

CURRICULUM VITAE  
EDWARD G. STOPA, M.D.

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The Warren Alpert Medical School of Brown University and  
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EDUCATION

Undergraduate: 1st Class Honours, B.Sc. (Physiology)  
McGill University, Montreal, P.Q., 1976

Medical School: M.D.C.M. McGill University, Montreal, P.Q., 1980

POSTGRADUATE TRAINING

Internship: Flexible Internship, Boston University School of Medicine  
Framingham Union Hospital, Framingham, MA, 7/80- 6/81

Residency: Anatomic Pathology, Brigham and Women's Hospital,  
Harvard Medical School, Boston, MA, 7/81 - 6/83  
Neuropathology, Brigham and Women's Hospital,  
Harvard Medical School, Boston, MA, 7/83 - 6/85

Research Training: NIH Physician Scientist Award 7/85-6/90  
Tufts University School of Medicine  
Mentors: Dr. Seymour Reichlin, Chief of Endocrinology  
Dr. Joan King, Chair of Anatomy and Cell Biology

PROFESSIONAL LICENSES AND BOARD CERTIFICATION

Diplomate, National Board of Medical Examiners, 6/81  
Board of Registration in Medicine, The Commonwealth of MA,  
Certificate No. 49189, 4/82 - present  
Certification by the American Board of Pathology in both  
Anatomic Pathology and Neuropathology, 5/87  
Professional License, State of New York, License No. 178496,  
7/89 - 7/94  
Professional License, State of Rhode Island, License No. 8329,  
1/93 - present

ACADEMIC APPOINTMENTS

7/81 - 5/85	Clinical Fellow in Pathology, Harvard Medical School.
7/85 - 6/89	Assistant Professor of Pathology and Anatomy and Cell Biology, Tufts University School of Medicine, Boston, MA.
7/85 - present	Research Affiliate in Neuropathology, McLean Hospital Human Brain Tissue Research Center, Harvard Medical School Boston, MA.
6/89 - 6/92	Assistant Director of Neuropathology, Assistant Professor of Pathology and Anatomy and Cell Biology, State University of New York, Health Science Center, Syracuse, NY.
7/92	Associate Professor of Pathology (with tenure), State University of New York, Health Science Center, Syracuse, NY.
1/93 - 6/02	Director of Neuropathology, Associate Professor of Pathology, The Warren Alpert Medical School of Brown University/ Rhode Island Hospital, Providence, RI.
7/02 - present	Professor of Pathology, Director of Neuropathology, The Warren Alpert Medical School of Brown University/ Rhode Island Hospital, Providence, RI.
11/93 - present	Faculty Member, Brown University Graduate Programs in Pathobiology and Neuroscience
1/05 – 12/2010	Professor of Clinical Neuroscience, The Warren Alpert Medical School of Brown University
1/2011- present	Professor of Neurosurgery, The Warren Alpert Medical School of Brown University

OTHER APPOINTMENTS:

1989 - 1992	Neuropathology Consultant, Multidisciplinary Pituitary Clinic, SUNY, Health Science Center.
1990 - 1992	Coordinator of Tissue Collection, Syracuse Chapter, American Association for Alzheimer's Disease and Related Disorders.
1989 - 1992	Neuropathology Consultant, Syracuse Medical Examiner's Office.
1990 - 1992	Neuropathology Consultant, Rochester Medical Examiner's Office.
1992 - 1995	Research Consultant, American Cyanamid Corp. (Lederle Pharmaceuticals)
1993 - present	Neuropathology Consultant, Rhode Island, Maine, New York and Iowa Medical Examiners' Offices Neuropathology Consultant, Brown University Pituitary Clinic Director, Brown University Brain Donation Program for Alzheimer's Disease and Related Disorders Research
1994	Research Consultant, Mason Laboratories, Worcester, MA

1994 - 2000                      Research Consultant, Cytotherapeutics Corp. Providence, RI  
1995 - 1998                      Research Consultant, PRIZM Pharmaceuticals, San Diego, CA  
    Research Consultant, Galaxo-Wellcome Pharmaceuticals,  
    Durham, NC  
1996                                  Research Consultant, Pfizer Pharmaceuticals, Groton, CT  
1997                                  Research Consultant, Alpha Genomics, Boston, MA  
1998 - 2000                      Scientific Advisory Board, Selective Genetics, San Diego, CA  
2001                                  Research Consultant, Clairus Technologies, Rockville, MD  
2004                                  Research Consultant Cyberkinetics, Foxborough, MA  
2008                                  Research Collaborator Merck Pharmaceuticals, Boston, MA  
2014                                  Boston Medical Development Group

#### MEMBERSHIP IN SOCIETIES

Massachusetts Medical Society.  
American Association of Neuropathologists  
American Association for the Advancement of  
Science  
Society for Neuroscience.  
Society for Research on Biological Rhythms.  
United States and Canadian Academy of Pathology.  
New York Academy of Sciences  
Society for the Light Treatment of Biological Rhythm  
Disorders  
Rhode Island Neurological Society  
New England Society of Pathologists  
Rhode Island Society of Pathologists  
Society for Research Into Hydrocephalus and Spina Bifida  
International Society for Hydrocephalus and CNS Disorders

#### POSTGRADUATE HONORS AND AWARDS

McGill University, Faculty of Medicine Summer Research Award (1975-1978).

Physician Scientist Award, National Institute on Aging (1985-1990).

Alzheimer's Association, Temple Discovery Award for Innovative Therapies of Alzheimer's  
Disease (2003)

Dean's Excellence In Teaching Award (2005, 2006, 2007, 2008, 2009, 2010, 2011, 2013)

#### MAJOR ADMINISTRATIVE RESPONSIBILITIES

1989 -                                  Interviewer, Medical School Admissions Committee  
1991 -                                  Dean's Committee for Alzheimer's Disease Research  
1991 -                                  Department of Pediatrics Chairman Search Committee

1992 -	Research Coordinator, Department of Pathology
1992 -	Residency Program Committee, Department of Pathology
1992 -	Medical Advisor, Alzheimer's Association of New York
1993 - present	Director, Neuropathology Fellowship Training Program
1993 - present	Department of Pathology Research Committee
1993 - 1995	Department of Pathology Executive Committee
1994 -	"Taking Charge Committee" for Hospital-Wide Reorganization
1994 -	Brown University School of Medicine Strategic Planning Committee
1994 - present	Medical Advisor, Alzheimer's Association of Rhode Island
1995 -	Dean's Committee on Faculty Responsibilities
1996 - present	MD 2000 Curriculum Assessment Committee
1997	AMC Pathology Staff Planning Committee
1997 - present	Promotions Committee, Brown University Department of Pathology
1998 - present	Pathology Department Executive Committee
1999	Chair, RIH Pathologist-in-Chief Search Committee (Internal)
1999	Women and Infants' Hospital Pathology Chair Search Committee
2000 - present	Lifespan Research Advisory Committee
2002	Brown University Pathology Search Committee
2005 - present	Executive Steering Committee Brown Alzheimer's Center
2008	Society for Research Into Hydrocephalus and Spina Bifida Annual Meeting Organizing Committee
2009	Lifespan Clinical and Translational Neuroscience Advisory Council
2009	Rhode Island Brain and Spine Tumor Foundation Executive Committee (Vice Chair)
2010	Organizing Committee, Lifespan Center for Brain Aging
2010	Co-director Lifespan Autopsy Services
2012-present	Executive Committee Member, The Norman Prince Neurosciences Institute

Major Scientific Advisory Committees:

1990 - 1995	Scientific Grants Review Committee, Ontario Mental Health Foundation, Ontario, Canada.
1991 -	Awards Committee, American Association of Neuropathologists
1994 -	Reviewer (ad hoc), Medical Research Council of Canada
1995 -	Reviewer, Academic Development Fund, University of Western Ontario
1997 - present	Review Board of the Medical and Scientific Advisory Council, Alzheimer's Association Ronald and Nancy Reagan Research Institute

1997	Brain Anatomy and Cell Biology Session Chair, American Association of Neuropathologists
1998 - 2000	National Institutes of Health, Brain Disorders and Clinical Neuroscience-3 (BDCN-3) Study Section
2000 - present	Reviewer, National Science Foundation, Arlington, VA
2001	Reviewer, Medical Research Council of Great Britain
2000	Reviewer, Canadian Institutes of Health Research
2003-2006	Editorial Board, Journal of Neuropathology and Experimental Neurology
2004 - present	National Institutes of Health, Clinical Neurologic Disease (CND) Study Section (formerly BDCN1)
2007	Chairperson, NIMH Special Emphasis Panel ZMH1 ERB-X (01) S
2007 - present	Cerebrospinal Fluid Research, Editorial Board
2008	Society for Research Into Hydrocephalus and Spina Bifida; "Normal Pressure Hydrocephalus and CSF Dynamics", Session Chair
2008	Hydrocephalus 2008 Hannover Germany "Aspects of Valve and Shunt Dynamics and Pathology in Hydrocephalus", Session Chair
2009	Reviewer, NIMH "Grand Opportunities" Program- American Recovery and Reinvestment Act Reviewer, NIH- Recovery Act Challenge Grants Program Reviewer, National Institute of Health, Cell Death in Neurodegeneration (CDIN) Study Section
2011	Executive Committee The Norman Prince Neurosciences Institute
2015	Reviewer, Italian Ministry of Health

Journal Reviewer:

- Peptides
- Endocrinology
- Brain Research
- Proceedings of the National Academy of Science
- Journal of Histochemistry and Cytochemistry
- Journal of Experimental Medicine
- Journal of Geriatric Psychiatry
- Journal of Neuropathology and Experimental Neurology
- Journal of Biological Rhythms
- Journal of Neuroscience
- Journal of Comparative Neurology
- Visual Neuroscience
- Brain Pathology
- American Journal of Respiratory and Critical Care Medicine
- Journal of the Autonomic Nervous System

- Diagnostic Molecular Pathology
- Cancer
- Neuroscience Letters
- Neurobiology of Aging
- Trends in Neuroscience
- Journal of Cell Biology
- Neuropathology
- Journal of Alzheimer's Disease
- Stroke
- Acta Neuropathologica
- Experimental Neurology
- Journal of Biological Chemistry
- Future Neurology
- Neuroscience
- The Journal of Gene Medicine
- Cerebrospinal Fluid Research
- Neurochemical Research
- Clinical Neurology and Neurosurgery

ORIGINAL PUBLICATIONS IN PEER-REVIEWED JOURNALS:

1. Stopa EG, O'Brien R, Katz M. The effect of colchicine on guinea pig Intrinsic Factor - Vitamin B12 (IF-B12) receptor. *Gastroenterology* 76:309-314, 1979.
2. Katz M, Stopa EG. The effect of Pentagastrin in Vitamin B12 absorption in the guinea pig, Vitamin B12 - proceedings of the 3rd European Symposium on B12 and Intrinsic Factor. B. Zagalak and W. Friedrich, p. 955, 1979.
3. Stopa EG, King JC, Lydic R, Schoene WC. Human brain contains vasopressin and vasoactive intestinal polypeptide neuronal subpopulations in the suprachiasmatic region. *Brain Research* 297:159-163, 1984.
4. Anthony ELP, King JC, Stopa EG. Immunocytochemical localization of LHRH in the median eminence infundibular stalk, and neurohypophysis: Evidence for multiple sites of releasing hormone secretion in humans and other mammals. *Cell and Tissue Research* 236:5-14, 1984.
5. King JC, Anthony ELP, Fitzgerald DM and Stopa EG. Luteinizing hormone-releasing hormone neurons in human pre-optic hypothalamus: Differential intraneuronal localization of immunoreactive forms. *J. of Clin. Endocrinology and Metabolism* 60:88-97, 1985.
6. Spriggs DR, Stopa EG, Mayer RJ, Schoene WC and Kufe DW. Fludarabine phosphate (NSC 3:2878) Infusion for the treatment of acute leukemia: A phase I and neuropathological study. *Cancer Research* 46:5953-5958, 1986.

7. Albers HE, Minamitani H, Stopa EG, And Ferris CF. Light selectively alters vasoactive intestinal peptide and peptide histidine isoleucine immunoreactivity within the rat suprachiasmatic nucleus. *Brain Research* 437:189-192, 1987.
8. Stopa EG, Sower SA, Svendsen CN, and King JC. Polygenic expression of gonadotropin-releasing hormone (GnRH) in human? *Peptides* 9:419-423, 1988.
9. Stopa EG, Minamitani N, Jonassen JA, King JC, Wolfe H, Mobtaker H and Albers HE. Localization of vasoactive intestinal peptide and peptide histidine isoleucine immunoreactivity and mRNA within the rat suprachiasmatic nucleus. *Mol. Brain Res.* 4:319-325, 1988.
10. Reppert SM, Weaver DR, Rivkees SA and Stopa EG. Putative melatonin receptors are located in a human biological clock. *Science* 242:78-81, 1988.
11. Stopa EG and Bird ED. Brain Donation. *New England Journal of Medicine* 320:62-63, 1989.
12. Koh, ET, Stopa EG, King JC, Reynolds BR, Rogers WT, Schwaber JS and Hillman DE. Computer-aided mapping of specific neuronal populations in the human brain. *Biotechniques* 7:596-602, 1989.
13. Albers HE, Stopa EG, Zoeller RT, Kauer JS, King JC, Fink JS, Mobtaker H and Wolfe H. Day-night variation in pre-provasoactive intestinal peptide/peptide histidine isoleucine mRNA within the rat suprachiasmatic nucleus. *Molecular Brain Research* 7:85-89, 1990.
14. Stopa EG, Gonzalez AM, Chorsky R, Corona RJ, Alvarez J, Bird ED, Baird A. Basic fibroblast growth factor in Alzheimer's Disease *Biochem. Biophys. Res. Comm.* 171:690-696, 1990.
15. Albers HE, Liou SY, Ferris CF, Stopa EG, Zoeller RT. Neurochemistry of Circadian Timing in SUPRACHIASMATIC NUCLEUS: THE MIND'S CLOCK. Edited by D.C. Klein, S.M. Reppert and R.Y. Moore, *Annals N.Y. Acad. Sci.* (1990).
16. Albers HE, Liou SY, Stopa EG, Zoeller RT. Neuropeptide co-localization: functional significance in the circadian timing system. *J. Neurosci.*, 11:846-851, 1991.
17. Stopa EG, Koh E, Svendsen CN, Rogers W, Schwaber J, King JC. Computer assisted mapping of immunoreactive gonadotropin-releasing hormone (GnRH) in human basal forebrain and amygdala. *Endocrinology* 128:3199-3297, 1991.
18. Friedman, DI, Johnson, JK, Chorsky, RL, and Stopa, EG. Labeling of human retinohypothalamic tract with carbocyanine dye, DiI. *Brain Research*. *Brain Research* 560:297-302 , 1991.

19. Benzing, WC, Mufson, EJ, Jennes, L, Stopa, EG and Armstrong, DM. Distribution of neurotensin immunoreactivity within the human amygdaloid complex: A comparison with acetylcholinesterase and Nissl stained tissue sections. *J. Comp. Neurol.* 317:283-297, 1992.
20. Alvarez, J.A., Baird, A., Tatum, A., Daucher, J., Chorsky, R., Gonzalez, A.M., and Stopa, EG Localization of Basic Fibroblast Growth Factor and Vascular Endothelial Growth Factor in Human Glial Neoplasms. *Modern Pathology* 5:303-307, 1992.
21. Stopa, EG ,Uhl, G.R., O'Hara, B.F., Chorsky, R.L., King, J.C., Bird, E.D. and Wolfe, H. Somatostatin-gene expression in the postmortem adult and fetal human brain. *Peptide Research* 5:201-205, 1992.
22. Weaver, D.R., Stehle, J.H., Stopa, EG and Reppert S.M. Melatonin receptors in human hypothalamus and pituitary: Implications for circadian and reproductive responses to melatonin. *J Clin Endocrin Metab* 76:295-301, 1993.
23. Peters, RV, Zoeller, RT, Hennessey, AC, Stopa, EG, Anderson, G, Albers, HE. The control of circadian rhythms and the levels of vasoactive intestinal peptide mRNA in the suprachiasmatic nucleus are altered in spontaneously hypertensive rats. *Brain Research* 639:217-227, 1994.
24. Vitek, MP, Bhattacharya, K, Glendening, JM, Stopa, EG, Vlassara, H, Bucala, R, Manogue, K, and Cerami, A. Advanced glycation end products contribute to amyloidosis in Alzheimer disease. *Proc Natl Acad Sci USA* 91:4766-4770, 1994.
25. Wasenko, JJ, Hochhauser, L, Stopa, EG and Winfield, JA. Cystic meningiomas: MR characteristics and surgical correlations. *AJNR* 15:1959-1965, 1994.
26. Satlin, A, Volicer, L, Stopa, EG and Harper, D. Circadian locomotor activity and core-body temperature rhythms in Alzheimer's disease. *Neurobiology of Aging* 16(5):765-771, 1995.
27. Schipper, HM, Cisse, S and Stopa, EG. Expression of heme oxygenase-1 in the senescent and Alzheimer-diseased brain. *Ann Neurol* 37:758-768, 1995.
28. Stopa, EG, Johnson, JK, Friedman, DI, Ryer, HI, Reidy, J, Kuo-LeBlanc, V and Albers, HE. Neuropeptide Y receptor distribution and regulation in the suprachiasmatic nucleus of the Syrian hamster (*Mesocricetus auratus*). *Peptide Research* 8(2):95-100, 1995.
29. Chozik, BS, Benzil, DL, Stopa, EG, Pezzullo, JC, Knuckey, NW, Epstein, MH, Finkelstein, SD and Finch, PW. Immunohistochemical evaluation of erbB2 and p53 protein expression in benign and atypical human meningiomas. *Journal of Neuro-Oncology* 27:117-126, 1996.
30. Glantz, MJ, Choy , H, Kearns, CM, Cole, BF, Mills, P, Zuhowski, EG, Saris, S, Rhodes, CG, Stopa, EG, and Egorin, MJ. Phase I study of weekly outpatient paclitaxel and



concurrent cranial irradiation in adults with astrocytomas. *Journal of Clinical Oncology*, 14(2): 600-609, 1996.

31. Young, C, Gordon, N, Safran, HP, Schatz, S, Stopa, EG, King, TC. Monoclonal B-cell population mimicking lymphoma in a patient with multiple sclerosis. *Arch Path Lab Med* 120:275-278, 1996.
32. Mittler, MA, Walters, BC and Stopa, EG. Observer reliability in histological grading of astrocytoma stereotactic biopsies. *J Neurosurg* 85:1091-1094, 1996.
33. Tobet, SA, Chickering, TW, King, JC, Stopa, EG, Kim, K, Kuo-LeBlanc, V and Schwarting, GA. Expression of (-aminobutyric acid and gonadotropin-releasing hormone during neuronal migration through the olfactory sytem. *Endocrinology* 137:5415-5420, 1996.
34. Gilchrist, JM, Sikirica, M, Stopa, EG and Shanske, S. Adult-onset MELAS: Evidence for involvement of neurons as well as cerebral vasculature in stroke-like episodes. *Stroke* 27(8):1420-1423, 1996.
35. Fenton, H, Finch, PW, Rubin ,JS, Rosenberg, JM, Taylor, WG, Kuo-LeBlanc, V, Rodriguez-Wolf, M, Baird, A, Schipper, HM and Stopa, EG. Hepatocyte Growth Factor (HGF/SF) in Alzheimer's Disease. *Brain Research* 779:262-270, 1997.
36. Madras, BK, Gr, Fahey acz LM MA, Elmaleh, D, Meltzer, PC, Liang, AY, Stopa, EG, Babich, J and Fischman , AJ .[125 I] Altropane, a SPECT Imaging Probe for Dopamine Neurons: III. Human Dopamine Transporter in Post-Mortem Normal and Parkinson's Diseased Brain. *Synapse* 29:116-127, 1998.
37. Schipper, HM, Liberman, A and Stopa, EG. Neural Heme-Oxygenase-1 Expression in Idiopathic Parkinson's Disease. *Experimental Neurology* 150:60-68, 1998.
38. Guglielmo, M, Chan, P, Cortez, S, Stopa , EG, MacMillan, P, Johanson, C , Epstein, M, and Doberstein, CE . The Temporal Profile and Morphologic Features of Neuronal Death in Human Stroke Resemble Those Observed in Experimental Forebrain Ischemia: The Potential Role of Apoptosis. *Neurologic Research* 20:283-296, 1998.
39. Stopa, EG, Volicer, L, Kuo-Leblanc, V, Harper, D, Lathi, D, Tate, B, and Satlin, A. Pathologic evaluation of the human suprachiasmatic nucleus in severe dementia. *Journal of Neuropathology and Experimental Neurology* 58(1): 29-30, 1999.
40. Johanson, CE, Preston, JE, Chodobski, A, Stopa, EG, Szmydynger-Chodobska, J, and McMillan, PN. AVP V1 receptor-mediated decrease in C1- efflux and increase in dark cell number in choroid plexus epithelium. *Am J Physiol* 276:C82-C90, 1999.
41. Donahue, JD, Berzin, TM, Rafi, MS, Glass, DJ, Yancopoulos, GD, Fallon, JR, and Stopa, EG. Agrin in Alzheimer's disease: Altered solubility and abnormal distribution within microvasculature and brain parenchyma. *Proc Natl Acad Sci* 96:6468-6479 ,1999.

42. Kim, KH, Patel, L, Tobet, SA, King, JC, Rubin, BS, Stopa, EG. Gonadotropin-releasing hormone immunoreactivity in the adult and fetal human olfactory system. *Brain Research* 826: 220-229, 1999.
43. Mittler, MA, Walters, BC, Fried, AH, Sotomayor, EA, Stopa, EG. Delayed transformation of a benign childhood spinal cord hamartoma/ganglioglioma: A case report and review of literature. *Pediatr Neurosurg* 30(3): 132-4, 1999.
44. Johanson CE, Szmydynger-Chodobska J, Chodobski A, Baird A, McMillan P, Stopa EG. Altered formation and bulk absorption of cerebrospinal fluid in FGF-2-induced hydrocephalus. *Am J Physiol* 277:R263-71, 1999.
45. Hallett, JJ, Harling-Berg, CJ, Knopf, PM, Stopa, EG, Kiessling, LS. Striatal autoimmunity in childhood Tourette syndrome. *J Neuroimmunol.* 2000 Nov 1;111(1-2):195-202.
46. Berzin TM, Zipser BD, Rafii MS, Kuo-Leblanc V, Yancopoulos GD, Glass DJ, Fallon JR and Stopa EG. Agrin and Microvascular Damage in Alzheimer's Disease. *Neurobiol Aging.* 2000 Mar-Apr;21(2):349-55.
47. Mihály E, Fekete C, Tatro JB, Liposits Z, Stopa EG, Lechan RM. Hypophysiotropic thyrotropin-releasing hormone-synthesizing neurons in the human hypothalamus are innervated by neuropeptide Y (NPY), Agouti-related protein (AGRP) and alpha melanocyte-stimulating hormone (?-MSH). *J Clin Endocrinol Metab.* 2000 Jul;85(7):2596-603.
48. Johanson, CE, Palm DE, Primiano, MJ, McMillan, PN, Chan, P, Knuckey, NW, and Stopa, EG. Choroid plexus recovery after transient forebrain ischemia: Role of growth factors and other repair mechanisms. *Cellular and Molecular Neurobiology* 20(2)195-214, 2000.
49. Donahue, JE, Stopa, EG, Chorsky RL, King JC, Schipper HM, Tobet SA, Blaustein JD and Reichlin S. Cells containing immunoreactive estrogen receptor-? In the human basal forebrain. *Brain Res.* 2000 Feb 21;856(1-2):142-51
50. Stopa, EG, Kim, S, Song, P, Berzin, T, Kuo-Leblanc, V, Rodriguez-Wolf, M, Baird, A, and Johanson, CE. Human choroid plexus growth factors: What are the implications for CSF and brain? *Exp Neurol.* 2001 Jan;167(1):40-7.
51. Harper DG, Stopa EG, McKee AC, Satlin A, Harlan PC, Goldstein R, Volicer L. Differential circadian rhythm disturbances in men with Alzheimer disease and frontotemporal degeneration. *Arch Gen Psychiatry.* 2001 Apr;58(4):353-60.
52. Adamec E, Chang HT, Stopa EG, Hedreen JC, Vonsattel JP. Tau protein expression in frontotemporal dementias. *Neurosci Lett.* 2001 Nov 23;315(1-2):21-4

53. Friedman J.H., Fernandez HH, Sikirica M, Stopa E and Friehs G. Stroke induced by gamma knife pallidotomy: Autopsy result. *Neurology* 58 June (1 of 2):1695-1697, 2002.
54. Petersson KH, Pinar H, Stopa EG, Faris RA, Sadowska GB, Hanumara RC and Stonestreet, BS. White matter injury after cerebral ischemia in ovine fetuses. *Pediatric Research* 51(6) 768-776, 2002.
55. LuGuang Luo, QuanFu Mao, IMD Jackson, EG Stopa. Thyrotropin Releasing Hormone (TRH) in the Alzheimer Hippocampus. *Journal of Alzheimer's Disease. J Alzheimers Dis.* 2002 Apr;4(2):97-103. PMID: 12417381
56. Yupo Ma, Li Chai, Selina C. Cortez, Edward G. Stopa, Margaret M. Steinhoff and Abby L. Maizel. Hsal 1 Expression in the Human Pituitary/Gonadal Axis *J Endocrinology* 2002 June;173(3):437-48. PMID: 12065233
57. Sheu M, Fauteux G, Chang H, Taylor W, Stopa E, Robinson-Boston L. Sincue pericranii: Dermatology considerations and literature review. *J Am Acad Dermatol* 2002 June;46(6):934-41.
58. Johanson CE, Gonzalez AM, Stopa EG. Water-imbalance-induced expression of FGF-2 in fluid-regulatory centers: choroid plexus and neurohypophysis. *Eur J Pediatr Surg* 2001 Dec;11 Suppl 1:S37-8.
59. Johanson CE, Jones HC, Stopa EG, Ayala C, Duncan JA, McMillan PN. Enhanced expression of the NA-K-2 Cl cotransporter at different regions of the blood-CSF barrier in the perinatal H-Tx rat. *Eur J Pediatr Surg* 2002;12 Suppl 1:S47-9.
60. Famiglietti EV, Stopa EG, McGookin ED, Song P, LeBlanc V, Streeten BW. Immunocytochemical localization of vascular endothelial growth factor in neurons and glial cells of human retina. *Brain Res* 2003;969(1-2):195-204.
61. Salloway S, Gur T, Berzin T, Tavares R, Zipser B, Correia S, Hovanesian V, Fallon J, Kuo-Leblanc V, Glass D, Hulette C, Rosenberg C, Vitek M, Stopa E. Effect of APOE genotype on microvascular basement membrane in Alzheimer's disease. *J Neurosci* 2002 Nov 15;203-204:183-7.
62. Peck JA, Stopa EG. Agrin and microvascular damage in Alzheimer's disease. *Med Health RI* 2002 July;85(7):202-6.
63. Johanson, C.E., Nguyen, T.T., Weaver, C.E., Spangenberg, A.G., Flaherty, S.L., Duncan, J.A., Stopa, E.G. and P.N. McMillan. Neuroendocrine-type cells in the choroid plexus epithelium: Putative inhibitory regulators of cerebrospinal fluid formation in response to elevated intracranial pressure. *Vth International Conference on Cerebral Vascular Biology*, p. 908, 2003.

64. Elitt CM, Sadowska GB, Stopa EG, Pinar H, Petersson KH, Stonestreet BS. Effects of antenatal steroids on ischemic brain injury in near-term ovine fetuses. *Early Hum Dev.* Aug;73(1-2):1-15, 2003.
65. Lahousse SA, Stopa EG, Mulberg AE, de la Monte SM. Reduced expression of the cystic fibrosis transmembrane conductance regulator gene in the hypothalamus of patients with Alzheimer's disease. *J Alzheimers Dis.* 2003 Dec;5(6):455-62.
66. Anthony SG, Schipper, HM, Taveres R, Hovanesian V, Cortez S, Stopa EG and Johanson CE. Stress protein expression in the Alzheimer-diseased choroid plexus. *Journal of Alzheimer's Disease* 5:171-177, 2003.
67. Preston J E, McMillan PN, Stopa EG, Nashold JR, Duncan JA and Johanson CE. Trial Natriuretic Peptide Induction of Dark Epithelial Cells in Choroid Plexus: Consistency with the Model of CSF Downregulation in Hydrocephalus. *Eur J Ped Surg*, 2003 Dec;13 Suppl 1:S40-2.
68. Eash S, Tavares R, Stopa EG, Robbins SH, Brossay L, Atwood WJ. Differential distribution of the JC virus receptor-type sial acid in normal human tissues. *Am J Pathol* 2004 Feb;164(2):419-28
69. Chang HT, Cortez S, Vonsattel JP, Stopa EG, Schelper RL. Familial frontotemporal dementia: a report of three cases severe cerebral atrophy with rare inclusions that are negative for tau and synuclein, but positive for ubiquitin. *Acta Neuropathology (Berl)*. 2004 July; 108(1):10-6. Epub 2004 Apr 2.
70. Sampath P. Weaver CE, Sungarian A, Cortez S. Alderson L, Stopa EG. Cerebrospinal fluid (vasuclar endothelial growth factor) a serologic (recoverin) tumor markers for malignant glioma. *Can Control* 2004 May-Jun; 11(3):174-80.
71. Harper DG, Stopa EG, McKee AC, Satlin A, Fish D, Volicer L. Dementia severity and Lewy boies affect circadian rhythm in Alzheimer disease. *Neurobiol Aging* 2004 Jul(6):771-81.
72. Petersson KH, Pinar H, Stopa EG, Sadowska GB, Hanumara RC, Stonestreet BS. Effects of exogenous glucose on brain ischemia in ovine fetuses. *Pediatr Res.* 2004 Oct;56(4):621-9. Epub 2004 Aug 19.
73. Luo L. Stopa EG. Thyrotropin releasing hormone inhibits tau phosphorylate by dual signaling pathways in hippocampal neurons. *J Alzheimers Dis.* 2004 Oct;6(5):527-36.
74. Johanson C, McMillan P, Tavares R, Sapngenberg A, Duncan J, Silverberg G, Stopa E. Homeostatic capabilities of the choroid plexus epithelium Alzheimer's disease. *Cerebrospinal Fluid Res.* 2004 Dec 10; (1):3.

75. Maclean AV, Woods R, Alderson LM, Salloway SP, Correia S, Cortez S, Stopa EG. Spontaneous lobar haemorrhage in CADASIL. *J Neurol Neurosurg Psychiatry*. 2005 Mar;76(3):456-7.
76. Harper DG, Volicer L, Stopa EG, McKee AC, Nitta M, Satlin A. Disturbance of endogenous circadian rhythm in aging and Alzheimer disease. *Am J Geriatr Psychiatry*. 2005 May;13(5):359-68
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#### INVITED PRESENTATIONS AT CONGRESSES AND CONFERENCES

- |             |  |
|-------------|--|
| 1986        | "Intracranial Neoplasms and Hamartomas of Infancy", Case #10, 10th International Congress of Neuropathology, Stockholm, Sweden   |
| 1987 - 1989 | "In situ Hybridization in Post Mortem Human Tissue", annual workshop on In situ hybridization as a clinical and research tool, Tufts University School of Continuing Medical Education, Boston, MA |
| 1990        | "Human Suprachiasmatic Nuclei", Great Lakes Endocrine Conference, Syracuse, NY   |
| 1992        | "General Overview of the Anatomy of the Neurohypophysis" Annals of the New York Academy of Sciences, 5th International Conference on the Neurohypophysis, Hanover, NH.                             |

- 1996 "Research Update"  
Annual Caregivers Conference  
Alzheimer's Association of Rhode Island
- "Financial and Administrative Concerns in Brain Banking"  
Special Session on Brain Banking  
Annual Meeting, Vancouver, BC  
American Association of Neuropathologists
- 1997 "The Alzheimer Brain"  
Annual Caregivers Conference  
Alzheimer's Association of Rhode Island
- "Pseudotumor cerebri"  
"Effect of Chronic bFGF infusion on the Choroid Plexus"  
International Workshop on Glaucoma and Hydrocephalus  
Val David, PQ
- 2001 "Agrin and Microvascular Damage in Alzheimer's Disease"  
IXth International Symposium on Systemic Amyloidosis,  
Budapest, Hungary
- " Present Findings in Alzheimer's Disease Research"  
Brian Ott Presidential Lecture, Rhode Island Alzheimer's  
Association
- 2002 " Control Brain Specimens: A Complex Dilemma"  
NIH International Workshop On Brain Banking, Bethesda, MD
- 2003 " Alzheimer's Disease" American Society for Clinical  
Laboratory Science, Rhode Island Convention Center
- 2003 "Microvascular Injury, Blood Brain Barrier Leakage and  
Extracellular Matrix Disruption in Alzheimer's Disease"  
Laboratory Week Invited Special Lecturer, United Health  
Services Hospitals, Binghamton, NY
- 2004 "Mad Cow Disease" American Society for Clinical Laboratory  
Science, Rhode Island Convention Center

- 2006 “Significant Milestones in Our Understanding of the Human SCN” Special Lecture, Society for Light Treatment of Biological Rhythm Disorders, Quebec, PQ
- 2007 “Vascular Mechanisms in Alzheimer’s Disease” Merck Pharmaceuticals Research Symposium. Boston, .MA
- 2008 “Altered Ependyma and Leptomeninges in Transgenic Mice that Over Express FGF2 and Amyloid Precursor Protein: Evidence for Early Hydrocephalus.” Society for Research Into Hydrocephalus and Spina Bifida, Providence, RI
- 2010 “Microarray Analysis of Choroid Plexus Gene Expression in Alzheimer’s Disease: Implications for CSF Dynamics” 5<sup>th</sup> International Hydrocephalus Workshop, Crete, Greece
- 2012 APOE, Agrin, Microvascular Injury and Blood Brain Barrier Compromise in Sporadic (Late Onset) Alzheimer’s Disease 15<sup>th</sup> International Symposium on Signal Transduction in the Blood-Brain Barriers
- 2013 Alzheimer’s Association International Conference, “White Matter Injury and the Orphan C20rf40 Gene Encoding Ecr4 in Alzheimer’s Disease”. July 13, 2013, Boston, MA

INVITED SEMINARS AT UNIVERSITIES, TEACHING HOSPITALS AND INDUSTRY

- 1986 Tufts University School of Medicine, Boston, MA  
Massachusetts General Hospital, Boston, MA  
New York Hospital, New York, New York  
University of Minnesota, Minneapolis, MN  
Dupont Experimental Station, Dover DL
- 1987 The New England Medical Center, Boston, MA  
Wayne State School of Medicine, Detroit MI  
University of Vermont, School of Medicine, Burlington, VT  
Montreal General Hospital, Montreal P.Q.  
University of Tennessee at Memphis, Memphis, TN
- 1988 University of Alabama, School of Medicine, Birmingham, AL  
University of Arizona, School of Medicine, Tucson, AZ  
Oregon Health Science Center, Portland, OR  
Univ. Pittsburgh, School of Medicine, Pittsburgh, PA



SUNY, Health Science Center, Syracuse, NY

1989  
 Brigham and Women's Hospital, Boston MA  
 Univ. of Massachusetts Medical School, Worcester, MA  
 McLean Hospital, Belmont, MA  
 The Eunice Shriver Center, Waltham, MA  
 Mount Sinai Medical School, New York, NY

1990  
 SUNY Health Science Center, Syracuse, NY  
 Institute for Sensory Research, Syracuse, NY  
 Rhode Island Hospital, Providence, RI  
 Montreal General Hospital, Montreal, P.Q.  
 Bloomfield Geriatric Center, Montreal, P.Q.

1991  
 SUNY Health Science Center, Syracuse, NY  
 University of Pittsburgh, Pittsburgh, PA  
 University of South Carolina, Charleston, SC  
 National Institute on Aging, Bethesda, MD

1992  
 American Cyanamid Corporation, Pearl River, NY  
 Rhode Island Hospital, Providence, RI  
 SUNY Health Science Center, Syracuse, NY  
 Albany Medical College, Albany, NY

1993  
 Georgia State University, Atlanta Georgia  
 Rhode Island Hospital, Providence, RI  
 Rhode Island Blood Bank, Providence, RI

1994  
 McLean Hospital, Belmont, MA  
 McGill University, Montreal, PQ

1995  
 Regeneron Pharmaceuticals, Tarrytown, NY  
 Brown University Pathobiology Lecture Series, Providence, RI

1996  
 Brown University Pathology Grand Rounds, Providence, RI  
 Pfizer Pharmaceuticals, Groton, CT

1997  
 University of South Florida, School of Medicine, Tampa, FL  
 Alpha Genomics, Woburn, MA  
 SUNY Health Science Center, Syracuse NY

1998  
 Dartmouth University School of Medicine, Hanover, NH  
 Tufts University School of Medicine, Boston, MA

1999  
 JFK Neuroscience Institute, Edison, NJ

- 2000 University of Illinois, Peoria, IL  
Wright State University, Dayton Ohio
- 2001 Duke University, Durham NC  
University of Alabama, Birmingham, AB  
SUNY Health Science Ctr, Syracuse, NY  
University of North Dakota, Grand Forks, ND  
JFK Neuroscience Institute, Edison,NJ  
Brown Medical School, Providence,RI
- 2002 University of Newcastle Upon Tyne, Newcastle, UK  
University of Western Australia, Perth, AU  
McGill University, Montreal Neurological Institute,  
Montreal,PQ  
Dartmouth-Hitchcock Medical Center, Hanover, NH  
Ardais Corp. Lexington,MA
- 2003 Roger Williams Medical Center, Providence, RI
- 2004 Montreal General Hospital Research Institute Retreat, Esterelle,  
PQ
- 2005 Butler Hospital Chronobiology Seminar, Providence, RI
- 2006 University of Montana, Missoula, MT
- 2008 Jackson Laboratory, Bar Harbor, ME
- 2009 Medical College of Georgia, Augusta, GA
- 2010 University of Ottawa, Ottawa, Ontario, Canada
- 2011 Massachusetts General Hospital, Harvard Medical  
School, Boston, MA

GRANTS

NIA, "Human Suprachiasmatic Nuclei: Age Related  
Alteration " 1K11 AG00295 (PI:Stopa) (9/85 - 8/90) 64,199.

Hendricks Foundation Award #930254 (1989), 22,000.

Pathology Medical Service Group Award (1989) 25,000.

NIA, "Heparin-Binding Growth Factors in Aging and Alzheimer's Disease"  
5 RO1 AG10682-06, (PI:Stopa) (6/93-11/98), 593,151

Rhode Island Hospital Research Foundation (1993) 40,000.

NCI, "New Approaches to Brain Tumor Therapy" CA62473 (PI:Calabresi), Consultant (3/94-12/97) 41,218.

NIA "Advanced Glycosylation Endproducts and AD Amyloidosis"  
1 RO1 AG12851 (PI:Vitek), Consultant (12/94-11/97) 145,550.

NINDS "Choroid Plexus-CSF, Growth Factors, Age and Injury"  
1 RO1 NS27601 (PI:Johanson), Co-Investigator (8/95-7/99) 142,382.

NIA, "Senile Changes in Circadian Rhythms and Behavior"  
5 RO1 AG09301 (PI:Satlin), Co-Investigator (1/95-12/00) 51,883

NIH "Hormonal Regulation of Brain Maturation"  
1 RO1 HD34618-01 (PI:Stonestreet) Consultant (7/96-6/00) 149,987

Tourette Syndrome Association "Neuroanatomical Correlates of Tourette Syndrome IgG Induced Dyskinesias in Rats" (PI:Hallett), Co-Investigator (6/97-5/98) 40,255.

NIH, "Subcortical Microvascular Disease in Geriatric Depression"  
5K08 MH 01-487-02 (PI:Salloway), Co-Investigator (11/98-10/03) 135,499

NIH, "Peptide Regulation of the Choroid Plexus - CSF System"  
1R01NS27601-06 (PI:Johanson), Co-Investigator (8/99-7/03) 188,427

NIH, "Heart Disease, CNS Dysfunction & Outcome in the Elderly"  
(PI:Cohen), Co-Investigator (4/00-3/05) 250,000

NIH, "Multiple Forms of GnRH in Primates"  
1 RO1 DK54497-01A1 (PI:Sower), Co-Investigator (4/00-6/03) 50,000

NIH, "Genetic Models of Human Dementias (sub project)"  
COBRE RFA RR-00-003 (PI: Sedivy), Co-Investigator (10/00-9/05) 116,447

NIH, "Sleep, Circadian Rhythms and Dementing Illness"  
1R01 AG020654-01 (PI: Harper) Co-Investigator (10/03- 9/08) 250,000

Alzheimer's Association, Temple Discovery Award for Innovative Therapies of Alzheimer's Disease, "Blood/CSF Barrier Function in Aging and Alzheimer's Disease"(PI: Stopa) (1/04-12/07) 250,000

Brown Brain Science Program Pilot Project Award "Brown Brain Bank" (PI:Stopa) 3/06-2/07 12,000

NIH, "Microvascular Injury, Aging and Alzheimer's Disease"  
Pending, (PI: Stopa), \$250,000

NIH K08 "Effects of ApoE Genotype on Blood-Brain Barrier Permeability and LRP-1  
Expression" (PI:Donahue) – Role: Mentor

NIH "Age Related Clearance in A-Beta Clearance pathways: CSF and BBB  
1RO1 AG027910-01 (PI: Johanson) Co-Investigator (2/07-1/11) \$208,007

NIH "Cytokines and the Blood Brain Barrier in the Ovine Fetus"  
1 RO1 HD057100-01 (PI:Stonestreet) Co-Investigator (4/08-3/13) \$281,820

NIH "The RI Alzheimer's Disease Core Center: Neuropathology Core"  
P30 ADCC (PI: Ott) Core Leader (Pending) \$652,594

UNIVERSITY TEACHING ROLES

1982	Teaching Assistant, General Pathology Course, Harvard Medical School, Boston, MA
1984 – 1989	Laboratory Instructor, Neuroscience Course, Tufts University School of Medicine, Boston, MA
1985 – 1989	Lecturer, Neuroscience Course, Tufts University School of Medicine, Boston, MA
1986	Lecturer, Pathology Course, Tufts University School of Dentistry, Boston, MA
1988	Laboratory Instructor, Neuroscience Course, Harvard Medical School, Boston, MA
1990 – 1992	Lecturer, Pathology Course (Neuropathology), SUNY Health Science Center, Syracuse, NY
1993 – present	Lecturer, Neurosciences 262 (Neuropathology) and Biology 3652, The Warren Alpert Medical School of Brown University
2005 – 2006	Dean’s Teaching Excellence Award
2006 - present	Student Mentor, Bio 195/196 Independent Research, Brown University
2006 - present	Lecturer, Biomed 285, Brown University Graduate Course in Pathobiology

Present Educational Activities:

*Graduate*

Research Supervisor, Masters in Medicine Program (Karen Kim, Tyler Berzin, Parag Butala)  
Research Supervisor, Masters in Science Degree (Miles Miller)

PhD Thesis Committee Member

David Harper, Tufts University ‘97  
Michael Raffi, Brown University ‘01  
Sylvia Esch Brown University ‘05  
Hyato Urabe Brown University ‘07

Matthew Mulcahey '14

Research Supervisor, Pathobiology Graduate Program (Stephanie Lahoute, introductory lab rotation)

'94-Sponsor for Dr. Sun-Young Kim, Director of Anatomic Pathology, Dongkang General Hospital, Gyeongnam, South Korea, 1 year sabbatical on growth factors in human brain and choroid plexus

*Undergraduate*

Student Mentor, Biology 195/196 Independent Research (Hubert Fenton '93-'97; Marianna Datseris '96-'97, Tyler Berzin '98-'99, Merielle Stephens '98-'99, Tamar Gur '99-'00, Charles Chan '00-'01, Parag Butala '01-'02, Krister Jones '03-'04, Kara Gaston, '04-'05, Hira Chaudury '06-'07, Eddie Blay '07-'09, Joshua Pascuale '08-'09, Miles Miller '06-'09, Kathy Huen '09

Research Supervisor, Hughes/Ultra Fellowship (Hubert Fenton '93; Marianna Datseris '97, Tyler Berzin '98, Brian Zipser '99, Charles Chan '00, Parag Butala '01, Deepak Thomas '01, Nitin Roper '03, Miles Miller '06)

HOSPITAL TEACHING ROLES

Neuropathology Fellowship Program:

1993 - present Director, Neuropathology Fellowship Training Program

Resident and Fellow Instruction in Gross and Microscopic Neuropathology (10 hrs/wk)

Neurosurgical and Neurology/Neuropathology Conferences (13hrs/wk)

*Neuropathology Fellows:*

Dr. Charles Brown '85-87

Dr. Robert Corona '89-'91

Dr. Richard Davis '91-93

Dr. Daffyd Thomas '91-93

Dr. Albert Klein '93-'94

Dr. Michael Sikirica '94-'96

Dr. Devayani Lathi '95-'98

Dr. Keith Brecher '95-'97

Dr. Edward Famiglietti '95-'99

Dr. John Donahue '96-'99

Dr. William Taylor '98-'00

Dr. Howard Chang '99-'01  
Dr. Aaron Gleckman '99-'01  
Dr. Lee Chalker '01-'03  
Dr. Jason Peck '01-'02  
Dr. Louis Neipris '02-'03  
Dr. Qian Wu '03-'05  
Dr. Leslie Tull '04-'05  
Dr. Brian Moore '03-'04 and '05-'06  
Dr. Robert Bagdasaryan '05-'07  
Dr. Carlos Chaves- Arias '06-'07  
Dr. Mirfreida Geller '07-'09  
Dr. Victor Alvarez '07-'09  
Dr. Jason DeGregorio '09-'11  
Dr. Dorota Latusynski '09-'10  
Dr. Mohammad Mahboob '11-'13  
Dr. Anne Lee '11-'12  
Dr. Keyla Kleyser- Sugrue '12-'14