

BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors in the order listed on Form Page 2. Follow this format for each person. **DO NOT EXCEED FOUR PAGES.**

NAME Cohen, Myron S.		POSITION TITLE Professor of Medicine, Microbiology & Immunology, Public Health	
eRA COMMONS USER NAME (credential, e.g., agency login)			
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable.)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	MM/YY	FIELD OF STUDY
University of Illinois, Urbana, IL	BS	1971	Psychology
Rush Medical College, Chicago, IL	MD	1974	Medicine
University of Michigan, Ann Arbor, MI	Internship	1975	Internal Medicine
University of Michigan, Ann Arbor, MI	Residency	1977	Internal Medicine

A. Positions and Honors

Positions and Employment

- 1980-1985 Assistant Professor of Medicine, Microbiology and Immunology, UNC-Chapel Hill
- 1985-1991 Associate Professor of Medicine, Microbiology and Immunology, UNC-Chapel Hill
- 1990- Chief, Division of Infectious Diseases, UNC-Chapel Hill
- 1991- Professor of Medicine, Microbiology and Immunology, UNC-Chapel Hill
- 1999- Director, UNC Center for Infectious Diseases
- 2001- J. Herbert Bate Distinguished Professor
- 2004- Professor of Medicine, Microbiology, Immunology and Public Health, UNC-Chapel Hill
- 2007- Director, Institute for Global Health and Infectious Diseases
- 2007- Associate Vice Chancellor for Medical Affairs—Global Health

Other Experience and Professional Memberships

- 1980 Fellow, Infectious Disease Society
- 1989 Member, American Society for Clinical Investigation
- 1997-2004 Director, NIH STD Clinical Trials Unit
- 1997- Associate Director, UNC CFAR
- 1997- Co-Director, UNC Fogarty Center
- 2000, 2004 Member, Institute of Medicine Committees
- 2004- Associate Editor, Sexually Transmitted Diseases
- 2005 Member, Association of American Physicians
- 2005- Scientific Leadership Group, NIH CHAVI
- 2005- Executive Committee, NIH Prevention Trials Network
- 2009 International AIDS Society Prevention Track Chair

Honors

Jefferson-Pilot Award (1982); R.J. Reynolds Award (1983); W.H. Reynolds Award (1987); Keenan Award (2004); Fekety Lectureship Award, University of Michigan (1998); Distinguished Alumnus Award, Rush Medical College (1999); Keynote Speaker UN World AIDS Day (2000); America’s Top Doctors (Castle) (2002-); NIH MERIT Award (2004); The Thomas Parran Award for Lifetime Achievement in STD Research (2005); UNC System O. Max Gardner Award (2008); Plenary Speaker, IAS Mexico City (2008)

B. Selected Peer-reviewed Publications

1. **Cohen MS**, Hoffman IF, Royce RA, Kazembe P, Dyer JR, Zimba D, Vernazza PL, Costello-Daly C, Maida M, Fiscus SA, Eron JJ. Reduction of concentration of HIV-1 in semen after treatment of urethritis: implications for prevention of sexual transmission of HIV-1. *Lancet* 349:1868-1873, 1997.
2. Dyer J, Gilliam B, Eron JJ, **Cohen MS**, Fiscus S, Vernazza P. Shedding of HIV in semen during primary HIV infection. *AIDS* 11:543-545, 1997.
3. Vernazza PL, Gilliam BL, Dyer J, Fiscus SA, Eron JJ, Frank AC, and **Cohen MS**. Quantification of HIV in semen: correlation with antiviral treatment and immune status. *AIDS* 11:987-993, 1997.
4. Vernazza PL, Gilliam BL, Flepp M, Dyer JR, Franc AC, Fiscus SA, **Cohen MS**, Eron JJ. Effect of antiviral treatment on shedding of HIV-1 in semen. *AIDS* 11:1249-1254, 1997.
5. Dyer JR, Vernazza PL, Gilliam B, Zimba D, Hoffman, IF, Royce RR, Fiscus SA, Kazembe P, **Cohen MS** and Eron JJ. High levels of human immunodeficiency virus type 1 in blood and semen of seropositive men in Malawi. *J Infect Dis* 177:1742-1746, 1998.
6. **Cohen MS**. Sexually transmitted diseases enhance transmission of HIV: No longer a hypothesis. *Lancet* 351:5-7, 1998.
7. Eron JJ, Vernazza PL, Johnston DM, Seillier-Moiseiwitsch F, Alcorn TM, Fiscus SA, **Cohen MS**. Resistance of HIV-1 to antiretroviral agents in blood and seminal plasma: Implications for transmission. *AIDS* 12:7397, 1998.
8. Dyer JR, Eron JJ, Hoffman IF, Kazembe P, Vernazza PL, Nkata E, Costello-Daly C, Fiscus SA, **Cohen MS**. Association of CD4 depletion and seminal plasma HIV-1 RNA concentrations with genital ulcer disease in HIV-1 infected men in Malawi. *J Infect Dis* 177:224-227, 1998.
9. Ping LH, Nelson JAE, Hoffman IF, Schock J, Lamers SL, Goodman M, Vernazza P, Kazembe P, Maida M, Zimba D, Goodenow M, Eron JJ, Fiscus SA, **Cohen MS**, Swanstrom R. Characterization of V3 sequence heterogeneity in subtype C HIV-1 isolates from Malawi: underrepresentation of X4 variants. *J Virol* 73:6271-6281, 1999.
10. Pereira AS, Kashuba ADM, Fiscus SA, Hall JE, Tidwell RR, Troiani L, Dunn JA, Eron JJ, **Cohen MS**. Nucleoside analogues achieve high concentrations in seminal plasma: relationship between drug concentration and virus burden. *J Infect Dis* 180:2039-2043, 1999.
11. Vernazza PL, Troiani L, Flepp MJ, Cone RW, Schock J, Roth F, Boggian K, **Cohen MS**, Fiscus SA, Eron JJ, and the Swiss HIV Cohort Study. Potent antiretroviral treatment of HIV-infection results in suppression of the seminal shedding of HIV. *AIDS* 14(2):117-121, 2000.
12. Ping LH, **Cohen MS**, Hoffman IF, Vernazza P, Seillier-Moiseiwitsch F, Chakraborty H, Kazembe P, Zimba D, Maida M, Fiscus SA, Eron JJ, Swanstrom R, Nelson JAE. Effects of genital tract inflammation on HIV-1 V3 populations in blood and semen, *J Virol* 74(19):8946-8952, 2000.
13. Robbins WA, Witt KL, Haseman JK, Dunson DB, Troiani L, **Cohen MS**, Hamilton CD, Perreault SD, Bishop JB and the RTP Germ Cell Working Group. Effects of antiretroviral therapy on genetic and morphological endpoints in lymphocytes and sperm of people with HIV infection. *J Infect Dis* 184(2):127-135, 2001.
14. Chakraborty H, Sen PK, Helms RW, Vernazza PL, Fiscus SA, Eron JJ, Patterson BK, Coombs RW, Krieger JN, **Cohen MS**. Viral burden in genital secretions determines male-to-female sexual transmission of HIV-1: A probabilistic empiric model. *AIDS* 15:621-627, 2001.
15. Jordan HL, Pereira AS, **Cohen MS**, Kashuba AD. Domestic cat model for predicting human nucleoside analogue pharmacokinetics in blood and seminal plasma. *Antimicrob Agents Chemother* 45:2173-6, 2001.
16. Pereira AS, Kenney KB, **Cohen MS**, Eron JJ, Tidwell RR, Dunn JA. Determination of amprenavir concentrations in human seminal plasma using high performance liquid chromatography and tandem mass spectrometry. *J Chromatog*: 766:307-317, 2001.
17. Reddy YS, Gotzkowsky SK, Eron JJ, Kim JY, Fiske WD, Fiscus SA, Petch, L, **Cohen MS**, Kashuba, ADM. Pharmacokinetic and pharmacodynamic investigation of efavirenz in the semen and blood of human immunodeficiency virus type 1-infected men. *J Infect Dis* 186:1339-1343, 2002.
18. Chakraborty H, Helms RW, Sen PK, **Cohen MS**. Estimating correlation by using general linear mixed models: correlation between the concentration of blood and semen HIV-1 RNA. *Stat Med* 22:1457-1454, 2003.
19. Feng, T, Ni, A Yang, G, Galvin, SR, Hoffman, I and **Cohen MS**. Distribution of the CCR5 gene 32-base pair deletion and CCR5 expression in Chinese minorities. *J Acquir Immune Defic Syndr* 32:121-124, 2003.

20. Pilcher, CD Price, MA, Hoffman, IF, Galvin, SR, Martinson, FEA, Kazembe, PN, Eron, JJ, Miller, WC, Fiscus, SA, **Cohen, MS**. Frequent detection of acute primary HIV infection in men in Malawi. *AIDS* 18:517-520, 2004.
21. Pilcher, CD, Tien, HC, Eron, JJ, Vernazza, PL, Leu, S, Stewart, PM, Goh, L, **Cohen, MS**. Brief but Efficient: Acute HIV Infection and the Sexual Transmission of HIV. *J Infect Dis* 10:1785-1792, 2004.
22. Galvin SR, **Cohen MS**. Sexual transmission of HIV. *Nature Microbiology Reviews* 2:33-42, 2004.
23. Min SS, Corbett, AH, Rezk, N, Cu-Uvin, S, **Cohen, MS** and Kashuba, ADM. Protease inhibitors and non-nucleoside reverse transcriptase inhibitor concentrations in the genital tract of HIV-1 infected women. *J Acquir Immune Defic Syndr* 37:1577-1580, 2004.
24. Pilcher, CD, Fiscus, SA, Trang, Q N, Foust, E, Wolf, L, Williams, D, Ashby, W, O Doud, JO, McPherson, T, Staber, B, Hightow, L, Miller, WC, Eron, J, **Cohen, MS**, Leone, P. Detection of acute HIV infections in the general HIV testing population. *N Engl J Med* 352(18):1873-1883, 2005.
25. Dumond, J, Yeh, R, Patterson, KB, Corbett, AH, Jung, BH, Rezk, NL, Bridges, AS, Stewart, PW, **Cohen, MS**, and Kashuba, Antiretroviral drug exposure in the female genital tract: implications for oral pre- and post-exposure prophylaxis. *AIDS* 21:1899-1907, 2007.
26. **Cohen MS**, Gay C, Kashuba AD, Blower S, and Paxton L. Narrative Review: antiretroviral therapy to prevent the sexual transmission of HIV-1. *Ann Intern Med* 146:591-601, 2007.
27. Chen XC, Wong SI, Lin C, Tucker J, Zhang GC, Gong XD, Gao X, Liang GJ, Yue XL, Chen XC, and **Cohen MS** for the Guangxi research team. Syphilis in China: results of a national surveillance program. *Lancet* 369:132-138, 2007.
28. Vourvahis M, Tappouri HL, Patterson KB, Chen YC, Rezk N, Fiscus SA, Kearney BP, Rooney JM, Hui J, Cohen MS and Kashuba ADM. The pharmacokinetics and viral activity of tenofovir in the male genital tract. *J Acquir Immune Defic Syndr* 47(3):329-333, 2008.
29. **Cohen MS**, Hellmann N, Levy JA, DeCock K, and Lange, J. The spread, treatment, and prevention of HIV-1: evolution of a global pandemic. *J Clin Invest* 118 :1244-1254, 2008.
30. Powers KA, Poole C, Pettifor AE, Cohen MS. Rethinking the heterosexual infectivity of HIV-1: a systematic review and meta-analysis. *Lancet Infect Dis* 8: 553-63., 2008.
31. Dumond JB, Reddy YS, Troiani L, Rodriguez JF, Bridges AS, Fiscus SA, Yuen GJ, Cohen MS, Kashuba AD. Differential extracellular and intracellular concentrations of zidovudine and lamivudine in semen and plasma of HIV-1-infected men. *J Acquir Immune Defic Syndr*. 48:156-62, 2008.
32. Keele BF, Giorgi EE, Salazar-Gonzalez JF, Decker JM, Pham KT, Salazar MG, Sun C, Grayson T, Wang S, Li H, Wei X, Jiang C, Kirchherr JL, Gao F, Anderson JA, Ping LH, Swanstrom R, Tomaras GD, Blattner WA, Goepfert PA, Kilby JM, Saag MS, Delwart EL, Busch MP, Cohen MS, Montefiori DC, Haynes BF, Gaschen B, Athreya GS, Lee HY, Wood N, Seoighe C, Perelson AS, Bhattacharya T, Korber BT, Hahn BH, Shaw GM. Identification and characterization of transmitted and early founder virus envelopes in primary HIV-1 infection. *Proc Natl Acad Sci U S A* 105:7552-7, 2008.
33. Salazar-Gonzalez JF, Salazar MG, Keele BF, Learn GH, Giorgi EE, Li H, Decker JM, Wang S, Baalwa J, Kraus MH, Parrish NF, Shaw KS, Guffey MB, Bar KJ, Davis KL, Ochsenbauer-Jambor C, Kappes JC, Saag MS, Cohen MS, Mulenga J, Derdeyn CA, Allen S, Hunter E, Markowitz M, Hraber P, Perelson AS, Bhattacharya T, Haynes BF, Korber BT, Hahn BH, Shaw GM. Genetic identity, biological phenotype, and evolutionary pathways of transmitted/founder viruses in acute and early HIV-1 infection. *J Exp Med*. 206:1273-89. 2009.
34. Goonetilleke N, Liu MK, Salazar-Gonzalez JF, Ferrari G, Giorgi E, Ganusov VV, Keele BF, Learn GH, Turnbull EL, Salazar MG, Weinhold KJ, Moore S; CHAVI Clinical Core B, Letvin N, Haynes BF, Cohen MS, Hraber P, Bhattacharya T, Borrow P, Perelson AS, Hahn BH, Shaw GM, Korber BT, McMichael AJ. The first T cell response to transmitted/founder virus contributes to the control of acute viremia in HIV-1 infection. *J Exp Med*. 206:1253-72 2009.
35. Abrahams MR, Anderson JA, Giorgi EE, Seoighe C, Mlisana K, Ping LH, Athreya GS, Treurnicht FK, Keele BF, Wood N, Salazar-Gonzalez JF, Bhattacharya T, Chu H, Hoffman I, Galvin S, Mapanje C, Kazembe P, Thebus R, Fiscus S, Hide W, Cohen MS, Karim SA, Haynes BF, Shaw GM, Hahn BH, Korber BT, Swanstrom R, Williamson C; CAPRISA Acute Infection Study Team; Center for HIV-AIDS Vaccine Immunology Consortium. Quantitating the multiplicity of infection with human immunodeficiency virus type 1 subtype C reveals a non-poisson distribution of transmitted variants. *J Virol*. 83:3556-67, 2009.

C. Research Support

Ongoing Research Support

R37DK49381 (Cohen) NIH MERIT AWARD This Award supports ongoing investigation related to the transmission of HIV. Role: PI	7/01/05-6/30/2015
D43 TW01039 (Adimora/Cohen) NIH/FIC Fogarty International Training Grant AIDS International Research and Training Program This grant provides funds for training directed towards HIV/STD prevention for personnel from Cameroon, China and Malawi.	09/30/98-05/31/09
9-P30-AI50410 (Swanstrom/Cohen) NIH UNC Center for AIDS Research Core A: Administration The Administrative Core (Core A) provides the administrative structure and support, and overall leadership for the UNC CFAR. Cohen serves as Associate Director of the UNC Center for AIDS Research Role: Co-principal investigator	08/01/01-05/31/11
5 U01 AI067854 (Haynes – Duke U) NIH Center for HIV/AIDS Vaccine Initiative Subcontract with Duke University, prime grantee. UNC will participate in a multi-center effort to develop a new HIV vaccine strategy. UNC faculty in Lilongwe, Malawi, and on the UNC campus will conduct clinical observational studies designed to detect patients with acute HIV infection and to enroll such subjects in an observational cohort. Dr. Cohen will also serve as a member of the Scientific Leadership Group for CHAVI.	10/01/05-07/31/12
1 U01 AI069518-01 (Cohen, M) Johns Hopkins University HIV Prevention Trials Unit-Malawi This is a renewal of the UNC HPTN site in Malawi in partnership with Johns Hopkins University	12/01/06-11/30/13
None Assigned (Cohen, M) Family Health International HIV Prevention Trials Network (HPTN) Leadership Group	07/01/06-05/31/09