

BIOGRAPHICAL SKETCH

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

NAME		POSITION TITLE	
Peter A. Anton, M.D.		Associate Professor	
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
Harvard University, Cambridge, MA	A.B.	1973-1977	Biology
Case Western Reserve Univ. Medical School, Cleveland, OH	M.D.	1978-1983	Medicine
Institute of Pathology, CWRU, Cleveland, OH		1980-1981	Pathology

A. Positions and Honors.**Positions and Employment**

1980 – 1981	Pathology Fellowship, Institute of Pathology, CWRU, Cleveland, OH.
1983	Trainee at I.C.D.D.R.-B, Dakha, Bangladesh
1983 – 1986	Internal Medicine, Brigham and Women's Hospital, Boston, MA
1986 – 1989	Gastroenterology Fellowship, UCLA Combined Training Program
1989 – 1991	Member Harbor/UCLA IBD Center - Executive Committee
1989 – 1993	Associate Director and member UCLA IBD Clinical and Research Center
1989 – 1997	Assistant Professor of Medicine, UCLA
1993 – 1998	Director: UCLA IBD Clinical and Research Center
1991 – Present	Dean's Task Force on Psychoneuroimmunology
1995 – Present	Director: UCLA Center for HIV and Digestive Diseases
1997 – Present	Associate Professor of Medicine, UCLA

Honors

1974 – 1976	University Scholar, Harvard University
1977	Magna cum laude, Harvard University
1978	Rotary Fellowship: Environmental Studies, Auckland, New Zealand
1983	Alpha Omega Alpha

B. Selected peer-reviewed publications (in chronological order).

- Bernstein CN, Artinian L, **Anton PA**, Shanahan F. Low-dose 6-mercaptopurine in inflammatory bowel disease is associated with minimal hematologic toxicity. *Dig Dis Sci* 1994;39:1638-1641.
- Mitrovic B, Martin FC, Charles AC, Ignarro LJ, **Anton PA**, Shanahan F, Merrill JE. Neurotransmitters and cytokines in CNS pathology. *Prog Brain Res* 1994;103:319-330.
- Bernstein CN, Seeger LL, Sayre JW, **Anton PA**, Artinian L, Shanahan F. Decreased bone density in inflammatory bowel disease is related to corticosteroid use and not disease diagnosis. *J Bone Miner Res* 1995;10:250-256.
- Bernstein CN, Shanahan F, **Anton PA**, Weinstein W. Patchiness of mucosal inflammation in treated ulcerative colitis: A prospective study. *Gastrointest Endosc* 1995;42:232-237.
- Bernstein CN, Seeger LL, **Anton PA**, Artinian L, Geoffrey S, Goodman W, Belin TR, Shanahan F. A randomized, placebo-controlled trial of calcium supplementation for decreased bone density in corticosteroid-using patients with inflammatory bowel disease: A pilot study. *Aliment Pharmacol Ther* 1996;10:777-786.
- Porter EM, Liu L, Oren A, **Anton PA**, Ganz T. Localization of human intestinal defensin 5 in Paneth cell granules. *Infect Immun* 1997;65:2389-2395.
- McGowan I, **Anton PA**. AIDS and intestinal disease. *Curr Opin Gastroenterol* 1997;13:18-23.
- Ilnyckyj A, Shanahan F, **Anton PA**, Cheang M, Bernstein CN. Quantification of the placebo response in ulcerative colitis. *Gastroenterology* 1997;112:1854-1858.

9. McGowan I, Fairhurst RM, Shanahan F, **Anton PA**. Mucosal substance P receptor expression in HIV infection and inflammatory bowel disease. *Neuroimmunomodulation* 1997;4:70-76.
10. **Anton PA**, O'Connell J, O'Connell D, Whitaker L, O'Sullivan GC, Collins JK, Shanahan F. Mucosal sub-epithelial binding sites for the bacterial chemotactic peptide, formyl-methionyl-leucyl-phenylalanine (fMLP). *Gut* 1998;42:374-379.
11. **Anton PA**, Shanahan F. Neuroimmunomodulation in inflammatory bowel disease: How far from "bench" to "bedside"? *Ann NY Acad Sci* 1998;840:723-734.
12. Goode T, O'Connell J, Sternini C, **Anton PA**, Wong H, O'Sullivan GC, Collins JK, Shanahan F. Substance P (NK-1) receptor is a marker of human mucosal but not peripheral mononuclear cells: molecular quantitation and localization. *J Immunol* 1998;161:2232-2240.
13. Million M, Taché Y, **Anton PA**. Susceptibility of Lewis and Fischer rats to stress-induced worsening of TNB-colitis: Protective role of brain CRF. *Am J Physiol* 1999;276:G1027-G1036.
14. Cole SW, Kemeny ME, Weitzman OB, Schoen M, **Anton PA**. Socially inhibited individuals show heightened DTH response during intense social engagement. *Brain Behav Immun* 1999;13:187-200.
15. Rawsthorne P, Shanahan F, Cronin NC, **Anton PA**, Löfberg R, Bohman L, Bernstein CN. An international survey of the use and attitudes regarding alternative medicine by patients with inflammatory bowel disease. *Am J Gastroenterol* 1999;94:1298-1303.
16. Goode T, O'Connell J, **Anton P**, Wong H, Reeve J, O'Sullivan GC, Collins JK, Shanahan F. Neurokinin-1 receptor expression in inflammatory bowel disease: molecular quantitation and localization. *Gut* 2000;47:387-396.
17. Mitsuyasu RT, **Anton PA**, Deeks SG, Scadden DT, Connick E, Downs MT, Bakker A, Roberts MR, June CH, Jalali S, Lin AA, Pennathur-Das R, Hege KM. Prolonged survival and tissue trafficking following adoptive transfer of CD4 ζ gene-modified autologous CD4⁺ and CD8⁺ T cells in human immunodeficiency virus-infected subjects. *Blood* 2000;96:785-793.
18. **Anton PA**, Elliott J, Poles MA, McGowan IM, Matud J, Hultin LE, Grovit-Ferbas K, Mackay CR, Chen ISY, Giorgi JV. Enhanced levels of functional HIV-1 co-receptors on human mucosal T cells demonstrated using intestinal biopsy tissue. *AIDS* 2000;14:1761-1765.
19. Olsson J, Poles M, Spetz A-L, Elliott J, Hultin L, Giorgi J, Andersson J, **Anton PA**. Human immunodeficiency virus type 1 infection is associated with significant mucosal inflammation characterized by increased expression of CCR5, CXCR4, and β -chemokines. *J Infect Dis* 2000;182:1625-1635.
20. Chang L, Munakata J, Mayer EA, Schmulson MJ, Johnson TD, Bernstein CN, Saba L, Naliboff B, **Anton PA**, Matin K. Perceptual responses in patients with inflammatory and functional bowel disease. *Gut* 2000;47:497-505.
21. Poles MA, Elliott J, Vingerhoets J, Michiels L, Scholliers A, Bloor S, Larder B, Hertogs K, **Anton PA**. Despite high concordance, distinct mutational and phenotypic drug resistance profiles in human immunodeficiency virus type 1 RNA are observed in gastrointestinal mucosal biopsy specimens and peripheral blood mononuclear cells compared with plasma. *J Infect Dis* 2001;183:143-148.
22. Poles MA, Fuerst M, McGowan I, Elliott J, Rezaei A, Mark D, Taing P, **Anton PA**. HIV-related diarrhea is multifactorial and fat malabsorption is commonly present, independent of HAART. *Am J Gastroenterol* 2001;96:1831-1837.
23. **Anton PA**, Poles MA, Elliott J, Mao SH, McGowan I, Lenz H-J, Chen ISY. Sensitive and reproducible quantitation of mucosal HIV-1 RNA and DNA viral burden in patients with detectable and undetectable plasma viral HIV-1 RNA using endoscopic biopsies. *J Virol Methods* 95:65-79, 2001.
24. Poles MA, Elliott J, Taing P, **Anton PA**, Chen ISY. A preponderance of CCR5⁺, CXCR4⁺ mononuclear cells enhances gastrointestinal mucosal susceptibility to human immunodeficiency virus type 1 infection. *J Virol* 2001;75:8390-8399.
25. Keire D, **Anton PA**, Faull KF, Ruth E, Walsh JH, Chew P, Quisimoro D, Territo M, Reeve JR Jr. Diethyl phthalate: A chemotactic factor secreted by *helicobacter pylori*. *J Biol Chem* 2001;276:48847-48853.
26. Deeks SG, Wagner B, **Anton PA**, Mitsuyasu RT, Scadden DT, Huang C, Macken C, Richman DD, Christopherson C, June CH, Lazar R, Broad DF, Jalali S, Hege KM. A phase II randomized study of HIV-specific T-cell gene therapy in subjects with undetectable plasma viremia on combination antiretroviral therapy. *Molecular Therapy* 2002;5:788-797.
27. Goldring AB, Kemeny ME, Taylor SE, **Anton PA**. Impact of health beliefs, quality of life and the physician-patient relationship on the treatment intentions of inflammatory bowel disease patients. *Health Psychology* 2002;21:219-228.
28. Lehner T, **Anton PA**. Mucosal immunity and vaccination against HIV. *AIDS* 2002;16:S125-S132.
29. **Anton PA**, Mitsuyasu RT, Deeks SG, Scadden DT, Wagner B, Huang C, Macken C, Richman D, Christopherson C, Borellini F, Lazar R, Hege K. Multiple measures of HIV burden in blood and tissue are correlated with each other but not with clinical parameters in aviremic subjects. *AIDS* 2003;17:53-63.

C. Research Support

Ongoing Research Support

P30 AI-28697 Chen (PI)

1/1/98 - 12/31/03

NIH/NIAID

UCLA Center for AIDS Research (CFAR) Core for Mucosal Immunology

The major goal of this project is to assist the development of HIV-related mucosal immunology projects as a Core facility including study design, patient access, assistance in IRB applications and tissue acquisition. This funding assists in providing the infrastructure for investigator access to mucosal tissue by supporting the development of reproducible methods for intestinal biopsy tissue acquisition and sample preparation

Role: Co-PI

K24 AI 01610 Anton (PI)

4/1/00-3/31/05

NIH/NIAID

Impact of co-receptor and HIV viral burden on gut mucosa.

The aims of the project are to optimize HIV quantitative tissue assays using endoscopic biopsies and characterization of mucosal mononuclear cells in the setting of HIV infection. The tools are to be used to correlate tissue viral burden with co-receptor expression in mucosa and investigate in vitro susceptibility to infection of mucosal cells from healthy and inflamed biopsies from HIV-negative subjects. Interventional trials using anti-inflammatory agents are planned.

Mentoring is a large component of this project.

Role: PI

R01 AI50467-01 Anton (PI)

9/30/01 – 6/30/04

NIH/NIAID

Role of Immunization Site in Eliciting Mucosal Immunity.

The major goals of this project are to evaluate peripheral and mucosal immune response in seronegative subjects receiving either inguinal or peripheral HIV-1 vaccination and to assess gastrointestinal lymphoid tissue immunity in HIV infected individuals.

Role: PI

5 U01 AI46749 McGowan (PI)

3/1/02 – 4/30/03

NIH/NIAID

HIV Prevention Trials Network (HPTN 056)

Characterization of baseline mucosal indices of injury and inflammation for use in rectal microbicide trials.

The aims of this study are to characterize relevant assays and their reproducibility as well as variability to enable reliable determinations of sensitivity and detection in rectal microbicide trials in men. These will look at immunologic, histologic and virologic responses at 30cm and 10cm in rectal mucosa in 4 different sets of subjects; the same subjects will also be assessed over a period of 6 weeks to evaluate stability of observations.

Role: Co-PI

UARP CC02-LA-001 Mitsuyasu (PI)

7/1/02 – 6/30/05

ACRC (AIDS Clinical Research Center)

Component Project: Effect of Prostratin on latent viral reservoirs.

This proposal is a condensed drug development and phase I safety study for prostratin addressing latent reservoirs of HIV, with particular focus on the mucosal compartment. The proposed studies will first develop a reproducible methodological template for testing agents useful in depletion of latent reservoirs and then will complete toxicology and human pharmacokinetic studies to submit an IND. After filing an IND, the studies will proceed to a human phase I clinical trial, in order to find a safe and well-tolerated dose of prostratin in HIV-positive patient on continuous HAART. There will be no funding overlap if this grant is awarded.

Role: Co-Investigator

R01 AI52021-01 Lee (PI)

7/1/02 – 6/30/07

NIH/NIAID

Studies on DC-SIGN interactions with HIV and SIV.

Principal Investigator/Program Director (Last, First, Middle):

This grant funds studies into the structural, immunological and cell biological basis for DC-SIGN's fcis- and trans-infection function.

Role: Co-PI

P50 DK064539 Mayer (PI)

9/1/02 – 8/31/07

NIH

Sex differences in neuroendocrine and immunologic responses in IBS.

The major goals of this project are to determine sex-related differences in stress responsiveness, in particular in neuroendocrine, autonomic responses and pain modulatory responses in healthy individuals and in irritable bowel syndrome and interstitial cystitis.

Role: Co-Investigator

Completed Research Support

78849 Anton (PI)

7/1/99 – 12/30/00

Procter and Gamble

A randomized, double-blind, placebo controlled parallel designed pilot study of Asacol 4.8 gr/day administered orally in HIV-positive subjects on stable anti-viral therapy.

This project was a pilot and feasibility study to investigate the safety of a particular anti-inflammatory medication, Asacol[®], as adjunctive therapy in HIV and evaluated changes in plasma and mucosal viral load as well as markers of inflammation.

Role: PI

amfAR 02620 Giorgi (PI)

10/1/99 – 9/30/00

American Foundation for AIDS Research

Novel preclinical mucosal immunization against HIV-1.

This project investigated the mucosal T and B cell immune response to vaccinia-HIV recombinant vaccination given by the targeted inguinal lymph node route

Role: Co-PI

CC 96-LA-175 Mitsuyasu (PI)

7/1/99-6/30/02

UARP

ACRC (AIDS Clinical Research Center) Component Project: HIV mucosal induced inflammation and response to anti-inflammatory medication.

This grant application aims to acquire funds for partial support of laboratory personnel and cover patient care as well as some laboratory supplies and related charges in a quantitative evaluation of mucosal inflammation in HIV and determine response to a specific anti-inflammatory medication, mesalamine. The specific aims will quantitate co-receptor expression on mucosal T cells and tissue concentrations of β -chemokines before and following intervention with a topical anti-inflammatory medication, mesalamine.

Role: Co-Investigator