BIOGRAPHICAL SKETCH

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NAME	POSITION TITLE
Hedera, Peter	Assistant Professor
eRA COMMONS USER NAME	
HEDERAP	

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)*

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	YEAR(s)	FIELD OF STUDY
Ian Amos Comenius University, Czechoslovakia	M.D.	1981-1987	Medicine

A. Positions and Honors.

Research and/or Professional Experience

1987-1991 **Resident**, First Neurological Clinic, University Hospital, Bratislava, Czechoslovakia
1991-1994 **Postdoctoral Fellow,** Alzheimer Center, University Hospitals of Cleveland, Cleveland, OH
1994-1995 **Intern (PGY-1)**, St. Luke's Medical Center, Department of Medicine, Cleveland, Ohio
1995-1998 **Resident,** Department of Neurology, University of Michigan Medical Center, Ann Arbor, MI
1998-1999 **Postdoctoral Fellow in Neurogenetics** with John K. Fink**,** Department of Neurology, University of Michigan Medical Center, Ann Arbor, MI
1999-2001 **Resident,** Department of Pediatrics/ Medical Genetics, University of Michigan Medical Center, Ann Arbor,
2001-2002 **Lecturer**, Department of Neurology, University of Michigan Medical Center, Ann Arbor, MI
2002-present **Assistant Professor**, Department of Neurology, Vanderbilt University, Nashville, TN

Honors and Awards

1987 President's Prize of Honor; Ian Amos Comenius University Bratislava
1998 Campbell Foundation Fellowship
1999 American Academy of Neurology Founder's Award

B. Selected peer-reviewed publications (in chronological order).

(Publications selected from 76 peer-reviewed publications)

1. Kalaria RN, **Hedera P**. Differential degeneration of the cerebral microvasculature in Alzheimer's disease. Neuroreport 1995; 6: 477-480.
2. **Hedera P**, Wu D, Lewin JS, Miller D, Lerner AJ, Friedland RP. Temporal patterns of uncoupling between oxidative metabolism and regional cerebral blood flow demonstrated by functional magnetic resonance imaging. Invest Radiol 1995; 30: 625-633.
3. Premkumar DRD, Cohen DL, **Hedera P**, Friedland RP, Kalaria RN. Apolipoprotein E e4 allelles in cerebral amyloid angiopathy and cerebrovascular pathology associated with Alzheimer's disease. Am J Pathol 1996; 146: 2083-2095.
4. Kalaria RN, **Hedera P**. b-amyloid vasoactivity in Alzheimer's disease. Lancet 1996; 347: 1492-1493.
5. Fink JK, Rainer S, Wilkowski J, Jones SM, Kume A, **Hedera P**, Albin R, Mathay J, Girbach L, Varvil T, Otterund B, Leppert M. Paroxysmal dystonic choreoathetosis: Tight linkage to chromosome 2q. Am J Hum Genet 1996; 59: 140-145.
6. **Hedera P**, Lai S, Lewin JS, Haacke EM, Wu D, Lerner AJ, Friedland RP. Assessment of cerebral blood flow reserve using functional magnetic resonance imaging. JMRI 1996; 6: 718-725.
7. **Hedera P**, Friedland RP. Cerebral autosomal dominant arteriopathy with subcortical infarcts and leukoencephalopathy: Study of two American families with predominant dementia. J Neurol Sci 1997; 146: 27-33.

8. Lerner AJ, **Hedera P**, Koss E, Stuckey J, Friedland RP. Delirium in Alzheimer's disease. Alz Dis A D 1997; 11: 16-20.
9. Fink JK, **Hedera P**, Mathay JG, Albin RL. Paroxysmal dystonia-choreoathetosis linked to chromosome 2q: Clinical analysis and proposed pathophysiology. Neurology 1997; 49: 177-183.
10. **Hedera P.** Wu D. Collins S. Lewin JS. Miller D. Lerner AJ. Klein S. Friedland RP. Sex and electroencephalographic synchronization after photic stimulation predict signal changes in the visual cortex on functional MR images. AJNR 1998; 19:853-857
11. **Hedera P**, Rainier S, Alvarado D, Williamson J, Otterud BE, Leppert MF, Fink JK. Novel locus for autosomal dominant hereditary spastic paraplegia on chromosome 8q. Am J Hum Genet 1999; 64:563-569
12. **Hedera P**, DiMauro S, Bonilla E, Wald J, Eldevik P, Fink JK. Phenotypic analysis of autosomal dominant hereditary spastic paraplegia linked to chromosome 8q. Neurology 1999; 53: 44-50
13. Fink, J.K., **Hedera, P**. "Hereditary spastic paraplegia: genetic heterogeneity, known genes and genotype-phenotype correlation". Sem Neurol1999;19:301-309.
14. Brewer GJ, Johnson VD, Dick RD, **Hedera P**, Fink JK, Kluin K. Treatment of Wilson's disease with zinc. XVII: Treatment during pregnancy. Hepatology 2000; 31:364-370
15. **Hedera P**, DiMauro S, Bonilla E, Wald JJ, Fink JK. Mitochondrial analysis in autosomal dominant hereditary spastic paraplegia. Neurology 2000; 55:1591-1592
16. **Hedera P**., Williamson JA, Rainier S, Alvarado D, Tukel T, Apak M, Fink JK. Prenatal Diagnosis of Hereditary Spastic Paraplegia. Prenat Diag 2001;21:202-206
17. Rainier S, **Hedera P,**Alvarado D, Xhao Z, Kleopa KA, Heiman-Patterson T, Fink JK. Hereditary spastic paraplegia linked to chromosome 14q11-q21: reduction of the SPG3 locus interval from 5.3 cM to 2.7 cM. J Med Genet 2001;38:e39.
18. Zhao X, Alvarado D, Rainier S, Lemons R, **Hedera P**, Weber CH, Tukel T, Apak M, Heineman-Peterson T, Ming L, Bui M, Fink JK.Mutation in a novel GTPase cause autosomal dominant hereditary spastic paraplegia. Nature Genetics 2001;29:326-331.
19. **Hedera P**, Alvarado D, Beydoun A, Fink JK. Novel mental retardation-epilepsy syndrome linked to Xp21-p11.4. Ann Neurol 2002; 51:45-50.
20. **Hedera P**, Rainier S, Zhao XP, Schalling M, Lindblad K, Yuan Q-P, Ikeuchi T, Trobe J, Wald JJ, Eldevik OP, Kluin K, Fink JK. Spastic paraplegia, ataxia, mental retardation (SPAR): a novel genetic disorder. Neurology 2002;58:411-4164
21. Brewer GJ, **Hedera P**, Kluin KJ, Carlson M, Askari F, Johnson V, Dick RB, Sitterly J, Fink JK. Treatment of Wilson's disease with tetrathiomolybdate III. Initial therapy in total of 55 neurologically affected patients and follow-up with zinc therapy. Arch Neurol, 2003;60:379-385.
22. **Hedera P**, Petty EM, Bui M, Blaivas M, Fink JK. "The second kindred with distal myopathy linked to chromosome 14q (MPD1): Genetic and clinical analysis." Arch Neurol 2003; 60:131321-1325.
23. **Hedera P**, Abou-Khalil B, Crunk EM, Taylor KA, Sutcliffe JS, Haines JL. "Autosomal dominant partial epilepsy with auditory features: two families with novel mutations in the *LGI1* gene." Epilepsia, 2004;45:218-222.
24. Meredith C, Herrman R, Parry C, Liyanage K, Dye DE, Durling HJ, de Visser M, **Hedera P**, Fink JK, Petty EM, Voit T, Mastaglia FL, Laing NG."Mutations in the slow skeletal muscle fibre myosin heavy chain gene (*MYH7*) cause early onset distal myopathy (MPD1)." Am J Hum Genet, 2004,75:703-708.
25. **Hedera P**, Fenichel GM, Blair MA, Haines JL. "Novel mutation in the SPG3A gene in an African American family with an early onset of hereditary spastic paraplegia." Arch Neurol 2004;61:1600-1603.
26. Probst FJ, **Hedera P**, Sclafani MA, Pomponi MG, Neri G, Tyson J, Douglas JA, Petty EM, Martin DM. Skewed X-inactivation in carriers establishes linkage in an X-linked deafness - mental retardation syndrome. Am J Med Genet, 2004;131:209-212.
27. Moretti P, **Hedera P**, Wald JJ, Fink JK. "Autosomal Recessive Primary Generalized Dystonia in Two Siblings from a Consanguineous Family". Mov Disord, 2005,20:245-247
29. Ma S, Abou-Khalil B, Sutcliffe JS, Haines JL, **Hedera P**. The GABBR1 locus and the G1465A variant is not associated with temporal lobe epilepsy preceded by febrile seizures. BMC Medical Genetics 2005;6:13
29 **Hedera P**, Eldevik PO, Maly P, Rainier S, Fink JK. Magnetic resonance imaging analysis of the spinal cord atrophy in autosomal dominant hereditary spastic paraplegia. Neuroradiology, 2005, 47:730-734

30. Ma S, Abou-Khalil B, Blair MA, Sutcliffe JS, Haines JL, **Hedera P**. Mutations in GABRA1, GABRA5, GABRG2 and GABRD receptor genes are not a major factor in the pathogenesis of familial focal epilepsy preceded by febrile seizures. Neurosci Lett, 2006;394:74-78
31. Lamont P, Udd B, Mastaglia FL, de Visser M, **Hedera P**, Voit T, Bridges LR, Fabian V, Rozemuller A, Laing NG. Laing early-onset distal myopathy – slow myosin defect with variable abnormalities on muscle biopsy. J Neurol Neurosurg Psych, 2006;77:207-215
32. Abou-Khalil B, Krei L, Lazenby B, Harris PA, Haines JL, **Hedera P**. Familial genetic predisposition, epilepsy localization and antecedent febrile seizures. Epilepsy Res, 2006, in press
33. Blair MA, Ma S, **Hedera P**. Mutation in KIF5A can also cause an adult onset hereditary spastic paraplegia. Neurogenetics, 2006, 7:47-50
34. Brewer GJ, Askari F, Lorincz MT, Carlson M, Schilsky M, Kluin KJ, **Hedera P**, Moretti P, Fink JK, Tankanow R, Dick RB, Sitterly J. Treatment of Wilson's Disease with Ammonium Tetrathiomolybdate: IV. Comparison of Tetrathiomolybdate and Trientine in a Double Blind Study of Treatment of the Neurologic Presentation of Wilson's Disease. Arch Neurol, 2006, 63:521-527
35. Ma S, Blair MA, Abou-Khalil B, Lagrange AH, Gurnett CA, **Hedera P**. Mutations in the GABRA1 and EFHC1 genes are rare in familial juvenile myoclonic epilepsy. Epilepsy Res, 2006, 71:129-134
36. **Hedera P**, Ma S, Blair MA, Taylor KA, Hamati A, Bradford Y, Abou-Khalil B, Haines JL. Identification of a novel locus for febrile seizures and epilepsy on chromosome 21q22. Epilepsia 2006;47:1622-1628
37. **Hedera P**. Spastin jigsaw puzzle: Another missing piece found. Neurology 2006; 67:1912-1913
38. Ma S, Davis TL, Fang JY, Blair MA, Haines JL, **Hedera P**. Familial essential tremor with apparent autosomal dominant inheritance: Should we also consider other inheritance modes? Mov Disord 2006, 21:1368-1374
39. Gurnett CA, **Hedera P**. New ideas in epilepsy genetics: Novel epilepsy genes, copy number alterations, and gene regulation. Arch Neurol 2006, in press
40. Blair MA, Ma S, Abou-Khalil B, **Hedera P**. Genetic variants in the *IMPA2* gene do not confer increased risk of febrile seizures in Caucasian patients. Eur J Neurol 2006, in press

C. Research Support

Ongoing Research Support

K08 NS42743-01 (Hedera-PI**)** 12/15/01-11/30/06

"Hereditary spastic paraplegia linked to chromosome 8q (*focus changed to genetics of epilepsy after transfer of the grant from the University of Michigan)"*

#3677 (Hedera PI) 1/1/2004-12/31/2006
Muscular Dystrophy Association USA
Molecular analysis of distal myopathy linked to chromosome 14q

(Hedera –PI) 9/1/2005-8/31/2007
Spastic Paraplegia Foundation
Invertebrate model of hereditary spastic paraplegia

Completed Research Support

(Hedera –PI) 1/1/2004-12/31/2005
Vanderbilt Discovery Grant (intramural grant)
Invertebrate model of hereditary spastic paraplegia