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## BIOGRAPHICAL SKETCH

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NAME <b>Steve W. Cole</b>	POSITION TITLE <b>Associate Professor of Medicine</b>		
eRA COMMONS USER NAME Coles2			
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of California at Santa Barbara	B.A.	1988	Psychology
Stanford University	Ph.D.	1993	Psychology
UCLA School of Medicine	Post-Doc.	1998	Neuroimmunology

### A. Positions and Honors.

#### Positions and Employment

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 – 2006 Assistant Professor, Division of Hematology-Oncology, UCLA School of Medicine  
2006 – present Associate Professor, Division of Hematology-Oncology, UCLA School of Medicine

#### Other Experience and Professional Memberships

2001-2003 NIH Center for Scientific Review: AIDS and related research IRG, ZRG1 AARR-1 (06), and HIV IRG, ZMH1 NRB-A (01).  
2002-2004 Executive Council Member, Psychoneuroimmunology Research Society  
2003-present Associate Member, UCLA Molecular Biology Institute  
2003-present Associate Member, Jonsson Comprehensive Cancer Center

#### Honors

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

### B. Selected peer-reviewed publications (in chronological order). (from a total of 56)

**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.** (1997) Blind T cell homeostasis and HIV infection. *Immunology Today*, 18, 505-506.  
**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.  
**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.  
**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.
- 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.
- 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.**, Kemeny, M., Fahey, J., Zack, J., and Naliboff, B. (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., Mitsuyasu, R., Rosenblatt, J. D., Ngok, F., Bakker, A., **Cole, S.**, Chorn, N., Bristol, G., Miles, S., Boyd, M., Ely, J., Zack, J., & Symonds, G. (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-kB DNA-binding in the peripheral blood leukocyte pool: Effects of lymphocyte redistribution. *Brain, Behavior and Immunity*, 18, 231-237.
- Zhou, X., **Cole, S. W.**, Cheng, Z., Li, Y., & Wong, D. T. W. (2005) Identification of partial chromosomal deletion through binary recursive partitioning of microarray differential expression data. *Journal of Medical Genetics*, 42, 416-419.
- Cole, S. W.**, Yan, W., Galic, Z., Arevalo, J., & Zack, J. A. (2005) Expression-based monitoring of transcription factor activity: The TELiS database. *Bioinformatics*, 21, 803-810.
- Zhou, X., Rao, N. P., **Cole, S. W.**, Mok, S. C., Chen, Z., Wong, D.T. W. (2005) Current progress in concurrent analysis of loss of heterozygosity and comparative genomic hybridization utilizing high density single nucleotide polymorphism arrays. *Cancer Genetics and Cytogenetics*, 159, 53-57.
- Chang, M., Brown, H. J., Collado-Hidalgo, A., Arevalo, J. M., Galic, Z., Symensma, T. L., Tanaka, L., Deng, H., Zack, J. A., Sun, R., & **Cole, S. W.** (2005) Beta adrenoreceptors reactivate Kaposi's Sarcoma-associated Herpesvirus lytic replication via PKA-dependent control of viral RTA. *Journal of Virology*, 79, 13538-13547.
- Antoni, M. H., Lutgendorf, S. K., **Cole, S. W.**, Dhabhar, F. S., Sephton, S. E., McDonald, P. G., Stefanek, M., and Sood, A. K. (2005) The Influence of Biobehavioral Factors on Tumor Biology: Pathways and Mechanisms. *Nature Reviews Cancer*, 6, 240-248.
- Sood, A. K., Bhatti, R. Kamat, A. A., Landen, C. N., Han, L., Thaker, P. H., Li, Y., Gershenson, D. M., Lutgendorf, S., and **Cole, S. W.** (2005) Stress hormone-mediated invasion of ovarian cancer cells. *Clinical Cancer Research*, 12, 369-375.
- Sloan, E. K., Tarara, R. P., Capitanio, J. P., & **Cole, S. W.** (2006) Enhanced SIV replication adjacent to catecholaminergic varicosities in primate lymph nodes. *Journal of Virology*, 80, 4326-4335.
- Collado-Hidalgo, A., Sung, C., and **Cole, S. W.** (2006) Adrenergic inhibition of innate antiviral response: PKA blockade of Type I interferon gene transcription mediates catecholamine support for HIV-1 replication. *Brain, Behavior, and Immunity*, 20, 552-563.

## **C. Research Support** **Ongoing Research Support**

1R01-CA116778 (Cole) 09/26/06-07/31/11  
NIH/NCI  
Combinatorial genomics in cancer  
Develop bioinformatics software to identify combinatorial genomic influences in cancer.  
Role: Principal Investigator

1R01 HL079955 (Irwin) 05/20/06-04/30/10  
NIH/NHLBI  
Sleep and Immune Mechanisms in Rheumatoid Arthritis  
Define the relationship between sleep and inflammation in Rheumatoid Arthritis.  
Role: Co-Investigator

1R01 CA109650 (Ganz) 9/14/06-07/31/11  
NIH/NCI  
Cognitive functioning after breast cancer treatment  
Assess immunologic alterations in breast cancer survivors suffering from unexplained fatigue.  
Role: Co-Investigator

5P60 AG10415 (Reuben) 07/01/06-06/30/11  
NIH/NIA  
UCLA Older Americans Independence Centers  
To expand scientific knowledge to maintain or restore independence of older Americans.  
Role: Co-Investigator – Inflammatory Biology Core (Research Core 3)

R01DE015970 (Wong) 5/01/04-4/30/09  
NIH/NIDCR  
Genomics and proteomics of oral precancer progression  
Develop statistical models to predict oral precancer progression to malignancy.  
Role: Co-Investigator

R01-CA110793 (Sood) 10/1/04-9/30/09  
NIH/NCI  
Tumor metastasis: Biobehavioral mechanisms  
Identify genes mediating effects of catecholamines on ovarian cancer metastasis.  
Role: Subcontract PI

1R01-CA109298 (Sood) 04/15/05-03/31/09  
NIH/NCI  
Ovarian cancer: Mechanisms of neuroendocrine regulation  
Analyze transcriptional effects of catecholamines on ovarian cancer cell lines.  
Role: Subcontract PI

## **Completed Research Support**

R01AI52737 (Cole) 05/15/02 – 04/30/06  
NIH/NIAID

Autonomic nervous system control of HIV-1 replication

Define molecular mechanisms by which autonomic neurotransmitters accelerate HIV-1 replication.

Role: PI

R01-DE016569-01 (Zhou)

04/01/05-8/31/06

NIH/NIDCR

Expression-based identification of OHNC genomic changes

Generate statistical tools to map chromosomal alterations in oral cancer cells.

Role: Co-I

P20-RR020645 (Rose)

06/10/05-07/31/06

NIH/NCRR

Integrative biology of brain, inflammation, and asthma

Define gene expression alterations associated with biobehavioral risk factors for inflammatory disease.

Role: Subcontract PI

CC99-LA-02 (Mitsuyasu)

12/01/02-11/30/04

UC/UARP

Beta-adrenergic blockade to inhibit HIV replication

Evaluate beta-blocker therapy as an adjunctive therapy for controlling residual HIV replication.

Role: Component PI

R01MH049033 (Capitanio)

07/01/03-06/30/05

NIH/NIMH

Simian AIDS: Social stress, endocrine and immune function

Define effects of social stress on lymph node innervation and SIV gene expression in rhesus macaques.

Role: Subcontract PI

R21AI49135 (Cole)

06/01/01-05/30/04

NIH/NIAID

Transcription-regulating vectors for antiviral immunity

Develop transcription factor-bearing vectors to shape dendritic cell-mediated immune response

Role: PI

R03-HD044694 (Cohan)

09/27/04-08/31/06

NIH/NICHHD

Marriage, Birth and divorce after terrorist attack

Develop statistical models to assess the impact of September 11 terrorist attacks on family health outcomes.

Role: Subcontract PI