CURRICULUM VITAE

12/2015

BARRY A. HENDIN, M.D.

Address: 5090 N. 40th St. Suite 250

Phoenix, AZ 85018

EDUCATION

A.B. 1964 - Washington University

M.D. 1968 - Washington University Medical School

CLINICAL APPOINTMENTS

Intern, St. Louis Jewish Hospital, 1968-1969

Resident & Fellow, Barnes Hospital, 1969-1972 (including rotating chief residency)

Acting Chief of Neurology Service, St. Louis City Hospital, 1972

Chief of Neurology Service, Wright-Patterson, AFB, 1972-1974

Chief of Neurology, Good Samaritan Hospital, 1979-2014

Co-Director, EEG Laboratory, Good Samaritan Hospital, 1979-2014

Co-Director, EEG Laboratory, Phoenix Baptist Hospital, 1976-1991

Co-Director, EEG Laboratory, Columbia Medical Center, 1993-1999

Chairman, Division of Neurosciences, Good Samaritan Hospital, 1991-1992

Chairman, Credentials Committee, Good Samaritan Hospital, 1993-1995

Chairman, Advisory Committee, Good Samaritan Hospital, 1993-1995

Vice Chief of Staff, Good Samaritan Hospital, 1993-1995

Executive Committee, Good Samaritan Hospital, 1993-2014

Co-Director, Multiple Sclerosis Fellowship Program, Barrow Neurological Institute - 2013

Partners in MS Care. National Multiple Sclerosis Society – 2014 - Present

Director, Multiple Sclerosis Clinic, Banner University Medical Center - 2015 - Present

ACADEMIC APPOINTMENTS

Assistant (Medicine), Washington University Medical School, 1968-1969
Assistant (Neurology), Washington University Medical School, 1969-1972
Instructor (Neurology), Washington University Medical School, 1972
Clinical Associate (Neurology), University of Arizona Medical School, 1985-1987
Clinical Lecturer (Neurology), University of Arizona Medical School, 1988-1995
Consultant/Lecturer, Chigasaki Tokushukai Medical Center, Japan, November 1990
Clinical Professor of Neurology, University of Arizona Medical School, 1995-present

CURRICULUM VITAE BARRY A. HENDIN, M.D. **PAGE TWO**

OTHER APPOINTMENTS

Governor's Council on Spinal and Head Injury, 1993 -1995

Member, Board of Directors, Samaritan Health Services, 1995-1999

Chairman, Science & Technology Committee

Audit Committee

Finance Committee

Development Committee

Governance Committee

Executive Committee

Member, Board of Directors Banner Health System, 1999 - 2014

Chairman, 2009 - 2011

Vice Chairman, 2007 - 2009

Executive Committee 1999 -2006; 2007 - 2014

Nominating Committee, 2009 - 2014

Corporate Strategy Committee, 1999 - 2014

Chairman, 2007-2007

Human Resources Committee 1999 - 2001

Care, Management & Quality Committee 1999 - 2014

Vice Chairman, 2007

Finance Committee 1999 - 2014

Strategic Planning Committee 1999 - 2001

Clinical Quality & Innovation Committee 1999 - 2014

Vice Chairman 2001

American Heart Association, Phoenix Board Member, 2000

Arizona Commission on Medical Education and Research, Task Force, 2006 -2007

National Multiple Sclerosis Society

Clinical Advisory Committee 2003 – Present

Board of Directors 2007 - Present

Committee member, House Ad Hoc Committee for Multiple Sclerosis Awareness and Education, Arizona House of Representatives - 2015 - Present

LICENSURE

Missouri, 1968 (inactive) Arizona, 1974 (License #8398)

HONORS AND AWARDS

Co-Editor, Neurologic Section, Arizona Medicine, 1975-1983

Outstanding Teacher Award, USAF Medical Center, Wright Patterson 1972-1973

Teacher of the Year Award, Good Samaritan Hospital, 1978-1979

Teacher of the Year Award, Good Samaritan Hospital, 1985-1986

Teacher of the Year Award, Good Samaritan Hospital, 1987-1988

Attending Physician of the Year Award, Barrow Neurological Institute, 1983-1984

Dean's List for Excellence in Teaching in the Clinical Sciences, University of AZ, 1999

Dean's List for Excellence in Teaching in the Clinical Sciences, University of AZ, 2001

Recognition of Excellence in Teaching the Clinical Sciences, University of Arizona, 2007

CURRICULUM VITAE BARRY A. HENDIN, M.D. PAGE THREE

HONORS AND AWARDS (CONT.)

Honorary Alumnus Award, University of Arizona
Art of Caring Award, Global Caring Nurses Foundation, 2008
Nominee, Clinical Sciences Teacher of the Year, University of Arizona, 2007-2008
Health Professional of the Year, National Multiple Sclerosis Society, Arizona Chapter, 2007 & 2009

SOCIETY MEMBERSHIPS

American Academy of Neurology, Fellow Member
Education Committee/Annual Meeting Subcommittee 1990-1997
Maricopa County Medical Society
Arizona Medical Association
Arizona Neurological Society
Board of Directors 2005-2007

MILITARY SERVICE

Major, USAF, MC - Active Duty, September 1972 - September 1974 Chief, Neurology Service, USAF Medical Center, Wright-Patterson

BOARD CERTIFICATION

Neurology - American Board of Psychiatry & Neurology - March 15, 1975 Board Examiner, American Board of Psychiatry & Neurology, 1975-2009

PUBLICATIONS

- 1. Hahn TJ, Haddad JG, Hendin BA. Effect of chronic anticonvulsant therapy on serum 25-OH vitamin D levels. Clinical Research 1972; 20:238
- 2. Hahn TJ, Hendin BA, Shoop CR, Haddad CG. Effect of anticonvulsant therapy on serum 25-Hydroxycholecalciferol in adults. New Eng Jour of Med 1972; 297:900-904
- 3. Hendin BA, DeVivo DC, Torac R, Lell M, Regab AH, Vieggi TJ. CNS parenchymatous degeneration in childhood leukemia. Presented at the American Society of Clinical Oncology, April 1972
- 4. Hendin BA, Hahn TJ, Haddad JG. Effect of anticonvulsant therapy on anticonvulsant vitamin D levels. Presented at the Society of Air Force Physicians, February 1973
- 5. Hendin BA, DeVivo DC, Torac R, Lell ME, Regab AH, Vietti TJ. Parenchymous degeneration of the central nervous system in childhood leukemia. Cancer 1974; 33:468-482
- 6. Trotter JL, Hendin BA, Osterland CK. Cerebellar degeneration with Hodgkin's disease an immunological study. Arch of Neurol 1976; 33:616-661
- 7. Hendin BA. The remote effects of cancer on the nervous system: cerebellar degeneration. AZ Med 1977; 34:462-463

PUBLICATIONS (CONT.)

- 8. Hahn TJ, Hendin BA, Haddad JG. Serum 25-Hydroxycholecalciferol levels and bone mass in children on clinical anticonvulsant therapy. New Eng Jour of Med 1975; 272:550-554
- 9. Hendin BA, Schaffert A. Tetanus. Samaritan Medicine. 1984; 29-32
- 10. Hendin BA. CPC: Herpes zoster. Samaritan Medicine 1985; 2:19
- 11. Yudell A, Hendin BA, Tamm HS, Guidry J. Coccidioidal meningitis narcotic amphotericin B therapy. Arch Internal Med 1988; 148:985-986
- 12. Clark W, Coull B, Hendin BA, et al. Randomized trial of Cervene a kappa receptor-selective opioid antagonist, in acute ischemic stroke (poster).

 Presented at American Academy of Neurology Meeting, Seattle, Washington, 1995
- 13. Clark W, Coull B, Hendin BA, et al. Randomized trial of Cervene, a kappa receptor-selective opioid antagonist, in acute ischemic stroke. Journal of Stroke and Cerebrovascular Disease; Vol 6, No. 1:35-40, 1996
- Miravalle A, Hendin BA, Vollmer T, Kala M. Glatiramer acetate in the reduction of relapse frequency in multiple sclerosis. Clinical Medicine Insights: Therapeutics 2011:3 151-158
- 15. Svenningsson A, Hendin BA. Clinical, biochemical and imaging parameters that may be predictive of high disease activity, rapid progression or increased disability in multiple sclerosis. Citation European Neurological Review 2012:7 (Supplement 2)
- 16. Prigatano GP, Hendin BA, Heiserman JE. Denial or unawareness of cog deficit associated with multiple sclerosis? A case Report. Journal of Clinical and Experimental Neuropsychology, DOI: 10.1080/13803395.2014.890700
- Current practice patterns of MS relapse management among MS specialists in the United States: survey results of the MS relapse practice patterns project. Q Khan, R Berkovich, B Hendin, A Javed, A Miller, C Tornatore. ECTRIMS 2015 Poster Presentation.
- 18. The Delphi Method on Peginterferon Beta-1 Injection Site Reactions and Management Strategies in the Relapsing-Remitting Multiple Sclerosis ALLOW Study. DeRen Huang, Sibyl Wray, Barry Hendin, Robert Naismith, Sheri Rosenblatt, Brian Werneburg, Javier Zambrano. ECTRIMS 2015 and PACTRIMS 2015 Poster.
- ALLOW A Phase 3b Trial Characterising Flu-like Symptoms in Patients
 Transitioning to Pegylated Interferon Beta-1a: Interim Analysis of all Patients.

 Robert T. Naismith, Barry Hendin, Sibyl Wray, Xiaojun You, Guido Sabatella,
 Javier Zambrano. ECTRIMS 2015 and PACTRIMS 2015 Poster.
- 20. Use of patient case scenarios to assess current practice patterns of MS relapse assessment and treatment among MS Specialists in the United States. Adil Javed, Regina Berkovich, Barry Hendin, Aaron Miller, Carlo Tornatore. ECTRIMS 2015 Poster.

MAJOR PRESENTATIONS

American College of Physicians. Management of Cerebrovascular Disease, November 1984

American College of Physicians. Management of Cerebrovascular Disease, November 1985

American College of Physicians. Management of Cerebrovascular Disease, November 1986

Arizona Medical Association. Prevention of Cerebrovascular Disease, June 1987

American College of Physicians. Management of Cerebrovascular Disease, November 1988

Arizona Academy of Family Physicians. Management of Cerebrovascular Disease, Current Management of Epilepsy, June 1989

American College of Physicians. Management of Cerebrovascular Disease, November 1989

American College of Physicians. Management of Cerebrovascular Disease, November 1990

American College of Physicians. Management of Cerebrovascular Disease, November 1991

American College of Physicians. Recent Advances in Therapeutics, November 1992

American College of Physicians. Recent Advances in Therapeutics, November 1993

American College of Physicians. Recent Advances in Therapeutics, November 1995

American College of Physicians. Recent Advances in Therapeutics, November 1997

American College of Physicians. Recent Advances in Therapeutics, November 1998

American College of Physicians. Management of Stroke and Cerebrovascular Disease, November 1999

American College of Physicians. Brain Attack, November 2000

American College of Physicians. Stroke Update. November 2001

American College of Physicians. Stroke Therapy 2002. Mayo Clinic Scottsdale, October 2002

MAJOR PRESENTATIONS (CONT.)

American College of Physicians. Neurology for the Internist. Update in Clinical Medicine. Scottsdale, AZ, November 7, 2002

American College of Physicians. Neurology Update. Scottsdale, Arizona, November 14, 2003

Instituto Nacional de Neurologia y Neurocirugia. Le Cefalia (cephalgia), Mexico City, July 1993

Kings County Family Practice Society. Recent Advances in Stroke Therapy, April 1994

San Diego Neurologic Society. New Antiepileptic Medications, May 1994

Stroke Update 1994, St. Joseph's Hospital. Acute Stroke Treatment - New Trials and Principles, September 1994

Instituto Nacional de Neurologia y Neurocirugia. El Diagnostico y Tratmiento de la Cefalea en el Primer Nivel de Atencion. La Emfermidad Cerebro Vascular en el Primer Nivel De Atencion, Mexico City, July 1995

Third Annual Neurosciences Symposium, Good Samaritan Regional Medical Center (Phoenix, AZ). Current Medical Advances in Neurological Diseases, June 1998

Mayo Clinic Scottsdale Neuro Grand Rounds. Current Advances in Neurologic Diseases, June 10, 1998

Management of Epilepsy: Consensus Conference on Current Clinical Practice (participant), June 17, 1998, Huatulco, Mexico. Published in Supplement 4 to Neurology, Volume 51, No 5, November 1998

Neurology Grand Rounds, University of New Mexico, Albuquerque, New Mexico. June 10, 1999

American Heart Association. Clinical Management and Protocols for Stoke Patients. Phoenix, AZ, September 10, 1999

Treatment of Psychiatric and Neurologic Disorders Symposium. The Pathophysiology and Treatment of Neuropathic Pain Transmission. San Diego, CA, February 5, 2000

San Diego Academy of Family Physicians. Epilepsy. San Diego, CA, July 8, 2000

Neurology & Neurosurgery Grand Rounds, University of Arizona Health Sciences Center, Tucson, Arizona. Strategy in Headache Management. September 29, 2000

Neurology Grand Rounds, University of California, Irvine. Rational Sequencing of Antiepileptic Drugs 2003

CURRICULUM VITAE BARRY A. HENDIN, M.D. PAGE SEVEN

MAJOR PRESENTATIONS (CONT.)

Nevada Academy of Family Physicians. Migraines. Reno, Nevada, May 1, 2003

Texas Academy of Family Physicians Migraine Symposium. Management of Migraine Headache. Austin, TX, October 18, 2003.

Nevada Academy of Family Physicians. Migraine. Every Minute Counts. Lake Tahoe, Nevada, February 1, 2005

Arizona Academy of Family Physicians. Migraine Update. March 2005

Update in Clinical Medicine. New Britain General Hospital. Update in Stroke/Cerebrovascular Disease. Scottsdale, Arizona, November 9, 2005

Mayo Clinic College of Medicine. 19th Annual Epilepsy Update. Scottsdale, Arizona, November 3, 2006

Neurology & Neurosurgery Grand Rounds, University of Arizona Health Sciences Center, Tucson, Arizona. Multiple Sclerosis Update. November 3, 2007

Sunrise Hospital & Medical Center. Advances in Clinical Neurology and Neurosurgery Update 2008: "Immunomodulatory Therapies for Multiple Sclerosis." Las Vegas, Nevada. March 26, 2008

Neurology & Neurosurgery Grand Rounds, University of Arizona Health Sciences Center, Tucson, Arizona. Multiple Sclerosis Update. August 27, 2010

Mayo Clinic MS Symposium. MS Symptomatic Therapies. Scottsdale, Arizona. March 5, 2011

Barrow Neurological Institute Multiple Sclerosis Symposium. Current Treatment Options for Multiple Sclerosis. April 12, 2014.

University of Gothenburg MS Clinic. Recent developments in MS. October 2015.

Arizona House of Representatives. Overview of current research on multiple sclerosis. November 17, 2015.

RESEARCH PROTOCOLS

Principal Investigator for the following:

Protocol # E301. DHE-45 Nasal Spray for headache Protocol # GHBA-903. Sumatriptan for headache

RESEARCH PROTOCOLS (CONT.)

Protocol # IX-101-002. IV Nalmefene for stroke

Protocol # 303. Mentane HP 029 for Alzheimer's disease

Protocol # 945-090. Gabapentin for epileptic seizures

Protocol # 979-7. C1979 for Alzheimer's disease

Protocol # VGPR0098. Sabril for epileptic seizures

Protocol # VGPR0101. Sabril for epileptic seizures

Protocol # UB-IN-9. Lubeluzole for stroke

Protocol # IX-103-002. Nalmefene for stroke

Protocol # BMS 180048. CN115-025 for migraine

Protocol # M92-825. Tiagabine for seizures

Protocol # GHBA. Eldepryl for Parkinson's disease

Protocol # S2WA-3001. Naratriptan for migraine

Protocol # IX-104-002. Nalmefene for stroke

Protocol # 982-25-045. Fosphenytoin for stroke

Protocol # SB202026. 20206 for Alzheimer's disease

Protocol # 945-000-213. Neurontin for seizures

Protocol # 945-217. Neurontin for migraine

Protocol # SB220453. 220453 for migraine

Protocol # 105-133. Lamictal for seizures

Protocol # Lub-USA-6. Lubeluzole for stroke

Protocol # 3062K1-200-US. Fiblast for stroke Protocol # 52WA4002. Naratriptan for migraine

Protocol # 202026/050 for Alzheimer's disease

Protocol # 1008-099/010. Pregabalin for seizures

Protocol # CN123-011. IV BMS 204352 for stroke

Protocol # IP302-016. Citocoline for stroke

Protocol # 1008-032/033. Pregabalin for low back pain

Protocol # 981-124 Atorvastatin for stroke/TIA

Protocol # AST02. ICOS HALT for stroke

Protocol # 30006. Lamictal comparison/menstrual abnormalities

Protocol # 0101. Rufinamide for seizures

Protocol # PRI-TOP-IN-28. Topamax for seizures

Protocol # ELET-071. Eletriptan for migraine

Protocol # GLY-30011. GAIN-ASIST for stroke

Protocol # LAM40091. Lamictal for seizures

Protocol # S2W40027. Naratriptan for menstrual migraine

Protocol #872CL003. ARTIST MRI for stoke

Protocol #872CL004. ARTIST + for stroke

Protocol # CCM9981A04. Comtan for Parkinson's disease

Protocol # BMS IM101-200 for multiple sclerosis

Protocol # Biogen C1802 for multiple sclerosis

Protocol # Astra Zeneca 311CVS/0022. Zomig Nasal Spray

Protocol # SUM40299. Imitrex for migraine headaches

Protocol # Charisma EFC4505. Plavix vs aspirin

Protocol # Fujisawa FK 506 for stroke.

RESEARCH PROTOCOLS (CONT.)

Protocol # XRP4563H/4001. Lovenox for stroke

Protocol # GSK 249417 for stroke

Protocol # GSK LAM40112. Lamictal for cognition

Protocol # GSK LAM40124. Lamictal for behavior

Protocol # Ilex-Campath for MS

Protocol # Berlex/MDS - MS study

Protocol # Biogen 1808 for multiple sclerosis

Protocol # Genentech. Rituxan for dermatomyositis

Protocol # ACT. Avonex/steroids for multiple sclerosis

Protocol # Teva 9013 for MS

Protocol # Teva NC100 for MS

Protocol # Pfizer Implement study for MS

Protocol # Genentech U2787g for MS

Protocol # Glaxo 101468/228 for Parkinson's disease

Protocol # Glaxo LAM100034 for partial seizure

Protocol # Glaxo LAM100036 for generalized seizure

Protocol # Ortho McNeil CAPSS272 for seizure

Protocol # Biogen Avonex for CIDP

Protocol # Glaxo 49653/461 for Alzheimer's

Protocol # Johnson & Johnson 333369EPY2003 for seizure

Protocol # Genentech RIM study for dermatomyositis

Protocol # Boehringer-Ingelheim - PROFESS for post-stroke

Protocol # Teva TNC GA MS 2004 01 ASSERT for MS

Protocol # Columbia University Selection for ALS

Protocol # T-GEN for ALS

Protocol # Teva PM028. NABS for MS

Protocol # Weintraub Palm Mag Device for Diabetic Neuropathy

Protocol # Biogen. Strata for MS

Protocol # Lilly HMDY for diabetic neuropathy

Protocol # Lilly F1J-US-HMEZ for diabetic neuropathy

Protocol # GSK AVA104617 for Alzheimer's disease

Protocol # Novartis FTY720D 2302 for MS

Protocol # Biogen 101MS 102 for MS

Protocol # Biogen 109 MS 301 for MS

Protocol # Lilly small fiber neuropathy

Protocol # BIOMS MBP8298-SP-03 for secondary progressive MS

Protocol # Biogen 101MS 402 for MS

Protocol # Teva Bravo for MS

Protocol # Lilly HMEF for MS

Protocol # Merck Musi Qo1 for MS

Protocol # Roche/Genentech ocrelizumab for MS

Protocol # MedImmune CP 151 for dermatomyositis/polymyositis

Protocol # David Saperstein - Lithium for inclusion body myositis

Protocol # Cytex Arimoclomol for ALS

Protocol # Mass General Ceftriaxone for ALS

CURRICULUM VITAE BARRY A. HENDIN, M.D. PAGE TEN

RESEARCH PROTOCOLS (CONT.)

Protocol # T-GEN Tretinoin for ALS

Protocol # Schering-Plough TIMI 50 for post-stroke

Protocol # Genzyme MTAP Myozyme for Pompe

Protocol # J&J 333369 NPP 2002 for diabetic peripheral neuropathy

Protocol # Biogen 108 MS 302 for MS

Protocol # UCB N01276 for Epilepsy

Protocol # UCB N01315 for Epilepsy

Protocol # Biogen 109 MS 303 for MS

Protocol # Biogen 105 MS 301 for MS

Protocol # Lilly FIJ-US for MS

Protocol # Cytokinetics CY4021 for ALS

Protocol # Biogen 205 MS 301 for MS

Protocol # Novartis Gil EPOC

Protocol # Sanofi Teracles

Protocol # Biogen Prefer

Protocol # Roche Opera WA21093

Protocol # Roche Oratorio WA25046

Protocol # Biogen Esteem

Protocol # Biogen Synergy

Protocol # Novartis BAF

Protocol # Biogen ALLOW

Protocol # Teva ARPEGGIO

Protocol # Novartis Transition

Protocol # Novartis Assess

Co-Investigator for the following:

Protocol # Genzyme Aubagio Hair Thinning Project MS

Protocol # Sanofi TeriPRO IPS13567 MS

Protocol # Biogen 109MS5413 Tecfidera Study

Protocol # Serono Autoinjector Study

Protocol # Genzyme Switch Study