

LORNE K. DIRENFELD, MD, FRCP (C)

NEUROLOGIST

DIPLOMATE, AMERICAN BOARD OF PSYCHIATRY AND NEUROLOGY

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CURRICULUM VITAE

CERTIFICATION AND LICENSURE

- 1996 Certified Medical Review Officer by the Medical Review Officer Certification Council and the State of Hawaii
- 1995 Certified Independent Medical Examiner by the American Board of Independent Medical Examiners
- 1988 Registered Physician in California
- 1983 Registered Physician in Hawaii
- 1982 Board Certified in Neurology by the American Board of Psychiatry and Neurology
- 1981 Fellow of the Royal College of Physicians, Canada
- 1978 Registered Physician in Massachusetts
- 1976 Registered Physician in Ontario
- 1976 Diplomate of the National Board of Medical Examiners
- 1976 Licentiate of the Medical Council of Canada

CURRENT POSITION

- 1983 - Present Private Practice in Neurology, based in Kahului, Maui, with consultative offices in Honolulu, Hilo, Kona, and Lihue. Practice emphasizing the objective evaluation and analysis of complex work-related injuries.
- 1986 - Present Assistant Clinical Professor, John A. Burns School of Medicine, Department of Medicine (Neurology), University of Hawaii.
- 1995 - Present Member, Standards Committee, American Board of Independent Medical Examiners.
- 1996 - Present Member, Editorial Board, The Guides Newsletter, published by the American Medical Association. This newsletter provides expert advice on the use of the Guides to the Evaluation of Permanent Impairment.

EDUCATION

- 1971-75 University of Toronto, Faculty of Medicine.
Doctor of Medicine. Dean's List.
- 1968-71 University of Toronto, Faculty of Arts and Science, University College.
Bachelor of Science.

PROFESSIONAL TRAINING AND EXPERIENCE

- 1995 - Medical Director, Maui Occupational Health Center, Kahului, Hawaii.
2001
- 1982-83 Instructor in Neurology, Boston University School of Medicine,
Boston, Massachusetts
- 1981-83 Principal Investigator, Dementia in Parkinson's Disease project.
Funded by the National Institutes of Health, Institute on Aging.
- 1981-82 Chief Resident in Neurology and Fellow in Neurobehavior, Boston University
School of Medicine and Boston Veterans Administration Hospital, Boston,
Massachusetts
- 1978-81 Resident and Teaching Fellow in Neurology, Boston University School of
Medicine, Boston Veterans Administration Hospital, Boston, Massachusetts
- 1977-78 Resident in Internal Medicine, University of Toronto, St. Michael's Hospital,
Toronto, Canada
- 1976-77 General practice, Toronto, Canada
- 1975-76 Intern (rotating), Royal Columbian Hospital, New Westminster, British
Columbia, Canada

ACADEMIC AWARDS

- 1975 Lange Medical Publications Award, Faculty of Medicine, University of Toronto,
for outstanding academic achievement as a medical student.
- 1972-74 Dr. C. S. Wainwright Memorial Scholarship, Faculty of Medicine, University of
Toronto, for outstanding academic achievement.
- 1971 Ann Shepard Memorial Scholarship, University College, University of Toronto,
for outstanding academic achievement.

RESEARCH AWARD

1981-83 Source: National Institutes of Health, Institute on Aging
 Type: Clinical Investigator Award
 Role: Principal Investigator
 Project: "Dementia in Parkinson's Disease"

SOCIETY MEMBERSHIPS

American Academy of Neurology
American College of Occupational and Environmental Medicine
American Medical Association
Massachusetts Medical Society

PUBLICATIONS

Direnfeld L., Spero L., Marotta J., Seeman P.: L-dopa on-off effect in Parkinson's disease: treatment with transient drug withdrawal and dopamine receptor resensitization. Ann.Neurol. 4:573-575, 1978. Presented at the 13th Annual Meeting of the Canadian Congress of Neurological Sciences, Vancouver, British Columbia, June 23, 1978.

Direnfeld L., Spero L., Marotta J., Seeman P.: Letter, response to chronic agonist-induced hypersensitivity theory, Ann.Neurol. 6:278, 1979.

Direnfeld L., Feldman R., Alexander M., Kelly-Hayes M.: Is L-dopa drug holiday useful: Neurology, 30:785-788, July, 1980. Presented at the 31st Annual Meeting of the American Academy of Neurology, Chicago, Illinois, April 26, 1979. Published in translation in Le Journal International de Medecine. 2:1077-1080, Nov. 1980.

Dellis D., Direnfeld L., Alexander M., Kaplan E.: Cognitive fluctuations associated with "on-off" phenomenon in Parkinson's disease, Neurology, 32:1049-1052, Sept. 1982.

Direnfeld L.: The genesis of EEG and its relation to electromagnetic radiation. J. Bioelectricity, 2 (2&3), 111-121, 1983.

Direnfeld L., Volicer L., Langlais P., Marquis J., Kaplan E., Albert M.: Parkinson's disease: the relationship of laterality to dementia and neurochemistry. Arch.Neurol., 41:935-941, 1984.

PUBLICATIONS (*Continued*)

Volicer L., Direnfeld L.K., Langlais P.J., Marquis J., Freedman M., Bird E.D., and Albert M.L.: Cyclic nucleotides in cerebrospinal fluid in patients with Alzheimer's (DAT) and Parkinson's (PD) diseases. Neurology, 34 (Suppl. 1) 145, Mar. 1984. Presented at the 36th Annual Meeting of the American Academy of Neurology, Boston, Massachusetts, April 10, 1984.

Volicer L., Direnfeld L.K., Freedman M., Albert M., Langlais P., and Bird E.D.: Relationship of serotonin and 5-hydroxyindolacetic acid in cerebrospinal fluid: Difference in Parkinson's and Alzheimer's diseases. Arch.Neurol., 42:127-129, 1985.

Marquis J.K., Volicer L., Mark K.A., Direnfeld L., Freedman M.: Cholinesterase activity in plasma erythrocytes and cerebrospinal fluid of patients with dementia of the Alzheimer type. Biological Psychiatry, 20:605-610, 1985.

Zubenko G.S., Volicer L., Direnfeld L.K., Freedman M., Langlais P.J., Nixon R.A.: Cerebrospinal fluid levels of angiotensin-converting enzyme in Alzheimer's disease, Parkinson's disease and progressive supranuclear palsy. Brain Res. 328(2):215-221, 1985.

Volicer L., Direnfeld L.K., Langlais P.J., Freedman M., Bird E.D., Albert M.: Catecholamine metabolites and cyclic nucleotides in cerebrospinal fluid in dementia of Alzheimer's type. Journal of Gerontology, 40:708-713, 1985.

Volicer L., Beal F., Direnfeld L., Marquis J.K., Albert M.: CSF cyclic nucleotides and somatostatin in Parkinson's disease. Neurology, 36:89-92, 1986. Presented in part at the Annual Meeting of the American Academy of Neurology, Boston, 1984.

Zubenko G.S., Marquis J.K., Volicer L., Direnfeld L., Nixon R.A.: Cerebrospinal fluid levels of angiotensin-converting enzyme, cetylcholinesterase, and dopamine metabolites in dementia associated with Alzheimer's disease and Parkinson's disease: A correlative study. Biological Psychiatry, 21(14):1365-1381, 1986.

Volicer L., Beal M.F., Direnfeld L.K., Marquis J.K., Albert M.L.: CSF cyclic nucleotides and somatostatin in Parkinson's disease. Neurology, 36(1):89-92, 1986.

Shaw, W., Direnfeld L.: Rating Central Nervous System Disorders. The Guides Newsletter, p. 4-5, published by the American Medical Association, Chicago, IL., Nov./Dec. 1996.

PUBLICATIONS *(Continued)*

Direnfeld L.: Rating Cranial Nerve and Spinal Cord Disorders. The Guides Newsletter, p. 3-4, published by the American Medical Association, Chicago, IL., Mar./Apr. 1997.

Direnfeld L.: Impairment Evaluation of Headaches. The Guides Newsletter, p. 7, published by the American Medical Association, Chicago, IL., Mar./Apr. 1997.

Direnfeld L.: Cervical Spine Injury Case Study. The Guides Newsletter, p. 8-9, published by the American Medical Association, Chicago, IL., Sept./Oct. 1999.

Direnfeld L.: Spinal Cord Impairments. The Guides Newsletter, p. 5-6, published by the American Medical Association, Chicago, IL., Jan./Feb. 2000.

Direnfeld L.: Impairment Assessment of the Nervous System, Clinics in Occupational Medicine, Vol. 1, No. 4, p. 749-770, published by W. B. Saunders Company, Philadelphia, PA, Nov. 2001.

Direnfeld, L., Talmage, J., Brigham, C.: Functionally Limiting Upper Extremity Pain: Controversies in Impairment Rating. The Guides Newsletter, p. 4-5, 8-12, published by the American Medical Association, Chicago, IL., Sept./Oct. 2003.

Dr. Direnfeld has served as an editorial reviewer for the following publications:

- Occupational Medicine Practice Guidelines, J. Harris ed., published by OEM Press, Beverly, MA, 1997.
- The Medical Disability Advisor, Fourth Edition, P. Reed ed., published by The Reed Group, Boulder, CO, 2001.
- The Guides Casebook, Second Edition, C. Brigham, L. Ensalada, J. Talmage eds., published by the American Medical Association, Chicago, IL, 2002.

LECTURES

Teaches and lectures regularly in Hawaii and nationally in the areas of neurologic assessment, the evaluation of injured workers and impairment ratings.

Principal speaker at major seminars sponsored by medical and adjunctive organizations.

Lorne Direnfeld, M.D. is a board-certified neurologist who has practiced in the State of Hawaii since 1983. For many years, Dr. Direnfeld's practice has emphasized the objective evaluation and analysis of complex, work-related injuries.

Dr. Direnfeld is nationally recognized for his skills in independent medical examinations and permanent partial impairment ratings. He has been a faculty member for both the fundamentals and advanced impairment and disability evaluation courses, sponsored by the American College of Occupational and Environmental Medicine. He is a frequent speaker within the State of Hawaii and nationally, on issues of workers' compensation and disability, particularly concerning conditions affecting the spine and the nervous system.

Dr. Direnfeld is a member of the Standards Committee of the American Board of Independent Medical Examiners and has been certified as an independent medical examiner by this board. He is on the editorial board of "The Guides Newsletter", published by the AMA, providing expert advice in the use of the "Guides to the Evaluation of Permanent Impairment", and has served as a consultant to the Practice Guidelines Committee of the American College of Occupational and Environmental Medicine, and as a member of the medical advisory board and reviewer for "The Medical Disability Advisor." He is a Master Fellow of the Academy of Independent Medical Examiners of Hawaii (AIMEHI).

Dr. Direnfeld is a Contributing Author to the AMA Guides to the Evaluation of Permanent Impairment – Sixth Edition, and holds an academic appointment as Assistant Clinical Professor at the John A. Burns School of Medicine, at the University of Hawaii. He is a member of the American Academy of Neurology, the American Medical Association, the Hawaii Medical Association, and the Massachusetts Medical Society.