Neurosci Lett** Vol: 430(3), pp: 230-5
42. Lagoda G., Sezen S.F., Liu T., **Höke A.**, Burnett A.L. (2008) "FK506-binding protein localizations in human penile innervation", **BJU International**. Vol: 101(5), pp:604-9
43. Chew, S.Y., Mi, R., **Höke, A.**, and Leong, K. (2008) "The effect of the alignment of electrospun fibrous scaffolds on Schwann cell maturation", **Biomaterials** Vol: 29(6), pp:653-61
44. Toth, C., Martinez J.A., Diggle J., Fang, Q., Ramji, N., Mi, R., **Höke, A.**, Zochodne, D.W. (2008) "Local erythropoietin signalling enhances regeneration in peripheral axons", **Neuroscience** Vol: 154 (2): 767-83
45. Ratan R.R., Siddiq A., Aminova L., Langley B., McConoughey S., Karpisheva K., Lee H.H., Carmichael T., Kornblum H., Coppola G., Geschwind D.H., **Höke A.**, Smirnova N., Rink C., Roy S., Sen C., Beattie M.S., Hart R.P., Grumet M., Sun D., Freeman R.S., Semenza G.L., Gazaryan I. (2008) "Small molecule activation of adaptive gene expression: tilorone or its analogs are novel potent activators of hypoxia inducible factor-

- 1 that provide prophylaxis against stroke and spinal cord injury” **Ann N Y Acad Sci.** Vol:1147; pp:383-94
46. Nguyen T., Mehta N.R., Conant K, Kim K-J., Jones M., Calabresi P.A., Melli G., **Höke A.**, Schnaar R.L., Ming G-L., Song H., Keswani S.C., and Griffin J.W (2008) “Axonal Protective Effects of the Myelin-Associated Glycoprotein” **J Neurosci** Vol: 29(3), pp:630-7
47. **Höke A.**, Morris M., and Haughey N.J. (2009) “GPI-1046 protects dorsal root ganglia from gp120-induced axonal injury by modulating store-operated calcium entry” **J Peripher Nerv Syst.** Vol: 14(1); pp: 27-35
48. Geng Y., **Höke A.**, and Delpire E. (2009) “The STE20 kinases SPAK and OSR1 regulate NKCC1 function in sensory neurons” **J Biol Chem.** Vol: 284(21); pp: 14020-8
49. Yang IH, Siddique R, Hosmane S, Thakor N, **Höke A.** (2009) “Compartmentalized Microfluidic Culture Platform to Study Mechanism of Paclitaxel-induced Axonal Degeneration” **Exp Neurol.** Vol: 218(1); pp: 124-8
50. Vyas A, Li Z, Aspalter M, Feiner J, **Höke A.**, Zhou C, O'Daly A, Abdullah M, Rohde C, Brushart TM. (2010) “An in vitro model of adult mammalian nerve repair” **Exp Neurol.** Vol: 223(1), pp: 112-8.
51. Vivithanaporn P, Heo G, Gamble J, Krentz HB, **Höke A.**, Gill MJ, Power C. (2010) “Neurologic disease burden in treated HIV/AIDS predicts survival: a population-based study” **Neurology** Vol: 75(13); pp: 1150-8
52. Lepore AC, Tolmie C, O'Donnell J, Wright MC, Dejea C, Rauck B, **Höke A.**, Ignagni AR, Onders RP, Maragakis NJ. (2010) “Peripheral hyperstimulation alters site of disease onset and course in SOD1 rats” **Neurobiol Dis.** Vol: 39(3); pp: 252-64
53. Lehmann, H.C., Chen, W., Borzan, J., Mankowski, J. and **Höke, A** (2011) “Mitochondrial dysfunction in distal axons contribute to HIV sensory neuropathy” **Ann Neurol** Vol: 69(1); pp:100-10
54. Keswani SC, Bosch-Marcé M, Reed N, Fischer A, Semenza GL, **Höke A.** (2011) “Nitric oxide prevents axonal degeneration by inducing HIF-1-dependent expression of erythropoietin” **Proc Natl Acad Sci U S A.** Vol:108 (12); pp:4986-90
55. Lehmann HC, Chen W, Mi R, Wang S, Liu Y, Rao M, **Höke A.** (2011) “Human Schwann cells retain essential phenotype characteristics after immortalization” **Stem Cells Dev.** Vol:21(3); pp:423-31
56. Burakgazi, A.Z., Messersmith, W., Vaidya, D., Hauer, P., **Höke, A.**, and Polydefkis, M. (2011) “Longitudinal assessment of oxaliplatin-induced neuropathy” **Neurology** Vol:77(10); pp:980-6
57. Dellon, A.L., **Höke, A.**, Williams, E.H., Williams, C., Zhang, Z., Rosson, G.D. (2012) “Sympathetic innervation of the human foot” **Plast Reconstr Surg** Vol:129(4); pp:905-9

58. Wadhwa V, Thakkar RS, Maragakis N, **Höke A**, Sumner CJ, Lloyd TE, Carrino JA, Belzberg AJ, Chhabra A. (2012) "Sciatic nerve tumor and tumor-like lesions – uncommon pathologies" *Skeletal Radiol* Vol: 41(7); pp:763-74
59. Pan B, Grünewald B, Nguyen T, Farah M, Polydefkis M, McDonald J, Schramm LP, Toyka KV, **Höke A**, Griffin JW. (2012) "The lateral thoracic nerve and the cutaneous maximus muscle-A novel in vivo model system for nerve degeneration and regeneration studies" *Exp Neurol* Vol:236(1); pp:6-18
60. Jiang X, Mi R, **Höke A**, Chew SY. (2012) "Nanofibrous nerve conduit-enhanced peripheral nerve regeneration" *J Tissue Eng Regen Med*. (Epub ahead of publication)

(ii) Peer-reviewed Reviews:

1. **Höke, A.** and Silver, J. (1994) "Heterogeneity Among Astrocytes in Reactive Gliosis" *Perspectives in Developmental Neurobiology* Vol: 2(3), pp: 269-274
2. **Höke, A.** and Silver, J. (1996) "Proteoglycans and Other Repulsive Molecules in Glial Boundaries During Development and Regeneration of the Nervous System" *Progress in Brain Research*, Vol: 108, pp:149-163
3. Keswani, S.C., Pardo, C.A., Cherry, C.L., **Höke, A.** and McArthur, J.C. (2002) "HIV-associated sensory neuropathies" *AIDS*, Vol: 16, pp: 2105-2117
4. **Höke, A.** (2005) "Proteoglycans in axonal regeneration" *Exp Neurol*, Vol: 195(2), pp: 273-7
5. **Höke, A.** (2006) "Neuroprotection in the peripheral nervous system: rationale for more effective therapies" *Arch Neurol*, Vol: 63(12), pp:1681-5
6. **Höke, A.** (2006) "Mechanisms of disease: what factors limit the success of peripheral nerve regeneration in humans?" *Nature Clinical Practice Neurology*, Vol: 2(8), pp: 448-54
7. Cornblath, D.R. and **Höke, A.** (2006) "Recent advances in HIV neuropathies" *Current Opinion in Neurology*, Vol: 19(5), pp: 446-50
8. Melli, G. and **Höke, A.** (2007) "Canadian Association of Neurosciences review: regulation of myelination by trophic factors and neuron-glia signalling" *Can J Neurol Sci*. Vol:34(3), pp:288-95
9. Mathews, D.J., Sugarman, J., Bok, H., Blass, D.M., Coyle, J.T., Duggan, P., Finkel, J., Greely H.T., Hillis, A., **Höke, A.**, Johnson, R., Kahn, J., Kerr, D., Kurtzberg, J., Liao, S.M., McDonald, J.W., McKahn, G., Nelson K.B., Rao, M., Regenberg A., Siegel A.W., Smith, K., Solter, D., Song, H., Vescovi, A., Young, W. Gearhart, J.D., Faden, R., (2008) "Cell-based interventions for neurologic conditions. Ethical challenges for early human trials" *Neurology* Vol: 71(4): 288-93
10. Regenberg A., Mathews, D.J., Bok, H., Blass, D.M., Coyle, J.T., Duggan, P., Finkel, J., Greely H.T., Hillis, A., **Höke, A.**, Johnson, R., Kahn, J., Kerr, D., Kurtzberg, J., Liao, S.M., McDonald, J.W., McKahn, G., Nelson K.B., Rao, M., Siegel A.W., Smith, K., Solter,

- D., Song, H., Sugarman, J., Vescovi, A., Young, W. Gearhart, J.D., Faden, R., (2009) "The role of animal models in evaluating reasonable safety and efficacy for human trials of cell-based interventions for neurologic conditions." *J Cereb Blood Flow Metab* Vol: 29(1), pp:1-9
11. Duggan PS, Siegel AW, Blass DM, Bok H, Coyle JT, Faden R, Finkel J, Gearhart JD, Greely HT, Hillis A, **Höke A**, Johnson R, Johnston M, Kahn J, Kerr D, King P, Kurtzberg J, Liao SM, McDonald JW, McKhann G, Nelson KB, Rao M, Regenberg A, Smith K, Solter D, Song H, Sugarman J, Traystman RJ, Vescovi A, Yanofski J, Young W, Mathews DJ. (2009) "Unintended changes in cognition, mood, and behavior arising from cell-based interventions for neurological conditions: ethical challenges" *Am J Bioeth.* Vol: 9(5); pp: 31-6
 12. Stevens R.D., Marshall S.A., Cornblath D.R., **Höke A.**, Needham D.M., de Jonghe B., Ali N.A., Sharshar T. (2009) "A framework for diagnosing and classifying intensive care unit-acquired weakness" *Crit Care.* Vol: 37(10 Suppl.); pp: S299-S308
 13. Melli G. and **Höke A.** (2009) "Dorsal root ganglia sensory neuronal cultures: a tool for drug discovery for peripheral neuropathies" *Expert Opin. Drug Discov.* Vol: 4(10); pp: 1035-45
 14. **Höke A.** and Brushart T. (2010) "Introduction to Special Issue: Challenges and Opportunities for Regeneration in the Peripheral Nervous System" *Exp Neurol.* Vol: 233(1), pp:1-4
 15. Lehmann H.C. and **Höke A.** (2010) "Schwann cells as a therapeutic target for peripheral neuropathies" *CNS & Neurological Disorders - Drug Targets* Vol: 9(6), pp: 801-6
 16. Burakgazi, A and **Höke, A.** (2010) "Respiratory muscle weakness in peripheral neuropathies" *JPNS* Vol: 15, pp:307-313
 17. Hui-Chou HG, Hashemi SS, **Höke A.**, Dellon AL. (2011) "Clinical Implications of Peripheral Myelin Protein 22 for Nerve Compression and Neural Regeneration: A Review" *J Reconstr Microsurg.* Vol: 27(1), pp: 67-74
 18. Krick, K., Tammia, M., Martin, R., **Höke, A.** and Mao, H-Q (2011) "Signaling cue presentation and cell delivery to promote nerve regeneration" *Curr Opinion in Biotech* Vol: 22, pp: 1-6
 19. **Höke, A.** (2011) "A (heat) shock to the system promotes peripheral nerve regeneration" *J Clin Invest.* Vol: 121(11), pp:4231-4
 20. **Höke, A** (2012) "Animal models of peripheral neuropathies" *Neurotherapeutics* Vol:9(2); pp:262-9

(iii) Peer-reviewed Case Reports:

1. **Höke, A.**, Rewcastle, N.B. and Zochodne, D.W. (1999) "Acute Quadriplegic Myopathy Unrelated to Steroids or Paralyzing Agents: Quantitative EMG studies" *The Canadian Journal of Neurological Sciences*, Vol: 26(4), pp: 325-9

2. Zhou, L and Höke, A. (2004) “ A novel insertional mutation in connexin 32 gene causes demyelinating polyneuropathy with predominantly axonal loss” **Journal of the Peripheral Nervous System**, Vol: 9(4), pp: 194-5
3. Ramchandren S, Chaudhry V, Höke A, Murinson BB, Cornblath DR, Treisman GJ, Griffin JW. (2008) “Peripheral nerve vasculitis presenting as complex regional pain syndrome” **J Clin Neuromuscul Dis**. Vol:10(2), pp:61-4
4. Dinakar P. and Höke A. (2009) “Paraneoplastic fasciitis-panniculitis syndrome: a neurological point of view” **Nat Clin Pract Neurol**. Feb;5(2):113-7.
5. Burakgazi A., Polydefkis M. and Höke A. (2012) “Skin biopsy-proven flecainide induced neuropathy” **Muscle & Nerve** 45(1):144-6.
6. Ostrow LW, Corse AM, Morrison BM, Huff CA, Carrino JA, Höke A, Mammen AL. (2012) “Expanding the spectrum of monoclonal light chain deposition disease in muscle” **Muscle & Nerve** 45(5):755-61.

Inventions/Patents

1. **Report of Invention (JHU Ref#: DM-3871)**: Use of Immunophilin Ligands to Preserve Penile Nerves Following Radical prostatectomy; 2001
2. **Patent pending (JHU Ref#: DM-4052)**: Immunophilin ligand treatment of antiretroviral toxic neuropathy; 2002 (**USPTO application no: 20050131029**; 2005)
3. **Report of Invention (JHU Ref#: DM-4092)**: Use of recombinant human erythropoietin to prevent neurotoxicity associated with use of nucleoside analogue reverse transcriptase inhibitors; 2003
4. **Patent pending (JHU Ref#: DM-4538)**: Pleiotrophin is a neurotrophic factor for motor neurons and dorsal root ganglion sensory neurons; 2004 (**USPTO application no: 20060122116**: Treatment for disorders of the peripheral nervous system; 2006)
5. **Patent pending (JHU Ref#: DM-4682)**: Immortalization of Nociceptive Dorsal Root Ganglion Neurons; 2005 (**USPTO application no: 2006014247**)
6. **Patent pending (JHU Ref#: DM-4892)**: Therapeutic electrospun fiber compositions; 2006 (**USPTO application no: 2006017444**)
7. **Patent pending (JHU Ref#: C-10297)**: Biodegradable nerve guides; 2008 (**USPTO application no: 2009000535**)
8. **Patent pending (JHU Ref#: C-10679)**: Sutureless adhesive connectors for tissue repair; 2009 (**USPTO application no: 2010026872**)
9. **Report of Invention (JHU Ref#: C11605)**: Ethoxyquin and derivatives for treatment of peripheral neuropathies and other neurodegenerative disorders

Extramural Sponsorship:

(i) Current:

- 8/15/2007 – 8/14/2013 **HIV and antiretroviral toxic neuropathy**
RO1 NS 43991-07
NINDS
\$1,250,000 (\$250,000 current year)
Hoke (PI), 20%; Major goals of this project are to understand the molecular basis of antiretroviral toxic neuropathy and interaction with the HIV in inducing axonal degeneration in the peripheral nervous system
- 4/1/2009 – 3/31/2014 **Mechanism of Preferential Motor Reinnervation**
RO1 NS 34484-11A2
NINDS
\$1,250,000 (\$250,000 current year)
Brushart (PI)
Hoke (Co-I), 4%; Major goals of this project are to examine the mechanism of specificity of motor reinnervation
- 12/03/10 – 12/02/13 **Nanofiber Nerve Guide for Peripheral Nerve Repair and Regeneration**
DM090772
Military Medical Research and Development Program
\$1,135,027 (\$274,462 first year)
Hoke (PI), 20%; This proposal aims to develop nanofiber nerve guides with improved nanofiber guidance cue and modulated trophic factor delivery capabilities that promise faster nerve regeneration and better functional recovery.
- 9/30/10 – 9/29/13 **Use of GDNF-Releasing Nanofiber Nerve Guide Conduits for the Repair of Conus Medullaris/Cauda Equina Injury in the Non-Human Primate**
SC090273P1
Military Medical Research and Development Program
\$150,000 (\$50,000/year)
Hoke (co-multi PI), 10%; This proposal aims to develop nanofiber nerve guides for use in spinal cord/cauda equina injury.
- 10/1/2010 – 9/30/2013 **Peripheral Neuropathy Research Registry**
The Foundation for Peripheral Neuropathy
\$210,000 (\$60,000 current year)
Hoke (PI), 5%; This project enrolls patients with peripheral neuropathy into a multi-center national registry. The aim is to identify phenotypic and molecular correlates of neuropathic pain in patients with peripheral neuropathy.
- 5/1/11 – 4/30/13 **Novel High-Throughput Drug Screening Platform for Chemotherapy -Induced Axonal Neuropathy**

BC102629 Idea Award
Military Medical Research and Development Program
\$375,000 (\$175,000 first year)
Hoke (co-PI), 5%; This proposal aims to a microfluidic drug screening platform to identify novel compounds for neuroprotection against paclitaxel-induced axonal degeneration.

7/1/11 – 6/30/16

Center for Novel Therapeutics for HIV-Associated Cognitive Disorders
P30 MH075673-06
NIMH
Hoke (PI of Development Core); This proposal aims to develop novel therapeutics for NeuroAIDS

03/10/12 – 03/09/13

Foundation for Peripheral Neuropathy Scientific Meeting 2012
R13NS079085-01
NINDS
Hoke (PI); This proposal provides funding for scholarships to young investigators to attend the FPN Symposium 2012

(ii) Pending:

9/30/11 – 8/31/16

Role of O-GlcNAcylation in Peripheral Neuropathy in Type 1 Diabetes
DP3DK094257-01
NIDDK
Hoke (co-multi PI); This proposal aims to study role of O-GlcNAcylation in peripheral neuropathy due to type I diabetes

(iii) Previous Grants/Contracts:

4/1/2001 – 3/31/2002

Pilot Project for Development of an *in vitro* Model of NRTI Neurotoxicity
The Centre for AIDS Research, JHU
\$50,695
Hoke (PI), 0%; Major goal of this pilot project is to develop an *in vitro* culture system and test the potential neurotoxicity of NRTIs

7/1/2001 – 6/31/2003

Role of Stem Cell Transplantation in Motor Axonal Regeneration in Short and Long-Term Denervation
The Packard Center for ALS Research, JHU
\$98,388
Hoke (PI), 0%; Major goals of this pilot project are to develop repeatable electrophysiological outcome measures of motor nerve regeneration and assess the potential benefit of mouse neuronal stem cell transplantation for functional motor recovery after prolonged periods of denervation as seen motor neuron diseases

1/1/2002 – 9/30/2002

Potential Rescue of Dorsal Root Ganglion Sensory Neurons by Erythropoietin in *in vitro* Models of HIV-Related Neuropathies

- Ortho-Biotech L.L.C.
\$21,688
Hoke (PI), 0%; Major goal of this pilot project is to test the potential neuroprotective efficacy of erythropoietin in *in vitro* models of HIV-associated neuropathies
- 9/30//2002 – 9/30/2005 **Lentivirus-induced Neuropathy: Viral Diversity and Host Response**
RO1 NS 46262
NINDS
\$675,000
Power (PI)
Hoke (Co-I), 5%; Major goals of this project are to examine the role of lentivirus diversity in inducing peripheral neuropathy
- 9/30/2002 – 9/30/2006 **An in vitro model of antiretroviral toxic neuropathy**
RO1 NS 43991
NINDS
\$760,000
Hoke (PI), 30%; Major goals of this project are to develop an *in vitro* culture system to examine the mechanism of neurotoxicity of Nucleoside analogue Reverse Transcriptase Inhibitors and to screen immunophilin and cyclophilin ligand libraries for potential neuroprotection against NRTI neurotoxicity
- 4/1/2003 – 3/31/2008 **Mechanism of Preferential Motor Reinnervation**
RO1 NS 34484
NINDS
\$1,100,000
Brushart (PI)
Hoke (Co-I), 5%; Major goals of this project are to examine the mechanism of specificity of motor reinnervation
- 7/1/2003 – 6/30/2004 **Calcium dysregulation in HIV-1 protein-induced peripheral neuropathy**
Blaustein Pain Research Fund, JHU
\$50,000
Haughey (PI)
Hoke (Co-I), 0%; This pilot project grant will allow us to acquire a calcium imager to examine the changes in calcium homeostasis in sensory neurons exposed to HIV viral envelope proteins
- 7/1/2003 – 6/30/2004 **Natural History of Oxaliplatin Neuropathy**
The JHU Cancer Research Pilot Project Fund
\$50,000
Polydefkis (PI)
Hoke (Co-I), 0%; Major goal of this pilot project is to define the natural history of oxaliplatin-induced peripheral neuropathy with detailed clinical, electrophysiological and morphological studies
- 8/1/2003 – 7/31/2005 **Stem Cells in Chronic Motor Axonal Regeneration**

The Packard Center for ALS Research, JHU
\$106,359

Hoke (PI), 0%; Major goals of this pilot project are to engineer mouse neuronal stem cells for transplantation into peripheral nerves to promote functional motor recovery after prolonged periods of denervation as seen motor neuron diseases

9/1/2003 – 8/30/2007

Project #2: Immunophilin Ligands in *in vitro* models of HIV Neuropathy
PPG: Immunophilin Ligands for HIV Dementia and Neuropathy

PO1 MH 70056

NINDS

\$975,000 (Project #2) \$3,925,000 (PPG)

Nath (PI of the PPG)

Hoke (PI of Project #2), 30%; Major goals of this project are to examine potential therapeutic role of immunophilin ligands in HIV dementia and neuropathy. I am the PI of the project #2, which examines the mechanisms of immunophilin ligand neuroprotection in *in vitro* models of HIV neuropathy

1/1/2004 – 12/31/2007

Peripheral neurotoxicity by the HIV-1 coat protein gp120

RO1 NS 47972

NINDS

\$652,488

Hoke (PI), 30%; Major goals of this project are to examine the role of HIV viral coat protein gp120 in mediating neurotoxicity in fetal human sensory neuron cultures

5/1/2004 – 4/30/2005

Recombinant human Erythropoietin (Procrit) in paclitaxel-induced peripheral neuropathy

Ortho-Biotech L.L.C.

\$52,408

Hoke (PI), 1%; Major goal of this pilot project is to test the potential neuroprotective efficacy of erythropoietin in an animal model of paclitaxel-induced peripheral neuropathy

7/1/2005 – 6/30/2006

Development of high throughput drug screening for neuropathic pain

Blaustein Pain Research Fund, JHU

\$50,000

Hoke (PI), 0%; This pilot project grant was designed to screen about a 2000 compound library for neuroprotection against capsaicin using an immortalized DRG sensory neuronal line

8/1/2005 – 7/31/2006

Pleiotrophin in Motor Neuron Disease

The Packard Center for ALS Research, JHU

\$84,538

Hoke (PI), 0%; Major goal of this pilot project is to use pleiotrophin as a motor neuron specific neurotrophic and neurotropic factor to

- promote functional motor recovery in models of motor neuron disease
- 1/1/2006 – 12/31/2007 **Development of high throughput drug screening for HIV neuropathy**
The Neuropathy Association
\$50,000
Hoke (PI), 0%; Major goal of this pilot project is to screen about a 2000 compound library for neuroprotection against antiretroviral drug, ddC using an immortalized DRG sensory neuronal line
- 8/1/2006 – 1/31/2009 **Pleiotrophin in Motor Neuron Disease**
The Packard Center for ALS Research, JHU
\$174,768 (\$90,230 current year)
Hoke (PI), 0%; Major goal of this pilot project is to use pleiotrophin as a motor neuron specific neurotrophic and neurotropic factor to promote functional motor recovery in models of motor neuron disease
- 1/1/2007 – 9/30/2007 **Biodegradable Nanofibers and Pleiotrophin for Nerve Repair**
CLF-MTAP
\$67,453
Hoke (PI), 2%; This project is designed to develop novel nanofiber containing nerve guides for peripheral nerve regeneration
- 4/1/2005 – 3/31/2009 **Stem Cell-Derived Motoneurons in the Adult Mammalian CNS**
RO1 NS 50412-05
NINDS
\$1,125,000 (\$225,000 current year)
Kerr (PI)
Hoke (Co-I), 5%; Major goals of this project are to generate motoneurons from embryonic stem cells and examine the potential of these cells in promoting recovery in spinal cord injury models
- 7/1/2006 – 12/31/2008 **Novel therapeutics for peripheral neuropathies and nerve regeneration**
The Adelson Program in Neural Repair and Rehabilitation
\$,750,000 (\$250,000 current year)
Hoke (PI), 15%; This project is designed to develop novel therapeutic drugs for peripheral nerve regeneration and neuroprotection
- 7/1/2007 – 12/31/2008 **Preventing or reversing Schwann cell loss during nerve regeneration**
The Adelson Program in Neural Repair and Rehabilitation
\$,773,280 (\$256,484 current year)
Hoke (PI), 15%; This project is designed to develop novel therapies to prevent Schwann cell loss that precludes peripheral nerve regeneration in humans

- 4/1/2008 – 3/31/2009 **Development of high content drug screening for peripheral nerve regeneration**
The Foundation for Peripheral Neuropathy
\$165,000 (\$165,000 current year)
Hoke (PI), 5%; This is a pilot project to develop tools and techniques for a high-content drug screening that enhances nerve regeneration
- 4/1/2009 – 3/31/2010 **Screening and animal modeling of existing drugs for peripheral neuropathy**
The Foundation for Peripheral Neuropathy
\$165,000 (\$165,000 current year)
Hoke (PI), 10%; This is a drug screening pilot project to determine the most optimum screening strategy and animal models for peripheral neuropathies
- 4/1/2009 – 3/31/2010 **Examination of the role of Schwann cell changes in chronic peripheral neuropathies**
The Foundation for Peripheral Neuropathy
\$165,000 (\$165,000 current year)
Hoke (PI), 10%; This project will evaluate the mechanisms of atrophy and apoptosis of Schwann cells in chronic neuropathies
- 6/1/2008 – 5/31/2010 **Development of novel therapies for peripheral neuropathies**
The BSI-Biogen Idec Research Program
\$260,029 (\$143,995 current year)
Hoke (PI), 10%; This is a pilot project to examine the feasibility of taking hits from a drug screen using a cell line to an animal model of peripheral neuropathy and demonstrating efficacy
- 1/1/2007 – 3/31/2011 **High dose ascorbic acid treatment of CMT1A**
Muscular Dystrophy Association and CMT Association
\$257,933 (\$87,325 current year – local site)
Lewis (PI)
Hoke (PI of Local Site), 8%; This multi-center clinical trial will examine the efficacy of high dose ascorbic acid in improving symptoms and clinical examination findings in CMT1A (Charcot-Marie-Tooth disease type 1A)
- 9/15/2007 – 3/31/2011 **Remark bundle structure and function in neuropathic pain**
RO1 NS 41269-06
NINDS
\$1,000,000 (\$200,000 current year)
Griffin (PI)
Hoke (Co-I), 4%; Major goals of this project are to understand the role of Remak Schwann cells in neuropathic pain
- 7/1/2009 – 6/30/2011 **Matrix-assisted generation and condition of Schwann cells from induced pluripotent stem cells for peripheral nerve regeneration**
Exploratory Research Application

- Maryland Stem Cell Research Fund
\$200,000 (\$100,000 current year)
Mao (PI)
Hoke (Co-I), 5%; Major goal of this project is to examine the therapeutic potential of iPS-derived Schwann cells in promoting peripheral nerve regeneration
- 9/1/2010 – 8/31/2011 **Seahorse XF-96 Analyzer for Non-Invasive Monitoring of Mitochondrial Function**
SIG Application
NCRR
\$171,836
Hoke (PI) 0%; This is a shared instrument grant application to obtain an advanced mitochondrial function analyzer
- 6/10/11 – 6/30/11 **Peripheral Nerve Society Biennial Meeting 2011"**
R13NS076157-01
NINDS
Hoke (PI); This proposal provides funding for scholarships to young investigators to attend the PNS meeting 2011
- 1/1/2009 – 12/31/2011 **North American CMT Network**
Muscular Dystrophy Association and CMT Association
\$41,072 (\$13,270 current year – local site)
Shy (PI)
Hoke (PI of Local Site), 2%; This grant is designed to obtain blood samples and detailed history from CMT patients with unidentified genetic defects for future genotype-phenotype studies
- 4/1/2007 – 3/31/2012 **Mechanisms & Mouse Models of Amyotrophic Lateral Sclerosis**
RO1 NS 40014-07
NINDS
\$1,091,250 (\$218,750 current year)
Wong (PI)
Hoke (Co-I), 2%; Major goals of this project are to clarify the mechanism whereby mutant dynactin p150^{glued} causes motor neuron disease and will have the potential to identify novel therapeutic targets and allow design of drug treatments for motor neuron disease
- 5/1/2010 – 4/30/2012 **Mechanisms of Glucose Toxicity**
R24 Application
NIDDK
\$300,000
Hart (PI)
Hoke (Co-I), 2%; This is a program development pilot project to obtain preliminary data for a PPG focusing on the role of hyper-GlcNAcylation in mediating end-organ complications of diabetes
- 4/1/2010 – 6/30/2012 **Developing therapies for peripheral neuropathies**

The Foundation for Peripheral Neuropathy
\$250,000 (\$125,000 current year)
Hoke (PI), 10%; This project will evaluate the mechanisms of atrophy and apoptosis of Schwann cells in chronic neuropathies

9/15/2008 – 8/30/2012

Peripheral neuropathy in lentivirus infections: early viral and host determinants
RO1 NS 62670-1
NINDS
\$999,564 (\$249,891 current year)
Power (PI)
Hoke (Co-I), 2%; Major goals of this project are to understand the role of viral heterogeneity and host factors in FIV infection induced peripheral neuropathy

7/01/10 – 6/30/12

Human Embryonic Stem Cell-Derived Schwann Cells to Enhance Nerve Repair in a Model of Chronic Denervation
Exploratory Research Application
Maryland Stem Cell Research Fund
\$200,000 (\$100,000/year)
Hoke (PI), 5%; Major goal of this pilot project is to evaluate the feasibility of enhancing peripheral nerve regeneration by hESC-derived Schwann cells

EDUCATIONAL ACTIVITIES

Educational Publications (non-peer-reviewed)

(i) Reviews

1. Höke, A., Keswani, S.C. and McArthur, J.C. (2003) "Current therapy in HIV sensory neuropathy" in *Current Treatment Options in Infectious Diseases*, Vol: 5, pp: 467-75
2. Mi, R. and Höke, A. (2007) "In search of novel treatments for peripheral neuropathies and nerve regeneration" *Discovery Medicine*. Vol:7 (39), pp:109-112

(ii) Editorials

1. Höke, A. (2006) Invited Comment on 'Erythropoietin preconditioning on hippocampus neuronal apoptosis following status epilepticus induced by Li-pilocarpine in rats through anti-caspase-3 expression' *Neurology India*, 54:63-63

(iii) Letters

1. Keswani, S. C., Höke, A., (2003) "Incidence of and risk factors for HIV-associated distal sensory polyneuropathy" [letter]. *Neurology*, Vol: 61(2), pp: 279-80
2. Höke, A. (2007) "What is next in ALS clinical trials?" [letter] *Neurology*, Vol: 70(16), pp: 1366

3. Höke, A. (2011) "In Memoriam: John W. "Jack" Griffin, MD", **Archives of Neurology** Vol: 68(9), pp:1204-5
4. Höke, A. (2011) "In Memoriam: John W. "Jack" Griffin, MD", **Muscle & Nerve** Vol: 44(3), pp:316-7
5. Höke, A. (2011) "Remembering John W. "Jack" Griffin, MD", **Nat. Rev. Neurol.**

(iv) Online Publications

1. Gottesman, R. and Höke, A. (2003) "Case-3: 44 year-old man with fever, headache, confusion and ataxia" Clinical Cases in Neurology from Johns Hopkins, **Medscape Online** URL: <http://www.medscape.com/viewarticle/460254>
2. Morrison BM, and Höke A. (2004) "Clinical cases in neurology from Johns Hopkins case 6: when is a headache not just a headache?" **MedGenMed.** 2004 Jun 30;6(2):48. URL: <http://www.medscape.com/viewarticle/481058>

(v) Book Chapters:

1. Höke, A. and Feasby, T.E. (2000) "Disorders of the Peripheral Nervous System" in **Kelly's Textbook of Internal Medicine**, H.D. Humes (ed), 4th Ed., Lippincott, Williams & Wilkins, Baltimore
2. Höke, A. (2001) "Heritable Muscle Disease" in **Current Therapy in Neurological Disease**, 6th Ed., Johnson, Griffin, McArthur (Eds), Mosby, St. Louis
3. Höke, A. and Cornblath, D.R. (2004) "Peripheral Neuropathies in Human Immunodeficiency Virus Infection" in **Advances in Clinical Neurophysiology (Supplements to Clinical Neurophysiology Vol 57)**, Hallet M., Phillips LM, Schomer DL, and Massey JM (Eds)., Elsevier, San Diego, Vol: 57, pp: 195-210
4. Höke, A. and Keswani, S.C. (2005) "Neuroprotection in the PNS; Erythropoietin and Immunophilin Ligands" in **Annals of N. Y Acad. Sci.: Neuroprotective Agents: Seventh International Conference**, W. Slikker Jr., R. J. Andrews, and B. Trembley (Eds), N.Y. Academy of Sciences, New York, Vol: 1053, pp: 491-501
5. Höke, A. and Griffin, J.W. (2005) "Mechanisms underlying Wallerian degeneration" in **Multiple Sclerosis as a Neuronal Disease**, S. Waxman (Ed), Elsevier, San Diego, pp: 341-54
6. Griffin, J.W. and Höke, A. (2005) "The control of axonal caliber" in **Peripheral Neuropathy**, 4th Edition, P.J. Dyck and P.K. Thomas (Eds), W.B. Saunders, Philadelphia, pp: 433-46
7. Höke, A. and Cornblath, D.R. (2005) "Peripheral Neuropathies in Human Immunodeficiency Virus Infection" in **Peripheral Neuropathy**, 4th Edition, P.J. Dyck and P.K. Thomas (Eds), W.B. Saunders, Philadelphia, pp: 2129-48
8. Keswani, S.C., Luciano, C., Pardo, C.A., Cherry, C.L., Höke, A. and McArthur, J.C. (2005) "Spectrum of Peripheral Neuropathies in AIDS", in **The Neurology of AIDS**, 2nd

Ed., Gendelman, Lipton, Epstein, Swindells (Eds)., Chapman & Hall, New York, pp: 423-44

9. Höke, A. (2006) "Pain related to inflammatory, infectious and toxic neuropathies: mechanisms and perspectives on treatment" in ***Emerging Strategies for the Treatment of Neuropathic Pain***, J.N. Campbell, A.I. Basbaum, A. Dray, R. Dubner, R.H. Dworkin and C.N. Sang (Eds) IASP Press, Seattle pp: 291-306
10. Baron, R., Griffin, J.W., Dworkin, R.H., Höke, A., Manning, D.C., Max, M.B., Petersen, K.L., Sang, C.N. and Schmidt, W.K. (2006) "Disease specific targets: Rapporteur report" in ***Emerging Strategies for the Treatment of Neuropathic Pain***, J.N. Campbell, A.I. Basbaum, A. Dray, R. Dubner, R.H. Dworkin and C.N. Sang (Eds) IASP Press, Seattle pp: 241-270
11. Melli, G., Keswani, S. C. and Höke, A. (2006) "History and biology of erythropoietin in hematopoietic and non-neural tissues" in ***Erythropoietin and the Nervous System***, A. Höke (Ed) Springer, Boston pp: 1-14
12. Höke, A. (2006) "Brain and Nervous System Disorders" in ***The Guide to Off-Label Prescription Drugs***, K. Loughlin and J. Generali (Eds), Simon and Shuster Inc., New York, pp: 3-76
13. Keswani, S. C. and Höke, A. (2006) "An endogenous pathway preventing axonal degeneration mediated by Schwann cell-derived erythropoietin" in ***Erythropoietin and the Nervous System***, A. Höke (Ed) Springer, Boston pp: 179-90
14. Griffin, J.W., Höke, A. and Nguyen, T. (2006) "Axon degeneration and rescue" in ***Textbook of Neural Repair and Rehabilitation***, M. Selzer, L.G. Cohen, S. Clarke, P.W. Duncan and F. Gage (Eds), Cambridge Press, Cambridge, UK Vol: I, pp: 293-302
15. Melli, G. and Höke, A. (2009) "HIV neuropathy" Chapter 95 in ***International Neurology: A Clinical Approach***, R.P. Lisak, D.D. Truong, W.M. Carroll and R. Bhidayasiri (Eds) Blackwell Publishing, Boston pp: 351-3
16. Höke, A. (2010) "Hot and Cold Feet – Sensory Neuropathy Associated with Human Immunodeficiency Virus" Case 22 in ***Companion to Peripheral Neuropathy: Illustrated Case Reports Plus***, P.J. Dyck (Ed), W.B. Saunders, Philadelphia pp: 105-7
17. Lehmann H.C. and Höke, A. (2010) "Neuroprotective and neurogenic effects of erythropoietin" in ***Hormones in Neurodegeneration, Neuroprotecton and Neurogenesis***, Gravanis and Mellon (Eds), Wiley-VCH Weinheim Germany pp: 251-263
18. Tan K., Nath A. and Höke, A. (2010) "HIV Infection and the PNS" in ***Chemokine Receptors and NeuroAIDS: Beyond the Coreceptor Function and Links to Other Neuropathologies***, Meucci O. (Ed) Springer-Verlag New York pp: 51-86

(vi) Books:

1. ***Erythropoietin and the Nervous System*** (2006) A. Höke (Ed) Springer, Boston

Teaching

(i) Classroom instruction:

- 2001 - 2007 Neuromuscular Diseases course to medical students rotating in Neurology service: Once a month lecture on neuromuscular cases
- 2003 - to date Annual lecture to medical students in Neuro A course
- 2007 - to date Annual lecture to graduate students in "Stem Cells" course
- 2007 - to date Annual lecture to undergraduate biomedical engineering students
- 2009 - to date Annual lecture to graduate students in "Neurotherapeutics" course

(ii) Clinical instruction:

- 1999 - to date Daily clinical rounds with medical students one month a year during Neurology inpatient service
- 2000 - to date Neurology Clinical Skills course: Annual participation in this 3-week course for 2nd year medical students
- 2000 - to date Neurophysiology Fellows Lecture series: Annual participation in this yearlong lecture series
- 2000 - to date Neuromuscular Pathology Lecture series: Annual participation in this year yearlong lecture and hands-on pathology demonstration series

(iii) CME instruction:

- 2000 "Approach to Peripheral Neuropathies" Abu Dhabi, United Arab Emirates
- 2004 "Current treatment options for peripheral neuropathies" Saskatchewan Medical Society, Vancouver, British Columbia, Canada
- 2005 "Development and regeneration of the peripheral nervous system", Neurology Symposium, JHU, Baltimore, MD
- 2005 "Workup of neuropathic pain" 11th Annual Pain Symposium, JHU, Baltimore, MD
- 2005 "Approach to treatable myopathies and neuropathies" 17th Annual Update in Neurology for Primary Care Physicians, JHU, Baltimore, MD
- 2005 "Update on treatable myopathies and neuropathies" 1st Annual Update in Neurology for Neurologists, JHU, Baltimore, MD
- 2009 "Treatment of neuropathic pain" 1st Annual Update in Neuromuscular Diseases, JHU, Baltimore, MD
- 2009 "The many faces of peripheral neuropathy" 8th Annual Update in Current Clinical Issues in Primary Care at Pri-Med MidAtlantic Conference & Exhibition, Baltimore, MD

Mentoring

(i) Advisees:

Postdoctoral:

- 2001 - 2003 Sanjay Keswani MBBS; Present position: Associate Medical Director, Eli-Lilly, Indianapolis, Indiana
- 2003 - 2004 Weiran Chen MD; Present position: Research Associate Faculty, Department of Neurology, Johns Hopkins University
- 2003 - 2006 Ruifa Mi MD, PhD; Present position: Research Associate Faculty, Department of Neurology, Johns Hopkins University
- 2003 - 2006 Giorgia Melli MD; Present position: Researcher, Istituto Nazionale Neurologico Carlo Besta, Milano, Italy

- 2006 - 2008 Neal Adams MD; K08 mentee. Present position: Associate Professor of Ophthalmology, Texas Tech University Health Sciences Center, Lubbock, TX
- 2008 - 2010 Megan Wright PhD
- 2008 - to date Jing Zhu PhD
- 2011 - to date Shuo Wang MD
- 2011 - to date Jae-sun park PhD

Doctoral

- 2003 - 2006 Sing Yian Chew; PhD student (co-mentor), Department of Materials Science and Engineering, JHU. Present Position: Staff Scientist, Department of Chemical and Biomedical Engineering, Nanyang Technical University, Singapore
- 2006 - 2009 Kavan Clifford; Md/PhD student in the Medical Scientist Training Program, Johns Hopkins University, School of Medicine. Present Position: Anaesthesiology Resident, Johns Hopkins Hospital
- 2011 - to date Kellin Krick; PhD student (co-mentor), Department of Biomedical Engineering, JHU
- 2011 - to date Markus Tammia; PhD student (co-mentor), Department of Biomedical Engineering, JHU
- 2011 - to date Russ Martin; PhD student (co-mentor), Department of Biomedical Engineering, JHU
- 2012 - to date Christopher Cashman; MD/PhD student in the Medical Scientist Training Program, Johns Hopkins University, School of Medicine

Predoctoral:

- 2000 - 2001 Brian Rosenberg; Undergraduate research, JHU.
- 2000 - 2002 Walter Heine; Received MSc in Biomedical Engineering, JHU. Thesis title: "Transplantation of neural stem cells into the peripheral nerves of rats". Present position: MD, PhD Student at Boston University
- 2001 - 2002 Bani Chander; Undergraduate research, JHU. Received Howard Hughes Summer Scholarship (2001) for her project in my lab. Present position: Medical Student at New York University
- 2001 - 2003 Sheila Kumar; Undergraduate research, JHU. Received Howard Hughes Summer Scholarship (2002) for her project in my lab. Present position: Medical Student at Yale University
- 2002 - 2004 Michelle Polley; Undergraduate research, JHU. Present position: Research Technician, JHU
- 2003 - 2004 John Schneider; Medical School summer research, JHU.
- 2003 - 2004 Ulas Buldanlioglu; Visiting undergraduate research, Marmara University School of Pharmacy, Istanbul, Turkey.
- 2004 Berke Guzelsu; Undergraduate summer research, Franklin and Marshall College
- 2004 - 2005 George Lambrinos; Undergraduate research, JHU
- 2004 - 2006 Lisa Philippose; Medical School summer research, JHU. Present Position: Emergency Room Resident, Harvard, Boston, MA
- 2007 Daniel Halle; Undergraduate Research Summer internship, LSU
- 2007 - 2008 Todd Spock; Undergraduate research, JHU
- 2007 - 2008 Sadiki Deane; Undergraduate Research Summer internship, Voorhees College
- 2008 - 2011 Raj Thakrar; Undergraduate research, JHU
- 2008 - 2011 Emmalynn Connor; Undergraduate research, JHU
- 2009 - 2011 Eric Lopez; Undergraduate research, JHU
- 2009 - to date Naz Belkaya; Undergraduate research, JHU
- 2010 - to date Giuliana Rotunno; Undergraduate research, JHU

2010 Ben Cocanougher; Undergraduate summer research, Centre College
2010 - 2011 Mark Edwards; Undergraduate research, JHU

(ii) Thesis Committees:

2004 Corinne Bright: Dept of Biomedical Engineering, JHU, PhD thesis defence July 7, 2004
2006 Sing Yian Chew: Department of Materials Science and Engineering, JHU, PhD thesis defence June 22, 2006
2006 Emily McVey: Department of Comparative Medicine, JHU, PhD thesis defence December 1, 2006
2008 Juliane Weber: Faculty of Science, University of Witwatersrand, Johannesburg, South Africa, PhD Thesis External Examiner May 2008
2009 Kavan Clifford: Department of Neuroscience, JHU, PhD thesis defence October 15, 2009
2010 Shawn Lim: Department of Materials Science and Engineering, JHU, PhD thesis defence April 9, 2010
2010 Suneil Hosmane: Department of Biomedical Engineering, JHU,
2010 Emily McVey: Department of Biomedical Engineering, JHU,
2010 Haojui Weng: Department of Neuroscience, JHU,
2010 Sarah Welsh: Department of Neuroscience, University of Calgary, PhD Thesis External Examiner October 2010
2011 Rezzina Siddiqi; Department of Biomedical Engineering, JHU
2011 Clint Cave, Department of Neuroscience, JHU
2011 Hao Weng, Department of Neuroscience, JHU
2011 Tanu Sharma, Department of Neuroscience, JHU

(iii) Training Grant Participation:

Neuroscience Training Grant, Department of Neuroscience, Johns Hopkins University (2002 – to date). I am a member of the faculty available for student mentoring.

R25 Training Grant, Department of Neurology, Johns Hopkins University School of Medicine (2009 – to date). I am a member of the faculty available for resident and fellow mentoring.

Editorial Activities

(i) Editorial Board Appointment

2006- Section Editor, Peripheral Neuropathy and Pain Section, Experimental Neurology
2007- Editorial Board Member, Journal of the Peripheral Nervous System
2009- Editorial Board Member, Turkish Journal of Neurology
2011- Editorial Board Member, Neural Regeneration Research
2013- Editor-in-Chief, Experimental Neurology

(ii) Journal Peer Review Activity

Ad hoc reviewer for:

2000- Annals of Neurology
2000- Canadian Journal of Neurological Sciences
2001- Journal of the Peripheral Nervous System
2001- Brain Research
2002- Cells Tissues Organs

2002- Journal of Neurology, Neurosurgery and Psychiatry
2002- Experimental Neurology
2003- Journal of Neuroscience
2003- Journal of Neuroscience Methods
2003- Neuroscience
2004- Journal of AIDS
2004- Proceedings of the National Academy of Sciences
2004- Journal of Neurochemistry
2004- Current Pharmaceutical Design
2004- Neurobiology of Disease
2005- Journal of Comparative Neurology
2005- Journal of National Cancer Institute
2005- Neurology India
2005- Molecular and Cellular Neuroscience
2006- Journal of Neuroscience Research
2006- Brain Behaviour and Immunology
2006- Neurochemical Research
2006- Paediatric Research
2006- Neuroscience Letters
2007- Muscle and Nerve
2007- Behavioural Neuroscience
2007- Archives of Neurology
2007- Arthritis Research and Therapy
2007- Acta Biomaterialia
2008- Tissue Engineering
2008- Neurorehabilitation and Neural Repair
2008- Brain
2008- Glia
2008- Trends in Cell Biology
2008- AIDS
2008- Molecular and Cellular Neuroscience
2008- European Journal of Neuroscience
2008- Mini Reviews in Medicinal Chemistry
2010- Critical Care Medicine
2010- PLoS Biology
2010- Stem Cell Reviews and Reports
2010- Journal of Neurochemistry
2011- Neuroscience Letters
2011- Cell Transplant
2011- Journal of Clinical Investigation
2011- Neuromolecular Medicine
2012- IUBMB Life

CLINICAL ACTIVITIES

Certification

Medical Licensure:

1992 - 1994 State of Ohio, USA #64136 (Inactive)
1994 - to date State of Maryland, USA #D46686 (Active)
1998 - 2007 Province of Alberta, CANADA #011868 (Inactive)

Specialty Board Certification:

- 1997 Fellow of the Royal College of Physicians and Surgeons of Canada
- 1999 Diplomate of the American Board of Psychiatry and Neurology

Service Responsibilities

- 1999 - to date Neuromuscular Clinics: 1 half-day session per week
- 1999 - to date Neurology Inpatient or Consult Service: 1 month a year
- 1999 - to date Neuromuscular Consult Service: 1 month a year
- 2000 - to date Neurology EMG Clinic: 1 half-day session per week
- 2000 - to date Neuromuscular Pathology Biopsy Reading Service: 3-4 months a year

ORGANIZATIONAL ACTIVITIES

Institutional Administrative Appointments

- 2002 - to date Appointments and Promotions Committee, Department of Neurology, Johns Hopkins University, School of Medicine, Baltimore, Maryland
- 2006 - to date Departmental Education Committee, Department of Neurology, Johns Hopkins University, School of Medicine, Baltimore, MD
- 2006 - 2008 Membership Committee, American Neurological Association, Minneapolis, MN
- 2007 - 2011 Neuromuscular Science Working Group, American Academy of Neurology, St. Paul, MN
- 2007 - to date Finance Committee, Department of Neurology, Johns Hopkins University, School of Medicine, Baltimore, Maryland
- 2007 - 2008 Departmental Compensation Task Force, Department of Neurology, Johns Hopkins University, School of Medicine, Baltimore, Maryland
- 2011 - 2014 Scientific Program Advisory Committee, American Neurological Association, Minneapolis, MN
- 2007 - to date Operating Committee, Packard Center for ALS Research, Johns Hopkins University, School of Medicine, Baltimore, Maryland

Membership in Professional Organizations

- 1990- Society for Neuroscience
- 1995- American Academy of Neurology
- 1997- Royal College of Physicians and Surgeons of Canada
- 1997 - 1999 Alberta Medical Association
- 1999- American Association of Electrodiagnostic Medicine
- 1999- Peripheral Nerve Society
- 1999 - 2002 World Muscle Society
- 2003- International Society for Neurovirology
- 2003 - 2005 International Society for Stem Cell Research
- 2003 - 2004 Society for Experimental Biology and Medicine
- 2004- American Association for the Advancement of Science
- 2005 - 2008 Faculty of Medicine 1000
- 2005- American Neurological Association

Conference Organization/Session Chair

- 2003 Session Chair, 5th International Symposium on Neurovirology and HIV Molecular & Clinical Neuroscience Workshop, Baltimore, Maryland

- 2004 Organizer, Society for Neuroscience Annual Meeting Satellite Symposium “Erythropoietin and the Nervous System”, San Diego, California
- 2005 Session Chair, “Special PNS Fellows Session” Peripheral Nerve Society biannual meeting, Piza, Italy
- 2005 Organizer and Chair, Society for Neuroscience Annual Meeting Mini-Symposium “Erythropoietin and the Nervous System”, Washington, DC
- 2006 Session Chair, American Academy of Neurology Annual Meeting, “Peripheral neuropathies: Diabetic and Small Fiber Sensory Neuropathies”, San Diego, CA
- 2006 Session Chair, XIth International Congress on Neuromuscular Diseases, “Peripheral neuropathies”, Istanbul Turkey
- 2010 Session Chair, Society for Neuroscience Annual Meeting, Nanosymposium “Neuroinflammation and degeneration”, San Diego, CA
- 2011 Organizer, Scientific Symposium “The Friends of the Axon, the Schwann cell, and Jack Griffin”, Baltimore, MD
- 2011 Session Chair, NCI Workshop “Chemotherapy-Induced Peripheral Neuropathy” Bethesda, MD
- 2011 Local Organizer and Session Chair, Peripheral Nerve Society biennial meeting, Potomac, MD
- 2012 Organizer and Chair of Scientific Program Committee, Foundation for Peripheral Neuropathy Research Symposium, Chicago, IL
- 2012 Organizer and Chair, NIND-JHU Neuromuscular Scientific Symposium, Baltimore, MD

Advisory Committee/Review Groups:

- 2002 The Wellcome Trust, UK. (ad hoc grant reviewer)
- 2003 The Center for AIDS Research, University of Kentucky, USA (ad hoc grant reviewer)
- 2004 NIH, Neurogenesis and Cell Fate Study Section (ad hoc grant reviewer)
- 2004 NIH, NIA Biology of Stem Cells Study Section (ad hoc grant reviewer)
- 2005 NIH, NIAAA AA-Biomedical Research Study Section (ad hoc grant reviewer)
- 2005 The Department of Veterans Affairs, Merit Awards (ad hoc grant reviewer)
- 2005 Medical Research Council, UK (ad hoc grant reviewer)
- 2006 NIH, CNNT Study Section (ad hoc grant reviewer)
- 2006 The Department of Veterans Affairs, Merit Awards (ad hoc grant reviewer)
- 2006 Abstract reviewer, American Academy of Neurology Annual Meeting, San Diego, CA
- 2006 Abstract reviewer, American Neurological Association Annual Meeting, Chicago, IL
- 2006 Chair, NIH, Special Emphasis Panel ZRG1 BDCN-B
- 2006 Therapeutics Committee, NIH Workshop on Peripheral Neuropathy, Bethesda, MD
- 2006 Fondazione Mariani, Italy (ad hoc grant reviewer)
- 2006 University of Singapore, Singapore (ad hoc grant reviewer)
- 2006 NIH, NCF Section (ad hoc grant reviewer)
- 2006 Motor Neurone Disease Association, UK (ad hoc grant reviewer)
- 2007 NIH, CNNT Study Section (ad hoc grant reviewer)
- 2007 The Wellcome Trust, UK. (ad hoc grant reviewer)
- 2007 Abstract reviewer, American Neurological Association Annual Meeting, Washington, DC
- 2008 The Craig H. Neilsen Foundation, USA (ad hoc grant reviewer)
- 2008 Austrian Science Fund, Austria (ad hoc grant reviewer)
- 2008 NIH, CNNT Study Section (regular member)
- 2008 The Wellcome Trust, UK. (ad hoc grant reviewer)
- 2008 Abstract reviewer, American Academy of Neurology Annual Meeting, Chicago, IL
- 2008 JHU NIMH NeuroAIDS Center (ad hoc grant reviewer)
- 2009 Abstract reviewer, American Academy of Neurology Annual Meeting, Seattle, WA

- 2009 Scientific Review Committee member, Peripheral Nerve Society Bi-annual Meeting, Würzburg, Germany
- 2009 Health Research Board, Ireland (ad hoc grant reviewer)
- 2009 NIH, CNNT Study Section (regular member)
- 2009 Abstract reviewer, Peripheral Nerve Society Biennial Meeting, Würzburg, Germany
- 2009 USAMRMC (US Army Medical Research and Materiel Command) (ad hoc grant reviewer)
- 2009 US Air Force (ad hoc grant reviewer)
- 2009 JHU NIMH NeuroAIDS Center (ad hoc grant reviewer)
- 2010 Abstract reviewer, American Academy of Neurology Annual Meeting, Toronto, Canada
- 2010 NIH, CNNT Study Section (regular member)
- 2010 The Craig H. Neilsen Foundation, USA (ad hoc grant reviewer)
- 2010 NIH, NAIAD Study Section (ad hoc grant reviewer)
- 2010 Medical Research Council, UK (ad hoc grant reviewer)
- 2010 Michigan Diabetes RTC (ad hoc grant reviewer)
- 2011 Abstract reviewer, American Academy of Neurology Annual Meeting, Toronto, Canada
- 2011 NIH, CNNT Study Section (regular member)
- 2011 Packard Center for ALS Research (ad hoc grant reviewer)
- 2011 Abstract reviewer, Peripheral Nerve Society Biennial Meeting, Potomac, MD
- 2011 USAMRMC (US Army Medical Research and Materiel Command) (ad hoc grant reviewer)
- 2011 JHU ADRC (ad hoc grant reviewer)
- 2011 JHU NIMH NeuroAIDS Center (ad hoc grant reviewer)
- 2012 Packard Center for ALS Research (ad hoc grant reviewer)
- 2012 Abstract reviewer, American Academy of Neurology Annual Meeting, New Orleans
- 2012 Abstract reviewer, American Neurological Association Annual Meeting, Boston

Consulting:

- 2001 Pharmaceutical Research and Development L.L.C, Johnson & Johnson; advisor for “mitochondria and neuropathies”
- 2004 Ortho-Biotech L.L.C., Johnson & Johnson; advisor for “erythropoietin and peripheral neuropathies”
- 2004 Perseus-Soros Biofund; advisor for “nerve growth factor and peripheral neuropathies”
- 2005 Ortho-Biotech L.L.C. Johnson & Johnson, advisor for “Commitment to Anaemia Research Excellence” Advisory Board
- 2006 Ortho-Biotech L.L.C. Johnson & Johnson, advisor for EPONRP2001 Phase II trial of erythropoietin in prevention of chemotherapy induced peripheral neuropathy in ovarian cancer
- 2007 Vertex Pharmaceuticals Inc, advisor on potential targets for neuropathic pain therapies
- 2008 Biogen-Idec, advisor on potential targets for nerve regeneration
- 2010 TEVA Pharmaceuticals, advisor on potential neuroprotective compounds for chemotherapy induced neuropathies
- 2012 Bristol Myers Squibb, advisor on potential neuroprotective compound for chemotherapy induced peripheral neuropathies

RECOGNITION

i) Awards/Honors

- 1981 - 1982 Turkish Scientific and Technical Research Council Scholarship
- 1982 Ministry of Education Outstanding Student Award

- 1982 İis Bank Outstanding Performance in University Entrance Examination Award
- 1982 - 1984 Vehbi Koç Foundation Scholarship
- 1983 Dean's List, Hacettepe University, Faculty of Medicine
- 1984- 1988 Turkish Scientific and Technical Research Council Scholarship
- 1988 Vehbi Koç Foundation Travel Award for Students Studying Abroad
- 1988- 1989 University of Illinois Fellowship
- 1996 American Academy of Neurology Annual Meeting Scholarship for Residents
- 1997 Second Place, Maryland Neurological Association Resident Research Day
- 1997 Jay Slotkin Award for Excellence in Research, Johns Hopkins University
- 1997- 1999 Alberta Heritage Foundation for Medical Research Clinical Research Fellowship
- 2001 Young Investigator Travel Award, Peripheral Nerve Society Meeting
- 2002 - 2004 Clinician Scientist Award, Johns Hopkins University
- 2003 Young Investigator Travel Award, Peripheral Nerve Society Meeting
- 2003 Platform Presentation Award, American Neurological Association Meeting
- 2004 Platform Presentation Award, American Neurological Association Meeting
- 2005 Elected, Faculty of 1000 Medicine
- 2005 Derek Denny Brown Young Neurological Scholar Award, American Neurological Association

ii) Invited Talks/Panels

- 1997 "Novel effects of GDNF on rat sciatic nerve" Neurology Grand Rounds, Queens University, Kingston, Ontario, Canada
- 1998 "Novel effects of GDNF on rat sciatic nerve" Neuroscience Research Group Seminar, University of Calgary, Calgary, Alberta, Canada
- 1999 "Does ischemia contribute to poor regeneration after chronic denervation?" Neuroscience Day, University of Calgary, Calgary, Alberta, Canada
- 2001 "In vitro models of NRTI neurotoxicity and HIV-Associated Sensory Neuropathies" Ortho-Biotech LLP, Raritan, New Jersey, USA
- 2001 "Neurotrophins and other novel therapeutic options for diabetic neuropathy" Plenary Speaker, 1st National Diabetic Neuropathy Symposia, Mersin, Turkey
- 2001 "An *in vitro* model of NRTI neurotoxicity and HIV neuropathy" Neuronyx Inc., Philadelphia, Pennsylvania, USA
- 2001 "An *in vitro* model of NRTI neurotoxicity" Guilford Pharmaceuticals, Baltimore, Maryland, USA
- 2001 "Impaired regeneration in chronically denervated peripheral nerves" Neurology Grand Rounds, Johns Hopkins University, Baltimore, Maryland, USA
- 2001 "Role of mitochondria in models of HIV-associated neuropathies" Mitochondria and HIV Symposium, New York, New York, USA
- 2002 "*in vitro* models of HIV-associated Neuropathies" Blaustein Pain Center Lecture Series, Johns Hopkins University, Baltimore, MD, USA
- 2002 "Role of Stem Cell Transplantation in Motor Axonal Regeneration Following Chronic Denervation" Packard Center for ALS Research Symposia, Baltimore, MD, USA
- 2002 "Stem Cell Transplantation in Axonal Regeneration Following Chronic Denervation" Sunderland Society 14th Meeting, Baltimore, MD, USA
- 2002 "Impaired regeneration in chronically denervated nerves" Neuroimmunology Lecture Series, Johns Hopkins University, Baltimore, MD, USA
- 2002 "*in vitro* models of HIV-associated Neuropathies" Clinical Neuroscience Lecture Series, Johns Hopkins University, Baltimore, MD, USA
- 2003 "Erythropoietin: an endogenous neuroprotectant in the PNS" Neurology Faculty Research Presentation, Johns Hopkins University, Baltimore, Maryland, USA

- 2003 “Neuroprotective and regenerative strategies in the PNS: immunophilin ligands, erythropoietin and stem cells” Neurology Grand Rounds, Hacettepe University School of Medicine, Ankara, Turkey
- 2003 “Erythropoietin and HIV Neuropathy” Ortho-Biotech LP, Raritan, NJ, USA
- 2003 “Critical Illness Neuropathy and Myopathy” NCCU Grand Rounds, Johns Hopkins University, Baltimore, MD, USA
- 2004 “Neuroprotection and regeneration in the PNS” Medtronic-NeuroICE meeting, Baltimore, Maryland, USA
- 2004 “Erythropoietin as an endogenous neuroprotectant in the PNS” Ortho-Biotech Erythropoietin Advisory Board Meeting, Newark, New Jersey, USA
- 2004 “Neuroprotective and regenerative strategies in the PNS: immunophilin ligands, erythropoietin and stem cells” Plenary speaker, 3rd Annual Meeting of the Turkish Neuroscience Society, Denizli, Turkey
- 2004 “Neuroprotective and regenerative strategies in the PNS: immunophilin ligands, erythropoietin and stem cells” Neuroscience Seminar, University of Calgary, Calgary, Canada
- 2004 “Peripheral neuropathies and nerve injuries: current and upcoming treatment options” Neurology Grand Rounds, University of Calgary, Calgary, Canada
- 2004 “Pleiotrophin is a neurotrophic factor for motor neurons” Packard Center for ALS Research Symposia, Baltimore, MD, USA
- 2004 “A novel mutation in Connexin-32 in an unusual CMT-X patient” Neurogenetics seminar, Johns Hopkins Hospital, Baltimore, MD, USA
- 2005 “Neuroprotection in the PNS: HIV neuropathy models and erythropoietin” Clinical Science Seminar, Lundbeck, LLC, Copenhagen, Denmark
- 2005 “Neuroprotection in models of HIV neuropathy” Seminar, Glaxo Smith Klein, Research Triangle Park, NC, USA
- 2005 “Neuroprotection in the PNS: models of HIV neuropathy and EPO” Seminar, Max Planck Institute for Experimental Medicine, University of Göttingen, Göttingen, Germany
- 2005 “Pleiotrophin is a neurotrophic factor for motor neurons: an update” Packard Center for ALS Research Symposia, Baltimore, MD, USA
- 2005 “Pleiotrophin is a neurotrophic factor for motor and sensory neurons” Project ALS Research Symposia, Baltimore, MD, USA
- 2005 “Pleiotrophin, nanofiber nerve guides and peripheral nerve regeneration” Alliance Meeting, Johns Hopkins University, School of Medicine Baltimore, MD, USA
- 2005 “HIV Neuropathy” Department of Neurology Grand Rounds, Johns Hopkins University, School of Medicine Baltimore, MD, USA
- 2005 “Development and regeneration of the peripheral nervous system”, Neurology Symposium, JHU, Baltimore, MD
- 2005 “Workup of neuropathic pain” 11th Annual Pain Symposium, JHU, Baltimore, MD
- 2005 “Approach to treatable myopathies and neuropathies” 17th Annual Update in Neurology for Primary Care Physicians, JHU, Baltimore, MD
- 2005 “Update on treatable myopathies and neuropathies” 1st Annual Update in Neurology for Neurologists, JHU, Baltimore, MD
- 2006 “Neuroprotection and regeneration in the PNS” Department of Neurology Grand Rounds, Emory University, School of Medicine Atlanta, GA, USA
- 2006 “Developing drug screening tools for neuropathic pain research” Blaustein Pain Conference, Johns Hopkins University, School of Medicine Baltimore, MD, USA
- 2006 “Regeneration in the PNS” Department of Cell Biology Research Seminar Series, Emory University, School of Medicine Atlanta, GA, USA
- 2006 “Pleiotrophin and motor neuron biology” Packard Center for ALS Research Symposia, Baltimore, MD, USA

- 2006 “Protective mechanisms in nerve: Focusing on axonal protection and regeneration” XI International Congress on Neuromuscular Disorders, Istanbul, Turkey
- 2006 “HIV-associated sensory neuropathies: Update on mechanisms” XXVIIIth International Congress of Clinical Neurophysiology, Edinburgh, Scotland
- 2006 “Developing therapeutics for peripheral neuropathies” NIH/NINDS Workshop on Peripheral Neuropathy, Bethesda, MD, USA
- 2006 “Pleiotrophin, nanofiber nerve guides and peripheral nerve regeneration” Charitable Leadership Foundation, Medical Technology Acceleration Program Annual Meeting, Albany, NY, USA
- 2006 “Erythropoietin and the peripheral nervous system” Ortho-Biotech EPONRP2001 Strategy Meeting, New York, NY, USA
- 2007 “HIV-associated sensory neuropathies: novel insights into mechanisms of axonal injury and neuroprotection”, Department of Neuroscience, Temple University, Philadelphia, PA, USA
- 2007 “Peripheral neuropathies and nerve regeneration in humans: new insights and novel therapies”, Department of Neurobiology, UCLA, Los Angeles, CA, USA
- 2007 “Novel approaches to development of therapies for peripheral neuropathies”, Vertex Pharmaceuticals, San Diego, CA, USA
- 2007 “Peripheral neuropathies and nerve regeneration in humans: new insights and novel therapies”, Amgen Inc., San Francisco, CA, USA
- 2007 “Strategies for nerve regeneration”, Brain Awareness Week invited lecturer, Johns Hopkins University, Undergraduate Neuroscience Society, Baltimore, MD, USA
- 2007 “Peripheral neuropathies and nerve regeneration in humans: new insights and novel therapies”, University of Iowa, Department of Neurology Grand Rounds, Iowa City, IA, USA
- 2007 “Peripheral neuropathies and nerve regeneration in humans: new insights and novel therapies”, University of Rochester, Department of Neurology Grand Rounds, Rochester, NY, USA
- 2007 “Peripheral neuropathies and nerve regeneration in humans: new insights and novel therapies”, Clinical Neuroscience Lecture Series, Johns Hopkins University, Baltimore, MD, USA
- 2007 “Peripheral neuropathies and nerve regeneration in humans: new insights and novel therapies”, Neurology Grand Rounds, Johns Hopkins University, Baltimore, MD, USA
- 2007 “Peripheral neuropathies and nerve regeneration in humans: new insights and novel therapies”, 43rd National Neurology Congress Annual Meeting, Antalya, Turkey
- 2008 “Of mice and men: How can we develop regenerative therapies for peripheral neuropathies and nerve regeneration in humans?” University of Rochester, Department of Neurology, Rochester, NY, USA
- 2008 “EPO protection in nerve injury and degeneration” NIDDK Workshop on Erythropoietin Receptor Expression and Function in Non-Hematopoietic Tissues, Bethesda, MD, USA
- 2008 “Regenerative therapies for peripheral neuropathies and neuropathic pain” Johns Hopkins Brain Sciences Institute Biotech 2008 Symposium Baltimore, MD, USA
- 2008 “Challenges and opportunities for regenerative therapies for peripheral neuropathies and nerve injuries in humans” Cornell-Burke Institute for Medical Research, White Plains NY, USA
- 2008 “Regeneration in the PNS: Challenges and Opportunities” UCSD Department of Neurology, San Diego, CA, USA
- 2009 “Challenges and opportunities for regenerative therapies for peripheral neuropathies and nerve injuries in humans”, Neurology Grand Rounds, Johns Hopkins University, Baltimore, MD, USA

- 2009 “Missed opportunities: weakness in the elderly”, Medicine Grand Rounds, Johns Hopkins Bayview Medical Center, Baltimore, MD, USA
- 2009 “Development of the Peripheral Nervous System: Schwann Cell Development, Biology and its Role in Regeneration”, EGE Vth Biannual International Neuroscience Graduate Summer School, Izmir, Turkey
- 2009 “Axon-Schwann Cell Interaction in Peripheral Neuropathies”, EGE Vth Biannual International Neuroscience Graduate Summer School, Izmir, Turkey
- 2009 “Axon-Schwann cell interactions and regeneration in the peripheral nervous system” University of Konstanz, Konstanz, Germany
- 2009 “Chronic denervation and Schwann cell heterogeneity in peripheral nerve regeneration” XXXVIIIth NeuroSki Meeting: Special Symposium in honour of Tessa Gordon, Kananaskis, Alberta, Canada
- 2009 “Nanofiber nerve guides for nerve regeneration” Biomaterials, Entrepreneurship, Innovations, Translation (BEIT 2009), Seattle, WA
- 2009 “Challenges and Opportunities for Regeneration in the Peripheral Nervous System” Drexel University, Department of Neuroscience, Philadelphia, PA, USA
- 2009 “Axonal degeneration in peripheral neuropathies” Molecular and cellular mechanisms of axon degeneration: 2nd International Workshop, Woods Hole, MA
- 2010 “Mitochondrial dysfunction in SIV and HIV-associated neuropathy” National NeuroAIDS Tissue Consortium Symposia, New York, NY
- 2010 “Recruiting young neurologists into the basic science laboratory” Muscle Study Group Meeting, Beaver Hollow, NY
- 2010 “Trophic factors as potential therapies” CMT Association CMT2 Symposium, Las Vegas, NV
- 2010 “Diagnostic Workup & Management of a Patient with Neuropathic Pain” George Washington University, Department of Neurology, Washington, DC, USA
- 2010 “Regeneration in the Peripheral Nervous System: Challenges and Opportunities” NINDS, National Institutes of Health, Bethesda, MD USA
- 2010 “Regeneration in the Peripheral Nervous System: Challenges and Opportunities” SUNY Stony Brook, Department of Neurobiology, Stony Brook, NY, USA
- 2010 “Mechanisms of axonal degeneration in peripheral neuropathies”, Department of Neurology Grand Rounds, SUNY Downstate, Brooklyn, NY USA
- 2010 “Regeneration in the PNS: Challenges and Opportunities” Department of Neurosciences Alumnus Seminar, Case Western Reserve University, Cleveland, OH USA
- 2010 “Mechanisms of distal axonal degeneration in peripheral neuropathies”, University of Calgary Neurology Grand Rounds, Calgary, Alberta, Canada
- 2010 “Regeneration in the PNS: Challenges and Opportunities” University of Calgary, Department of Neuroscience Invited Seminar, Calgary, Alberta, Canada
- 2011 “Schwann cells and Regeneration in the PNS”, Winter Conference on Brain Research, Keystone, CO
- 2011 “Nanoscale Guidance Cues for Peripheral Nerve Regeneration” University of Rochester “Frontiers in Materials Science” Symposium, Rochester, NY
- 2011 “Regeneration in the PNS: Challenges and Opportunities” London Pain Consortium Workshop Invited Talk, London, UK
- 2011 “Mechanisms of distal axonal degeneration in peripheral neuropathies” London Pain Consortium Seminar, London, UK
- 2011 “Axonal Damage and Repair in a Model of CIPN” NCI Workshop on Chemotherapy-Induced Peripheral Neuropathy, Rockville, MD
- 2011 “Basic science for clinicians” 2011 Peripheral Nerve Society Bi-annual Meeting, Potomac, MD

- 2011 “Mitochondrial aging and dysfunction in peripheral neuropathies” University of Maryland – JHU Mitochondrial Research Symposium, Baltimore, MD
- 2011 “Peripheral Neuropathies” Foundation for Peripheral Neuropathy Retreat, Chicago, IL
- 2012 “Mitochondrial aging and dysfunction in peripheral neuropathies” University of Maryland, Anaesthesiology Research Talk, Baltimore, MD
- 2012 “Mechanism of axonal degeneration in peripheral neuropathies” University of California Irvine, Neurology Grand Rounds, Irvine, CA
- 2012 “Chronic denervation in lumbar spinal injury” Reeve-Irvine Research Center Annual Symposium, Irvine, CA
- 2012 “Regeneration in the PNS: Challenges”, Foundation for Peripheral Neuropathy Research Symposium, Chicago, IL
- 2012 “Peripheral nerve regeneration and therapies for peripheral neuropathies” NINDS-JHU Neuromuscular Scientific Symposium, Baltimore, MD
- 2012 “Mechanism of axonal degeneration in HIV-SN”, American Pain Society Annual Meeting, Honolulu, HI
- 2012 “Axonal regeneration” Versailles International Neurointensive Care Symposium 2012, Versailles, France

iii) Conference Platform Presentations

Höke, A., Rosenberg, B., Hoffman, P. And Griffin, J.W. (2001) “Differential Expression of Neurotrophin mRNA in Denervated Schwann Cells of Motor and Sensory Nerve Fibers” **2001 Peripheral Nerve Society Meeting, Austria**

Keswani, S., Hasan, C., McArthur, J.C., Griffin, J.W. and **Höke, A.** (2001) “GP120 neurotoxicity in primary Dorsal Root Ganglion (DRG) neuronal cultures” **2001 Society for Neuroscience Conference, San Diego, CA**

Heine, W., Conant, K., Griffin, J.W. and **Höke, A.** (2003) “Neural stem cell transplantation improves regeneration through chronically denervated peripheral nerves” **2003 Peripheral Nerve Society Meeting, Banff, Canada**

Keswani, S., Polley, M., McArthur, J.C., Griffin, J.W. and **Höke, A.** (2003) “Mechanism of HIV associated neuropathy” **2003 Peripheral Nerve Society Meeting, Banff, Canada**

Heine, W., Conant, K., Griffin, J.W. and **Höke, A.** (2003) “Neural stem cell transplantation improves regeneration through chronically denervated peripheral nerves” **2003 American Neurological Association Meeting, San Francisco, CA**

Heine, W., Conant, K., Griffin, J.W. and **Höke, A.** (2003) “Neural stem cell transplantation improves regeneration through chronically denervated peripheral nerves” **2003 Society for Neuroscience Meeting, New Orleans, LA**

Mi, R., and **Höke, A.** (2004) “Pleiotrophin is a neurotrophic factor for motor neurons” **2004 American Neurological Association Meeting, Toronto, Canada**

Mi, R., and **Höke, A.** (2004) “Pleiotrophin is a neurotrophic factor for motor neurons” **2004 Sunderland Society Meeting, Toronto, Canada**

Höke, A., Zhou, C., Redett, R., Jari, R., and Brushart, T. (2004) “Differential upregulation of neurotrophic factors during reinnervation of sensory and motor nerve grafts” **2004 Society for Neuroscience Meeting, San Diego, CA**

Höke, A. (2004) “Neuroprotection in the PNS: Erythropoietin and Immunophilin ligands” **7th International Conference on Neuroprotection, Asilomar, CA**

Höke, A., Zhou, C., Redett, R., Jari, R., and Brushart, T. (2005) “Differential upregulation of neurotrophic factors during reinnervation of sensory and motor nerve grafts” **2005 Peripheral Nerve Society Bi-annual Meeting, Tuscany, Italy**

Höke, A. (2005) “Neuroprotection in the PNS” **Derek Denny-Brown Award Lecture at the 2005 American Neurological Association Meeting, San Diego, CA**

Jack, C., Zhou, C. and **Höke, A. (2005)** “Development of a small rodent model of HIV-associated sensory neuropathy” **2005 Society for Neuroscience Meeting, Washington, DC**

Mi, R., and **Höke, A. (2006)** “ALK is the receptor that mediates neurotrophism of pleiotrophin” **2006 American Academy of Neurology Annual Meeting, San Diego, CA**

Melli, G., Jack, C. and **Höke, A. (2006)** “Erythropoietin prevents distal axonal degeneration in a mouse model of paclitaxel induced neuropathy” **XI International Congress on Neuromuscular Disorders, Istanbul, Turkey**

Höke, A., Zhou, C., Redett, R., Jari, R., and Brushart, T. (2007) “Differential growth factor expression in subsets of Schwann cells” **2007 Peripheral Nerve Society Bi-annual Meeting, Snowbird, UT**

Höke, A., (2010) “Accumulation of mtDNA mutations and increased oxidative stress in a transgenic mouse model of HIV-SN”, **Society for Neuroscience Annual Meeting, Nanosymposium presentation, San Diego, CA**

Höke, A., (2010) “Human embryonic stem cell-derived Schwann cells to enhance nerve repair in a model of chronic denervation”, **Maryland Stem Cell Meeting, Baltimore, MD**

Clifford, K., Reed, N, Melli, G., Glass, J., Cavaletti G, and **Höke, A., (2011)** “Paclitaxel-induced distal axonal degeneration involves the intrinsic pathway of apoptosis”, **2011 Peripheral Nerve Society Bi-annual Meeting, Potomac, MD**

Höke, A., (2011) “Biomaterials-based guidance conduits for nerve regeneration”, **JHU-AFIRM Symposium on Translational Research of Military Relevance, Baltimore, MD**

Höke, A., (2011) “Mitochondrial “aging” and dysfunction in peripheral neuropathies”, **University of Maryland – JHU Mitochondrial Research Retreat, Baltimore, MD**

Höke, A., (2011) “Identification of a neuroprotective compound to ameliorate chemotherapy induced peripheral neuropathy”, **Society for Neuroscience Annual Meeting, Nanosymposium presentation, Washington, DC**

Höke, A., (2012) “Regeneration in the PNS: Challenges”, **Foundation for Peripheral Neuropathy Research Symposium, Chicago, IL**

