

Dr David N. Louis  
 Pathologist-in-Chief, Massachusetts General Hospital  
 Benjamin Castleman Professor of Pathology,  
 Harvard Medical School  
 James Homer Wright Pathology Laboratories  
 Massachusetts General Hospital  
 55 Fruit Street, Warren 225  
 Boston, MA 02114  
 Tel.: 617-726-2966  
 Fax.: 617-726-7533 (fax)  
 E-mail: dlouis@mgh.harvard.edu



#### *Academic degrees*

AB, English, Cornell University, Ithaca, NY, USA (1981)  
 MD, Medicine, State University of New York, Stony Brook, NY, USA (1985)

#### *Prizes and honors*

Cornell University College of Arts and Sciences, Magna cum laude (1981)  
 Cornell University College of Arts and Sciences, Distinction in All Subjects (1981)  
 State University of New York at Stony Brook School of Medicine, Valedictory Speaker,  
 (Class of 1985)  
 State University of New York at Stony Brook School of Medicine, Alpha Omega Alpha  
 Medical Honor Society (1985)  
 Rubinstein Award for Best Paper on Neuro-oncology, American Association of  
 Neuropathologists (1993)  
 Rubinstein Award for Best Paper on Neuro-oncology, American Association of  
 Neuropathologists (1995)  
 Rappaport Scholar, Massachusetts General Hospital (1996-97)  
 Alexis A. Boss Chair of Research, The Brain Tumor Society (1996-97)  
 American Brain Tumor Association Research Excellence Award, Society for Neuro-  
 Oncology (1998)  
 Irving M. London Teaching Award, Harvard University/Massachusetts Institute of  
 Technology Division of Health Sciences and Technology (2000)  
 M.A. (Honoris causa), Harvard University, Cambridge, MA (2002)  
 Farber Award for Meritorious Achievements in Brain Tumor Research, Anne and Jason  
 Farber Foundation, Society for Neuro-Oncology and Joint Section on Tumors of the  
 American Association of Neurosurgeons/Congress of Neurological Surgeons (2003)  
 Saul R. Korey Award/Lecture, American Association of Neuropathologists (2008)  
 Zülch Prize (Klaus Joachim Zülch-Preis of the Gertrud Reemtsma Foundation of the  
 Max Planck Society; highest honor in Germany for neurological research) (2008)

Distinguished Alumnus Award, Stony Brook University School of Medicine (2008)  
 Rubinstein Award for Best Paper on Neuro-oncology, American Association of Neuropathologists (2009)  
 President, American Association of Neuropathologists (2009-2010)  
 President, New England Society of Pathologists (2011-2012)  
 Rubinstein Award for Best Paper on Neuro-oncology, American Association of Neuropathologists (2012)  
 Feldman Founders Award, National Brain Tumor Society (2013)  
 Matthew T. Moore Award/Lecture, American Association of Neuropathologists (2014)  
 President, History of Pathology Society (2014-2015)  
 Weil Award for Best Paper in Experimental Neuropathology, American Association of Neuropathologists (2014)  
 Victor Levin Award for Neuro-Oncology Research, Society for Neuro-Oncology (2016)

#### *Editorial board*

Journal of Neuropathology and Experimental Neuropathology (1994-present)  
 Acta Neuropathologica (1994-present)  
 Brain Pathology (1996-present)  
 American Journal of Pathology, 1996-2011 (Associate Editor, 2000-2002)  
 Neurogenetics (1997-present)  
 Neuro-Oncology (1998-2011)  
 Neuropathology and Applied Neurobiology (North American editor), 1999-  
 Folia Neuropathologica, (2000-present)  
 Pathology International, 2001- (International Advisory Board)  
 Cancer Biology and Therapy (2001-present)  
 Neuropathology (2003-present)  
 Archives of Pathology and Laboratory Medicine, 2011- (Executive Advisory Board)

#### *Selected publications*

von Deimling A, von Ammon K, Schoenfeld DA, Wiestler OD, Seizinger BR, Louis DN. Subsets of glioblastoma multiforme defined by molecular genetic analysis. Brain Pathol 3:19-26 (1993)  
 Cairncross JG, Ueki K, Zlatescu MC, Lisle DK, Finkelstein DM, Hammond RR, Silver JS, Stark PC, Macdonald DR, Ino Y, Ramsay DA, Louis DN. Specific chromosomal losses predict chemotherapeutic response and survival in patients with anaplastic oligodendrogliomas. J Natl Canc Inst 90:173-1479 (1998)  
 Ino Y, Betensky RA, Zlatescu MC, Sasaki H, Macdonald DR, Stemmer-Rachamimov AO, Ramsay DA, Cairncross JG, Louis DN. Molecular subtypes of anaplastic oligodendroglioma: implications for patient management at diagnosis. Clinical Cancer Res 7:839-845 (2001)

- Okada Y, Hurwitz EE, Esposito JM, Brower MA, Nutt CL, Louis DN. Selection pressures of TP53 mutation and microenvironmental location influence EGFR gene amplification in human glioblastomas. *Cancer Res* 63:413–416 (2003)
- Nutt CL, Mani DR, Betensky DA, Tamayo P, Cairncross JG, Ladd C, Pohl U, Hartmann C, McLaughlin ME, Batchelor TT, Black PM, von Deimling A, Pomeroy SL, Golub TR, Louis DN. Gene expression-based classification of malignant gliomas correlates better with survival than histological classification. *Cancer Res* 63:1602-1607 (2003)
- Riemenschneider MJ, Mueller W, Betensky RA, Mohapatra G, Louis DN. In situ analysis of integrin and growth factor receptor signaling pathways in human glioblastomas suggests overlapping relationships with FAK activation. *Am J Pathol* 167:1379-1387 (2005)
- Cahill DP, Levine KK, Betensky RA, Codd PJ, Romany CA, Reavie LB, Batchelor TT, Futreal PA, Stratton MR, Curry WT, Iafrate JA, Louis DN. Loss of the mismatch repair protein MSH6 in human glioblastomas is associated with tumor progression during temozolomide treatment. *Clin Cancer Res* 13:2038-2045 (2007)
- Yip S, Miao J, Cahill DP, Iafrate AJ, Aldape K, Nutt CL, Louis DN. MSH6 mutations arise in glioblastomas during temozolomide therapy and mediate temozolomide resistance. *Clin Cancer Res* 15:4622-4629 (2009)
- Mohapatra G, Engler DA, Starbuck KD, Kim JC, Bernay DC, Scangas GA, Rousseau A, Batchelor TT, Betensky RA, Louis DN. Genome-wide comparison of paired fresh frozen and formalin-fixed paraffin-embedded gliomas by custom BAC and oligonucleotide array comparative genomic hybridization: facilitating analysis of archival gliomas. *Acta Neuropathol* 121:529-43 (2011)
- Camelo-Piragua S, Jansen M, Ganguly A, Kim JCM, Cospers AK, Dias-Santagata D, Nutt CL, Iafrate AJ, Louis DN. A sensitive and specific diagnostic panel to distinguish diffuse astrocytoma from astrocytosis: chromosome 7 gain with mutant IDH1 and p53. *J Neuropathol Exp Neurol* 70:110-115 (2011)
- Jansen M, Mohapatra G, Betensky RA, Keohane C, Louis DN. Gain of chromosome arm 1q in atypical meningioma correlates with shorter progression-free survival. *Neuropathol Appl Neurobiol* 38:213-219 (2012)
- Chi AS, Batchelor TT, Yang D, Dias-Santagata D, Borger D, Ellisen L, Iafrate AJ, Louis DN. BRAF V600E mutation identifies a subset of low-grade diffusely infiltrating gliomas in adults. *J Clin Oncol* 31: e233-e236 (2013)
- Louis DN, Gerber GK, Baron JM, Bry L, Dighe AS, Getz G, Higgins JM, Kuo FC, Lane WJ, Michaelson JS, Le LP, Mermel CH, Gilbertson JR, Golden JA. Computational pathology: an emerging definition. *Arch Pathol Lab Med* 138:1133-1138 (2014)
- Suvà ML, Rheinbay E, Gillespie SM, Patel AP, Riggi N, Wakimoto H, Rabkin SD, Martuza RL, Chi AS, Rivera MN, Wortman I, Shalek A, Rozenblatt-Rosen O, Regev A, Louis DN, Bernstein BE. Reconstructing and reprogramming the tumor-propagating potential of glioblastoma stem-like cells. *Cell* 157:580-594 (2014)

- Louis DN, Perry A, Burger P, Ellison DW, Reifenberger G, von Deimling A, Aldape K, Brat D, Collins VP, Eberhart C, Figarella-Branger D, Fuller GN, Giangaspero F, Giannini C, Hawkins C, Kleihues P, Korshunov A, Kros JM, Lopes MB, Ng HK, Ohgaki H, Paulus W, Pietsch T, Rosenblum M, Rushing E, Soylemezoglu F, Wiestler O, Wesseling P. International Society of Neuropathology-Haarlem consensus guidelines for nervous system tumor classification and grading. *Brain Pathol* 24:429-435 (2014)
- Louis DN, Feldman M, Carter AB, Dighe AS, Pfeifer JD, Bry L, Almeida JS, Saltz J, Braun J, Tomaszewski JE, Gilbertson JR, Sinard JH, Gerber GK, Gall SJ, Golden JA, Becich MJ. Computational pathology: a path ahead. *Arch Pathol Lab Med* 140:41-50 (2016)
- Venteicher AS, Tirosch I, Hebert C, Yizhak K, Neftel C, Filbin MG, Escalante LE, Shaw ML, Rodman C, Gillespie SM, Luo CC, Nahed BV, Curry WT, Mylvaganam R, Rivera MN, Frosch MP, Golub T, Getz G, Patel AP, Rozenblatt-Rosen O, Cahill DP, Louis DN, Bernstein BE, Regev A, Suvà ML. Decoupling genetic, developmental and micro-environmental programs in IDH-mutant gliomas through single-cell RNA-seq. *Nature* (in press).

#### *Selected text books*

- Ironside JW, Moss TH, Louis DN, Lowe JS, Weller RO. *Diagnostic Pathology of Nervous System Tumours*. London: Churchill Livingstone 2002
- Louis DN, Ohgaki H, Wiestler OD, Cavenee WK (eds.). *World Health Organization Classification of Tumours of the Central Nervous System*, 4<sup>th</sup> edition. IARC, Lyon; 2007
- Love S, Louis DN, Ellison DW (eds.). *Greenfield's Neuropathology*, London: Arnold 2008
- Louis DN, Frosch MP, Mena H, Rushing EJ, Judkins AR. *Non-neoplastic Diseases of the Central Nervous System. First Non-neoplastic Disease Fascicle Series*. Washington, D.C.: Armed Forces Institute of Pathology 2009
- Louis DN, Young RH (eds.). "Keen Minds to Explore the Dark Continents of Disease": A History of the Pathology Services at the Massachusetts General Hospital, Boston: MGH 2011
- Louis DN, Ohgaki H, Wiestler OD, Cavenee WK (eds.). *World Health Organization Classification of Tumours of the Central Nervous System*, revised 4<sup>th</sup> edition. IARC, Lyon, 2016.