

## CURRICULUM VITAE

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### **Education and Training**

A.B.; Harvard College, Cambridge, MA; September 1977-June 1981

M.D.; Tufts University School of Medicine, Boston, MA; July 1981-June 1985

Tufts-New England Medical Center, Boston, MA  
Department of Medicine, Internship and residency in internal medicine, July 1985-June 1988

National Institutes of Health, National Institute of Allergy and Infectious Diseases, Bethesda, MD; Infectious Diseases fellowship, July 1988-June 1991:  
1988-89: Medical Staff Fellow, Laboratory of Clinical Investigation  
1989-91: Clinical Associate, Medical Virology Section, laboratory of Stephen Straus

Program in Molecular Medicine, University of Massachusetts Medical Center, Worcester, MA;  
Postdoctoral fellowship, laboratory of Dr. Michael R. Green, MD, PhD, July 1991-June 1994

### **Board Certifications:**

Diplomate in Infectious Diseases, American Board of Internal Medicine, 1992 (recertified 2002, 2012)  
Diplomate in Internal Medicine, American Board of Internal Medicine, 1988 (permanent)

### **Medical Licensure:**

North Carolina 2005-01254 (2005)  
Texas L2444 (2001, expired)  
Maryland D38637 (1990, expired)  
Virginia, 0101-042247 (1989, expired)  
Massachusetts, 56381 (1986, expired)

### **Professional Experience**

*The University of North Carolina at Chapel Hill; August 2005-present*  
Professor of Internal Medicine, Division of Infectious Diseases, The University of North Carolina at Chapel Hill, Chapel Hill, NC  
Professor of Epidemiology, The University of North Carolina at Chapel Hill School of Public Health, Chapel Hill, NC

Professor of Microbiology and Immunology, The University of North Carolina at Chapel Hill Graduate School, Chapel Hill, NC  
Director, UNC HIV Cure center, Institute of Global Health and Infectious Diseases, The University of North Carolina at Chapel Hill, Chapel Hill, NC

*The University of Texas Southwestern Medical School at Dallas August 1999-August 2005:*

Chief, Infectious Diseases Section, Medicine Service, Dallas Veterans Affairs Medical Center; 2002-2005

Associate Professor of Internal Medicine, Division of Infectious Diseases, The University of Texas Southwestern Medical Center; 1999-2005

Member, Program in Molecular Microbiology; Division of Cell & Molecular Biology, The University of Texas Southwestern Medical Center; 1999-2005

Director, HIV Services, Dallas Veterans Administration Medical Center, Dallas, TX; 1999-2002

*The University of Maryland, Baltimore MD, July 1994-August 1999:*

Assistant Professor, Institute of Human Virology, University of Maryland Biotechnology Institute

Assistant Professor of Medicine and Microbiology and Immunology, University of Maryland School of Medicine

Attending Physician, Evelyn Jordan Center (HIV Clinic) and University of Maryland Medical Center

Associate Member, Molecular and Cell Biology Program, University of Maryland at Baltimore Graduate School

*The University of Massachusetts School of Medicine, Worcester MA, July 1991-June 1994:*

Assistant Professor and Attending Physician, Division of Infectious Diseases and Adult HIV Clinic, University of Massachusetts Medical Center

### **Honors and Awards**

Tim Gill Visiting Professor, University of Colorado at Denver, 2013

M. Glenn Koenig Visiting Professor, Vanderbilt Univ. School of Medicine, 2011

William J. Way award for HIV medicine, Duke Univ. School of Medicine, 2005

Member, American Society of Clinical Investigation, 2005

5th International Workshop on HIV Drug Resistance & Treatment Strategies; best presentation award, 2001

Fellow, Infectious Diseases Society of America, 1998

Infectious Diseases Society of America, Ortho-MacNeil Young Investigator, 1997

National Foundation for Infectious Diseases Young Investigator, 1996

Fellow, American College of Physicians, 1996

NIH Physician-Scientist (K-11) Award, 1991

Clinical Associates award, NE chapter, American College of Physicians, 1988

Magna Cum Laude, Harvard College, 1981

**Bibliography***Original research*

1. Lee SK, Zhou S, Luiz P, Spielvogel E, Archin N, Hudgens M, Margolis DM, Swanstrom R. Quantification of Latent HIV-1 Reservoir Using Ultra Deep Sequencing and Primer ID. *JAIDS. In press.*
2. Clutton G, Xu Y, Baldoni PL, Mollan KR, Kirchherr J, Kuruc JD, Kashuba A, Barnard R, Archin N, Gay CL, Hudgens MG, Margolis DM, Goonetilleke N. The differential short- and long-term effects of HIV-1 latency reversing agents on T cell function. *Sci Rep.* 2016; 6:30749. doi: 10.1038/srep30749. PMID:27480951
3. Tsai P, Wu G, Baker CE, Thayer WO, Spagnuolo A, Sanchez R, Howell B, Margolis DM, Hazuda DJ, Archin N, Garcia JV. In vivo analysis of the effect of panobinostat on cell-associated HIV RNA and DNA levels and latent HIV infection. *Retrovirology* 2016;13(1):36. doi: 10.1186/s12977-016-0268-7
4. Kuruc JD, Cope AB, Sampson LA, Gay CL, Ashby RM, Foust EM, Brinson M, Barnhart JM, Margolis D, Miller WC, Leone PA, Eron JJ. Ten Years of Screening and Testing for Acute HIV Infection in North Carolina. *JAIDS.* 2016; 71(1):111-9.
5. Jacobson JM, Routy JP, Welles S, DeBenedette M, Tcherepanova I, Angel JB, Asmuth DM, Stein DK, Baril JG, McKellar M, Margolis DM, Trottier B, Wood K, Nicolette C. Dendritic Cell Immunotherapy for HIV-1 Infection Using Autologous HIV-1 RNA: A Randomized, Double-Blind, Placebo-Controlled Clinical Trial. *J Acquir Immune Defic Syndr.* 2016; 72(1):31-38, PMID:26751016
6. Soriano-Sarabia N, Archin NM, Bateson RE, Dahl NP, Crooks AM, Kuruc JD, Garrido C, Margolis DM. Peripheral  $\gamma\delta$  T cells are a novel reservoir of latent HIV infection. *PLoS Pathog* 11(10): e1005201. doi:10.1371/journal.ppat.1005201. PMID:26473478
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8. White CH, Johnston HE, Moesker B, Manousopoulou-Garbis A, Margolis DM, Richman DD, Spina CA, Garbis SD, Woelk CH, Beliakova-Bethell N. Mixed effects of suberoylanilide hydroxamic acid (SAHA) on the host transcriptome and proteome and their implications for HIV reactivation from latency. *Antiviral Research.* 2015; 123:78-85. doi: 10.1016/j.antiviral.2015.09.002. PMID:26343910
9. Reardon B, Beliakova-Bethell N, Spina CA, Singhania A, Margolis DM, Richman DR, Woelk CH. Dose-responsive gene expression in suberoylanilide hydroxamic acid-treated resting CD4+ T cells. *AIDS.* 2015. [Epub ahead of print] PMID:26258524
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12. Crooks AM, Bateson R, Cope AB, Dahl NP, Griggs M, Kuruc JD, Gay CL, Eron JJ, Archin NM, Bosch RJ, Margolis DM. Precise Quantitation of the Latent HIV-1 Reservoir: Implications for Eradication Strategies. *J Infect Dis.* 2015; 212(9): 1361-5. doi: 10.1093/infdis/jiv218. PMID:25877550

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### **Other peer-reviewed articles**

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### **Invited Editorials**

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### **Published abstracts**

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2. MK Tripathy and DM Margolis. HIV LTR H3K27 demethylation enhances latent proviral response to vorinostat in authentic resting CD4+ T cells. *Keystone Symposia on Mechanisms of HIV Persistence: Implications for a Cure*, Boston MA, April 2015
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84. Transcriptional Repression of the Human Immunodeficiency Virus Type-1 Long Terminal Repeat via Recruitment of Histone Deacetylase-1. Coull, J, Romerio, F, Sun, J-M, Volker, JM, Galvin, KM, Davie, JR, Shi, Y, Hansen, U, Margolis, DM. 8<sup>th</sup> Conference on Retroviruses and Opportunistic Infections, Chicago, IL, February 2001.
85. A pilot study of the use of mycophenolate mofetil as a component of therapy for multidrug-resistant HIV-1. Coull, J.J., Betts, M., Turner, D., Melby, T., Lanier, E.R., Margolis, DM. 4<sup>th</sup> International Workshop on HIV Drug Resistance & Treatment Strategies, Sitges, Spain, June 2000.

86. In *Vitro* Synergistic Antiretroviral Activities of Abacavir/Mycophenolic acid and DDI/Resveratrol Combinations Against Multi-drug Resistant HIV-1 (RT Mutants) Suggest a New Approach to Control Resistance. Heredia, C. Davis, D. Margolis, D. Oldach, R. Hazen, N. Le, and R. Redfield. Keystone Symposia: Novel Biological Approaches to HIV-1 Infection Based on New Insights into HIV Biology, Keystone, CO. April 2000
87. Phase 1 Pilot Study of Mycophenolic Mofetil and Abacavir in Patients with Multi-drug Resistant Virus. Robert Redfield MD, Charles Davis MD, Alonso Heredia PHD, David Margolis MD, and David Oldach MD. Keystone Symposia: Novel Biological Approaches to HIV-1 Infection Based on New Insights into HIV Biology, Keystone, CO. April 2000
88. Selective Repression of HIV-1 Transcription by the Cooperation of Two Host Cellular Factors: a Mechanism for the Maintenance of Quiescent Viral Reservoirs?. Coull, J., Romerio, F., Sun, J.-M., Volker, J.M., Galvin, K.M., Davie, J.R., Shi, Y., Hansen, U., Margolis, D.M. 7th Conference on Retroviruses and Opportunistic Infections, San Francisco, CA, February 2000
89. A pilot study of the use of Mycophenolate Mofetil (MMF) as a component of therapy for multidrug resistant HIV-1. J.J. Coull, M. Betts, D. Turner, T. Melby, E.R. Lanier, and D.M. Margolis. Abstr. 1173, 39th ICAAC, San Francisco, CA September 1999.
90. Stable gene transfer to CD34+ cells augmented by coordinated non-viral delivery of AAV components. Gould-Fogerite, S., Cottler-Fox, M., Mannino, R., and Margolis, D.M. American Society for Gene Therapy meeting, Washington D.C., June 1999
91. Abacavir and mycophenolic acid, an inhibitor of inosine monophosphate dehydrogenase, have profound and synergistic anti-HIV activity. Margolis, D.M., Heredia, A., Hazen, D.J., Oldach, D., Drusano, G., Redfield, R.R. 3rd Annual Symposium on HIV Drug Resistance, San Diego, CA. June 1999
92. Host Cell Factors Repress HIV-1 Gene Expression: mechanisms for viral latency. Coull, J., Davie, J., Shi, Y., Hansen, U., and Margolis, D.M. Infectious Disease Society of America 37th annual meeting, Denver, CO, November, 1998
93. Development of a tissue culture method to isolate replication-competent drug-resistant viral variants in the peripheral blood lymphocytes of untreated HIV-1 infected individuals. Heredia, A., Margolis, D.M, Fantry, L., Redfield, R.R. 3rd Annual Institute of Human Virology meeting. Baltimore, MD; August 1998.
94. Selective Repression of HIV-1 Transcription by the Cooperation of Two Host Cellular Factors: a Mechanism for the Maintenance of Quiescent Viral Reservoirs. Romerio, F., Galvin, K., Volker, J., Shi, Y., Hansen, U., and Margolis, D.M. Keystone Symposia: HIV Pathogenesis; Park City, UT, March 1998.
95. Regulation of cooperative repression of HIV-1 transcription by host factors YY1 & LSF. Fabio Romerio and David M. Margolis. 4rth Conference on Retroviruses and Opportunistic Infections, Washington, DC, February 1997
96. Turning on the CD4 gene in CD8+ cells: implications in HIV pathogenesis. Flamand, L., Crowley, R.W., Lusso, P., Margolis, D.M., and Gallo R.C. Institute of Human Virology annual meeting, September 1996.
97. Repression of HIV-1 transcription by the human transcription factor YY1. Romerio, F., Gabriel, M., and Margolis, D.M. Institute of Human Virology annual meeting, September 1996.
98. Repression of HIV-1 transcription by the human transcription factor YY1. Romerio, F., and Margolis, D.M. Retroviruses, Cold Spring Harbor, May 1996.
99. Downregulation of HIV-1 expression by the transcription factor YY1. Margolis, D.M., Somasundaran, M., Shi, Y., and Green, M.R. 9<sup>th</sup> International Conference on AIDS. Berlin, June 1993.

100. The role of DNA binding motifs in the transactivation of the HIV LTR by HSV-1. Margolis, D.M., Parrott, C., Leonard, J., Rabson, A.B., Ostrove, J.M. UCLA Symposia on Molecular and Cellular Biology, March 1990. J. Cell. Biochemistry 1990; Suppl. 14D: 123
101. The role of HSV-1 in the transactivation of the HIV LTR. Margolis, D.M., Rabson, A.B., Ostrove, J.M. 15th International Herpesvirus Workshop. Washington D.C., August 1990

### **Invited oral presentations**

1. Enlisting Effector Cells to Clear HIV Infection. IMPAACT network meeting. June 14, 2016, Washington DC
2. HIV Latency Reversal and Clearance: Translational Challenges. Temple University Hospital, and Department of Neuroscience and Center for Neurovirology. March 4, 2016; Philadelphia, PA
3. Understanding HIV latency reversal and clearance. Aaron Diamond AIDS Research Center, Rockefeller University. October 26, 2015; NY, NY.
4. Understanding HIV latency reversal and clearance. Banbury Conference, Cold Spring Harbor Laboratories. October 15, 2015; Cold Spring Harbor, NY.
5. Latency disruption and clearance. Institute of Human Virology, University of Maryland School of Medicine, September 28, 2015; Baltimore, MD
6. Understanding HIV latency reversal and clearance. Ragon Institute of MGH, MIT and Harvard, Cambridge, MA; September 22, 2015.
7. Re-activation of the latent reservoir. 13<sup>th</sup> European Meeting on HIV & Hepatitis - Treatment Strategies & Antiviral Drug Resistance, Barcelona, Spain; June 3-5, 2016
8. HIV latency disruption and clearance. ID Grand Rounds. UMass Medical Center. March 25, 2015; Worcester, MA
9. Strategies for cure, from bench to bedside. IDWeek (IDSA, SHEA, HIVMA, PIDS meeting). October 8-12, 2014 in Philadelphia, Pennsylvania
10. Les Cent Gardes meeting: HIV Vaccines: Prospects for the Future. Foundation Merieux, Veyrier du Lac – France, October 5-7, 2014
11. The current status of HIV cure research. Plenary at First Annual HIV Nordic Conference; Stockholm, Sweden, October 2-3, 2014
12. HIV Eradication: Will the brain be left behind? Plenary at satellite symposium at AIDS 2014, IAS meeting, Melbourne July 2014
13. Towards an HIV Cure: Medical, social, and ethical challenges in research and testing. Plenary at symposium at AIDS 2014, IAS meeting, Melbourne July 2014
14. Eradication therapies for HIV: building the critical path. Keynote at 27<sup>th</sup> International Conference on Antiviral Research (ICAR); Raleigh, NC, May 12-15, 2014
15. Progress towards the eradication of HIV infection: research hurdles and early clinical trials. Keynote at: HIV Cure: Social science & ethics. Brocher Foundation, Geneva, May 7-10, 2014
16. Turning the Tide on HIV, keynote speaker. Canadian Conference on HIV/AIDS Research (CAHR 2014), St. John's, Newfoundland May 1-4, 2014.
17. Eradication of Latent Pathogens: lessons from HIV. Keystone Symposia meeting on Novel Therapeutic Approaches to Tuberculosis. Keystone CO, March 31-April 4, 2014
18. HIV Eradication Approaches. Keystone Symposia meeting on HIV Pathogenesis – virus vs. host. Banff, Alberta, March 9-14, 2014
19. Assembling the Tools to Clear HIV Infection. 2014 Center for Retrovirus Research visiting professor, Ohio State University, Columbus OH; February 5-6, 2014.
20. Translational Challenges in Targeting Latent HIV Infection. 6<sup>th</sup> Workshop on HIV Persistence on Therapy. Miami, FL December 3-6<sup>th</sup> 2013
21. Early development and testing of tools for cure. At: What will it take to achieve an AIDS-

- free world? Cell-Lancet Translational Medicine conference, San Francisco, November 2013
22. Translational Challenges in Targeting Latent HIV Infection. At: Eradication of HIV-CNS reservoirs; current strategies and future priorities. NIMH Symposium, Washington DC, October 2013.
  23. Assembling the Tools to Clear HIV Infection. U Penn HIV Symposium series, University of Pennsylvania, Philadelphia, PA; October 31, 2013.
  24. Towards Eradication of HIV Infection. Erasmus Medical College, Rotterdam; September 20, 2013
  25. Approaches to Eradication of HIV Infection. 3<sup>rd</sup> Frontiers in Retrovirology workshop. University of Cambridge, UK, September 18, 2013.
  26. Disrupting latency: Challenges in seeking a cure for HIV infection. Nobel Forum, Karolinska Institut, Stockholm, September 6, 2013
  27. Which strategy to achieve a cure for HIV-1 infection? At: 30 years of HIV science: Imagine the future. Institut Pasteur, Paris, May 2013.
  28. Disrupting Latency. 11<sup>th</sup> European Meeting on HIV & Hepatitis: Treatment Strategies & Antiviral Drug Resistance. Rome, Italy, March 2013.
  29. Persistent HIV Infection: an Assessment of Cellular Reservoirs. 2013 Palm Springs Symposium on HIV/AIDS. Palm Springs, CA, March 2013.
  30. Study of Transitional Memory CD4+ T Cells and Gamma-Delta T cells as Latent Reservoirs for Replication Competent HIV-1. Natalia Soriano--Sarabia\*, N Archin, and D Margolis. 19<sup>th</sup> Annual Conference on Retroviruses and Opportunistic Infections, Atlanta GA, WA, March 2013; Abstract 46
  31. Assembling the Tools to Clear HIV Infection. 2013 Microbiology & Immunology Graduate Program visiting professor, University of British Columbia, Vancouver, Canada; February 25-27, 2013.
  32. Cure of HIV by Purging the Latent Reservoir. 23<sup>rd</sup> Challenge in Virology; Swiss Academic Foundation for Education in Infectious Diseases. Saanen, Switzerland, January 2013
  33. Plenary Lecture: Curing HIV. 14<sup>th</sup> Community Summit, San Antonio, TX November 10, 2012
  34. Towards Eradication of HIV Infection: Challenges & Controversies. Yale Microbiology Graduate Program Seminar Series, New Haven CT September 20, 2012
  35. Translating epigenetics to therapeutics for latent HIV infection. 2012 Chromatin Control of Viral Infection. NIH Symposium, Bethesda MD September 17-18, 2012
  36. Assembling the Tools to Clear HIV Infection: contributions from virology and immunology. Symposium address at AIDS Vaccine 2012, Boston MA, September 9-12, 2012.
  37. Targeting latent HIV infection: on the road towards an HIV Cure. Keynote address at International AIDS Society Symposium "Towards an HIV Cure;" Washington DC; 20-21 July 2012
  38. Targeting HIV for Elimination. Keystone Symposia: Frontiers in HIV Pathogenesis, Therapy, and Eradication; Whistler, BC, 28 March 2012.
  39. Challenges in the effort to eradicate HIV infection. Johns Hopkins School of Medicine Neuroimmunology Seminar Series, 20 March 2012
  40. Administration of Vorinostat Disrupts HIV-1 Latency in Patients on ART. N Archin, A Liberty, A Kashuba, S Choudhary, J Kuruc, M Hudgens, M Kearney, J Eron, D Hazuda, and DM Margolis. 18<sup>th</sup> Annual Conference on Retroviruses and Opportunistic Infections, Seattle, WA, March 2012; Abstract 157LB
  41. Towards a Cure for AIDS: HIV Grand Rounds at the Perelman School of Medicine at the University of Pennsylvania, Philadelphia, PA, 16 February 2012.



42. Disrupting latency to cure AIDS: HDAC inhibitors and other interventions. 3rd Hamburger HIV-Strategieforum, Hamburg, Germany, 14 January 2012
43. The Effect of Vorinostat on Latent HIV-1 Expression *in vivo*: Preliminary Findings from a Clinical Study in ART-suppressed HIV-1-infected Patients. 5th International Workshop on HIV Persistence, Reservoirs & Eradication Strategies, St. Maarten, 10 December 2011.
44. National Centers for AIDS Research Symposium. Eradication of HIV infection. Duke University School of Medicine, 27 October 2011.
45. M. Glenn Koenig lecture, Medicine Grand Rounds: Solutions for the 4th Decade of the HIV Pandemic. Vanderbilt School of Medicine, 20 October 2011.
46. US-Japan Cooperative Medical Sciences Program: Challenges in Persistent HIV Infection: Building a Development Pathway Towards Eradication. Atlanta, GA 21-23 September 2011.
47. Current Concepts of HIV Eradication and Reservoirs: On the Road to a Cure. 51st ICAAC, Chicago, IL, 19 September 2011
48. NIDCR Workshop on Epigenomics of Oral Viruses. Epigenetics and Other Factors in Proviral Latency of HIV-1. Rockville, MD 12 September 2011.
49. North European Workshop on HIV-infection in the CNS. HIV persistence and the CNS as a sanctuary. Gothenburg, Sweden, 26-28 May 2011
50. Office of AIDS Research Advisory Council 32<sup>nd</sup> Meeting: Research Leading To A Cure for HIV/AIDS. Modulating Proviral Gene Expression: Development and Testing of Therapies to Target Latent HIV Genomes. Rockville, MD March 2011.
51. NIGMS 25th Annual Meeting of the Groups Studying the Structures of AIDS-Related Systems and Their Application to Targeted Drug Design. Targeting silent HIV genomes: the next frontier. Bethesda MD, March 2011
52. Attacking Persistent Infection: towards HIV eradication. Genetech. San Francisco, CA, March 2011.
53. NIDA meeting: Translating Epigenomics into Improvements in Human Health. Modulating proviral gene expression: targeting latent HIV within the genome. Rockville MD, March 2011.
54. Attacking Persistent Infection: towards an ART-less future. 8<sup>th</sup> Annual UCLA HIV Symposium. Los Angeles, CA, October 2010.
55. HIV Latency and Eradication. 2010 Case CFAR Annual Conference: Molecular Basis for HIV Pathogenesis, Cleveland OH, August 2010
56. Control and Eradication of HIV, Perspectives in Virology Clinical Symposium - HIV & Hepatitis, Melbourne, Australia, August 2010
57. Residual virus, latency, and eradication strategies, McFarlane Burnett Institute, Melbourne Australia, August 2010.
58. Keynote Lecture: Residual virus, latency, and eradication strategies. Mid-Atlantic SIV Research Group Symposium, Frederick, MD, July 2010
59. Epigenetic regulation of HIV expression. Centennial Retrovirology Symposium, Prague, Czech Republic, May 2010
60. Epigenetic Regulation of Proviral HIV Infection. Institute Genetique et Moleculaire, Montpellier, France, March 2010.
61. Anti-HIV Latency Drugs. International Symposium on HIV & Emerging Infectious Diseases, Marseille, France, March 2010
62. "Any problem, when examined carefully, becomes more complicated: Designing Eradication Trials." 4th International Workshop on HIV Persistence during Therapy, St Maarten, December 2009.

63. World AIDS Day Distinguished Speaker: "Attacking Persistent Infection: towards a complete response to treatment." Walter Reed Army Institute of Research, Silver Spring MD, December 2009.
64. World AIDS Day Invited Speaker: "Towards therapies to eradicate HIV Infection" Glaxo SmithKline World AIDS Day symposium, Research Triangle Park, NC, December 2009.
65. Invited lecture: "Towards Eradication: the challenge of finding a cure for HIV infection." Czech Science Academy, Prague, Czech Republic, October 2009.
66. Inaugural lecture: 1st annual conference of GESIDA (Spanish AIDS National Study Group): "Towards Eradication: the challenge of finding a cure for HIV infection." Madrid, October 2009.
67. Keynote Lecture: HDAC Inhibitors and HIV Latency: lost in translation? 16<sup>th</sup> West Coast Retrovirus meeting, Palm Springs, CA October 2009.
68. Prospects for Eradication: Host factors determining viral latency. 5th IAS Conference on HIV Pathogenesis, Treatment and Prevention (IAS 2009), Cape Town, South Africa, July 2009.
69. State of the Art Plenary: Eradication of HIV infection: any problem, however complicated, if looked in the right way, becomes more complicated. XVII International HIV Drug Resistance Workshop: Basic Principles & Clinical Implications. Fort Meyers FL, June 2009.
70. Drexel University College of Medicine, Dept. of Microbiology and Immunology Research Seminar Series. The Challenge of a Cure for HIV: persistent infection and what to do about it. Philadelphia, PA; June 2009.
71. Plenary Lecture: Curing HIV: pharmacological approaches to persistent HIV infection. 10<sup>th</sup> International Conference on HIV Pharmacology, Amsterdam, April 2009.
72. Mechanisms that Maintain Proviral Latency: Targets for Future Therapeutics. Third International Workshop on HIV Persistence during Therapy, St Maarten, December 2007.
73. Attacking latent HIV: towards therapies for persistent HIV infection. 10th Annual International Meeting of the Institute of Human Virology. Baltimore, MD. November 2006.
74. Targeting the Reservoir. Symposium on HIV Treatment. 44<sup>th</sup> Annual Meeting of the IDSA. Toronto, CA, October 2006.
75. Opportunities in translational research: HIV as a paradigm. Keynote address: Texas Tech Health Sciences Center Annual Research Day, Amarillo, TX. August 2006
76. Histone deacetylase inhibition: towards eradication of HIV infection. Case CFAR conference, Cleveland, OH, June 2006.
77. Predictors of HIV Disease Progression in Patients Who Stop ART with CD4 Cell Counts >350 cells/mm<sup>3</sup> D Skest, D Havlir, R Coombs, E Adams, P Cain, T Petersen, D Rusin, C Jennings, K Robertson, D Margolis, and the ACTG 5170 Team 13<sup>th</sup> Annual Conference on Retroviruses and Opportunistic Infections, Denver, CO, February 2006.
78. William J. Way award lecture, Duke University School of Medicine, "Towards eradication of HIV infection." January 2006
79. Histone deacetylase inhibition in vivo depletes latent HIV infection. D.M. Margolis. Second International Workshop on HIV Persistence during Therapy. Saint Martin, FWI, December 2005.
80. Rapid Depletion of Latent HIV infection in vivo. D.M. Margolis. Plenary lecture. West Coast Retrovirus meeting. Palm Springs, CA. October 2005.
81. Treatment with Growth Hormone Leads to Improvement in Total and Naïve CD4 Lymphocyte Recovery in HIV-Infected Subjects with Incomplete Immune Reconstitution on HAART. Smith, K., Margolis, D.M., and ACTG 5174 study team. 3rd IAS Conference on HIV Pathogenesis and Treatment. Rio de Janeiro, Brazil July 2005

82. Chromatin deacetylation does not precede waning of HIV expression. N.M. Archin and D.M. Margolis. Keystone Symposium on HIV Pathogenesis. Banff, Alberta, Canada. April 2005
83. Towards Eradication of HIV Infection. D.M. Margolis. Immune restoration Think Tank IX: the Dobson Project. San Francisco, CA, October 2004.
84. Targeting Reservoirs of Human Immunodeficiency Virus Infection: inducing latent viral expression without host cell activation. D.M. Margolis. 13<sup>th</sup> International HIV Drug Resistance and Therapies Workshop. Tenerife, Spain, June 2004
85. Mycophenolate and Cyclosporine in HIV Therapy. D.M. Margolis. NIAID Workshop: Assessment of Future Developments in Immune Based Therapies in HIV Infection. Landsdowne, MD. January 2004
86. The blockade of transcriptional repression at the HIV LTR allows outgrowth of virus from the resting T cells of aviremic patients. D.M. Margolis. First International Workshop on HIV Persistence during Therapy. Saint Martin, FWI, December 2003.
87. Derepression by DNA-binding Polyamides Allows Outgrowth of Human Immunodeficiency Type 1 from Resting CD4+ T Cells: Regulators of HIV Latency. D.M. Margolis. Keystone Symposium Twenty Years of HIV Research: From Discovery to Understanding. Banff, Alberta. March 2003
88. Polyamides induce Derepression of HIV within Primary Resting T Cells. D.M. Margolis. Keystone Symposium on Drug Target Validation: Gene Suppression. Tahoe City, CA, Jan. 2003.
89. New targets in HIV therapies. D.M. Margolis. amfAR Think Tank. Dedham, MA. Dec. 2002.
90. Adjuvant Therapy. D.M. Margolis. International Workshop for the Treatment of ART-Experienced Patients. San Diego, CA, September 2002
91. Host transcription factors maintain the stable latent reservoir HIV-1 infection. D.M. Margolis. Viral Reservoirs/Transient Infection Think Tank in HIV/AIDS: Basic Science Division, Division of AIDS, NIAID, NIH. Bethesda, MD, June 2002.
92. Therapeutic Modulation of Host Cell Factors. D.M. Margolis. 6<sup>th</sup> UCSF Symposium on Antiviral Chemotherapy. San Francisco, CA, April 19-20, 2002.
93. Late Breaker Oral Presentation: Analysis of Gluconeogenesis Using Stable Isotopes in Patients with HIV. Weis, B.C., Margolis, D.M., Merritt, M., E., Burgess, S.C., and Malloy, C.R. 9th Conference on Retroviruses and Opportunistic Infections, Seattle, WA, February 2002.
94. Localization of Histone Deacetylase 1 at the Promoter of Inactive Integrated Human Immunodeficiency Virus Type 1. He, G., Coull, J.J., Margolis, DM. Keystone Symposia: HIV Pathogenesis, Keystone, CO. April 2001
95. Selective Repression of HIV-1 Transcription by the Cooperation of Two Host Cellular Factors: a Mechanism for the Maintenance of Quiescent Viral Reservoirs. Romerio, F., Sun, J.M., Coull, J.J., Galvin, K., Volker, J., Davie, J., Shi, Y., Hansen, U., and Margolis, D.M. 3rd Annual Meeting Institute of the Human Virology. Baltimore, MD; August 1998.
96. Repression of HIV-1 through the novel cooperation of YY1 and LSF. Romerio, F., Gabriel, M., and Margolis, D.M. 2rd Annual Meeting Institute of the Human Virology. Baltimore, MD; August 1997.

#### Patents and Patent Applications

1. Margolis, D.M. and Romerio, F.R.: Transcription factors that repress HIV transcription and methods based thereon. U.S. provisional patent application serial no.06/036,242; January 23,1997.
2. Margolis, D.M., Gould-Fogerite, S., Menino, R: Stable gene transfer to human progenitor

- cells via cochleate liposome/DNA/protein complexes. U.S. Patent 6,340,591; January 22, 2002.
3. Margolis, D.M., Heredia, A., Oldach, D., Redfield, R.R.: Synergistic combinations of guanosine analog reverse transcriptase inhibitors and inosine monophosphate inhibitors and uses therefor. U.S. Patent 6,514,979; February 4, 2003.
  4. Margolis, D.M., Gould-Fogerite, S., Menino, R: Integrative protein-DNA cochleate formulations and methods for transforming cells. Australian patent 759178; July 24, 2003.
  5. Hazuda, D., Espeseth, A., Margolis, D.M., Archin, N. Methods of Using SAHA for Treating HIV Infection. U.S. Patent 2010/0324034 A1, Dec. 23, 2010; International Patent Application PCT/US2008/001738, February 8, 2008
  6. Haynes BF, Ferrari G, Koenig S, Johnson LS, Lam CYK, Jung JA, Margolis DM: Bispecific molecules comprising an HIV-1 envelope targeting arm. International Patent Application PCT/US2015/053027, April 7, 2016

**Teaching record** (since 1999)

*The University of North Carolina at Chapel Hill*

Course co-director: Host Defense and Microbial Pathogenesis (MEDI 143)

First year medical students  
2006-2009

Lecturer: Host Defense and Microbial Pathogenesis (MEDI 143)

Microbiology & Immunology graduate students  
2005-2013

Recent Advances in Virology (MCRO 711)  
Microbiology & Immunology graduate students  
2007-present when offered

Integration Selective Seminars, School of Medicine  
Fourth year medical students  
2009-present

Doctoral Students: Department of Microbiology & Immunology

Kara Keedy (2006-2010)  
Kirston Barton (2009-2014)

Dissertation committees:

UNC Department of Microbiology & Immunology:

Tamara Nunn (2006-08)  
Vijay Sivaraman (2008-2009)  
William Ince (2008-2010)  
Kristen Tamburro (2009-2011)  
Alina Lotstein (2009-2011)  
Rachel Burger-Calderon (2009-2013)  
Morgan Chateau (2010-2014)  
Mark Potempa (2010-2015)  
Richard Watkins (2012-2015)

UNC Eshelman School of Pharmacy:

Corbin Thompson (2014-present)

UNC Program in Translational Medicine, clinical mentor:

Raquel Burger-Calderon (2010-2013)

The Rockefeller University, NY:  
Joshua Horowitz (2016; Michel Nussenzweig laboratory)

*University of Texas Southwestern School of Medicine:*

Lecturer in Medical Microbiology: 1999-2005  
Lecturer in Immunology: 2001-2005

*UTSW Graduate School, Division of Cell and Molecular Biology:*

Lecturer in Virology: 2000-2005  
Lecturer in Immunology: 2002-2005  
ID Fellowship lecture series  
Qualifying exam committees: Christina Martinez-Smith (2002)  
Roger Travis Taylor (2003)  
Brian Keller (2004)  
Dissertation committees: Ken Ball (2003)  
Nadia Tsankova (2005)

*Postdoctoral and Doctoral Trainees:*

Fabio Romerio, Ph.D. (1995-97): Current Position: Assistant Professor, University of Maryland Institute of Human Virology  
Sook Jin Hur, Ph.D (1997-98): Subsequent Position: staff scientist, National Institute of Health, Korea  
Jason J. Coull, Ph.D (1998-2001); Subsequent Position: Research Director, Glaxo SmithKline, Stevenage, UK  
Mohammed M. Hossain, Ph.D (1999-2001): Subsequent Position: Assistant Professor, University of Pittsburgh, Pittsburgh, PA.  
Guocheng He, Ph.D (2000-2002): Subsequent Position: Instructor, UT Southwestern  
Lyoda Pons Ylisastigui (2001-2004): Subsequent Position: Scientist, ODC Therapy Inc., Baylor Inst. for Immunology Research, Dallas, TX  
Rupinder Kaur, Ph.D. (2002-2005): Subsequent Position: family leave  
Vladimir Klichko, Ph.D. (2003-2005): Subsequent Position: Research Scientist, Southern Methodist University, Dallas, TX  
Guochun Jiang, Ph.D. (2005-2007): Current Position: Assistant Professor, UC Davis  
Shailesh Choudhary, Ph.D. (2005-2008): Subsequent Position: Research Instructor, UNC  
Mary Catherine Bowman, M.D., Ph.D. (2006-2009): Current Position: Assistant Director, Internal Medicine Residency Program, Florida Hospital Medical Center  
Nancie Archin, Ph.D. (2002-2007): Current Position, Research Assistant Professor UNC  
Kara Keedy (2006-2010): Current Position, Research Scientist, Cempra Pharmaceuticals  
Kirston Barton (2009-2014): Current Position, Postdoctoral research fellow, Millenium Institute, Melbourne  
Liguo Niu, Ph.D. (2009-2012): Current Position, Scientist, Accuvein, Inc.  
Mary McManamy, Ph.D. (2011-2013): Current Position, Instructor, Elon Univeristy  
Carolina Garrido Pavon, PhD (2011-present); Current Position, Research Scientist, UNC-CH  
Natalia Soriano, PhD (2011-2015); Current Position, Research Instructor, UNC-CH  
Brandon Burch, PhD (2011-2014): Current Position, Research Scientist, Cempra Pharmaceuticals  
Manoj Tripathy, PhD (2011-2015): Current Position, Postdoctoral Fellow, Dr. Uma Nagarajan, UNC-CH

Julia Marsh Sung, MD (2012-2015); Current Position, Clinical Assistant Professor UNC-CH  
 Maria Abad, PhD (2013-2015); Current Position, Postdoctoral Fellow, UNC  
 Anne-Marie Turner, PhD (2016-present)

### *Attending on Clinical Service*

#### *UNC Memorial Hospital (2005-present)*

- Medicine ward service or Infectious Diseases consult service: 4 weeks/yr.
- HIV/ID clinic: half day/week  
intermittent ID fellow supervision and general ID consultation  
direct primary care for HIV-infected patients

#### *Dallas VAMC (1999-2005)*

- General Medicine ward service: 6 weeks/yr.
- Infectious Diseases consulting service: 6 weeks/yr.
- HIV/ID clinic, Dallas VAMC: 3 half-days/week

#### *University of Maryland Medical Center (1994-1999)*

- ID/HIV ward service: 3 months/yr.
- Infectious Diseases consulting service: 1 month/yr.
- HIV clinic: 2 full days/week

## **Grant Support**

### **ACTIVE**

U19 AI096113-05 (Margolis)	07/08/11-06/30/17	2.88 calendar
NIH	\$5,729,039	

Martin Delaney Collaboratory to Eradicate HIV-1 Infection

Despite the clinical success of antiretroviral therapy (ART), more people contract human immunodeficiency virus (HIV) infection daily than initiate ART. The difficulties of lifelong ART -- particularly in the developing world -- make the eradication of HIV imperative.

Role: PI

UM1AI126619-01 (Margolis)	07/14/16-06/30/21	3.66 calendar
NIH	\$ 4,592,950	

Collaboratory of AIDS Researchers for Eradication (CARE)

Extending and redirecting the work initiated in 2011-2016, the reorganized CARE brings together scientists from UNC, Duke, Emory, and UCSD, and from Merck Research Laboratories, Qura Therapeutics, and MacroGenics, to seek therapies to eradicate HIV infection.

Role: PI

R01AI108366-02 (Tucker)	06/15/13-05/31/18	0.24 calendar
NIH/ NIAID	\$ 404,463	

Unintended and Intended Implications of HIV Cure: A Social and Ethical Analysis

The major goal of this research is to undertake theoretical research, stakeholder research, and stakeholder engagement research to better understand HIV cure in Chapel Hill USA, Guangzhou China, and Cape Town South Africa.

Role:Co-Investigator

U01AI117844-01 (Margolis) 03/01/15 - 02/28/20 1.20 calendar  
 NIH/NIAID \$ 903,322

A Pilot Trial of the effect of Vorinostat and AGS-004 on Persistent HIV-1 Infection

This is a proof-of-principal study to measure the potential of VOR and AGS-004 to: a) induce expression of persistent proviral HIV, b) induce an HIV-specific immune response, and c) clear persistent infection in HIV+ patients in whom viral replication, evasion, and spread is inhibited by uninterrupted ART.

Role: PI

No number (Margolis) 10/01/15 – 12/31/16 0.96 calendar  
 Qura Therapeutics \$ 230,000

Project #4 Mechanism-targeted Latency Reversing Agent (LRA) discovery

This project seeks to discover new LRAs, for the development of therapies leading to an HIV Cure

Role: PI

HHSN272201500032C (Koenig) 01/01/16-08/31/22 0.24 calendar  
 NIH/NIAID \$ 4,994,237

Immune-Based Antiviral Products for Suppression/Elimination of HIV-1

To perform product development and advance therapeutic products, Dual Affinity Re-Targeting (DART®)-1 and DART-2, into Phase 1/2 Clinical Trials for use as therapeutic agents, in combination with latency reversing treatments, and to deplete human immunodeficiency virus (HIV) infection that persists despite the presence of existing combination anti-retroviral therapy.

Role: Co-Investigator

R01AI125097-01A1 (Soriano) 07/05/16 – 06/30/21 0.60 calendar  
 NIH/NIAID \$ 473,282

Peripheral and tissue-resident gamma/delta T cells in HIV latency

Our investigations will contribute critically to the effort to define and attack HIV infection within persistent, latently infected cells.

Role: Co-Investigator

R01HL132791-01 (Margolis) 07/15/16-03/31/21 0.60 calendar  
 NIH/NHLBI \$ 2,990,145

HIV-specific ex-vivo expanded T cell therapy (HXTC) to Deplete the Latent Reservoir of Persistent HIV Infection

This project aims to investigate HIV-specific ex vivo expanded T cells (HXTCs) alone and in combination with the latency reversing agent, vorinostat, for induction of latent virus expression and depletion of the latent reservoir.

Role: PI

UM1 AI124436-01 (Hunter PI) 06/01/16-05/31/21 0.24 calendar  
 NIH/NIAID \$ 454,109

B AND T CELL BIOLOGY OF PROTECTION FROM AND ERADICATION OF SIV/SHIV INFECTION

The Emory Consortium for Innovative AIDS Research in Nonhuman Primates aims to understand the B and T Cell Biology of Protection from and Eradication of SIV/SHIV Infection.

Role:Co-Investigator

Margolis, David M.

July 2016

T32 AI 007151-37 (Margolis) 07/01/78-05/31/19

0 calendar

NIH/NIAID

\$268,141

Infectious Disease Pathogenesis Research Training

This project funds the study of infectious disease pathogenesis by postdoctoral MD, PhD, and MD-PhD fellows.

Role: PI

**COMPLETED:**

U19 AI096113-05 (Margolis) 07/08/2011-06/30/16

3.17 calendar

NIH

\$5,729,039

Martin Delaney Collaboratory to Eradicate HIV-1 Infection

Despite the clinical success of antiretroviral therapy (ART), more people contract human immunodeficiency virus (HIV) infection daily than initiate ART. The difficulties of lifelong ART -- particularly in the developing world -- make the eradication of HIV imperative.

Role: PI

R56AI114464-01A1 (Margolis) 09/01/14-08/31/19

2.40 calendar

NIH

\$1,855,913

The Role Gamma Delta T Cells as Persistent Reservoirs of HIV Infection

Role: PI

5U01AI095052-01-03 (Margolis) 04/01/11-03/31/16

1.20 calendar

NIH

\$343,686

A Phase I/II Investigation of the Effect of Vorinostat (VOR) in HIV Infection

Role: PI

R01 DA030156 (PI: Margolis)

07/15/2010-02/28/2015

NIH/NIDA

\$486,264/yr

HIV Latency, Epigenetics, and Therapeutics

This projects studies the molecular mechanisms that drive epigenetic regulation of HIV proviral latency in CD4+ T cells.

5 R01 MH085597-03 (Margolis) 02/01/2009-01/31/2014 NIAID \$250,673/yr

Nanocrystal delivery to the CNS to improve HIV Therapy

We will test novel nanotherapeutics in cell culture and animal model systems to the blood-brain barrier and of HIV infection.

HSSN266200600019C 09/30/2011-05/31/2013

NIAID/ Argos Therapeutics, Inc.

\$126,946

AGS-004-003 A Randomized, Double Blind, Phase 2B Study Testing the Efficacy and Safety of AGS-004 on Host Control of HIV Replication during Analytical Treatment Interruption; sub-study in acute HIV infection,

ARCHE program (Margolis) 10/01/12-09/30/13

amfAR

\$148,957

Novel assay to measure latently HIV-infected cells: a collaborative project proposed with Dr. Siliciano and Dr Wilson (U Colorado)

R01 AI83158 (replaced AI045297) (Margolis) 07/01/99-08/31/12

Mechanisms of chromatin regulation that drive HIV latency



Over 10 years in this project we defined the role of chromatin regulation, and recruitment and activity of HDACs in latent HIV infection.

5 U01-AI067854-07 (Haynes, B.) 07/01/07-06/30/12

Duke University

Center for HIV/AIDS Vaccine Immunology (CHAVI)

Acute HIV-1 Infection Prospective Cohort Study – to collect biological specimens to study the HIV-1 virus, the host response, the genetic factors that determine HIV transmission and viral set point.

1R21 AI81613-02 (Choudhary)

05/22/09-04/30/11

NIH/NIAID

\$125,000

Modeling HIV-1 Eradication Therapies in the hu-Rag2<sup>-/-</sup> gamma c<sup>-/-</sup> Mouse Model

We will establish suppressive ART in a novel murine model and validate persistent infection of human CD4<sup>+</sup> T cells despite ART, thus providing a model system to study HIV-1 latency and test approaches to deplete persistent HIV infection.

33567

05/28/09-05/27/11

Merck & Co., Inc.

\$50,282

A Pilot Investigation of the Effect of Vorinostat on HIV-1 RNA Expression within Resting CD4<sup>+</sup> T Cells Obtained from HIV-Infected Patients Receiving Stable Antiretroviral Therapy.

1 R34 AI084553-01(Margolis)

09/01/09-08/31/11

NIH/NIAID

\$75,000

The *in vivo* effect of HDAC inhibitors on HIV gene expression in resting CD4<sup>+</sup> T cells. We will directly assess the effect of HDAC inhibitors on HIV latency *in vivo*.

1U19AI082608-02

09/02/09-08/31/11

NIH/NIAID

\$962,660

Innovative therapies to eliminate persistent HIV Infection

This Integrated Preclinical/Clinical Program (IPCP) proposes collaborative and iterative studies using cell culture models of HIV latency, a murine model of HIV infection the setting of potent HAART, and pilot clinical trials in HIV-infected, aviremic human volunteers receiving antiretroviral therapy (ART).

3 R33 AI71940-05S1 (Garcia-Martinez)

06/01/10-05/31/11

NIAID

\$333,850

Implementation of a vaginal/rectal HIV Transmission Model to Evaluate Microbicides

Despite the availability of highly effective antiretroviral therapy HIV infection continues to spread. In the absence of an effective vaccine, alternative approaches to HIV prevention must be developed. The long term goal of our proposal is to elucidate the molecular basis of protection that prevent infection of certain individuals that are repeatedly exposed to HIV. This will lead to novel HIV prevention modalities.

**PRIOR:**

4/05-3/08: NIAID, NIH: R01 award: Clearing persistently HIV-infected resting CD4<sup>+</sup> lymphocytes. \$2,293,565; P.I.

7/08-6/09: Bristol-Myers Squibb Fellows Training Program. Gold Nanoparticle Therapeutics in the Treatment of HIV-1. \$20,000 (mentor of MC Bowman, MD PhD)

- 6/04-5/05: NIAID, NIH: Supplement to R01 award: Repression of HIV transcription; \$102,000; P.I.
- 10/04-9/08: Veteran's Administration Research Service Merit Award: Inhibiting residual replication: towards eradication of HIV infection \$566,400; P.I.
- 1/05-12/05: NIAID, NIH: AIDS Clinical Trials Group, extension \$1,228,674; P.I.
- 4/02-4/04: Veteran's Administration Research Service Merit Award: Modulation of host cell nucleoside metabolism in antiretroviral therapy \$278,500; PI
- 6/01-12/04: NIAID, NIH: AIDS Clinical Trials Group, \$1,481,718 (annual); P.I.
- 8/02-12/04: Roche Laboratories: A Phase II, 24-Week Pilot Study of the Virologic Activity, Safety, Tolerability, and Pharmacokinetics of the Addition of Mycophenolate Mofetil (MMF) 500 mg BID to Failing Antiretroviral Regimens \$359,250; P.I.
- 9/03-3/05: UNCF/Merck Minority Fellowship: sponsor of Nancy Archin, Ph.D.; \$70,000
- 7/03-5/04: NIAID, NIH: Supplement to R01 award: Repression of HIV transcription; \$72,000; P.I.
- 2/04-7/05: Bristol-Myers Squibb: A prospective study evaluating the effects of Atazanavir on several metabolic markers in HIV patients with dyslipidemia; \$82,641; P.I.
- 3/01-4/03: Dupont/BMS developmental funds: Novel Antiretroviral resistance assay \$46,875; PI
- 5/01-5/02: amfAR Basic Research grant: Towards Therapeutic Modulation of HIV Expression, \$72,000; P.I.
- 8/01-8/02: NIAID, NIH: Supplement to R01 award: Repression of HIV transcription \$77,620; P.I.
- 3/00-3/01: Dupont Pharmaceuticals development funds: Novel Antiretroviral resistance assay \$30,000; PI
- 9/99-9/00: NIGM, NIH: SBIR award: funds for study of non-viral gene delivery system \$30,000; collaborator
- 11/99-11/00: Glaxo Wellcome Development Funds: Novel HIV Therapies \$30,000; PI
- 3/98-3/99: NIAID, NIH: R21 award: Repression of HIV transcription \$75,000;
- 9/98-3/99: BioDelivery Sciences: development funds for study of non-viral gene delivery system \$14,050; P.I
- 7/97-7/99: Infectious Diseases Society of America Ortho-MacNeil Young Investigator award: Repression of HIV transcription \$120,000; P.I.
- 2/96-1/97: Univ. of MD Cancer Center award: Repression by BP2, \$20,000; co-P.I.
- 7/96-6/97: Univ. of MD School of Medicine investigator award: Repression of HIV transcription, \$15,000; P.I.
- 7/96-6/97: National Foundation for Infectious Diseases Young Investigator grant: gene transfer to stem cells, \$4000; P.I.
- 8/91-7/94: NIH Physician-Scientist (K-11) Award: HIV-1 Tat activation \$269,864, P.I.

### **Professional Service**

#### *National and Local Committees*

- 1995-97: Community Programs for Clinical Research on AIDS (CPCRA):  
HIV therapies committee (1995-97)  
Co-chairman, HIV therapies protocol development team (1995-6)  
Chairman, HIV therapies protocol development team (1996-7)  
Core (executive) committee (1996-97)
- 2000-04: Member, Immunology Research Agenda Committee, NIAID Adult AIDS Clinical Trials Group (AACTG)
- 2000-02: Member, Therapeutic Immunology Subcommittee, IRAC, NIAID AACTG
- 2000-04: Member, HIV Disease Research Agenda Committee, NIAID AACTG

- 2004-05: Treasurer, V.A. Society for ID Practitioners  
 2004-06: Member, Laboratory Evaluation Subcommittee, NIAID AACTG  
 2005-07: Member, Optimization of Antiretroviral Therapy Committee, NIAID AACTG  
 2006-08: AIDS Clinical Trials Strategic Working Group, NIAID, NIH  
 2004-08: Division of AIDS Research Advisory Committee (ARAC), NIAID, NIH  
 2005-08: Executive Committee, UNC Carolina Clinical Trials Center  
 2007-08: Division of AIDS Research Clinical Trials Networks Strategic Working Group, ARAC liason  
 2007-2010: Member, Translational Research and Drug Development Committee, NIAID ACTG  
 2008-2011: Infectious Diseases Society of America research committee  
 2010: Scientific Steering Committee for 2010 AIDS Vaccine Meeting  
 2011: Scientific Steering Committee for 5th International Workshop on HIV Persistence during Therapy, 2011  
 2007-2015: Member, HIV Reservoirs and Viral Eradication Transformative Science Group (Cure TSG), NIAID ACTG  
 2011-present: International AIDS Society "Towards an HIV Cure" Working Group  
 2009-present: International Workshop on HIV Persistence during Therapy, steering committee  
 Co-chair, 6th International Workshop on HIV Persistence during Therapy, 2013  
 Co-chair, 7th International Workshop on HIV Persistence during Therapy, 2015  
 2016: Chair, Keystone Symposium on HIV Persistence: Pathogenesis and Eradication Squaw Valley, CA; March 20-25

### *Consultant*

- American Foundation for AIDS Research (amfAR) scientific advisory board (2002-present)  
 Service Disabled Veterans Healthcare national advisory board (2005-2006)  
 Hoffman LaRoche data safety monitoring board (2005-2007)  
 CIHR Canadian HIV Trials Network external advisory board (2015-2018)

### *Editorial appointments*

- Editorial Board, *Pathogens & Immunity*, 2016 - present  
 Editorial Board, *Journal of Infectious Diseases*, 2015 - present  
 Editorial Board, *Journal of Virology*, 2008 - 2014  
 Editorial Board, *AIDS*, 2006 - 2012  
 HIV Editor-in-chief, *Contagion*, 2004 - 2006  
 Medical Editor, National AIDS Treatment Advocacy Project, 2003 - 2008  
 Medical Editor, amfAR Research Global Link, 2003 - 2005

### *Ad hoc journal review*

- |                                       |                                   |
|---------------------------------------|-----------------------------------|
| AIDS Research and Human Retrovirology | Gene                              |
| Annals of Internal Medicine           | Immunity                          |
| Antiviral Therapy                     | Journal of AIDS                   |
| Cell                                  | JAMA                              |
| Clinical Pharm. & Therapeutics        | Journal of Biological Chemistry   |
| Current HIV Research                  | Journal of Clinical Investigation |
| Clinical Infectious Diseases          | Journal of Human Virology         |
| DNA and Cell Biology                  | Journal of Immunology             |
| E-Biomedicine                         | Journal of Infectious Diseases    |

Margolis, David M.  
Journal of Virology  
Lancet  
Molecular and Cellular Biology  
Mol. & Cellular Endocrinology  
Nature  
Nature Communications  
Nature Medicine  
Nucleic Acids Research

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Pediatric Infectious Disease  
PLoS Medicine  
PLoS Pathogens  
PLoS One  
Proc. Natl. Acad. Sci. USA  
Science  
Science Translational Medicine  
Virology

#### *Grant review*

- American Foundation for AIDS Research (2002-present)
- NIAID AIDS Clinical Studies & Epi. Study Section (ad hoc 2003, 2004, standing 2010-2014)
- Medical Research Council (U.K.) (ad hoc 1999)
- V.A. Merit Review, Infectious Diseases subcommittee (ad hoc 2000, 2004, 2005)
- American Foundation for AIDS Research (amfAR) 2001-present
- NIH special emphasis panel, Centers for AIDS Research 2001
- NIH AIDS and Related Research Study Section 1 (ad hoc 2002)
- NIAID/NCI Inter-Institute Program for Development of AIDS-related Therapeutics (2003, 2004)
- Canadian Institute of Health Research (ad hoc 2005)
- Swiss National Science Foundation (ad hoc 2006)
- Deutsche Forschungsgemeinschaft (DFG) German Research Foundation (ad hoc 2016)

#### *Site visitor*

- National Cancer Institute Vaccine Branch, 2010

#### *University Service*

- Faculty Committee on Research (2008-2012).
- Tenure/promotion review committees: 2007, 2008
- 21<sup>st</sup> Century Visioning Committee “Using Research to Solve the World’s Problems”; chair Barbara Entewhistle, UNC Provost; 2012-2013

#### *Other Service*

- Greensboro Area Health Education Center: lecturer in Infectious Diseases  
□ (2006, 2008)
- Physician Ass’t Standards Board, N. Texas Veterans' Health System (2002-05)
- Maryland AIDS Drug Assistance Program advisory panel (1998-1999)

#### **Clinical Trials Experience:**

2005-present: UNC Memorial Hospital

##### Principal Investigator:

Inhibiting Histone Deacetylase: Toward Eradication of HIV, 2005-present  
CHAVI 012: Mucosal and Innate Immune Responses, and Viral Reservoirs in Tissues and Cells During Acute HIV-1 Infection, 2008-present

#### NIAID Adult AIDS Clinical Trials Group:

*Investigator University Of North Carolina at Chapel Hill ACTU: 2005-*

Study Team Investigator: ACTG 5286: A Pilot Study of Rifaximin as a Modulator of Gut Microbial Translocation and Systemic Immune Activation in HIV-Infected Individuals with Incomplete CD4+ T-cell Recovery on Antiretroviral Therapy

Study Team Investigator: ACTG 5244: A Double-Blind, Randomized, Pilot Study to Measure the Effect of Treatment Intensification with a Potent Integrase Inhibitor, Raltegravir (MK-0518), on the Level of Persistent Plasma Viremia below 50 copies/mL in Subjects on Protease Inhibitor- or Non-Nucleoside Reverse Transcriptase Inhibitor-Containing Regimens

Study Team Investigator: ACTG 5201: A Prospective open-label trial of regimen simplification to atazanavir/ritonavir alone as maintenance antiretroviral therapy after sustained virologic suppression, 2003-2005

National Protocol Chairman: ACTG 5165: A Randomized, Double-Blind, Placebo-Controlled Pilot Study of  $\beta$ -D-2, 6-Diaminopurine Dioxolane (DAPD) versus DAPD plus Mycophenolate Mofetil (MMF) in Treatment Experienced Subjects; 2001-2006

National Protocol Co-Chair and Protocol Immunologist: ACTG 5170: Predictors of immunologic and clinical progression in subjects with a low pre-antiretroviral therapy risk of progression who discontinue antiretroviral therapy with CD4+ cell counts > 350 cells/mm<sup>3</sup>; 2001-2006

*Investigator University of Texas Southwestern Medical Center ACTU: 2000-2001*  
*Principal Investigator UTSW ACTU: 2001-2005*

Study Team Investigator and IRAC representative: ACTG 5138: Augmenting the magnitude of HAART-induced immune restoration with the use of cyclosporine; 2001-2005

Vice-Chair and IRAC representative: ACTG 5174: Improving immune reconstitution with growth hormone in HIV infected subjects with incomplete CD4+ lymphocyte restoration on HAART; 2001-2005

Study Team Investigator: ACTG 5183: Phase I/II, open-label study analyzing the safety and immunogenicity of a highly attenuated strain of vaccinia virus (MVA-BN<sup>®</sup>) administered to HIV-infected individuals with controlled viral replication; 2002-2004

1999-2005: University of Texas Southwestern Medical Center  
Dallas Veterans Affairs Medical Center:  
Principal Site Investigator:

Gilead Sciences 907: A Phase III, Double-Blind, Randomized, Placebo-Controlled, Multicenter Study of the Safety and Efficacy of Tenofovir DF in Combination with Other Antiretrovirals for the Treatment of HIV-Infected Patients; 2000-01

Gilead Sciences 908: Tenofovir DF in Combination With Other Antiretrovirals for the Treatment of HIV-Infection; 2000-01

Abbott ABT378/r early Access Program; 2000-2001

Glaxo Wellcome COL 30336: The Efficacy and Safety of Quadruple Combination Antiretroviral Therapy with Combivir, Ziagen, and Sustiva; 2000-01

Glaxo Wellcome ESS40006: A Phase II, Randomized, Open Label Comparative Study of Two Different Dosage Regimens of Amprenavir in Combination with Ritonavir Plus Abacavir, Another NRTI, and Either Efavirenz or Tenofovir DF in HIV-1 Infected Subjects with Virologic Evidence of Treatment Failure, 2000-2002

Gilead Sciences 910: An Open Label Extension Study of Tenofovir DF in Combination with Other Antiretrovirals for the Treatment of HIV-Infected Patients; 2001-2003

OPTIMA: A Tri-National (Canada, UK, USA) Randomized Controlled Trial To Determine The Optimal Management Of Patients With HIV Infection For Whom First And Second-Line Highly Active Antiretroviral Therapy Has Failed; 2001-2005

Glaxo SmithKline ZIP: A Phase IV, Open-Label, Multicenter Study of Treatment with Trizivir and Tenofovir in HIV-Infected Subjects Experiencing Early Virologic Failure; 2002-2004

Boehringer-Ingelheim 1182.12, 1182.17, 1182.51 and 1182.52: Phase III studies of tipranavir; 2003-2005

Tibotec Pharmaceuticals TMC 125-002: Phase II study of TMC 125; 2004-05

Principal Investigator:

Pilot study of the safety and virological efficacy of abacavir and mycophenolate mofetil in HIV infection, 1999-2003

A Phase II, 24-Week Pilot Study of the Virologic Activity, Safety, Tolerability, and Pharmacokinetics of the Addition of Mycophenolate Mofetil (MMF) 500 mg BID to Failing Antiretroviral Regimens, 2002-2004

Effect of Cirrhosis or HIV Infection on Hepatic Gluconeogenesis by NMR of Blood and Urine (co-PI); 2001-2002

Effect of Depot Recombinant Human Growth Hormone in HIV-related lipodystrophy (co-PI), 2003-2004

A randomized pilot study comparing dual (TDF/FTC) versus monotherapy (TDF) in HIV treatment naïve subjects with Hepatitis B viremia (co-PI) 2002-2005

The Effect of Intensified ART Therapy on the Frequency of HIV in Resting CD4 Cells (PI), 2003-2005

The effects of atazanavir on QT dispersion in HIV patients (PI), 2003-04

A prospective study evaluating the effects of Atazanavir on several metabolic markers in HIV patients with dyslipidemia, 2004-2006

1994-99: University of Maryland Medical Systems:

*Investigator:* Baltimore TRIALS CPCRA research unit, 1994-1997

*Principal Site Investigator:*

Upjohn delavirdine protocols 0021 and 0023, 1996-98

Efavirenz expanded access, 1997-1998

Pilot study of the safety and virological efficacy of abacavir and mycophenolate mofetil in HIV infection, 1999

1991-94: University of Massachusetts Medical Center:

*Principal Site Investigator:*

Parallel track protocol A1455-900: Evaluation of two doses of stavudine  
Treatment IND study 087085: Rifabutin for MAC prophylaxis

*Investigator:*

University of Massachusetts Medical Center ACTU:  
ACTG 117, ACTG 118, ACTG 164, ACTG 168, CCTG 066174