

BIOGRAPHICAL SKETCH

NAME Diane Edmund Griffin	POSITION TITLE Professor and Chair, Molecular Microbiology & Immunology		
DGRIFFI6			
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
Augustana College, Rock Island, IL	BA	1962	Biology
Stanford University, Palo Alto, CA	MD	1968	Medicine
Stanford University, Palo Alto, CA	PhD	1970	Immunology

A. Positions and Honors.**Positions and Employment**

1968 - 1970	Medical intern and resident, Stanford University Hospital
1970 - 1973	Post doctoral fellow, Virology and Infectious Diseases, Johns Hopkins Univ. Sch of Med
1973 - 1979	Assistant Professor, Medicine and Neurology, Johns Hopkins Univ. School of Medicine
1975 - 1982	Investigator, Howard Hughes Medical Institute
1979 - 1986	Associate Professor, Medicine and Neurology, Johns Hopkins Univ. School of Medicine
1986 - present	Professor, Medicine and Neurology, Johns Hopkins University School of Medicine
1994 - present	University Professor and Chair, Molecular Microbiology & Immunology, Johns Hopkins Bloomberg School of Public Health

Other positions and Professional Memberships

1971 – present	American Society for Microbiology (President 2006-2007)
1975 - present	American Association of Immunologists
1975 - present	American Assoc. for the Advancement of Sci. (Fellow; Council 1995-1997; Chair Sect N)
1978 - present	Infectious Diseases Society of America (Fellow)
1982 - present	American Society for Clinical Investigation
1982 - 1986	Member, Virology Study Section, NIH
1984 - present	Editorial Board, <i>Virology</i>
1990 - 1997	Editorial Board, <i>Microbial Pathogenesis</i>
1985 - 1990	Editorial Board, <i>Intervirology</i>
1993 - present	Editorial Board, <i>Virus Research</i>
1982 - present	American Society for Virology (Council 1984-89; President 1999-2000)
1986 - 1991	Member, National Multiple Sclerosis Society Research Advisory Committee
1987 - present	Interurban Clinical Club (President 1993)
1989 - 1994	Member and Chair Microbiology and Infectious Diseases Res. Advisory Comm., NIAID
1994 - present	US-Japan Viral Diseases Panel (Chair 2005-present)
1994 - 2004	Editor, <i>Journal of Virology</i>
1998 - 2002	NINDS, Board of Scientific Counselors
2004 – present	Editorial Board, <i>Proceedings of the National Academy of Sciences (USA)</i>
2008 – present	NIAID, Board of Scientific Counselors, (Co-Chair 2009-present)
2008 – present	Board of Reviewing Editors, <i>Science</i>
2010 – present	Council, National Academy of Sciences

Honors

1990 - 1997	Javits Neuroscience Investigator Award
2004	National Academy of Sciences
2004	American Academy of Microbiology
2004	Institute of Medicine
2009	NeuroVirology Pioneer Award, International Society for NeuroVirology

B. Selected Publications (2004-2010)

(selected from >300 total peer-reviewed publications)

Nargi-Aizenman J.L., Havert M.B., Zhang M., Irani D.N., Rothstein J.D. and Griffin D.E. Glutamate receptor antagonists protect from virus-induced neural degeneration. *Ann. Neurol.* 55:541-549, 2004.

- Vernon, P.S., and Griffin, D.E. Characterization of an in vitro model of alphavirus infection of immature and mature neurons. *J. Virol.* 79:3438-3447, 2005. PMCID:1075694
- Burdeinick-Kerr R and Griffin DE. Gamma interferon-dependent, noncytolytic clearance of Sindbis virus infection from neurons in vitro. *J. Virol.* 79:5374-5385, 2005. PMCID: PMC1082728
- Zaitsena E, Mittal A, Griffin DE, and Chernomordik LV. Class II fusion protein of alphaviruses drives membrane fusion through the same pathway as class I proteins. *J. Cell. Biol.* 169:167-177, 2005. PMCID:2171914
- Garcia M, Yu X-F, Griffin DE, and Moss WJ. In vitro suppression of human immunodeficiency virus type-1 replication by measles virus. *J. Virol.* 79:9197-9207, 2005. PMCID:1168732
- Pan C-H, Valsamakis A, Colella T, Nair N, Adams RJ, Polack FP, Greer CE, Perri S, Polo JM and Griffin DE. Inaugural article: Modulation of disease, T cell responses and measles virus clearance in monkeys vaccinated with H-encoding alphavirus replicon particles. *Proc. Natl. Acad. Sci. USA* 102:11581-11588, 2005. PMCID: PMC1187989
- Ryon JJ, Moss WJ, Monze M, Quinn TC and Griffin DE. Influence of HIV infection on changes in circulating leukocytes during measles in Zambian children. *J. Infect. Dis.* 192:1950-1955, 2005.
- Bear SJ, Byrnes AP and Griffin DE. Heparin-binding and patterns of virulence for two recombinant strains of Sindbis virus. *Virology* 347:183-190, 2006.
- Zilliox MJ, Parmigiani G and Griffin DE. Gene expression patterns in dendritic cells infected with measles virus compared with other pathogens. *Proc. Natl. Acad. Sci. USA* 103:3363-3368, 2006. PMCID: PMC1413941
- Oh, S-K, Stegman B, Pendleton CD, Ota MO, Pan C-H, Griffin DE, Burke DS and Berzofsky JA. Protective immunity provided by HLA-A2 epitopes for fusion and hemagglutinin proteins of measles virus. *Virology* 352:390-399, 2006.
- Neverov AA, Riddell MA, Moss WJ, Volokhov DV, Rota PA, Lowe LE, Chibo, D, Smit SB, Griffin DE, Chumakov KM and Chizhikov VE. Genotyping of measles virus in clinical specimens based on oligonucleotide microarray hybridization patterns. *J Clin Microbiol* 44:3752-3759, 2006. PMCID:1594792
- Ng CC and Griffin DE. Acid sphingomyelinase deficiency increases susceptibility to fatal alphavirus encephalomyelitis. *J Virol* 80:10989-10999, 2006. PMCID: PMC1642146
- Setse RW, Cutts F, Monze M, Ryon JJ, Quinn TC, Griffin DE and Moss WJ. HIV-1 infection as a risk factor for incomplete childhood immunization in Zambia. *J Trop Ped* 52:324-328, 2006.
- Moss, W.J. and Griffin, D.E. Global measles elimination. *Nat. Rev. Microbiol* 4:900-908, 2006.
- Burdeinick-Kerr, R, Wind J and Griffin DE. Synergistic roles of antibody and interferon in noncytolytic clearance of Sindbis virus from different regions of the central nervous system. *J Virol* 81:5628-5636, 2007. PMCID:1900320
- Ota MO, Ndhlovu Z, Oh SK, Piyasirisilp S, Berzofsky JA, Moss WJ and Griffin DE. Hemagglutinin protein is a primary target of the measles virus-specific HLA-A2-restricted CD8+ T cell response during measles and after vaccination. *J Infect Dis* 195:1799-1807, 2007.
- Zilliox, M.J., Moss, W.J. and Griffin, D.E. Gene expression changes in peripheral blood mononuclear cells during measles. *Clin. Vaccine Immunol.* 14:918-923, 2007. PMCID: PMC1951064
- Moss, W.J., Scott, S., Mugala, N., Ndhlovu, Z., Beeler, J., Audet, S., Ngala M., Mwangala, S., Nkonga-Mwangilwa, C., Ryon, J.J., Monze, M., Kasolo, F., Quinn, T.C., Cousens, S., Griffin, D.E. and Cutts, F.T. Immunogenicity of standard-titer measles vaccine in HIV-1-infected and uninfected Zambian children: an observational study. *J. Infect. Dis.* 196:347-355, 2007.
- Nair N, Gans H, Lew-Yasukawal L, Long-Wagar, AC, Arvin A and Griffin DE. Age-dependent differences in IgG isotype and avidity induced by measles vaccine received during the first year of life. *J Infect. Dis.* 196:1339-1345, 2007.
- Scott, S., Moss, W.J., Cousens, S., Beeler, J.A., Audet S.A., Mugala, N., Quinn, T.C., Griffin, D.E. and Cutts, F.T. The influence of HIV-1 exposure and infection on levels of passively acquired antibodies to measles virus in Zambian infants. *Clin. Infect. Dis.* 45:1417-1424, 2007.
- Moss, W.J., Fisher, C., Scott, S., Monze, M., Ryon, J.J., Quinn, T.C., Cutts, F. and Griffin D.E. HIV type 1 infection is a risk factor for mortality in hospitalized Zambian children with measles. *Clin. Infect. Dis.* 46:523-527, 2008.
- Greene, I.P., Lee, E-Y, Prow, N., Ngwang, B. and Griffin, D.E. Protection from fatal viral encephalomyelitis: AMPA receptor antagonists have a direct effect on the inflammatory response to infection. *Proc. Natl. Acad. Sci. USA* 105:3575-3580, 2008. PMCID:2265123
- Pan C-H, Nair N., Adams R.J., Zink M.C., Lee E.Y., Polack F.P., Singh M., O'Hagan D.T. and Griffin D.E.

- Dose-dependent protection against or exacerbation of disease by a polylactide glycolide microparticle-adsorbed, alphavirus-based measles virus DNA vaccine in rhesus macaques. *Clin. Vaccine Immunol.* 15:697-706, 2008. PMID:2292652
- Garcia M., Yu X.F., Griffin D.E. and Moss W.J. Measles virus inhibits human immunodeficiency virus type 1 reverse transcription and replication by blocking cell-cycle progression of CD4⁺ T lymphocytes. *J. Gen. Virol.* 89:984-993, 2008.
- Pan C-H, Jimenez G.S., Nair N., Wei Q., Adams R.J., Polack, F.P., Rolland A. Vilalta A. and Griffin D.E. Use of Vaxfectin adjuvant with DNA vaccine encoding the measles virus hemagglutinin and fusion proteins protects juvenile and infant rhesus macaques against measles virus. *Clin. Vaccine Immunol.* 15:1214-1221, 2008. PMID:2519314
- Sutcliffe C.G., Scott S, Mugala N., Ndhlovu Z., Monze M., Quinn T.C., Cousens S., Griffin D.E. and Moss W.J. survival from 9 months of age among HIV-infected and uninfected Zambian children prior to the availability of antiretroviral therapy. *Clin. Infect. Dis* 47:837-844, 2008.
- Ng C.G., Coppens I., Govindarajan, D., Pisciotta, J., Shulaev, V. and Griffin D.E. Effects of host cell lipid metabolism on alphavirus replication, virion morphogenesis and infectivity. *Proc. Natl. Acad. Sci. USA* 105:16326-16331, 2008. PMID: PMC2571027
- Burdeinick-Kerr, R., Govindarajan, D. and Griffin D.E. Noncytolytic clearance of Sindbis virus infection from neurons by IFN- γ is dependent on Jak/Stat signaling. *J. Virol.* 83:3429-3435, 2009. PMID: PMC2663278
- Ndhlovu, Z.M., Angenendt, M., Heckel, D., Schneck, J.P. Griffin, D.E. and Oelke, M. Development of an artificial antigen-presenting cell (aAPC)-based assay for the detection of low frequency virus-specific CD8⁺T cells in whole blood with application to measles virus. *Clin. Vaccine Immunol.* 16:1066-1073, 2009. PMID: PMC2708410
- Knight R.L., Schultz, K.L.W., Kent, R.J., Venkatesan, M. and Griffin D.E. Role of N-linked glycosylation for Sindbis virus infection and replication in vertebrate and invertebrate systems. *J. Virol.* 83:5640-5647, 2009. PMID: PMC2681937
- Nair, N., Moss, W.J., Scott, S. Mugala, N, Ndhlovu, Z.M., Ryon, J.J., Monze, M. Quinn, T.C., Cousens, S., Cutts, F. and Griffin, D.E. HIV-1 infection impairs measles virus-specific IgG avidity maturation in Zambian children following vaccination and infection. *J. Infect. Dis.* 200:1031-1038, 2009.
- Park, E. and Griffin D.E. The nsP3 macro domain is important for Sindbis virus replication in neurons and neurovirulence in mice. *Virology* 388:305-314, 2009. PMID:2683903
- Park, E. and Griffin, D.E. Interaction of Sindbis virus nonstructural protein 3 with poly(ADP-ribose) polymerase-1 in neuronal cells. *J. Gen. Virol.* 90:2073-2080, 2009.
- Pan, C-H., Greer, CE, Hauer, D., Legg, H.S., Lee, E-Y, Bergen, J, Lau, B., Adams, R.J., Polo, J.M. and Griffin, D.E. A chimeric alphavirus replicon particle vaccine expressing the hemagglutinin and fusion proteins protects juvenile and infant rhesus macaques from measles. *J. Virol.* 84:3798-3807, 2010.
- Ndhlovu, Z.M., Oelke, M. Schneck, J. and Griffin, D.E. Dynamic regulation of functionally distinct virus-specific T cells. *Proc. Natl. Acad. Sci. USA* 107:3669-3674, 2010.
- Griffin, D.E. Emergence and re-emergence of viral diseases of the central nervous system. *Prog Neurobiol* 91:95-101, 2010.
- Griffin D.E. Recovery from viral encephalomyelitis: immune-mediated noncytolytic virus clearance from neurons. *Immunol Res.* 47:123-133, 2010.
- Bergen M.J., Pan, C.H., Greer, C.E., Legg, H.S., Polo, J.M. and Griffin D.E. Comparison of the immune responses induced by chimeric alphavirus-vectored and formalin-inactivated alum-precipitated measles vaccines in mice. *PLoS ONE* 5:e10297, 2010.
- Griffin, D.E. Measles virus-induced suppression of immune responses. *Immunol Rev* 236:176-189, 2010.
- Lin, W.H., Griffin, D.E., Rota, P.A., Papania, M. Cape, S.P., Bennett, D., Quinn, B., Sievers, R.E., Shermer, C. Powell, K., Adams, R.J., Godin, S. and Winston, S. Successful respiratory immunization with dry powder live-attenuated measles virus vaccine in rhesus macaques. *Proc. Natl. Acad. Sci. USA.* (in press).