

BIOGRAPHICAL SKETCH

Provide the following information for the key personnel in the order listed for Form Page 2.
Follow the sample format for each person. **DO NOT EXCEED FOUR PAGES.**

NAME	POSITION TITLE		
Cole, Steve W.	Assistant Professor of Medicine		
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of California, Santa Barbara	B.A.	1988	Psychology
Stanford University	Ph.D.	1993	Psychology
UCLA School of Medicine	Postdoc.	1998	Neuroimmunology

PROFESSIONAL EXPERIENCE

1987 – 1988 Research Assistant, Cognition and Medical Decision-Making, UC Santa Barbara
 1992 – 1993 Statistical Consultant to the World Health Organization Study of Outcomes
 1992 – 1996 Statistical Consultant to the Terman Longitudinal Study
 1992 – 1993 Teaching Fellow, Stanford University
 1993 – 1996 Postdoctoral Fellow, UCLA Department of Psychology
 1996 – 1998 Postdoctoral Fellow, Division of Hematology-Oncology, UCLA School of Medicine
 1998 – 2000 Assistant Research Biologist, Division of Hematology-Oncology, UCLA School of Medicine
 2001 – present Assistant Professor, Division of Hematology-Oncology, UCLA School of Medicine
 2003 – present Associate Member, UCLA Molecular Biology Institute
 2003 – present Associate Member, Jonsson Comprehensive Cancer Center

HONORS AND AWARDS

1998 Centennial Teaching Award, Stanford University
 2000 Cornelius L. Hoppers Award, Outstanding Young Investigator, Univ. California AIDS Research Program
 2001 Invited Scholar in Residence, Santa Fe Institute for Complex Systems
 2002 Neil E. Miller New Investigator Award, Academy of Behavioral Medicine Research

PROFESSIONAL SERVICE

NIH Center for Scientific Review: AIDS and related research IRG, ZRG1 AARR-1 (06), and HIV IRG, ZMH1 NRB-A (01).
 Executive Council Member, Psychoneuroimmunology Research Society, 2002-2004

SELECTED PUBLICATIONS

Cole, S., Kemeny, M., Taylor, S., Visscher, B., & Fahey, J. (1996) Accelerated course of Human Immunodeficiency Virus infection in gay men who conceal their homosexual identity. *Psychosomatic Medicine*, 58, 219-231.
 Cole, S., Kemeny, M., Taylor, S., & Visscher, B. (1996) Elevated physical health risk among gay men who conceal their homosexual identity. *Health Psychology*, 15, 243-251.
 Cole, S. (1997) Blind T cell homeostasis and HIV infection. *Immunology Today*, 18, 505-506.
 Cole, S., & Kemeny, M. (1997) Psychobiology of HIV infection. *Critical Reviews in Neurobiology*, 11, 289-321.
 Cole, S., Kemeny, M., & Taylor, S. (1997) Social identity and physical health: Accelerated HIV progression in rejection-sensitive gay men. *Journal of Personality and Social Psychology*, 72, 320-336.
 Jablensky, A., & Cole, S. W. (1997) Is the earlier age at onset of schizophrenia in males a confounded finding?: Results from a cross-cultural investigation. *British Journal of Psychiatry*, 170, 234-240.
 Knutson, B., Cole, S., Wolkowitz, O., Reus, V., Chan, T., & Moore, E. (1997) Serotonergic intervention increases affiliative behavior in humans. *Annals of the New York Academy of Sciences*, 807, 492-493.
 Miller, G. E., Kemeny, M. E., Taylor, S. E., Cole, S. W., & Visscher, B. (1997) Social relationships and immune processes in HIV seropositive gay and bisexual men. *Annals of Behavioral Medicine*, 19, 139-151.
 Valentin, A., Aldrovandi, G., Zolotukhin, A. S., Cole, S. W., Zack, J. A., Pavlakis, G. A., & Felber, B. K. (1997) Reduced viral load and lack of CD4 depletion in SCID-hu mice infected with Rev-independent clones of HIV-1. *Journal of Virology*, 71, 9817-1822.
 Cole, S. W., Korin, Y. D., Fahey, J. L., & Zack, J. A. (1998) Norepinephrine accelerates HIV replication via protein kinase A-dependent effects on cytokine production. *Journal of Immunology*, 161, 610-616.

- Knutson, B., Wolkowitz, O. W., Cole, S. W., Chan, T., Moore, E. A., Johnson, R. C., Terpstra, J., Turner, R. A., & Reus, V. I. (1998) Serotonergic intervention selectively alters aspects of personality and social behavior in normal humans. *American Journal of Psychiatry*, 155, 373-379.
- Miller, G. E., & Cole, S. W. (1998) Social relationships and the progression of human immunodeficiency virus infection. *Annals of Behavioral Medicine*, 20, 181-189.
- Amado, R. G., Jamieson, B. D., Cortado R., Cole, S. W., & Zack, J. (1999) Reconstitution of human thymic implants is limited by Human Immunodeficiency Virus breakthrough during antiretroviral therapy. *Journal of Virology*, 73, 6361-6369.
- Cole, S. W., Jamieson, B. D., & Zack, J. A. (1999) cAMP externalizes lymphocyte CXCR4: Implications for chemotaxis and HIV infection. *Journal of Immunology*, 162, 1392-1400.
- Cole, S. W., Kemeny, M. E., Weitzman, O. B., Schoen, M., & Anton, P. (1999) Socially inhibited individuals show heightened DTH response during intense social engagement. *Brain, Behavior, and Immunity*, 13, 187-200.
- Schmid, I., Cole, S. W., Korin, Y. D., Zack, J. A., & Giorgi, J. V. (2000) Detection of cell cycle subcompartments by flow cytometric estimation of DNA-RNA content in combination with dual-color immunofluorescence. *Cytometry*, 39, 108-116.
- Schmid, I., Cole, S. W., Zack, J. A., & Giorgi, J. V. (2000) Measurement of lymphocyte subset proliferation by three-color immunofluorescence and DNA flow cytometry. *Journal of Immunologic Methods*, 235, 121-131.
- Schmid, I., Hausner, M. A., Cole, S. W., Uittenbogaart, C. H., Giorgi, J. V., & Jamieson, B. D. (2001) Simultaneous flow cytometric measurement of viability and lymphocyte subset proliferation. *Journal of Immunologic Methods*, 247, 175-186.
- Cole, S. W., Naliboff, B. D., Kemeny, M. E., Griswold, M., Fahey, J. L., & Zack, J. A. (2001) Impaired response to HAART in patients with high autonomic nervous system activity. *Proceedings of the National Academy of Sciences of the USA*, 98, 12695-12700.
- Arjomand, J., Cole, S., & Evans, C. J. (2002) Novel orphanin FQ/nociceptin transcripts are expressed in human immune cells. *Journal of Neuroimmunology*, 130, 100-108.
- Cohan, C.L., & Cole, S. (2002). Life course transitions and natural disaster: Marriage, birth, and divorce following Hurricane Hugo. *Journal of Family Psychology*, 16, 14-25.
- Liu, X., Zha, J., Chen, H., Nishitani, J., Camarco, P. M., Cole, S. W., & Zack, J. A. (2003). Human Immunodeficiency Virus Type 1 infection and replication in normal human oral keratinocytes. *Journal of Virology*, 77, 3470-3476.
- Bower, J. E., Ganz, P. A., Fahey, J. L., Aziz, N., & Cole, S. (2003) T cell homeostasis in breast cancer survivors with persistent fatigue. *Journal of the National Cancer Institute*, 95, 1165-1168.
- Cole, S. W., Galic, Z., & Zack, J. A. (2003) Controlling false negative errors in microarray differential expression analysis: A PRIM approach. *Bioinformatics*, 19, 1808-1816.
- Martinez-Guzman, D., Rickabaugh, T., Wu, T.-T., Brown, H., Cole, S., Song, M. J., Tong, L., & Sun, R. (2003) Transcription program of murine gammaherpesvirus 68. *Journal of Virology*, 10488-10503.
- Lutgendorf, S. K., Cole, S., Costanzo, E., Bradley, S., Coffin, J., Jabbari, S., Rainwater, K., Ritchie, J. M., Yang, M., & Sood, A. (2003) Stress-related mediators stimulate vascular endothelial cell growth factor secretion by two ovarian cancer cell lines. *Clinical Cancer Research*, 9, 4514-4521.
- Cole, S. W., Kemeny, M. E., Fahey, J. L., Zack, J. A., and Naliboff, B. D. (2003) Psychological risk factors for HIV pathogenesis: Mediation by the autonomic nervous system. *Biological Psychiatry*, 54, 1444-1456.
- Symensma, T. L., Martinez-Guzman, D., Jia, Q., Bortz, E., Wu, T.-T., Rudra-Ganguly, N., Cole, S., Herschman, H., & Sun, R. (2003) COX-2 induction during Murine Gammaherpesvirus-68 infection leads to enhancement of viral gene expression. *Journal of Virology*, 77, 12753-12763.
- Amado, R. G., Mitsuyasu, R. T., Rosenblatt, J. D., Ngok, F. K., Bakker, A., Cole, S., Chorn, N., Bristol, G., Miles, S. A., Boyd, M., Ely, J. A., Zack, J. A., & Symonds, G. P. (2004) Development of T lymphocytes from genetically altered hematopoietic progenitors in HIV-1 infected patients. *Human Gene Therapy*, 15, 251-262.
- Zhou, C., Cole, S. W., Hu, S., & Wong, D. T. W. (2004) Detection of DNA copy number abnormality by microarray expression analysis. *Human Genetics*, 114, 464-467.
- Richlin, V. A., Arevalo, J. M. G., Zack, J. A., & Cole, S. W. (2004) Stress-induced enhancement of NF- κ B DNA-binding in the peripheral blood leukocyte pool: Effects of lymphocyte redistribution. *Brain, Behavior and Immunity*, 18, 231-237.
- Cole, S. W. (2004) The complexity of dynamic host networks. To appear in T. S. Deisboeck, J. Y. Kresh, & T. Kepler (Eds.) *Complex Systems Science in Biomedicine*. New York, Kluwer Academic – Plenum Publishers.
- Cole, S. W., Yan, W., Galic, Z., Arevalo, J., & Zack, J. A. (under review) Expression-based monitoring of signal-transduction pathways: The TELiS database.

- van der Meijden, M. Cole, S., Htike, M., Ferbas, J., Detels, R., & Martinez-Maza, O. (under review) HIV infection-associated aberrant expression of cell surface stimulatory molecules on circulating B lymphocytes: Effects of anti-retroviral treatment.
- Chen, H., Zha, J., Gowans, R. E., Camargo, P., Nishitani, J., McQuirter, J. L., Cole, S. W., Zack, J. A., & Liu, X. (under review) Alcohol enhances HIV-1 infection in normal human oral keratinocytes by upregulating CXCR4 coreceptor.
- Chang, M., Brown, H. J., Symensma, T. L., Tanaka, L., Arevalo, J. M., Collado-Hidalgo, A., Galic, Z., Deng, H., Zack, J. A., Sun, R., & Cole, S. (under review) Reactivation of HHV-8 lytic replication by β -adrenoreceptors: PKA-dependent control of RTA expression and trans-activating capacity.

RESEARCH – ONGOING AND COMPLETED DURING THE LAST THREE YEARS

ONGOING RESEARCH

- NIH R01 DE015970 "Genomics and proteomics of oral precancer progression"
 PI: David Wong 8/1/01-7/30/04
 Develop statistical models to predict oral precancer progression to malignancy.
- NIH R01 AI/NS52737-01 "Autonomic nervous system control of HIV-1 replication"
 PI: Steve Cole 8/1/02-7/30/06
 Define molecular mechanisms by which autonomic neurotransmitters accelerate HIV-1 replication.
- UARP CC99-LA-02 "Beta-adrenergic blockade to inhibit HIV replication."
 PI: Mitsuyasu 12/01/02-11/30/04
 Core project to evaluate beta-blocker therapy as an adjunctive therapy for controlling residual HIV replication in antiretroviral-treated patients.
- 2R01MH049033-11A1 "Simian AIDS: Social stress, endocrine and immune function"
 PI: (Subcontract) Cole 07/01/03-06/30/05
 Define effects of social stress on lymph node innervation and SIV gene expression in rhesus macaques.

COMPLETED RESEARCH

- NIH R21 AI49135-01 "Transcription-regulating vectors for antiviral immunity"
 PI: Steve Cole 8/1/01-7/30/04
 Develop viral vectors that manipulate dendritic cell signaling during primary immune responses.
- UARP K99-LA-030 "cAMP regulation of Dendritic Cell response to HIV-1"
 PI: Steve Cole 7/1/99-6/30/01
 Evaluate effect of HIV-induced PKA activity on dendritic cell stimulation of T cell response.
- UCLA AIDS INSTITUTE "Nervous system regulation of immune function in HIV infection"
 PI: Jerome Zack and Steve Cole 4/1/00-3/31/01
 Define effects of autonomic nervous system neurotransmitter on cytokine production, cell trafficking molecules, and T cell maturation/differentiation.