CURRICULUM VITAE

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Education and Training

A.B.; Harvard College, Cambridge, MA 1977-81

M.D.; Tufts University School of Medicine, Boston, MA; 1981-85

Tufts-New England Medical Center, Boston, MA; Department of Medicine, Internship and residency in internal medicine, 1985-88

National Institutes of Health, National Institute of Allergy and Infectious Diseases,

Bethesda, MD; Infectious Diseases fellowship, 1988-91:

1988-89: Medical Staff Fellow, Laboratory of Clinical Investigation1989-91: 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, 1991-1994

Board Certifications:

Diplomate in Infectious Diseases, American Board of Internal Medicine, 1992, 2003

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; 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

The University of Texas Southwestern Medical School at Dallas 1999-2005 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, 1994-1999

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, 1991-94 Assistant Professor and Attending Physician, Division of Infectious Diseases and Adult HIV Clinic, University of Massachusetts Medical Center

Honors and Awards

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

Member, American Society of Clinical Investigation, 2005

First place, presentation: 5th International Workshop on HIV Drug Resistance and Treatment Strategies; 2001

Fellow, Infectious Diseases Society of America, 1998

Infectious Diseases Society of America Ortho-MacNeil Young Investigator award, 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, New England chapter, American College of Physicians, 1988

Magna Cum Laude, Harvard College, 1981

Bibliography

Original research

- Sabado RL, O'Brien M, Subedi A, Qin L, Hu N, Taylor E, Dibben O, Stacey A, Fellay J, Shianna K, Siegal F, Shodell M, Shah K, Larsson M, Lifson J, Nadas A, Marmor M, Hutt R, Margolis DM, Garmon D, Markowitz M, Valentine F, Borrow P, Bhardwaj N. Evidence of dysregulation of dendritic cells in primary HIV infection. Blood. 2010; Epub ahead of print. PMID: 20693428
- 2. Gandhi RT, Zheng L, Bosch RJ, Chan ES, Margolis DM, Read S, Kallungal B, Palmer S, Medvik K, Lederman MM, Alatrakchi N, Jacobson JM, Wiegand A, Kearney M, Coffin J, Mellors JW, Eron JJ, on behalf of the AIDS Clinical

Trials Group A5244 team. The Effect of Raltegravir Intensification on Low-level Residual Viremia in HIV-Infected Patients on Antiretroviral Therapy: A Randomized Controlled Trial. PLoS Med. 2010; 7(8). pii: e1000321.

- Smith K., Zheng L., Bosch R., Margolis DM, Tenorio A., Napolitano L., Saag M., Connick E., Gross B., Francis I., Valdez H., Muurahainen N., Stocker V., Pollard R. Treatment with Recombinant Growth Hormone Is Associated with Modest Improvement in CD4 Lymphocyte Reconstitution in HIV-Infected Persons on Antiretroviral Therapy: Results of ACTG A5174. AIDS Res Human Retro 2010; 26: 425-432.
- 4. Archin NA, Cheema M, Parker D, Wiegand A, Bosch R, Coffin J, Eron J, Cohen M, and Margolis DM. Antiretroviral intensification and valproic acid have limited effect on residual HIV-1 viremia or resting CD4+ cell infection. PLoS One 2010; 5:e9390.
- Robertson KR, Su Z, Margolis DM, Krambrink AR, Havlir DV, Evans S, Skiest DJ for the A5170 study team. Neurocognitive effects of treatment interruption in stable HIV-positive patients in an observational cohort. Neurology. 2010; 74:1260-1266
- 6. S Munshaw, H Liao, A Dixon, X Chen, A Nagel, K Derosa, R Parks, J Amos, JF Whitesides, DJ Marshalls, Y Yang, F Gao, GD Tomaras, MA Moody, GH Kelsoe, TC Shea, DM Margolis, M Markowitz, P Goepfert, G Shaw, BF Haynes, and TB Kepler. A large-scale analysis of immunoglobulin sequences derived from plasmablasts/plasma cells in acute HIV-1 infection subjects. Retrovirology 2009; 6 (Suppl 3):4. PMCID: PMC2767562
- L Liao, X Chen, A Dixon, S Munshaw, M Moody, R Zhang, A Nagel, A Foulger, K Derosa, R Parks, M Mcparland, J Whitesides, D Marshall, J Amos, Y Yang, F Gao, T Shea, D Margolis, G Shaw, M Markowitz, T Denny, G Kelsoe, G Tomaras, T Kepler, and B Haynes. Characterization of the plasma cell repertoire in acute HIV-1 infection (AHI). Retrovirology 2009; 6(Suppl 3): 73. PMCID: PMC2767977
- Archin NM, Keedy KS, Espeseth AS, Dang H, Hazuda DJ, and Margolis DM. Expression of Latent Human Immunodeficiency Type-1 is Induced by Novel and Selective Histone Deacetylase Inhibitors. AIDS. 2009; 23:1799-806.
- 9. Choudhary SK, Rezk NL, Ince WL, Cheema M, Zhang L, Su L, Swanstrom R, Kashuba AD, Margolis DM. Suppression of HIV-1 viremia with reverse transcriptase and integrase inhibitors, CD4+ T cell recovery, and viral rebound upon therapy interruption in a new model for HIV treatment in the humanized Rag^{-/-} γ_c^{-/-} mice. J Virol. 2009. 83:8254–8258. PMID: 19494021
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- 11. Keedy KS, Archin NM, Gates AT, Espeseth AS, Hazuda DJ, and Margolis DM. A limited group of class I histone deacetylases act to repress human immunodeficiency virus type-1 expression. J Virol. 2009; 88:4749–4756. PMID: 19279091.

12. Archin NM, Espeseth A, Parker D, Cheema C, Hazuda DJ, Margolis DM. Expression of Latent HIV Induced by the Potent HDAC Inhibitor Suberoylanilide Hydroxamic Acid. AIDS Res Hum Retro. 2009; 25:207-212.

- 13. Wilkin TJ, DiRienzo G, Droll K, McKinnon J, Fletcher C, Margolis DM, Bastow B, Thal G, Woodward W, Godfrey C, Swindells S. Regimen Simplification to Atazanavir-Ritonavir Alone as Maintenance Antiretroviral Therapy After Sustained Virologic Suppression: Final 48-Week Results. J. Infect Diseases 2009; 199:866-71.
- 14. Skiest DJ, Krambrink A, Su Z, Robertson KR, Margolis DM and the A5170 study team. Improved Measures of Quality of Life, Lipid Profile and Lipoatrophy after Treatment Interruption in HIV-Infected Patients with Immune Preservation: a substudy of ACTG 5170. J Acquir Immune Defic Syndr. 2008; 49:377-83.
- 15. Vahey MT, Wang Z, Ockenhouse CF, Su Z, Nau ME, Krambrink A, Skiest DJ, Margolis DM. Differential Expression of Genes Associated with the Regulation of Apoptosis Predicts Progression in Persons Who Discontinue Antiretroviral Therapy. AIDS Res Hum Retro. 2008; 24:1047-66
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- 17. Archin NA, Eron JJ, Palmer S, Hartmann-Duff A, Martinson JA, Wiegand A, Bandarenko N, Schmitz JL, Bosch RJ, Landay AL, Coffin JM, Margolis DM. Standard ART and Valproic Acid Have Limited Impact on the Persistence of HIV Infection in Resting CD4+ T Cells. AIDS 2008; 22:1131-1135
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- 19. Choudhary, S.K., Archin, N.M., Margolis, D.M. Hexamethylbisacetamide and Disruption of Human Immunodeficiency Virus Type 1 Latency in CD4+ T Cells. J Infectious Diseases 2008; 197:1162–1170.
- 20. Busti AJ, Bedimo R, Margolis DM, Hardin DS. Improvement in insulin sensitivity and dyslipidemia in protease inhibitor-treated adult, male patients after switch to atazanavir/ritonavir. J. Invest. Med. 2008; 56:539-544.
- 21. Jiang G, Espeseth A, Archin NM, Hazuda DJ, and Margolis DM. c-Myc and Sp1 contribute to proviral latency by recruiting HDAC1 to the Human Immunodeficiency Virus Type 1 promoter. J. Virology 2007; 81:10914-23.
- 22. Margolis DM, Mukherjee L, Hogg E, Fletcher C, Ogata-Arakaki D, Petersen T, Rusin D, Martinez A, Adams E, Mellors J, and Adult AIDS Clinical Trials Group A5165 team. The Safety and Antiviral Activity of b-D-2,6-Diaminopurine Dioxolane (DAPD) with or without Mycophenolate Mofetil (MMF) in Multidrug-resistant HIV Infection (AIDS Clinical Trials Group study A5165). AIDS 2007; 21:2025-2032.
- 23. Skiest, D.J., Su, Z., Havlir, D.V., Robertson, K.R., Coombs, R.W., Cain, P., Peterson, T., Kambrick, A., Jahed, N., McMahon, D., Margolis, D.M. Antiretroviral Treatment Interruption in HIV-infected Patients with Preserved Immune Function is Associated with a Low Rate of Clinical Progression: A Prospective Study. J. Infect. Diseases. 2007; 195:1426-36.
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Sevin, A., Tebas, P., Sieg, S.F., Medvik, K., Margolis, D.M., Pollard, R., Ertl H.C.J., Valdez, H. In chronic HIV-1 infection, Cyclosporine A provides no sustained immunologic benefit to persons starting suppressive antiretroviral therapies – results of a randomized controlled trial of the AIDS Clinical Trials Group: A5138. J. Infect. Diseases. 2006; 194:1677–85

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- 28. Kaur, R., Bedimo, R., Shaw, L., and Margolis, D.M. A placebo-controlled, double blind, pilot trial of intensification of antiviral therapy with mycophenolate mofetil. AIDS Res Ther. 2006; 3:16-20.
- 29. Klichko, V., Kaur, R.J., Archin, N., Lehrman, G, and Margolis, D.M. Hexamethylbisacetamide remodels the Human Immunodeficiency Virus type 1 promoter and induces Tat-independent HIV-1 expression without cellular activation. J. Virology. 2006; 80:4570–4579
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- 33. Ylisastigui L., Coull, J.J., Rucker V.C., Melander, C., Bosch, R.J., Brodie, S.J., Corey, L., Sodora, D.L., Dervan, P.B., and Margolis, D.M. Polyamides Reveal a Role for Repression in Viral Latency within HIV-infected Donors' Resting CD4+ T Cells. J. Infectious Diseases. 2004; 190:1429-37.
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- 43. Margolis, DM, Kewn, S, Coull, JJ, Ylisastigui, L, Turner, D, Wise, H, Hossain, MM, Lanier, ER, Shaw, LM, Back, DJ. The Addition of Mycophenolate Mofetil to Antiretroviral Therapy Including Abacavir is Associated with Depletion of Intracellular Deoxyguanosine Triphosphate and a Decrease in Plasma HIV-1 RNA. J. Acquir. Immune Defic Syndr. 2002; 31:45–49
- 44. Hossain MM, Coull JJ, Drusano GL, Margolis, DM. Dose proportional inhibition of HIV-1 replication by mycophenolic acid and synergistic inhibition in combination with abacavir, didanosine, and tenofovir. Antiviral Res. 2002; 55:41-52.
- 45. Coull, JJ, Turner, D, Betts, M, Melby, T, Lanier, ER, Margolis, DM. A pilot study of the use of mycophenolate mofetil as a component of therapy for multidrug-resistant HIV-1. J Acquir Immune Defic Syndr 2001; 26:423-434.
- 46. Hossain, MM, Margolis, DM. Inhibition of HIV Replication by A77 1726, the Active Metabolite of Leflunomide, in Combination with Pyrimidine Nucleoside Reverse Transcriptase Inhibitors. J Acquir Immune Defic Syndr. 2001; 28:199-201.
- 47. Coull, J, Romerio, F, Sun, J-M, Volker, JM, Galvin, KM, Davie, JR, Shi, Y, Hansen, U, Margolis, DM. The human factors YY1 and LSF repress the human immunodeficiency virus type-1 long terminal repeat via recruitment of histone deacetylase 1. J. Virology 2000; 74:6790–6799.
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- 54. Chougnet, CA, Margolis, DM, Landay AL, Kessler HA, Shearer, GM. Contribution of prostaglandin E2 to the Interleukin-12 defect in HIV-infected patients. AIDS 1996; 10:1043-1045
- 55. Margolis, DM, Somasundaran, M, Green, MR. Human transcription factor YY1 represses HIV-1 transcription and virion production. J. Virology 1994; 68:905-910.
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- 59. Margolis, DM, Melnick, DA, Alling, DW, Gallin, JI. Trimethoprim-sulfamethoxazole in the management of chronic granulomatous disease. J. Infect. Dis. 1990; 162:723-726.
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- 62. Sidman, RL, Willinger, M, Margolis, DM. Mouse weaver mutation affects granule cell neurite growth in vitro. Birth Defects Orig Artic Ser. 1983; 19:189-200.
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- Romerio, F, and Margolis, DM: In vitro techniques for studies of HIV-1 promoter activity. In: N.L. Michael and J.H. Kim, eds. Methods in Molecular Medicine, vol. 17: HIV Protocols. Totowa, NJ: Humana, 1999: 197-203.

Other peer-reviewed articles

- 1. Curing HIV: Pharmacologic approaches to target HIV-1 latency. Choudhary SK, Margolis DM. Annu Rev Pharmacol Toxicol. 2011; 51:397-418.
- 2. Margolis DM. Histone deacetylase inhibitors and HIV latency. Curr Opin HIV AIDS in HIV and AIDS 2011; 6:25–29
- 1. Margolis DM. Mechanisms of HIV Latency: An Emerging Picture of Complexity. Curr HIV/AIDS Rep. 2010; 7:37-43. PMID: 20425056
- 2. Keedy KK, Margolis DM. Therapy for Persistent HIV. Trends Pharm Sci. 2010; 31:206-211. PMID: 20207023
- 3. Richman DD, Margolis DM, Delaney M, Greene WC, Hazuda D, Pomerantz R. The Challenge of a Cure for HIV Infection. Science. 2009; 323:1304-1307.
- 4. Bowman MC, Archin NM, Margolis DM. Pharmaceutical approaches to eradication of persistent HIV infection. Expert Rev. Mol. Med. 2009; 11:e6.
- Margolis DM. Confronting proviral Infection. Current HIV/AIDS Reports 2007, 4:60–64
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- 9. He, G, Ylisastigui, L, Margolis, DM. Chromatin Regulation of HIV-1 Expression. DNA and Cell Biology 2002; 21:697-705.
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- 12. Bräu, N., Leaf, H.L., Wieczorek, R.L., Margolis, D.M. Severe hepatitis in three AIDS patients treated with the protease inhibitor indinavir. Lancet 1997, 349:924-925.
- Clark, JA, Margolis, DM. A cutaneous lesion due to Mycobacterium Avium complex: an unusual presentation in an AIDS patient. Clin. Inf. Dis. 1993; 16: 655-657.
- 14. Davey, RC, Margolis, DM, Kleiner, DE, Travis WD, Masur, H.: Digital necrosis and disseminated pneumocystis carinii. Ann. Int. Med. 1989; 111(8): 681-682.
- 15. Margolis DM, Ross E, Miller KB: Rhabdomyolysis associated with high-dose cytarabine. Cancer Treatment Reports 1987; 71(12): 1325-1326.

Editorials and letters

- Infectious Diseases Society of America Research Committee. Grinding to a Halt: The Effects of the Increasing Regulatory Burden on Research and Quality Improvement Efforts. Clinical Infectious Diseases 2009; 49:328–335.
- 2. Margolis DM. Treatment for lipoatrophy: facing the real costs. AIDS. 2007; 21:1819-2
- 3. Margolis DM and Archin NM. Eliminating Persistent HIV Infection: Getting to the End of the Rainbow. J Infect Dis. 2007; 195:1734-6.
- 4. Margolis, D.M. Low-level viremia and low-level anxiety: Defining the clinical comfort zone. Contagion 2005; 2 (11): 457-458.
- 5. Margolis, D.M. Bashing the cell to kill the virus: inhibition of human enzymes as an alternate antiviral strategy. Contagion 2005; 2 (7): 334-335.
- 6. Bedimo, R., Margolis, D.M. Challenges of non-AIDS-defining cancers among HIV-infected patients. Contagion 2005; 2(2): 71-73.
- Margolis, D.M. Drug resistance patterns and selecting or revising antiretroviral therapy. Contagion 2004; 1(1): 29-31.
- 8. Margolis, D.M. Interferon inactivator(s) in patients with AIDS and AIDS-unrelated Kaposi's sarcoma. Am J Med. 1987; 82(6): 1278.

Published abstracts

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- Raltegravir (RAL) intensification does not reduce low-level residual viremia in HIV-1-infected patients on antiretroviral therapy (ART): results from ACTG A5244. R. Gandhi, S. Zheng, R. Bosch, E. Chan, D. Margolis, S. Read, B. Kallungal, H. Sprenger, J. Janik, J. Jacobson, A. Wiegand, M. Kearney, S. Palmer, J. Coffin, J. Mellors, J. Eron, AIDS Clinical Trials Group A5244 Team. 5th IAS Conference on HIV Pathogenesis, Treatment and Prevention (IAS 2009), 19-22 July 2009 - Cape Town, South Africa
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- 11. Induction of B Cell Polyclonal Differentiation and Apoptosis With Massive Gastrointestinal Tract Germinal Center Loss In the Earliest Stages of HIV-1 Infection. BF Haynes, MA Moody, MC Levesque, KKi Hwang, GM Shaw, G Tomaras, C Hicks, M Markowitz, T Kepler, S Munshaw, G Kelsoe, DM Margolis, and HX Liao, Keystone Symposium on HIV Vaccines. Keystone, CO. April 2009.
- 12. Analysis of Immunoglobulin Sequences Derived From Plasmablasts/Plasma Cells in Acute HIV-1 Infection Subjects. S Munshaw, HX Liao, A Dixon, X Chen, A Nagel, R Parks, JF Whitesides, DJ Marshall, J Amos, Y Yang, F Gao, MC Levesque, GD Tomaras, A Moody, G Kelsoe, DM Margolis, M Markowitz, BF Haynes and TB Kepler. Keystone Symposium on HIV Vaccines. Keystone, CO. April 2009.
- 13. Production and characterization of blood, bone marrow and terminal ileum anti-HIV antibodies from subjects with acute/early HIV-1 infection. KK Hwang, M McAdams, SM Xia, M Gustilo, G Tomaras, DM Margolis, TC Shea, CB Hicks, M Markowitz, SM Alam, HX Liao, and BF Haynes. Keystone Symposium on HIV Vaccines. Keystone, CO. April 2009.
- 14. Characterization of the Specificities of Bone Marrow and Blood Plasmablasts/Plasma Cells in Acute HIV-1 Infection Subjects. H-X Liao, A Dixon, X Chen, A Nagel, S Munshaw, R Parks, JF Whitesides, DJ Marshall, J Amos, Y Yang, F Gao, TB Kepler, MC Levesque, GD Tomaras, A Moody, G Kelsoe, TC Shea, DM Margolis, M Markowitz, and BF Haynes. Keystone Symposium on HIV Vaccines. Keystone, CO. April 2009.

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- 17. Differential Representation of HIV-1 gp41 Immunodominant Versus Membrane Proximal Epitope-Specific B Cells in Subjects Chronically Infected with Clade B HIV-1. MA Moody, TC Gurley, S Allgood, PD McNair, MS Drinker, HX Liao, M Markowitz, D Margolis, CB Hicks, SM Alam, DJ Marshall, JF Whitesides, MC Levesque, BF Haynes. Center for HIV-AIDS Vaccine Immunology (CHAVI) Annual Meeting, Durham, NC, September 2008
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- 19. Efficacy of NNRTI-Based Antiretroviral Therapy initiated during Acute HIV Infection. C Gay, A Johnson, S McCoy, J Kuruc, K McGee, L McNeil, M Kerkau, C Pilcher, D Margolis, P Leone, S Fiscus, G Ferrari, C Hicks, J, The Duke-UNC Acute HIV Infection Consortium. AIDS 2008 XVII International AIDS Conference, Mexico City, Mexico August 2008.
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- 23. HIV-1 Inhibition with Multivalent Gold Nanoparticles. MC Bowman, E Ballard, C Akerson, J D'Antonio, D Feldheim, C Melander, and D Margolis. 15th Annual Conference on Retroviruses and Opportunistic Infections, Boston MA, February 2008; abstr. 744
- 24. Diagnosing Acute HIV Infection in North Carolina: Challenges and Opportunities. K McGee, S Kim, A Johnson, J Kuruc, S McCoy, L McNeil, C Gay, D Margolis, J Eron, and C Hicks. 15th Annual Conference on

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- 26. Resting CD4+ T cell infection in acute HIV infection reflects early control of viral replication. NM Archin, J Eron, L Ngo, J Kuruc, C Hicks, N Bandarenko, S Fiscus, C Gay, M Kerkau, S McCoy, K McGee, J Whitesides, J Schmitz, Cohen MS, and DM Margolis. Center for HIV-AIDS Vaccine Immunology (CHAVI) Annual Meeting, Durham, NC, September 2007
- 27. Antiretroviral Treatment of Acute HIV Infection: Symptomatic bias, cytokines and chemokines. Cohen, MS, Gay, C, Stacey, A, Dibben, O, McCoy, S, Kuruc, J, McGee, K, Fiscus, S, Margolis, D, Eron, J, Hicks, C, Borrow, P. Center for HIV-AIDS Vaccine Immunology (CHAVI) Annual Meeting, Durham, NC, September 2007
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- 29. Patient reported symptoms improve following prolonged treatment interruption: ACTG 5170 quality of life results. Skiest D., Krambrink A., Su Z., Robertson K., Havlir D., Margolis D. 4th IAS Conference, Sydney, Australia, July 2007.
- 30. Standard ART and Valproic Acid have Limited Impact on Persistent HIV Infection of Resting CD4+ T Cells. NM Archin, J Eron, S Palmer, L Ngo, A Hartmann Duff, N Bandarenko, J Schmitz, A Wiegand, JM Coffin, AL Landay, RJ Bosch, Cohen MS, DM Margolis. 16th International HIV Drug Resistance Workshop, Barbados, June 2007
- 31. This Is Your Brain Off Drugs: Neurocognitive Function before and after ART Discontinuation in Patients with High CD4 Nadir (ACTG A5170). K Robertson, Z Su, A Krambrink, S Evans, D Havlir, D Margolis, D Skiest, and ACTG 5170 team. 14th Annual Conference on Retroviruses and Opportunistic Infections, Los Angeles CA, February 2007; abstr. 113
- 32. c-Myc and Sp1 Recruit Histone Deacetylase-1 to the HIV-1 Promoter: Combinatorial Mechanisms Maintain Latency. G Jiang, A Espeseth, D Hazuda, and D Margolis. 14th Annual Conference on Retroviruses and Opportunistic Infections, Los Angeles CA, February 2007; abstr. 225
- 33. Expression of Latent HIV Induced by a Selective Class I HDAC Inhibitor. N Archin, A Espeseth, A Duff, M Cheema, D Parker, D Hazuda, and D Margolis. 14th Annual Conference on Retroviruses and Opportunistic Infections, Los Angeles CA, February 2007; abstr. 501
- 34. In Chronic HIV-1 infection, Cyclosporine A Provides No Sustained Immunologic Benefit to Persons Starting ART. M Lederman, L Smeaton, K Smith, B Rodriguez, H Wang, P Tebas, S Sieg, D Margolis, C Pilcher, H Valdez, and AIDS Clinical Trials Group A5138 team. 14th Annual Conference on Retroviruses and Opportunistic Infections, Los Angeles CA, February 2007; abstr. 129

35. Attacking latent HIV: towards eradication of HIV infection. Archin N, Hartmann Duff A, Eron J, Ngo L, Bandarenko N, Schmitz J, Leone P, Pilcher C, Jiang G, Hicks CB, Wohl D, Fiscus S, Swanstrom R, Cohen M, Margolis D. AIDS 2006 - XVI International AIDS Conference, Abstract no. TUPE0059

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- 37. Resistance Mutations to Non-Nucleoside Reverse Transcriptase Inhibitors (NNRTIs) After Discontinuation of a Virologically Suppressive Regimen. CB Hare, J Mellors, A Krambrink, Z Su, D Skiest, D Margolis, S Patel, D Barnas, L Frenkel, R Coombs, F Aweeka, G Morse, D Haas, R Kim, V Boltz, S Palmer, J Coffin, DV Havlir. 15th International HIV Drug Resistance Workshop, Sitges, Spain, June 2006
- 38. Multi-Genome Sequencing (MGS): A New, Sensitive Method of Detecting Low Frequency Drug–Resistant Mutants. D Barnas, Mary Kearney, V Boltz, S Patel, F Maldarelli, B Hare, D Havlir, Z Su, A Krambrink, D. Margolis, S Palmer, J Coffin, and J Mellors. 15th International HIV Drug Resistance Workshop, Sitges, Spain, June 2006
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- 40. Differences in Calculated Glomerular Filtration Rates in Efavirenz- or Tenofovir-treated Adults in ESS40006. Melanie Thompson, R Haubrich, D Margolis, S Schneider, R Schooley, K Pappa, J Sail, L Yau, and J Hernandez. 13th Annual Conference on Retroviruses and Opportunistic Infections, Denver, CO, February 2006.
- 41. Induction of HIV-1 expression in latently infected cell lines and inhibition of Primary Blood Cell Infection by HMBA. V. Klichko, R. Kaur and D.M. Margolis. Keystone Symposium HIV Pathogenesis. Banff, Alberta, Canada. April 2005
- 42. 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., Wang R., Bosch R., Margolis D., Tenorio A., Pollard R., Stocker V., Gross B., Frances I., Muurahainen N., ACTG Protocol Team A. The 3rd IAS Conference on HIV Pathogenesis and Treatment, 2005. Abstract no. TuOa0203
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- 45. Determinants of replication capacity (RC) in HIV-1 isolates from ARTexperienced adults failing a PI based regimen. RH Haubrich, J Hernandez, M Bates, M Thompson, D Margolis, K Pappa, L Yau, R Schooley. 15th International AIDS Conference, Bangkok Thailand, July 2004.
- 46. Late Breaker: Coaxing Human Immunodeficiency Virus Type 1 from Resting CD4+ T Cells: valproic acid induces latent viral expression. DM Margolis, G Lehrman, NM Archin, L Ylisastigui, MB Kvanli, D Turner, J Wagner, H Wise, and RJ Bosch. 11th Annual Conference on Retroviruses and Opportunistic Infections, San Francisco, CA, February 2004.
- 47. Late Breaker: Towards Depletion of the Resting CD4 Cell Reservoir of HIV-1. Ylisastigui L, Johnson H, Margolis, DM. 10th Annual Conference on Retroviruses and Opportunistic Infections, Boston, MA, February 2003
- 48. Effect of Amprenavir Hyper-susceptibility on the Response to APV/Ritonavir-based Therapy in ART-experienced Adults Selected by Baseline Susceptibility (ESS40006): 24-week Data. R Schooley, R Haubrich, M Thompson, D Margolis, S Schneider, D Richman, K Pappa, L Yau, S Hessenthaler, J Hernandez. 10th Annual Conference on Retroviruses and Opportunistic Infections, Boston, MA, February 2003
- 49. Virologic Response to Amprenavir (APV)/Ritonavir (RTV)-based regimens in NNRTI naïve or experienced adults selected by baseline susceptibility (ESS40006): 24-wk data. R Haubrich, M Thompson, D Margolis, S Schneider, R Schooley, D Richman, K Pappa, A Pierce, L Yau, S Hessenthaler and J Hernandez. International Workshop for the Treatment of ART-Experienced Patients, San Diego, CA, September 2002.
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- 52. Derepression of HIV LTR by pyrrole-imidazole polyamides in resting CD4+ T cells. Ylisastigui L, Wozniakowski A, Johnson H, Rucker V, Dervan P, Sodora D and Margolis, DM. Retroviruses, Cold Spring Harbor, NY, May 2002.
- 53. Exposing the Latent Reservoir of Human Immunodeficiency Virus Type 1 via Blockade of Host Repressors. David M. Margolis, Guocheng He, Loyda Ylisastigui, Victor C. Rucker, and Peter B. Dervan. 9th Annual Conference on Retroviruses and Opportunistic Infections, Seattle, WA, February 2002.
- 54. Combivir/Abacavir/Efavrienz- Preliminary 48-week results (COL 30336). Parenti, D., Ruane, P., Margolis, D., Van Kempen, A., Kauf, T., Danehower, S., Yau, L., Hessenthaler, S., Hernandez, J. 39th Annual Meeting of the Infectious Disease Society of America, San Francisco, CA, October 2001.
- 55. The Addition of Mycophenolate Mofetil to Antiretroviral Therapy including Abacavir Can Decrease HIV-1 RNA and Deplete Intracellular dGTP. Margolis, DM, Hossain, MM, Shaw, L, and Back, D. 5th International Workshop on HIV Drug Resistance & Treatment Strategies, Scottsdale, AZ, June 2001.

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- 60. 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. 8th Conference on Retroviruses and Opportunistic Infections, Chicago, IL, February 2001.
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- 71. 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
- 72. 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.
- 73. 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.
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- 75. Downregulation of HIV-1 expression by the transcription factor YY1. Margolis, D.M., Somasundaran, M., Shi, Y., and Green, M.R. 9th International Conference on AIDS. Berlin, June 1993.
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In press/Submitted manuscripts:

- 1. Keedy, K. S., N. M. Archin, and D. M. Margolis. Histone deacetylases 1, 2, and 3 contribute to variegated repression of human immunodeficiency virus type 1 proviral integrants in resting CD4+ T cells. 2011; 29 pages.
- NM Archin, NK Vaidya, M Cheema, R Sackmann, A Sugarbaker, J Scepanski, J Kuruc, C Gay, MS Cohen, J Eron, AS Perelson, and Margolis DM. Early Antiretroviral Therapy during Acute HIV Infection Reduces Latent Infection of Resting CD4⁺ T cells. 2011; 21 pages.

3. Anderson J, Archin NA, Ince W, Parker D., Wiegand A, Coffin J, Kuruc J., Eron JJ, Swanstrom R, Margolis DM. Residual HIV-1 Viremia In Patients on Intensified Antiretroviral Therapy Is Found in Circulating Resting CD4+ T Cells. 2010; 19 pages

- 4. Liao HX, Chen X, Munshaw S, Zhang R, Marshall D, Vandergrift N, Whitesides J, Lu X, Yu JS, Hwang KK, Gao F, Markowitz M, Goepfert P, Shaw G, Walter E, Alam M, Margolis DM, Denny TM, Woods C, Kelsoe G, Tomaras G, Moody AM, Kepler TB, Haynes BF. Plasmacytic Antibody Responses To Transmitted HIV-1 gp41 Envelope Are Polyreactive and Can Originate By Activation of Mutated B Cell Clonal Lineages. 2010; 20 pgs.
- Correlation of HIV-Specific Neutralizing Antibodies (NAb) with Clinical Progression after ART interruption in a Prospectively Evaluated Cohort. McLinden RJ, Margolis DM, Polonis VR, Paris R, Close N, Su Z, Shikuma CM, Kim JH. 2011; 42 pgs.
- 6. O'Brien M, Manches O, Sabado RL, Baranda SJ, Wang Y, Marie I, Rolnitzky L, Markowitz M, Margolis DM, Levy D, and Bhardwaj N. Spatiotemporal trafficking of HIV in human plasmacytoid dendritic cells defines a persistently IFN□-producing and partially matured phenotype. J Clinical Invest. 36 pages; *In press.*

Invited oral presentations

- 1. Attacking Persistent Infection: towards an ART-less future. 8th Annual UCLA HIV Symposium. Los Angeles, CA, October 2010.
- 2. HIV Latency and Eradication. 2010 Case CFAR Annual Conference: Molecular Basis for HIV Pathogenesis, Cleveland OH, August 2010
- 3. Control and Eradication of HIV, Perspectives in Virology Clinical Symposium HIV & Hepatitis, Melbourne, Australia, August 2010
- 4. Residual virus, latency, and eradication strategies, McFarlane Burnett Institute, Melbourne Australia, August 2010.
- 5. Keynote Lecture: Residual virus, latency, and eradication strategies. Mid-Atlantic SIV Research Group Symposium, Frederick, MD, July 2010
- 6. Epigenetic regulation of HIV expression. Centennial Retrovirology Symposium, Prague, Czech Republic, May 2010
- 7. Epigenetic Regulation of Proviral HIV Infection. Institute Genetique et Moleculaire, Montpelier, France, March 2010.
- 8. Anti-HIV Latency Drugs. International Symposium on HIV & Emerging Infectious Diseases, Marseille, France, March 2010
- 9. "Any problem, when examined carefully, becomes more complicated: Designing Eradications Trials." 4rth International Workshop on HIV Persistence during Therapy, St Maarten, December 2009.
- 10. 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.
- 11. World AIDS Day Invited Speaker: "Towards therapies to eradicate HIV Infection" Glaxo SmithKline World AIDS Day symposium, Research Triangle Park, NC, December 2009.
- 12. Invited lecture: "Towards Eradication: the challenge of finding a cure for HIV infection." Czech Science Academy, Prague, Czech Republic, October 2009.

13. Inaugural lecture: 1rst annual conference of GESIDA (Spanish AIDS National Study Group): "Towards Eradication: the challenge of finding a cure for HIV infection." Madrid, October 2009.

- 14. Keynote Lecture: HDAC Inhibitors and HIV Latency: lost in translation? 16th West Coast Retrovirus meeting, Palm Springs, CA October 2009.
- 15. 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.
- 16. 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.
- 17. 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.
- Plenary Lecture: Curing HIV: pharmacological approaches to persistent HIV infection. 10th International Conference on HIV Pharmacology, Amsterdam, April 2009.
- 19. Mechanisms that Maintain Proviral Latency: Targets for Future Therapeutics. Third International Workshop on HIV Persistence during Therapy, St Maarten, December 2007.
- 20. Attacking latent HIV: towards therapies for persistent HIV infection. 10th Annual International Meeting of the Institute of Human Virology. Baltimore, MD. November 2006.
- 21. Targeting the Reservoir. Symposium on HIV Treatment. 44th Annual Meeting of the IDSA. Toronto, CA, October 2006.
- 22. Opportunities in translational research: HIV as a paradigm. Keynote address: Texas Tech Health Sciences Center Annual Research Day, Amarillo, TX. August 2006
- 23. Histone deacetylase inhibition: towards eradication of HIV infection. Case CFAR conference, Cleveland, OH, June 2006.
- 24. Predictors of HIV Disease Progression in Patients Who Stop ART with CD4 Cell Counts >350 cells/mm³ D Skiest, D Havlir, R Coombs, E Adams, P Cain, T Petersen, D Rusin, C Jennings, K Robertson, D Margolis, and the ACTG 5170 Team 13th Annual Conference on Retroviruses and Opportunistic Infections, Denver, CO, February 2006.
- 25. William J. Way award lecture, Duke University School of Medicine, "Towards eradication of HIV infection." January 2006
- 26. 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.
- 27. Rapid Depletion of Latent HIV infection in vivo. D.M. Margolis. Plenary lecture. West Coast Retrovirus meeting. Palm Springs, CA. October 2005.
- 28. 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

29. 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

- 30. Towards Eradication of HIV Infection. D.M. Margolis. Immune restoration Think Tank IX: the Dobson Project. San Francisco, CA, October 2004.
- 31. Targeting Reservoirs of Human Immunodeficiency Virus Infection: inducing latent viral expression without host cell activation. D.M. Margolis. 13th International HIV Drug Resistance and Therapies Workshop. Tenerife, Spain, June 2004
- 32. 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
- 33. 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.
- 34. 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
- 35. 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.
- 36. New targets in HIV therapies. D.M. Margolis. amfAR Think Tank. Dedham, MA. Dec. 2002.
- 37. Adjuvant Therapy. D.M. Margolis. International Workshop for the Treatment of ART-Experienced Patients. San Diego, CA, September 2002
- 38. 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.
- 39. Therapeutic Modulation of Host Cell Factors. D.M. Margolis. 6th UCSF Symposium on Antiviral Chemotherapy. San Francisco, CA, April 19-20, 2002.
- 40. 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.
- 41. 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
- 42. 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.
- 43. 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.

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.
- 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.
- 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

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-present

Recent Advances in Virology (MCRO 711)
Microbiology & Immunology graduate students

2007-present

Integration Selective Seminars, School of Medicine

Fourth year medical students

2009-present

Dissertation committees:

Department of Microbiology & Immunology:

Tamara Nunn (2006-08) Vijay Sivaraman (2008-2009) William Ince (2008-2010)

Kristen Tamburro (2009-present) Alina Lotstein (2009-present)

Program in Translational Medicine, clinical mentor & committee member:

Raquel Burger (2010-present)

Doctoral Student: Kara Keedy (2006-2010)

Kirston Barton (2009-present)

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)

Medical Grand Rounds and other CME lectures (since 2002)

World AIDS Day lecture, UNC School of Pharmacy, December 1, 2010

The Mechanisms of Persistent HIV Infection. UNC Microbiology & Immunology Departmental seminar, Chapel Hill, NC March 2010

Top Ten Advances in HIV Research in 2009. 2010 HIV Mini Fellowship, The University of Texas Medical Branch, Galveston, TX, February 2010.

The desperation of AIDS, the miracle of the therapy, and the challenge to persist. World AIDS Day, Roanoke NC, December 2009

"Can we cure AIDS?" Medical Grand Rounds UNC Memorial Hospital, Chapel Hill, NC November 2009

UNC HIV Care 2009: Drug resistance and Antiretroviral Therapy, Chapel Hill, NC May 2009

UNC HIV Care 2008: Antiretroviral Therapy, Hepatitis B/C; Chapel Hill, NC May 2008

Mechanisms that Maintain Proviral Latency. University of Colorado, Denver, CO; January 2008.

Beyond <50 copies: Can we prevent or eradicate HIV infection in the 3rd decade of AIDS? Medical Management of HIV Infection in the Rural Southeast, SEATEC annual conference, Amelia Island, FL, May 2007.

Encore Colloquium for Continuing Education: Advances in HIV medicine. Raleigh NC, 5 February 2007

Advances in HIV Medicine. Alamance County Med Ctr, AHEC lecture, January 2007

Towards therapies for persistent HIV infection. Vanderbilt School of Medicine, Nashville, TN, November 2006

Attacking persistent HIV infection. Aaron Diamond AIDS Research Center, NYC, NY, October 2006.

Histone deacetylase inhibition: towards eradication of HIV infection. Grady Memorial Hospital, Atlanta, GA, July 2006

HIV Care 2006: UNC at Chapel Hill Symposium. Towards Eradication of Persistent HIV Infection. Chapel Hill, NC May 1, 2006.

Towards eradication of HIV infection. D.M. Margolis. Medical Grand Rounds, Tufts-NE Medical Center. Boston, MA. October 2005.

Rapid Depletion of Latent HIV infection in vivo. D.M. Margolis. PRN Forum. New York City. October 2005

UT Southwestern Medical Grand Rounds: "Eradicating the latent reservoir of HIV: finding light at the end of the tunnel." Dallas, TX Jan. 6, 2005.

National AIDS Treatment Advocacy Project Forum: HIV, the future, and your choices. Houston, TX, July 31, 2004.

Univ. North Carolina Center Department of Medicine Grand Rounds: "Targeting the persistent reservoir of HIV infection." Chapel Hill, NC, June 2, 2004.

- UT Southwestern 14th Annual Symposia on Recent Advances in HIV Medicine. "Resistance Testing and Sequencing in Practice" Dallas, TX, April 23, 2004.
- UT Southwestern Medical Grand Rounds: "Prevention, Suppression or Eradication of Viral Infection: Paradigms for dealing with the challenges of Human Immunodeficiency Virus." Dallas, TX April 8, 2004.
- UT Southwestern 13th Annual Symposia on Recent Advances in HIV Medicine. "Coping with Antiretroviral Resistance." Dallas, TX, April 18, 2003.
- Tulane Univ. School of Medicine. "Molecular mechanisms of persistent HIV infection." New Orleans, LA, March 6, 2003.
- Univ. of Pennsylvania Center for AIDS Research. "Strategies to disrupt the persistent reservoir of HIV infection." Philadelphia, PA, March 3, 2003
- Univ. North Carolina Center for AIDS Research. "Targeting the persistent reservoir of HIV infection." Chapel Hill, NC, Sept. 20, 2002
- Tulane Univ. School of Medicine. "Modulation of Host Cell Nucleoside Metabolism in Antiretroviral Therapy." New Orleans, LA, June 6, 2002.
- UT Southwestern 10th Annual Symposia on Recent Advances in HIV Medicine." "Dealing with Drug Resistance." Dallas, TX, April 5, 2002.

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): Current Position: staff scientist, National Institute of Health, Korea

Jason J. Coull, Ph.D (1998-2001); Current Position: Research Director, Glaxo SmithKline, Stevenage, UK

Mohammed M. Hossain, Ph.D (1999-2001): Current Position: Assistant Professor, University of Pittsburgh, Pttsburgh, PA.

Guocheng He, Ph.D (2000-2002): Current Position: Instructor, UT Southwestern

Lyoda Pons Ylisastigui (2001-2004): Current Position: Scientist, ODC

Therapy Inc., Baylor Inst. for Immunology Research, Dallas, TX

Rupinder Kaur, Ph.D. (2002-2005): Current: family leave

Vladimir Klichko, Ph.D. (2003-2005): Current Position: Research Scientist,

Southern Methodist University, Dallas, TX

Guochun Jiang, Ph.D. (2005-2007): Current Position: Fellowship, Vanderbilt Univ.

Shailesh Choudhary, Ph.D. (2005-2008): Current Position: Research Instructor, UNC Chapel Hill

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, Associate Research Scientist UNC-CH

Kara Keedy (2006-2010): Research Scientist, Cempra Pharmaceuticals Kirston Barton (2009-present)

Liguo Niu, Ph.D. (2009-present)

Mary Manson, Ph.D. (2011-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:

5 U01-Al067854-04 (Haynes, B.) 07/01/07-06/30/12

Duke University \$356,250

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.

5 U01 Al069423-04 (PI: Eron, Joseph) 02/01/07-11/30/13

NIH/NIAID \$1,441,514

UNC AIDS Clinical Trials Unit

The major goals of this project are to provide an effective and efficient system to evaluate the safety and efficacy of the therapeutic interventions against HIV infection, AIDS, and its associated conditions.

1 R01 MH085597-02 (Margolis) 04/01/09-01/31/14

NIH/NIAID \$253,464

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.

1R21 Al81613-02 (Choudhary) 05/22/09-04/30/11

NIH/NIAID \$125,000

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

We will establish suppressive ART in a novel murine model and validate persistent infection of human CD4+ 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+ T Cells Obtained from HIV-Infected Patients Receiving Stable Antiretroviral Therapy.

1 R34 Al084553-01(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+ 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.

No Number Assigned (Margolis) 12/02/09-12/01/12 Argos

Therapeutics \$20,031

AGS-NTS-012 A Study of HIV-Infected Subjects Initiating ART for the First Time for the Purpose of Obtaining Pre-Therapy HIV RNA to Qualify Subjects for the Subsequent HIV RNA-Electroporated Dendritic Cell Immunization Study

1 R01DA030156-01 (Margolis) 07/15/10-02/28/11 NIH/NIDA \$493,207

HIV Latency, Epigenetics, and Therapeutics

Highly active antiretroviral therapy (ART) has lead to a significant decrease in the morbidity and mortality of HIV-infected individuals, but eradication of virus from HIV-infected individuals remains a distant prospect due largely to the ability of HIV to establish latency in resting CD4+ T-lymphocytes. To overcome HIV latency in a broad population of infected individuals, it is also important to assess the effect of environmental exposures, such as those to drugs of abuse, on persistent HIV infection. Therefore a more detailed understanding is needed of the epigenetic mechanisms behind persistent infection.

1 R56 Al83158-01A1 (Margolis)

09/15/10-08/31/11

NIH/NIAID \$273,575

Mechanisms of chromatin regulation that drive HIV latency

The goal of this project is to examine latent infection in different memory T cell subpopulations, and the response of different population to inductive signals.

PENDING

1 R56 AI 89313-01A1 (Nordone) 10/1/2010-9/31/2011

NIH/NIAID \$374,970

Title: Mechanism of HIV latency and viral reactivation in Regulatory T cells
The project seeks to use a primary cell model of infection and cells derived from
HIV+ patients to define the mechanisms by which latency is established and virus
is reactivated in Regulatory T cells.

No Number Assigned (Margolis) 07/01/11-06/30/16

NIH \$4,812,904

Martin Delaney Collaboratory to Eradicate HIV-1 Infection

UO1 Al095052 (Margolis) 03/01/11-02/28/14 NIAID \$450,380

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

No Number Assigned 01/01/11-12/31/15

University of Colorado \$70,423

Addressing Basic Science Questions Concerning Nanoscale Therapeutics

PRIOR:

6/02-5/07: NIAID, NIH: R01 award: Repression of HIV transcription

\$1,125,000; P.I.

4/05-3/08: NIAID, NIH: R01 award: Clearing persistently HIV-infected

resting CD4+ 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
- 4/99-7/02: NIAID, NIH: R01 award: Repression of HIV transcription, \$540,823; P.I.
- 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 Practicioners
- 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- : Member, Translational Research and Drug Development

Committee, NIAID AACTG

2008- : Infectious Diseases Society of America research committee
 2010: Scientific Steering Committee for 2010 AIDS Vaccine Meeting
 2011: Scientific Steering Committee for 2011 International HIV Latency

Workshop

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)

Editorial appointments

Editorial Board, Journal of Virology, 2008-

Editorial Board, AIDS, 2006-

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
Annals of Internal Medicine
Clinical Infectious Diseases

Clinical Pharm. & Therapeutics Current HIV Research

DNA and Cell Biology Gene

Immunity Journal of AIDS

Journal of Biological Chemistry Journal of Clinical Investigation

Journal of Human Virology Journal of Immunology

Journal of Infectious Diseases Molecular and Cellular Biology

PLoS Medicine PLos One

Mol. & Cellular Endocrinology Nucleic Acids Research

The Pediatric Infectious Disease Journal

PLoS Pathogens

Proc. Natl. Acad. Sci. USA 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)

Site visitor

National Cancer Institute Vaccine Branch, 2010

University Service

- Faculty Committee on Research (2008-2012).
- Tenure/promotion review committees: 2007, 2008

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 β-D-2, 6-Diaminopurine Dioxolane (DAPD)

Margolis, David M. January 2011 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/mm³; 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®) administered to HIV-infected individuals with controlled viral replication; 2002-2004

<u>1999-2005: University of Texas Southwestern Medical Center</u>
<u>Dallas Veterans Affairs Medical Center:</u>
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

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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

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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

<u>1991-94: University of Massachusetts Medical Center:</u>

Principal Site Investigator:

Parallel track protocol Al455-900: 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