

Curriculum Vitae
The Johns Hopkins University School of Medicine

Signature:

Name: Ahmet Höke

Date: 6/10/08

DEMOGRAPHIC INFORMATION

Current Appointments:

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

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

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 Research Articles:

1. 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., Regenbreg 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* Epub ahead of print May 7, 2008
2. 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* Epub ahead of print March 29, 2008
3. Laird, F., Farah, M., Ackerley, S., **Höke, A.**, Maragakis, N.J., Rothstein, J.D., Griffin, J.W., Price, D., Lee, M., Wong, P. **(2008)** “Mutant dynactin p150^{Glued} causes motor neuron disease characterized by defects in vesicular trafficking”, *J. Neurosci* Vol: 28(9), pp: 1997-2005
4. 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
5. 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
6. 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
7. 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

8. 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
9. 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
10. 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
11. Mi, R., Chen, W. and **Höke, A.** (2007) "Pleiotrophin is a neurotrophic factor for motor neurons", **PNAS**, Vol: 104(11), pp: 4664-9
12. 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
13. 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
14. 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
15. **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
16. 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
17. 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
18. 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
19. 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

20. 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
21. 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
22. 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
23. 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.
24. 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
25. 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
26. 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
27. 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
28. 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
29. 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
30. 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
31. 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
32. 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

33. 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
34. 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
35. 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
36. 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
37. 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
38. 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
39. 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
40. 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**
41. Vol: 11(8), pp:1651-4.
42. 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
43. 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
44. 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
45. 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

46. 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
47. Höke, A. (1994) "Astrocyte Proteoglycans in a Model of Reactive Gliosis" **Doctoral Thesis**, Case Western Reserve University, Cleveland, OH.

(ii) Non-peer reviewed Articles

1. Höke, A. (2007) "What is next in ALS clinical trials?" [letter] **Neurology** Published online Oct 18, 2007
2. 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

(iii) Online Publications

1. 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>
2. 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>

(iv) Editorials and Reviews:

1. 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
2. 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
3. Höke, A. (2006) "Neuroprotection in the peripheral nervous system: rationale for more effective therapies" **Arch Neurol**, Vol: 63(12), pp:1681-5
4. 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
5. Cornblath, D.R. and Höke, A. (2006) "Recent advances in HIV neuropathies" **Current Opinion in Neurology**, Vol: 19(5), pp: 446-50
6. 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

7. Höke, A. (2005) "Proteoglycans in axonal regeneration" **Exp Neurol**, Vol: 195(2), pp: 273-7
8. 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
9. 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
10. 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
11. Höke, A. and Silver, J. (1994) "Heterogeneity Among Astrocytes in Reactive Gliosis" **Perspectives in Developmental Neurobiology** Vol: 2(3), pp: 269-274

(iv) Book Chapters and Monographs:

1. 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
2. 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
3. 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
4. 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
5. 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
6. Griffin, J.W. and Höke, A. 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
7. 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

8. 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
9. 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
10. 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
11. 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
12. 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
13. Höke, A. (2001) "Heritable Muscle Disease" in ***Current Therapy in Neurological Disease***, 6th Ed., Johnson, Griffin, McArthur (Eds), Mosby, St. Louis
14. 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

(v) Books:

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

Inventions/Patents

1. **Report of Invention (JHU Ref#: C-10297):** Hydrogel-grafted degradable nerve guides; 2008
2. **Report of Invention (JHU Ref#: DM-4892):** Protein-Encapsulated Aligned Fibers by Electrospinning for Enhanced Peripheral Nerve Regeneration; 2006
3. **Report of Invention (JHU Ref#: DM-4682):** Immortalization of Nociceptive Dorsal Root Ganglion Neurons; 2005 (**USPTO application no: 2006014247**)
4. **Report of Invention (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. **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
6. **Patent pending (JHU Ref#: DM-4052):** Immunophilin ligand treatment of antiretroviral toxic neuropathy; 2002 (**USPTO application no: 20050131029**; 2005)
7. **Report of Invention (JHU Ref#: DM-3871):** Use of Immunophilin Ligands to Preserve Penile Nerves Following Radical prostatectomy; 2001

Extramural Sponsorship:

(i) Current:

- Hoke (PI) 8/15/2007 – 8/14/2012
RO1 NS 43991-05 NINDS
Current year direct cost: \$ 250,000
Total direct cost: \$ 1250,000
“HIV and antiretroviral toxic neuropathy”
The 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. (Effort: 20%)
- Hoke (PI) 8/1/2006 – 12/31/2008
The Centre for ALS Research, JHU
Current year direct cost: \$ 84,538
Total direct cost: \$ 84,538
“Pleiotrophin in Motor Neuron Disease”
The 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 (no salary support)
- Hoke (co-I) (PI: Griffin) 9/15//2007 – 3/31/2011
RO1 NS041269-05A1-01 NINDS
Current year direct cost: \$ 200,000
Total direct cost: \$ 1,00,000
“Remark bundle structure and function in neuropathic pain”
The major goals of this project are to understand the role of Remak Schwann cells in neuropathic pain (Effort: 5%)
- Hoke (co-I) (PI: Kerr) 4/1//2005 – 3/31/2009
RO1 NS050412-01 NINDS
Current year direct cost: \$ 225,000
Total direct cost: \$ 1,125,000
“Stem Cell-Derived Motoneurons in the Adult Mammalian CNS”
The major goals of this project are to generate motoneurons form embryonic stem cells and examine the potential of these cells in promoting recovery in spinal cord injury models (Effort: 5%)
- Hoke (PI) 7/1/2006 – 6/30/2009
The Adelson Program in Neural Repair and Rehabilitation

Current year direct cost: \$ 250,000

Total direct cost: \$ 750,000

“Novel therapeutics for peripheral neuropathies and nerve regeneration”

This project is designed to develop novel therapeutic drugs for peripheral nerve regeneration and neuroprotection. (Effort 15%)

- Hoke (PI) 7/1/2007 – 6/30/2010

The Adelson Program in Neural Repair and Rehabilitation

Current year direct cost: \$ 256,484

Total direct cost: \$ 773,280

“Preventing or reversing Schwann cell loss during nerve regeneration”

This project is designed to develop novel therapies to prevent Schwann cell loss that precludes peripheral nerve regeneration in humans. (Effort 15%)

- Hoke (PI of Local site) (PI: Lewis) 1/1/2007 – 12/31/2009

Muscular Dystrophy Association and CMT Association

Current year direct cost: \$ 87,325 (local site)

Total direct cost: \$ 257,933 (local site)

“High dose ascorbic acid treatment of CMT1A”

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). (Effort 5%)

- Hoke (co-I) (PI: Wong) 4/1/2007 – 3/31/2012

RO1 NS040014-06 NINDS

Current year direct cost: \$ 218,750

Total direct cost: \$ 1,091,250

“Mechanisms & Mouse Models of Amyotrophic Lateral Sclerosis”

The 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. (Effort: 2%)

- Hoke (PI) 6/1/2008 – 5/31/2009

The BSI-Biogen Idec Research Program

Current year direct cost: \$ 116,034

Total direct cost: \$ 116,034

“Development of novel therapies for peripheral neuropathies”

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. (Effort 5%)

(ii) Pending:

- Hoke (PI) 1/1/2008 – 12/31/2012

RO1 NS 44807-06 NINDS

Current year direct cost: \$ 318,265

Total direct cost: \$ 1,693,438

“HIV sensory neuropathy: risk factors and mechanisms of injury”

The major goals of this project are to identify potential genetic risk factors for host susceptibility for HIV-SN, and understand the role of Schwann cells and mitochondrial dysfunction in development of HIV-SN in patients. (Effort: 20%)

(iii) Previous Grants/Contracts:

- Hoke (PI) 4/1/2001 – 3/31/2002
The Centre for AIDS Research, JHU
Total direct cost: \$ 50,695
“Pilot Project for Development of an *in vitro* Model of NRTI Neurotoxicity”
The major goal of this pilot project is to develop an *in vitro* culture system and test the potential neurotoxicity of NRTIs. (No salary support)

- Hoke (PI) 1/1/2002 – 9/30/2002
Ortho-Biotech L.L.C.
Total direct cost: \$ 21,688
“Potential Rescue of Dorsal Root Ganglion Sensory Neurons by Erythropoietin in *in vitro* Models of HIV-Related Neuropathies”
The major goal of this pilot project is to test the potential neuroprotective efficacy of erythropoietin in *in vitro* models of HIV-associated neuropathies. (Effort: 10%)

- Hoke (PI) 7/1/2001 – 6/31/2003
The Centre for ALS Research, JHU
Total direct cost: \$ 98,388
“Role of Stem Cell Transplantation in Motor Axonal Regeneration in Short and Long-Term Denervation”
The 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. (No salary support)

- Hoke (co-PI) (PI: Haughey) 7/1/2003 – 6/30/2004
Blaustein Pain Research Fund, JHU \$50,000
“Calcium dysregulation in HIV-1 protein-induced peripheral neuropathy”
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. (No salary support)

- Hoke (co-PI) (PI: Brushart) 4/1/2003 – 3/31/2005
RO1 NS 34484-06 NINDS
Current year direct cost: \$ 52,000 for my section (\$ 250,000 for the whole project)
Total direct cost: \$ 104,000 for my section (\$ 500,000 for the whole project)
“Mechanism of Preferential Motor Reinnervation”
The major goals of this are to examine the mechanism of specificity of motor reinnervation. My section will examine the differences in gene expression between denervated motor and sensory Schwann cells. (Effort: 5%)

- Hoke (co-PI) (PI: Polydefkis) 4/1/2004 – 3/31/2005
The JHU Cancer Research Pilot Project Fund
Total direct cost: \$ 50,000
“Natural History of Oxaliplatin Neuropathy”
The major goal of this pilot project is to define the natural history of oxaliplatin-induced peripheral neuropathy with detailed clinical, electrophysiological and morphological studies. (No salary support)

- Hoke (PI) 5/1/2004 – 4/30/2005
Ortho-Biotech L.L.C.

Total direct cost: \$ 52,408

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

The major goal of this pilot project is to test the potential neuroprotective efficacy of erythropoietin in an animal model of paclitaxel-induced peripheral neuropathy (Effort: 1%)

- Hoke (PI) 8/1/2003 – 7/31/2005

The Centre for ALS Research, JHU

Current year direct cost: \$ 52,163

Total direct cost: \$ 106,359

“Stem Cells in Chronic Motor Axonal Regeneration”

The 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 (no salary support)

- Hoke (co-PI) (PI: Power) 9/30/2002 – 9/30/2005

RO1 NS 46262-01 NINDS

Current year direct cost: \$ 60,000 for my section (\$ 225,000 for the whole project)

Total direct cost: \$ 180,000 for my section (\$ 675,000 for the whole project)

“Lentivirus-induced Neuropathy: Viral Diversity and Host Response”

The major goals of this project are to examine the role of lentivirus diversity in inducing peripheral neuropathy. My laboratory will be involved in examining the skin biopsy samples from the FIV-infected cats and examine the role of diversity of viral envelope proteins in inducing neurotoxicity in an in vitro model. (Effort: 5%)

- Hoke (PI) 7/1/2005 – 6/30/2006

Blaustein Pain Research Fund, JHU

\$50,000

“Development of high throughput drug screening for neuropathic pain”

This pilot project grant will allow us to screen about a 2000 compound library for neuroprotection against capsaicin using an immortalized DRG sensory neuronal line. (No salary support)

- Hoke (PI) 8/1/2005 – 7/31/2006

The Centre for ALS Research, JHU

Current year direct cost: \$ 84,538

Total direct cost: \$ 84,538

“Pleiotrophin in Motor Neuron Disease”

The 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 (no salary support)

- Hoke (PI) 9/30/2002 – 9/30/2006

RO1 NS 43991-04 NINDS

Current year direct cost: \$ 190,000

Total direct cost: \$ 760,000

“An in vitro model of antiretroviral toxic neuropathy”

The 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. (Effort: 30%)

- Hoke (PI of Project #2) (PI of PPG: Nath) 9/1/2003 – 8/30/2007
PO1 MH 70056-01 NIMH
Current year direct cost: \$ 192,000 for Project 2 (\$ 975,000 for the whole PPG)
Total direct cost: \$ 768,000 for Project 2 (\$ 3,925,000 for the whole PPG)
“ **Project #2: Immunophilin Ligands in *in vitro* models of HIV Neuropathy**”
“ **PPG: Immunophilin Ligands for HIV Dementia and Neuropathy**”
The 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 will examine the mechanisms of immunophilin ligand neuroprotection in *in vitro* models of HIV neuropathy. (Effort: 30%)

- Hoke (PI) 1/1/2006 – 12/31/2007
The Neuropathy Association \$50,000
“**Development of high throughput drug screening for HIV neuropathy**”
This pilot project grant will allow us to screen about a 2000 compound library for neuroprotection against antiretroviral drug, ddC using an immortalized DRG sensory neuronal line. (No salary support)

- Hoke (PI) 1/1/2004 – 12/31/2007
RO1 NS 47972-01 NINDS
Current year direct cost: \$ 163,122
Total direct cost: \$ 652,488
“**Peripheral neurotoxicity by the HIV-1 coat protein gp120**”
The 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. (Effort: 30%)

- Hoke (PI) 1/1/2007 – 9/30/2007
CLF-MTAP
Current year direct cost: \$ 67,453
Total direct cost: \$ 67,453
“**Biodegradable Nanofibers and Pleiotrophin for Nerve Repair**”
This project is designed to develop novel nanofiber containing nerve guides for peripheral nerve regeneration. (Effort 2%)

EDUCATIONAL ACTIVITIES

Teaching

(i) Classroom instruction:

- Annual lecture to graduate students in “Stem Cells” course (2007 – to date)
- Annual lecture to undergraduate biomedical engineering students (2007 – to date)
- Annual lecture to medical students in Neuro A course (2003 – to date)
- Neuromuscular Diseases course to medical students rotating in Neurology service: Once a month lecture on neuromuscular cases. (2001 – 2007)

(ii) Clinical instruction:

- Daily clinical rounds with medical students one month a year during Neurology inpatient service (1999 – 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 (2000 – to date)

(iii) CME instruction:

- 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
- 2004 “Current treatment options for peripheral neuropathies” Saskatchewan Medical Society, Vancouver, British Columbia, Canada
- 2000 “Approach to Peripheral Neuropathies” Abu Dhabi, United Arab Emirates

Mentoring

(i) Advisees:

Postdoctoral:

- Megan Wright (2008 – to date)
- Giorgia Melli MD (2003 – 2006) Present position: Researcher, Istituto Nazionale Neurologico Carlo Besta, Milano, Italy
- Ruifa Mi MD, PhD (2003 –2006) Present position: Research Associate Faculty, Department of Neurology, Johns Hopkins University
- Weiran Chen MD (2003- 2004). Present position: Research Associate Faculty, Department of Neurology, Johns Hopkins University
- Sanjay Keswani MBBS: (2001-2003). Present position: Associate Medical Director, Eli-Lilly, Indianapolis, Indiana

Predoctoral:

- Kavan Clifford (2006-to date) Md/PhD student in the Medical Scientist Training Program, Johns Hopkins University, School of Medicine
- Lisa Philippose (2004-2006) Medical School summer research, JHU
- Berke Guzelsu (2004) Undergraduate summer research, Franklin and Marshall College
- Sing Yian Chew (2003-2006) 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
- John Schneider (2003-2004) Medical School summer research, JHU.
- Robert Huang (2003-2004) Undergraduate research, JHU
- Robert Chow (2003-2004) Undergraduate research, JHU
- Michelle Polley (2002-2004) Undergraduate research, JHU.
- Sheila Kumar (2001-2003) Undergraduate research, JHU. Received Howard Hughes Summer Scholarship (2002) for her project in my lab. Present position: Medical Student at Yale University

- Bani Chander (2001-2002) Undergraduate research, JHU. Received Howard Hughes Summer Scholarship (2001) for her project in my lab. Present position: Medical Student at New York University
- Walter Heine (2000-2002). Received MSc in Biomedical Engineering, JHU. Thesis title: “Transplantation of neural stem cells into the peripheral nerves of rats”. Present position: Medical Student at Boston University
- Brian Rosenberg (2000-2001) Undergraduate research, JHU.

(ii) Thesis Committees:

- Corinne Bright: Dept of Biomedical Engineering, JHU, PhD thesis defence July 7, 2004
- Sing Yian Chew: Department of Materials Science and Engineering, JHU, PhD thesis defence June 22, 2006
- Emily McVey: Department of Comparative Medicine, JHU, PhD thesis defence December 1, 2006
- Juliane Weber: Faculty of Science, University of Witwatersrand, Johannesburg, South Africa, PhD Thesis External Examiner May 2008

(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.

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

(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 Biomateriala

CLINICAL ACTIVITIES

Certification

Medical Licensure:

1992-4 State of Ohio, USA #64136 (Inactive)
1994- State of Maryland, USA #D46686 (Active)
1998- Province of Alberta, CANADA #011868 (Active)

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

Neurology Inpatient or Consult Service: 1 month a year since 1999
Neuromuscular Consult Service: 1 month a year since 1999
Neuromuscular Pathology Biopsy Reading Service: 2-4 months a year since 2000
Neuromuscular Clinics: 1 half-day session per week since 1999
Neurology EMG Clinic: 1 half-day session per week since 2000

ORGANIZATIONAL ACTIVITIES

Institutional Administrative Appointments

2002- Appointments and Promotions Committee, Department of Neurology, Johns Hopkins University, School of Medicine, Baltimore, Maryland
2006- Departmental Education Committee, Department of Neurology, Johns Hopkins University, School of Medicine, Baltimore, MD
2006- Membership Committee, American Neurological Association, Chicago, IL
2007- Neuromuscular Science Working Group, American Academy of Neurology, St. Paul, MN
2007- Finance Committee, Department of Neurology, Johns Hopkins University, School of Medicine, Baltimore, Maryland
2007- Departmental Compensation Task Force, Department of Neurology, 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

1997-9 Alberta Medical Association
1999- American Association of Electrodiagnostic Medicine
1999- Peripheral Nerve Society
1999-02 World Muscle Society
2003- International Society for Neurovirology
2003-05 International Society for Stem Cell Research
2003-04 Society for Experimental Biology and Medicine
2004- American Association for the Advancement of Science
2005- 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 Sensory Neuropathies”, San Diego, CA
2006 Session Chair, XIth International Congress on Neuromuscular Diseases, “Peripheral neuropathies”, Istanbul Turkey

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 Abstract reviewer, American Neurological Association Annual Meeting, Washington, DC

Consultantships:

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

RECOGNITION

i) Awards/Honors

- 1981-2 Turkish Scientific and Technical Research Council Scholarship
- 1982 Ministry of Education Outstanding Student Award
- 1982 İis Bank Outstanding Performance in University Entrance Examination Award
- 1982-4 Vehbi Koç Foundation Scholarship
- 1983 Dean’s List, Hacettepe University, Faculty of Medicine
- 1984-8 Turkish Scientific and Technical Research Council Scholarship
- 1988 Vehbi Koç Foundation Travel Award for Students Studying Abroad
- 1988-9 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
- 1997-9 Alberta Heritage Foundation for Medical Research Clinical Research Fellowship
- 2001 Young Investigator Travel Award, Peripheral Nerve Society Meeting
- 2002-4 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

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, Tuscany, Italy**

iv) Invited Reviews/Editorials:

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

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

Höke, A. (2005) "Proteoglycans in axonal regeneration" **Exp Neurol**, Vol: 195(2), pp: 273-7

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

Höke, A. (2006) "What factors limit the success of peripheral nerve regeneration in humans" **Nature Neurology Clinical Practice**, Vol: 2(8), pp: 446-50

Cornblath, D.R. and Höke, A. (2006) "Recent advances in HIV neuropathies" **Current Opinion in Neurology**, Vol: 19(5), pp: 446-50

Höke, A. (2006) "Neuroprotection in the peripheral nervous system: rationale for more effective therapies" **Arch Neurol**, Vol: 63(12), pp: 1681-5

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

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