

David H. Gutmann, MD, PhD

**Donald O. Schnuck Family Professor
Vice Chair for Research Affairs
Department of Neurology**

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DATE OF BIRTH: August 18, 1959

PLACE OF BIRTH: Cincinnati, Ohio

EDUCATION

1973-1977 Oak Park High School, Oak Park, MI, Phi Beta Kappa
1977-1979 The University of Michigan, Ann Arbor, MI, B.S. in Comparative Physiology, Highest Honors
1979-1980 The University of Michigan, Ann Arbor, MI, M.S. in Human Genetics
1980-1984 The University of Michigan, Ann Arbor, MI, Ph.D. in Microbiology and Immunology (Thesis Advisor: John E. Niederhuber, M.D.)
1979-1986 The University of Michigan Medical School, Ann Arbor, MI, M.D., With Distinction
1986-1987 Internship, Internal Medicine, The Hospital of The University of Pennsylvania, Philadelphia, PA
1987-1990 Residency, Neurology, The Hospital of The University of Pennsylvania, Philadelphia, PA
1990-1993 Postdoctoral Fellowship, Human Molecular Genetics, The Howard Hughes Medical Institute, The University of Michigan Medical Center, Ann Arbor, MI (Advisor: Francis S. Collins, M.D., Ph.D.)

ACADEMIC POSITIONS/EMPLOYMENT

1989-1990 Clinical Instructor, The University of Pennsylvania School of Medicine
1990-1992 Research Associate, Howard Hughes Medical Institute, The University of Michigan Medical Center, Ann Arbor, MI
1991-1993 Lecturer, Department of Neurology, The University of Michigan Medical Center, Ann Arbor, MI
1992-1993 Research Associate, Division of Medical Genetics, Department of Internal Medicine, The University of Michigan Medical Center, Ann Arbor, MI
1993-1998 Assistant Professor, Departments of Neurology, Pediatrics and Genetics, Washington University School of Medicine, St. Louis, MO
1998-2001 Associate Professor, Departments of Neurology, Pediatrics and Genetics, Washington University School of Medicine, St. Louis, MO
2001- Professor, Departments of Neurology, Pediatrics, and Genetics, Washington University School of Medicine, St. Louis, MO

- 2006- Professor, Departments of Neurology, Neurosurgery, Pediatrics, and Genetics, Washington University School of Medicine, St. Louis, MO
- 2015- Vice Chair for Research Affairs, Department of Neurology, Washington University School of Medicine, St. Louis, MO

UNIVERSITY & HOSPITAL APPTS AND COMMITTEES

- Director, Neurofibromatosis Clinical Program, St. Louis Children's Hospital, 1994 to date
Full Member, Washington University/Alvin J. Siteman Cancer Center, 1996 to date
Co-Director, Neuro-Oncology, Washington University/Alvin J. Siteman Cancer Center, 2004-2013
Member, Department of Neuroscience, Washington University, Invited Speaker Committee member, 2004-2007
Director, Washington University Neurofibromatosis Center, 2004 to date
Member, Executive Faculty Committee, Department of Neurology, 2005 to date
Member, Genomics Curriculum Project Workgroup, 2007-2008
Course Director, Neuro-Oncology Resident and Medical Student Elective, 2006 to date
Ad hoc member, Appointments and Promotions Committee, Department of Internal Medicine, Washington University School of Medicine, 2013
Member, Research Affairs Committee, Washington University School of Medicine, 2013 to date
Selected Participant, Washington University Academic Medical Leadership Program, January-June 2014
Scientific Advisory Committee, Intellectual and Developmental Disabilities Research Center, 2014 to date

MEDICAL LICENSURE

Pennsylvania (inactive), Michigan (inactive), Missouri (active)

BOARD CERTIFICATION

Neurology #35357

HONORS AND AWARDS

- Gordon-Timmis Research Fellowship, 1977
Michigan Alumni-Regents Scholarship, 1977
Henry Ford Hospital Research Fellowship, 1978
Campbell Cancer Res. Fellowship, 1980
March of Dimes Thomas Francis, Jr. Award, 1980
Campbell Cancer Res. Fellowship, 1981
Campbell Cancer Res. Fellowship, 1982
Horace H. Rackham PreDoctoral Fellowship, 1982
Campbell Cancer Res. Fellowship, 1983
Horace H. Rackham PreDoctoral Fellowship, 1983
NIH Clinical Investigator Development Award (K08), NINDS, 1992
March of Dimes Young Investigator Award, FASEB Summer, 1993
Research Conference, 1994
Peter A. Aron National Neurofibromatosis Foundation Award, 1994
Decade of the Brain Plenary Session Speaker, American Academy of Neurology, 1996
American Neurological Association, elected member, 1997
Carolyn Farb Endowed Lecture in Neurofibromatosis, 1998
National Neurofibromatosis Foundation Crystal Award, 1998
Walker Lecturer in Neurofibromatosis, 1999
Eliason Teaching Award, Department of Neurology, 1999
Linse Block Neuro-oncology Visiting Professor, Mayo Clinic Foundation, 2001
Donald O. Schnuck Family Chair in Neurology, 2001
National Neurofibromatosis Foundation Center of Excellence Award, 2002
Washington University School of Medicine Clinical Teacher of the Year Award, 2003
American Society for Clinical Investigation, inducted 2003
Manuel R. Gomez Named Visiting Professor, 2006
Ninth Annual Arthur and Sonia Labatt Brain Tumor Research Centre Lecturer, 2007
Award for Excellence in Pediatric Basic/Translational Research, Society for Neuro-Oncology, 2007
Award for Excellence in Pediatric Translational Research, Society for Neuro-Oncology, 2008

Takao Hoshino Lectureship, University of California – San Francisco, 2008
University of Arkansas MD/PhD Student Choice Speaker, 2010
Pfizer Visiting Professor, University of Virginia, 2010
Ranked in top 10% of Barnes-Jewish Hospital Physician Providers (Patient Satisfaction)
Chosen 2010 Washington University/Siteman Cancer Center “Rock Doc”
Children’s Tumor Foundation Frederich Von Recklinghausen Award, 2012
Washington University Distinguished Faculty Research Award, 2013
Susan B. Stine Memorial Lectureship, 2013
16th Annual Sara Hertafeld Memorial Lectureship, 2013
8th Annual Riley Church Guest Professor, Stanford University, 2014
Oregon Society for Neuroscience Retreat Keynote speaker, 2015

PROFESSIONAL ACTIVITIES

Ad Hoc Manuscript Reviewer

American J of Med Genetics
American Journal of Pathology
Annals of Neurology
Archives of Neurology
Blood
BMC Cancer
Brain
Cancer
Cancer Cell
Cancer Discovery
Cancer Research
Cell
Cell Stem Cell
Cell Growth and Differentiation
Clinical Cancer Research
Developmental Dynamics

Experimental Neurology
Genes & Development
GLIA
Human Molecular Genetics
International Journal of Cancer
Journal of the Am Med Assoc
Journal of Biological Chemistry
Journal of Cell Biology
Journal of Clinical Investigation
Journal of Medical Genetics
Journal of Neurobiology
Journal of Neurological Science
Journal of Neurosurgery
Journal of Neuro-oncology
Laboratory Investigation
Molecular and Cellular Biology
Nature

Nature Communications
Nature Methods
Nature Neuroscience
Nature Reports
Nature Reviews Cell Biology
Nature Reviews Neuroscience
Neurobiology of Disease
Neurology
Neuron
Neuro-Oncology
Oncogene
Pediatrics
Proc Natl Acad Sci USA
Science

Editorial Board

Associate Editor, *Neurology Network Commentary*, 1997-2002
Familial Cancer, 1998-date
Neurobiology of Disease, 2000-2008
Associate Editor, *Cancer Research*, 2003-2013
Experimental Neurology, 2003-2011
GLIA, 2004-date
Neuro-Oncology, 2005-date
Disease Models and Mechanisms, 2008-2015
Experimental Neurology, Section Editor, 2011-2012
Current Cancer Therapy Reviews, Editorial Board, 2015-date

Grant Reviewer

NINDS/NIH, Special Emphasis Panel, Chairman, November 1996
Texas Neurofibromatosis Foundation, 1995
United States Army Medical Research and Material Command Neurofibromatosis Research Program, Final Review Panel, 1997
NINDS/NIH, Special Emphasis Panel, August 1997
Comitato Promotore Telethon, 1997-1999
NINDS/NIH Special Emphasis Panel, March 1998
National Neurofibromatosis Foundation, Research Advisory Board, 1997-2007
National Tuberous Sclerosis Association, Research Advisory Board, 1998-2003
United States Army Medical Research Command, Neurofibromatosis Research Program Review Panel, 1999
NINDS/NIH, Special Emphasis Panel, October 1999
NINDS/NIH, Special Emphasis Panel, October 2001

Washington University Siteman Cancer Center, American Cancer Society-IRG Board, 2000-2003
NINDS/NIH, Special Emphasis Panel, December 2001
Washington University American Cancer Society Grant Awards Committee, 2002-2006
NINDS/NIH, Special Emphasis Panel, October 2003
Washington University Howard Hughes Medical Institute Fellowship Awards Committee, 2004
NINDS/NIH, Special Emphasis Panel, June 2004
NINDS/NIH, CNBT study section, permanent (standing) member, 2005-2009
Israel Cancer Res. Fund, 2006-2008
Children's Tumor Foundation, Drug Discovery Initiative, Chair, 2006-2008
Goldhirsch Foundation, 2007-2009
St. Jude Children's Research Hospital, Brain Tumor Program, External Review Panel, 2009
Department of Defense Peer-Reviewed Cancer Res. Program Integration Panel, 2009
Brain Tumors Funders Collective, 2009 to date
American Association for Cancer Research, Basic Cancer Research Fellowship review panel, 2011 to date
NCI, Intramural Research Program Reviewer (one branch), 2011
NCI, Provocative Questions Initiative grant review panel, 2012
NCI, New Innovator grant review panel, 2013
NCI R21/R03 Omnibus review panel, 2014
ZRG1 New Innovator Award (DP2) Panel Reviewer, National Cancer Institute, 2014
Alex's Lemonade Stand Foundation, Reviewer, 2014
ZRG1 New Innovator Award (DP2) Panel Reviewer, National Cancer Institute, 2015
NCI, Intramural Research Program Reviewer (two different branches), 2015
National Institute of Neurological Disorders and Stroke Advisory Council, member, 2015 (*ad hoc*), 2016-2020 (appointed)

PROFESSIONAL SOCIETIES AND ORGANIZATIONS

American Academy of Neurology, 1987 to date
American Association for the Advancement of Science, 1988 to date
American Society of Human Genetics, 1989 to date
American Society of Microbiology, 1994 to date
American Association for Cancer Research, active member, 1994 to date
Society for Neuro-Oncology (founding member), 1995 to date
Society for Neuroscience, 2003 to date
American Neurological Association, inducted 1997
American Society for Clinical Investigation, inducted 2003

MEDICAL SCHOOL TEACHING RESPONSIBILITIES

2006 to date, "The Use of Mouse Models to Understand Human Disease", First Year Medical School Genetics Curriculum

SERVICE

Vice-Chairman, Clinical Care Advisory Board, National Neurofibromatosis Foundation/Children's Tumor Foundation, 1996-2014
Chairman, Optic Pathway Glioma Task Force, National Neurofibromatosis Foundation, 1995-2010
Co-Moderator, Neurogenetics Session, American Society for Human Genetics Meeting, 1996
Member, Professional Scientific Advisory Board, National Tuberous Sclerosis Association, 1997-2003
Member, Research Advisory Board, National Neurofibromatosis Foundation, 1997-2004
Member, Neuro-oncology Basic Science Committee, Radiation Therapy Oncology Group, 1999-2000
Co-Director, Washington University Neurology & Neurosurgery Continuing Medical Education Course, 2000
Member, Scientific Advisory Board, House Ear Institute, 2000
Member, Hereditary Cancer Core Committee, Siteman Cancer Center, 2000-2006
Member, Basic Science Committee, Society for Neuro-oncology, 1999-2002, 2006-2011
Co-Organizer, NeuroTumor Club, American Association for Cancer Res., 2002
Co-Organizer, Mouse Models of Human Cancers Consortium Nervous System Tumors Workshop, November 2002
Chair, Society for Neuro-Oncology, Education Day Symposium, 2003-2005
Member, Board of Directors, Society for Neuro-Oncology, 2003-2005
Co-organizer, National Neurofibromatosis Foundation International Symposium on NF1 and NF2, 2003

ASCI representative, FASEB, Science Policy Committee, 2004-2007
Steering Committee, NCI Mouse Models of Human Cancers Consortium (MMHCC), 2004-2014
Advisory Board, Mayo Clinic Foundation Brain Tumor SPORE, 2004-2008
Medical Affairs Committee, National Neurofibromatosis Foundation/Children's Tumor Foundation, 2004-2008
Co-Organizer, Mouse Models of Human Cancers Consortium Nervous System Tumors Workshop, June 2005
Co-Organizer, Mouse Models of NF-Associated Tumors Workshop, November 2005
Co-Organizer, Juvenile Pilocytic Astrocytoma Workshop, May 2006
Chair, Drug Discovery Initiative, Children's Tumor Foundation, 2006-2008
Co-Organizer, Mouse Models of Human Cancers Consortium Nervous System Tumors Workshop, November 2007
Member, The Cancer Genome Atlas Steering Committee, National Cancer Institute, 2007 to date
Co-Organizer, National Institutes of Health Symposium on mTOR signaling, January 2008
Co-Organizer, James S. McDonnell Conference on Mathematical Modeling of Glioma, April 2009
Member, Scientific Review Committee, American Association of Cancer Research, February 2010
Co-Organizer, Mechanisms of Neural Differentiation and Brain Tumors, Cold Spring Harbor Laboratories, July 2010
Co-Organizer, Mouse Models of Human Cancers Consortium Nervous System Tumors Workshop, October 2010
Chair, Neurofibromatosis Inc., Medical Advisory Board, 2010 to date
Member, Education and Community Advisory Board, Jazz St. Louis, 2011 to date
Member, National Cancer Institute Clinical Genetics, Intramural Review Committee, 2011
Co-Organizer, Mechanisms of Neural Differentiation and Brain Tumors, Cold Spring Harbor Laboratories, July 2012
Scientific Program Committee, Pediatric Society for Neuro-Oncology Meeting, Ft. Lauderdale FLA, May 2013
American Association for Cancer Research Clinical and Translational Cancer Research Grants Scientific Review Committee, 2013-2014
American Association for Cancer Research Annual Meeting Scientific Program Committee, 2013-2014
Society for Neuro-Oncology, Annual Meeting Abstract Review Committee, 2013-2015
Children's Tumor Foundation, Annual Meeting Abstract Review Committee, 2015

RESEARCH SUPPORT (since 2010)

PI, US Army Department of Defense, Improving Cognitive and Behavior Function in *Nf1* Genetically-Engineered Mice, 2010-2013
PI, NIH, R01, Neurofibromin Regulation of Neural Stem Cell Function *In Vitro* and *In Vivo*, 2010-2015.
PI, NIH, RC4, Integrative Approaches to Stroma-Directed Glioma Therapy, 2010-2013.
Co-PI, (J. B. Rubin, PI), Children's Discovery Institute, Sexually Dimorphic cAMP Signaling Impacts the Rate of Brain Tumors in Prepubertal Boys and Girls, 2011-2014.
Site PI, (B. R. Korf, PI), US Army Department of Defense, NF Clinical Trials Consortium, 2012-2017.
Co-Investigator, (A. Stemmer-Rachamimov, PI), Children's Tumor Foundation, NF1-associated Gliomas Multicenter Consortium, 2012-2014.
Co-Investigator, (D. Hambardzumyan, PI), NCI Tumor Microenvironment Network (TMEN) U01, Non-neoplastic cell types dictate gliomagenesis and response to therapy, 2012-2017.
PI, James S. McDonnell Foundation, Brain Tumor Ecology Collective, 2013-2016.
PI, Pediatric Brain Tumor Society, KIA1549: BRAF genetically-engineered mice for pediatric glioma-targeted therapeutic drug discovery and evaluation, 2013-2015.
PI, Department of Defense, Identifying Novel Glioma Therapeutic Targets Using An Ecosystems Approach, 2013-2016.
PI, Alex's Lemonade Stand Foundation, "Developing Personalized (Precision) Medicine Strategies to Optimize Pediatric Brain Tumor Management, 2014-2016.
PI, NCI, R01, Leveraging genetically-engineered mice to optimize pediatric glioma management, 2015-2018.
Co-PI, Children's Tumor Foundation Synodos NF1 Low-Grade Glioma Consortium, 2015-2018

PATENTS & INVENTIONS

Neurofibromatosis Gene
U.S. Patent No. 5,859,195
Issued 1/12/99 (expires 5/25/15)

Neurofibromin Pathway Modulators
U.S. Patent No. 8,101,606 B2
Issued 1/24/2012

Neurofibromin/Dopamine Signaling as a Biomarker for Cognitive and Behavioral Problems in Children with Neurofibromatosis Type 1
U.S. Patent No. 62/181,949
Patent filed

CLINICAL TITLE & RESPONSIBILITIES

Attending Neurologist - Barnes, Jewish, and St. Louis Children's Hospital
Director, Neurofibromatosis Clinical Program, St. Louis Children's Hospital, Washington University School of Medicine
Division Chief, Neuro-Oncology/Neurofibromatosis, Department of Neurology, Washington University School of Medicine

GRADUATE SCHOOL RESPONSIBILITIES

Division of Biology and Biomedical Sciences Graduate School Admissions Committee, 1996-1998 (3 years)
Member, Division of Biology and Biomedical Sciences Executive Council, Washington University, 2014 to date

Thesis Committees:

Paul Kotzbauer
Stacia Peiffer
Jennifer Doll (Chair)
John SunWoo (Chair)
Judy Cheng
Alexander Swirnoff
Vivek Gupta
Heming Xing
Dorothy Turetsky
Josh Hasbani
Ferrin Noonan
Paul Frohnert
Eunice Lee
Michelle Schlieff
Patricia Goldhof
Shannon Macauley
Mahil Rao
Namiko Abe
Liana Roberts-Stein (Chair)
Parul Kothari
Michael Vasek
Charles Shyng
Danny Abernathy
Breanna Harty
Karolyn Au

Postdoctoral fellows and students supervised:

Karen Norton, MD
Michael Giordano, MD
Jenny Yu, PhD
Susan Saporito-Irwin, PhD
Andy Limb, MD
M. Livia Bajenaru, PhD (NIH NRSA awardee)
Erik Uhlmann, MD-PhD (NIH NRSA awardee)
Zhi-yong Huang, MD, PhD
Chun-Xiao Sun, MD, PhD
Jun Li, MD-PhD
Victoria Hildebrandt Robb, PhD (NIH NRSA awardee)
Anthony J. Apicelli (HHMI predoctoral awardee)
Ezequiel I. Surace (PhD student)
Biplab Dasgupta, PhD
Kevin C. Ess, MD, PhD
Mukesh Sharma, PhD
Eriks Lulis, MD (Doris Duke Fellow)
Danielle Scheidenhelm (MSTP student)
Girish Dagainakatte, PhD
Mark Gerber, PhD (NIH NRSA awardee)
Balazs Hegedus, PhD
Sean Houshmandi, PhD (NIH NRSA awardee)
Huabiao Zhang, MD, PhD
Da Yong Lee, PhD (CTF Young Investigator awardee)
Tu-Hsueh Yeh, MD, PhD
Sutapa Banerjee, PhD (CTF Young Investigator awardee)
Jacqueline Brown, PhD (NCI Diversity grant awardee)
Jourdan Stuart (T32 Clinical Research Fellow)
Grant Simmons, PhD
Aparna Kaul, PhD
Cynthia Garcia (PhD student; NIH NRSA awardee)
Winnie Pong, PhD (Keck fellowship awardee)
Nikkilina Crouse, PhD
Ibrahim Hussain (Doris Duke Medical Fellow)
Anne Solga (PhD student)
Hugh Bender (PhD student; CTF Young Investigator awardee)
Yi-Hsien Chen, PhD (ABTA post-doctoral fellowship awardee)
Kelly Diggs-Andrews, PhD (NCI Diversity grant awardee)
Anthony J. Apicelli, MD, PhD (Holman fellowship awardee)
Corina Anastasaki, PhD

Sonika Dahiya, MD
Lucy D'Agostino (Bioinformatics MS student)
Laura Smithson, PhD
Patrick J. Cimino, MD, PhD
Angela Hirbe, MD, PhD (Medical Oncology PSTP Fellow)
Joseph Toonen, PhD (Vision & Neurology Training Grant Fellow)
Sidney Williams, PhD (Neurology Training Grant Fellow)
Yuan Pan, PhD
Stephanie Morris, MD (NSADA Fellow)
Ran Chen, PhD
Matthew Stroh, PhD

BIBLIOGRAPHYPeer-reviewed Manuscripts

1. Groux N, **Gutmann DH**. Carcinoma of the lung. *Physician Assistant-Health Care Practitioner* 4:20-29, 1980.
2. Doneen BA, **Gutmann DH**. Lipid composition and *in vitro* biosynthetic rates of neutral lipids and phosphatidylcholine and anterior and posterior chambers of the goldfish swimbladder. *Comparative Biochemistry and Physiology A* 60:291-295, 1981.
3. Schook LB, Bingham EL, **Gutmann DH**, Niederhuber JE. Characterization and expression of H-2I region gene products on bone marrow derived macrophages. *Eur J Immunol.* 12:991-997, 1982. PMID: 6819150
4. **Gutmann DH**. The use of restriction endonucleases in the prenatal diagnosis of hemoglobinopathies. *Am J Med Technol.* 48:361-366, 1982. PMID: 6285741
5. **Gutmann DH**, Allen PM, Niederhuber JE. Separation of the immune response genes for LDH-B and MOPC-173. I. Description of an immune response defect in B10.BASR1. *J. Immunol.* 131:2919-2923, 1983. PMID: 6417235
6. **Gutmann DH**. Restriction Endonucleases. *Am J Med Technol.* 49:60, 1983. PMID: 6303123
7. **Gutmann DH**, Niederhuber JE. Separation of the immune response genes for LDH-B and MOPC-173: II. Description of an immune response defect in BIO.ASR7. *J Immunol.* 132:1955-1959, 1984. PMID: 6199419
8. Allen PM, **Gutmann DH**, Sher MR, Niederhuber JE. Characterization of the three new Intra-I-Region recombinant mouse strains, B10.ASR7 (H-2^{as3}), B10.BAR4 (H-2^{h4}), and B10.BASR1 (H-2^{as4}). *Immunogenetics* 19:175-178, 1984. PMID: 6421725
9. Schook LB, **Gutmann DH**, Marlin LE, Niederhuber JE. *In vitro* derived bone marrow macrophages: Expression of Ia antigens during macrophage differentiation. *Transplantation* 37:585-590, 1984. PMID: 6427997
10. **Gutmann DH**, Niederhuber JE. Separation of the immune response genes for LDH-B and MOPC-173. III. The failure of B10. BASR1 to respond to LDH-B is due to an antigen presenting cell defect. *Transplantation* 40:556-562, 1985. PMID: 2932822
11. **Gutmann DH**, Niederhuber JE. Major histocompatibility complex regulation of the immune response. *J Surg Res.* 39:172-181, 1985. PMID: 3894799
12. **Gutmann DH**, Beard BA, Collinge ML. Nonfatal disseminated mucocutaneous herpes simplex virus type 2 infection in an otherwise healthy woman presenting with a urinary tract infection. *Obstetrics and Gynecology* 72:506-508, 1988. PMID: 3405569
13. **Gutmann DH**, Fischbeck KH, Sergott RC. Hereditary vasculopathy with cerebral white matter lesions. *Am J Med Genet.* 34:217-220, 1989. PMID: 2817001
14. **Gutmann DH**, Scherer S. Ataxic hemiparesis syndrome: Localization to the corona radiata by magnetic resonance imaging. *Stroke* 20:1571-1573, 1989. PMID: 2815193
15. Raps EC, **Gutmann DH**, Brorson J, O'Connor MJ, Hurtig HH. Symptomatic hydrocephalus and reversible spinal cord deformity in *Listeria monocytogenes* meningitis. *J Neurosurg.* 71:620-622, 1989. PMID: 2795184
16. **Gutmann DH**, Fischbeck KH. Molecular biology of Duchenne and Becker Muscular Dystrophy: Clinical Applications. *Ann Neurol.* 26:189-194, 1989. PMID: 2673003
17. **Gutmann DH**, Fischbeck KH, Kamholz J. Complicated hereditary spastic paraparesis with cerebral white matter lesions. *Am J Med Genet.* 36:251-7, 1990. PMID: 2368815

18. **Gutmann DH**, Grossman RI, Mollman JE. Personality changes associated with thalamic infiltration. *J Neuro-Oncol.* 8:263-267, 1990. PMID: 2358857
19. **Gutmann DH**, Cantor CR, Piacente GJ, McCluskey LF. Isolated cerebral vasculopathy and infarction in a woman with carcinomatous meningitis. *J Neuro-Oncol.* 9:183-5, 1990. PMID: 2262804
20. **Gutmann DH**, Marino P. An alternative apnea test for the evaluation of brain death. *Ann Neurol.* 30:852-853, 1991. PMID: 1789700
21. **Gutmann DH**. Chromosome 11q23.3-qter deletion and Alexander's disease. *Am J Med Genet.* 39:226, 1991. PMID: 2063930
22. **Gutmann DH**, Zackai EH, McDonald-McGinn DM, Fischbeck KH, Kamholz J. Oculodentodigital dysplasia syndrome associated with abnormal cerebral white matter. *Am J Medical Genetics* 41:18-20, 1991. PMID: 1659191
23. **Gutmann DH**, Brooks ML, Emmanuel BS, McDonald-McGinn DM, Zackai EH. Congenital nystagmus in a (46XX, 45X) mosaic female from a family with X-linked congenital nystagmus. *Am J Medical Genetics* 39:167-169, 1991. PMID: 2063919
24. Yousem DM, **Gutmann DH**, Milestone BN, Lenkinski RE. Integrated magnetic resonance imaging and spectroscopy in a family with complicated hereditary spastic paraparesis. *Am J Neuroradiol.* 12:785-790, 1991. PMID: 1882768
25. **Gutmann DH**, Wood DL, Collins FS. Identification of the neurofibromatosis gene type 1 product. *Proc Natl Acad Sci USA* 88:9658-9662, 1991. PMID: 1946382
26. Marchuk DA, Saulino AM, Tavakkol R, Swaroop M, Wallace MR, Andersen LB, Mitchell AL, **Gutmann DH**, Boguski M, Collins FS. cDNA cloning of the type 1 neurofibromatosis gene: Complete sequence of the *NF1* gene products. *Genomics* 11:931-940, 1991. PMID: 1783401
27. Basu TN, **Gutmann DH**, Fletcher JA, Glover TW, Collins FS, Downward J. Aberrant regulation of ras proteins in tumor cells from type 1 neurofibromatosis patients. *Nature* 356:713-715, 1992. PMID: 1570015
28. **Gutmann DH**, Zackai EH, Emanuel BS. Congenital nystagmus in a (46XX, 45X) mosaic female from a family with X-linked congenital nystagmus: a reply. *Am J Med Genetics* 43:897, 1992. PMID: 2063919
29. **Gutmann DH**, Collins FS. Recent progress towards understanding the molecular biology of von Recklinghausen neurofibromatosis. *Ann Neurol* 31:555-561, 1992. PMID: 1596091
30. **Gutmann DH**, Boguski M, Marchuk D, Wigler M, Collins FS, Ballester R. Analysis of the neurofibromatosis type 1 (*NF1*) GAP-related domain by site directed mutagenesis. *Oncogene* 8:761-769, 1993. PMID: 8437860
31. Andersen LB, Ballester R, Marchuk DA, Chang E, **Gutmann DH**, Saulino AM, Camonis J, Wigler M, Collins FS. A conserved alternative splice in the von Recklinghausen neurofibromatosis (*NF1*) gene produces two neurofibromin isoforms, both with GAP activity. *Mol Cell Biol.* 13:487-495, 1993. PMID: 8417346
32. Gregory PE, **Gutmann DH**, Mitchell AL, Park S, Jacks T, Wood DL, Boguski M, Jove R, Collins FS. The neurofibromatosis type 1 gene product co-localizes with microtubules. *Somatic Cell and Molecular Genetics* 13:487-495, 1993. PMID: 8332934
33. Andersen LB, Fountain JW, **Gutmann DH**, Tarle SA, Glover TW, Dracopoli NC, Housman DE, Collins FS. Mutations in the neurofibromatosis 1 gene in sporadic malignant melanoma. *Nature Genetics* 3:118-121, 1993. PMID: 8499944
34. **Gutmann DH**, Andersen LB, Cole JL, Swaroop M, Collins FS. An alternatively-spliced mRNA in the carboxy terminus of the neurofibromatosis type 1 (*NF1*) gene is expressed in muscle. *Hum Mol Genet.* 2:989-992, 1993. PMID: 8364582

35. **Gutmann DH**, Tennekoon GI, Cole JL, Collins FS, Rutkowski JL. Modulation of the neurofibromatosis type 1 (NF1) gene product, neurofibromin, during Schwann cell differentiation. *J Neurosci Res.* 36:216-223, 1993. PMID: 7505343
36. Boyer M, **Gutmann DH**, Collins F, Bar-Sagi D. Co-capping of neurofibromin, but not GAP, with surface immunoglobulins in B lymphocytes. *Oncogene* 9:349-357, 1994. PMID: 8290249
37. Nakamura T, Nemoto T, Arai M, Yamazaki Y, Kasuga T, **Gutmann DH**, Collins FS, Ishikawa T. Specific expression of the neurofibromatosis type 1 (NF1) gene in the hamster Schwann cell. *Am J Pathol.* 144:549-555, 1994. PMID: 8129040
38. **Gutmann DH**, Cole JL, Stone WJ, Ponder BAJ, Collins FS. Loss of neurofibromin in adrenal gland tumors from patients with neurofibromatosis type 1. *Genes, Chromosomes and Cancer* 10:55-58, 1994. PMID: 7519874
39. Yousem DM, **Gutmann DH**, Lenkinski RE. Limitations of Magnetic Resonance Spectroscopy in patients with white matter disease. *Ann Neurol.* 36:932-933, 1994. PMID: 7998784
40. **Gutmann DH**, Cole JL, Collins FS. Modulation of neurofibromatosis type 1 (NF1) gene expression during *in vitro* myoblast differentiation. *J. Neurosci Res.* 37:398-405, 1994. PMID: 8176761
41. **Gutmann DH**, Geist RT, Rose K, Wright DE. Expression of two new protein isoforms of the neurofibromatosis type 1 gene product, neurofibromin, in muscle tissues. *Dev Dynamics* 202:302-311, 1995. PMID: 7780179
42. **Gutmann DH**, Silos-Santiago I, Geist RT, Daras M, Rutkowski JL. Lack of *NF1* gene expression in a sporadic schwannoma from a patient without neurofibromatosis. *J Neuro-Oncol* 25:103-111, 1995. PMID: 8543966
43. **Gutmann DH**, Geist RT, Rose K, Wallin G, Moley JF. Loss of neurofibromatosis type 1 (NF1) gene expression in pheochromocytomas from patients without NF1. *Genes, Chromosomes and Cancer* 13:104-109, 1995. PMID: 7542904
44. **Gutmann DH**, Geist RT, Wright DE, Snider WD. Expression of the neurofibromatosis type 1 (NF1) isoforms in rat embryonic and adult tissues. *Cell Growth and Differentiation* 6:315-322, 1995. PMID: 7794799
45. Norton KK, Carey JC, **Gutmann DH**. Oculodentodigital dysplasia with cerebral white matter lesions in a two generation family. *Am J Med Genet.* 57:458-461, 1995. PMID: 7677152
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Selected Invited Talks (since 2010)

Invited Speaker, Huntsman Cancer Institute, University of Utah, Salt Lake City UT, February 2010
Invited Speaker, Pfizer Visiting Professor, University of Virginia, Charlottesville VA, April 2010
Invited Speaker, Department of Pediatrics, Indiana University, Indianapolis IN, May 2010
Invited Speaker, American Association of Neuropathologists, Philadelphia PA, June 2010
Co-Organizer, "Mechanisms of Neural Differentiation and Brain Tumors" Course, Cold Spring Harbor Laboratories NY, July 2010
Invited Speaker, James S. McDonnell Symposium, Oncoforest, Almagro SPAIN, September 2010
Co-Organizer, Mouse Models of Human Cancers Consortium Nervous System Tumors Workshop, November 2010
Invited Speaker, University of Toronto, Labatt Brain Tumor Center, Toronto CA, March 2011
Co-Organizer, James S. McDonnell Glioma Ecosystem Biology Workshop, San Diego CA, April 2011
Invited Speaker, Dana Farber Cancer Institute, Harvard Medical School, Boston MA, September 2011
Co-Organizer, "Neurobiology of Neuro-Oncology" Symposium, American Neurological Association, San Diego CA, September 2011
Invited Speaker, Sanford-Burnham Medical Research Institute, San Diego CA, December 2011
Invited Speaker, Stem Cell Biology and Regenerative Medicine, Cleveland Clinic Foundation, Cleveland OH, March 2012
Keynote Speaker, Neurofibromatosis Symposium, University of Minnesota, Minneapolis, MN, May 2012
Co-Organizer, "Mechanisms of Neural Differentiation and Brain Tumors" Course, Cold Spring Harbor Laboratories NY, July 2012
Invited Speaker, Neuro-Oncology Program, MD Anderson Cancer Center, Houston TX, September 2012
Organizer, "Neurofibromatosis: Modeling CNS Dysfunction" Symposium, Society for Neuroscience, New Orleans LA, October 2012
Invited Speaker, Ludwig Cancer Institute, University of California – San Diego, San Diego CA, December 2012
Visiting Professor, Sidney Kimmel Comprehensive Cancer Center, Johns Hopkins University, Baltimore MD, February 2013
Invited Speaker, Memorial Sloan Kettering Cancer Center, New York City NY, March 2013
Invited Speaker, International RAS-opathy Meeting, Cardiff, Wales, September 2013
Invited Speaker, Neurology Grand Rounds, Johns Hopkins University, Baltimore MD, October 2013
Invited Speaker, Neurology Grand Rounds, University of Rochester, Rochester NY, November 2013
Invited Speaker, Memorial Sloan Kettering Cancer Center, New York City NY, December 2013
Invited Speaker, NYU Cancer Center Special Seminar, New York City NY, December 2013
Invited Speaker, Children's Brain Tumor Foundation, Project Renew Symposium, St. Louis MO, March 2014
Invited Speaker, "Mechanisms of Neural Differentiation and Brain Tumors" Course, Cold Spring Harbor Laboratories NY, August 2014
Invited Speaker, International Society of Paediatric Oncology, Toronto MA, October 2014
Invited Speaker, Beth Israel/Longwood Neurology Grand Rounds, Boston MA, November 2014
Invited Speaker, Stanford University, Palo Alto CA, December 2014
Invited Speaker, St. Jude Children's Research Hospital, Memphis TN, March 2015
Keynote Speaker, Oregon Society for Neuroscience Retreat, Portland OR, March 2015
Invited Speaker, National Eye Institute, Bethesda MD, April 2015
Invited Speaker, Integrated Center for Neurogenetics, UCLA, Los Angeles CA, April 2015
Invited Speaker, "Genetic Predisposition to Brain Cancer", Columbus OH, May 2015
Invited Speaker, "Brain Tumor 2015", Max Delbrück Center for Molecular Medicine, Berlin, Germany, May 2015
Co-Organizer, NF1 Autism Workshop, Children's Tumor Foundation International Meeting, Monterrey CA, June 2015
Invited Speaker, Department of Pediatrics, University of Texas Southwestern Medical School, Dallas TX, July 2015
Workshop Organizer, "Neurofibromatosis", Society for Neuro-Oncology, San Antonio TX, November 2015
Invited Speaker, Case Western Reserve University Comprehensive Cancer Center, Cleveland OH, March 2016
Invited Speaker, University of Minnesota Comprehensive Cancer Center, Minneapolis MN, May 2016
Co-Organizer, NF1 Autism Workshop, Children's Tumor Foundation International Meeting, Austin TX, June 2016
Invited Speaker, Cold Spring Harbor Laboratories, "Mechanisms of Neural Differentiation and Brain Tumors" Course, New York City NY, August 2016