

- **Personal Information**

Home Address: 901 Edgewater Drive
Atlanta, GA 30328

Office Address: Office of the Vice-Chancellor
Vice-Chancellery
Mona, Kingston 7
Jamaica, W.I.

Place of Birth: Guyana, South America

Citizenship: USA

Marital Status: Married: Yvette Williams-Harris, M.D. (Internist)
Children: Three (Zaman, Tamia, Sandhya)

- **Current Position**

Vice Chancellor
The University of the West Indies

- **Education**

Academic Degrees:	1965-68	B.S.	Howard University, Washington, D.C. with High Honors in Chemistry Magna Cum Laude, <u>Phi Beta Kappa</u>
	1973	M.Phil	Yale University, New Haven, CT
	1977	M.D.	University of Pennsylvania Philadelphia, PA <u>Alpha Omega Alpha</u>
	1982	D.M.	University of the West Indies (Doctor of Medicine) Kingston, Jamaica

- **Licensure**

Kentucky, 1987, No. 25416
 Georgia, 1998, No. 045068
 Jamaica, 1977

- **Board Certification**

1990 American Board of Internal Medicine
 1992 American Rheumatology Board

- **Professional Experience:**

Postgraduate Training and Fellowship Appointments:

1977-78 Internship, University Hospital of the West Indies, (UHWI)
 1978-82 Resident in Internal Medicine, UHWI
 1982 Chief Resident in Internal Medicine, UHWI
 1983-85 Fellow, Rheumatology Unit, Hammersmith Hospital, London, England

Administrative and Faculty Appointments:

1/96-Present Professor of Medicine, Morehouse School of Medicine
 1/96-09/2004 Dean and Senior Vice President for Academic Affairs
 Morehouse School of Medicine
 7/94-12/97 Professor of Medicine, University of Louisville
 1993-95 Chief, Division of Rheumatology, University of Louisville
 7/91-06/94 Associate Professor of Medicine, University of Louisville
 9/87-07/91 Assistant Professor of Medicine, University of Louisville
 7/85-09/87 Deputy Director, Lupus Research Laboratory
 Senior Lecturer, Rayne Institute, St. Thomas' Hospital, London, England
 7/82-12/82 Lecturer, UHWI, Kingston, Jamaica

Hospital Appointments:

1997-Present Grady Memorial Hospital, Atlanta, Georgia
 1988-95 Norton Hospital, Louisville, Kentucky
 1988-95 Jewish Hospital, Louisville, Kentucky
 1987-95 Veterans Administration Medical Center
 1987-95 University of Louisville Hospital
 1985-87 St. Thomas' Hospital, London, United Kingdom
 1983-85 Hammersmith Hospital, London, United Kingdom
 1978-82 University Hospital of the West Indies Kingston, Jamaica

- **Honors and Awards**

- 2000 Health Advancement/Patient Services Award, Community Health Charities of Georgia
- 1995 Centennial Award for Contributions to Medicine, National Medical Association
- 1993 International League Against Rheumatism--Ciba Geigy Prize for Work on Antiphospholipid Antibodies
- 1990 Outstanding Speaker Award, Rheumatology on the Beach
- 1990 Young Investigator Award, University of Louisville
- 1984 Wellcome Research Fellowship, Royal Postgraduate Medical School, London
- 1977 Alpha Omega Alpha Honor Society, University of Pennsylvania
- 1969 Institute of International Education (IIE)
- 1968 Yale Fellowship to Study Biochemistry
- 1968 Phi Beta Kappa, Howard University
- 1967 Lubrizol Scholarship for Outstanding Performance in Chemistry, Howard University, Washington, D.C.
- 1966 Merck Index Award for Chemistry, Howard University, Washington, D.C.
- 1966 Cook Hall Prize, Howard University, Washington, D.C.
- 1965 Institute of International Education Scholarship to Howard University

- **Professional Societies**

Medical Societies:

- Fellow: American College of Rheumatology
- Member: American College of Physicians
National Medical Association
American Medical Association
Georgia State Medical Association
Atlanta Medical Association
Georgia Society of Rheumatology

I. Boards/Panels

- National Center for Research Resources (NCRR) Council member 2001 – 2004.
- Arthritis Advisory Board Member (Served as interim chair for several sessions during 2001), Food and Drug Administration, 1998-2001.
- Board Member, National Space Biomedical Research Institute, 1997 - 2004
- AAMC Clinical Research Task Force, 1997-1999.
- Member, Editorial Board, Academic Medicine 2001 - 2004
- Advisory Committee on Human Research Protection to the U.S. Department of Health & Human Services (2002)- 2004

Boards/Panels (cont'd)

- Member, Board of Directors, Grady Healthcare, Inc. (HMO of Grady Hospital), 1998-2000.
- Academic Advisory Board, Pfizer Visiting Professorship Program, 1998 - 2004.
- Senior Advisor, American Medical Association Minority Affairs Consortium.
- Served as chairperson of the AAMCs 2000 David E. Rogers Award Review Committee
- Panel member [consensus conferences I, 10/23/97-10/26/97; and II, 12/11-12/13/97-- Initiative for Biomedical and Behavioral Minority Research conducted by the US Army Medical Research and Material Command (USAMRMC)].
- Member, Editorial Board of Lupus News.
- Member, Editorial Advisory Board, APL Newsletter (American Autoimmune and Related Diseases).
- Member, Scientific Advisory Board, American Autoimmune and Related Diseases.
- Member, American Clinical and Climatological Association

II. Committees

Several committees related to Antiphospholipid Antibodies.

- Founder (with Doctors Graham Hughes and Dr. Azzudin Ghavari) of International Meetings on Antiphospholipid Antibodies [organized meetings in **1984, London; 1986, London; and 1988 Kingston, Jamaica**. Was on organizing committee of subsequent meetings, 1990, Italy; 1992, San Antonio, Texas; 1994, Leuven, Belgium; 1996, New Orleans, Louisiana; and 1998, Sapporo, Japan] and others subsequently.
- Initiated and coordinated five international workshops to standardize the anti-cardiolipin test.
- Organizer and chairperson of Antiphospholipid Study Group, American College of Rheumatology, 1992-1995, and 1999 to 2001.
- Served as chairperson of several anti-cardiolipin sessions and meetings in the USA, Britain, France, Italy, and Japan.

III. Community

- Chairperson, Medical Advisory Board, Lupus Foundation of America, Greater Atlanta Chapter, 1996-2004
- Member, National Medical Advisory Board, Lupus Foundation of America, 1994-1996.
- Member, Medical Council of Arthritis Foundation of Kentucky, 1991-1995.
- Program Organizer, Georgia Society of Rheumatology Meeting, June, 1998.
- Leadership Atlanta, Class of 1998.

Community (cont'd)

- President, Georgia Society of Rheumatology, 1999-2000.
- Member, Committee on Medical Schools, Medical Association of Georgia, June 1, 1998 – May 31, 2000.

ANTIPHOSPHOLIPID STANDARDIZATION LABORATORY

This laboratory was started in 1987 at the University of Louisville to lead world-wide efforts in standardization of the anticardiolipin test by making and distributing anticardiolipin standards, providing advice to private and commercial laboratories wishing to establish the anticardiolipin test, testing samples for anticardiolipin antibodies, and training fellows in laboratory techniques related to antiphospholipid antibodies.

Accomplishments of Antiphospholipid Standardization Laboratory:

1. Anticardiolipin standards have been distributed to over 500 laboratories world-wide. They are utilized by several large commercial laboratories in the USA and by companies making anticardiolipin kits. This laboratory prepares standards utilized by the College of American Pathologists.
2. The laboratory performs anticardiolipin tests on about 1000 patient samples annually. (often to confirm tests that were equivocal in other laboratories.)
3. Visiting fellows (1988 – 1994)* are listed below:

11/88-12/88	Dr. Ramon Aroyo	San Antonio, TX
05/90	Dr. Vada Sanders	Washington, D.C.
02/90-08/90	Dr. Jordi Barquinero	Barcelona, Spain
06/90-08/90	Dr. Jose Ordi-Ros	Barcelona, Spain
05/91-06/91	Dr. Pornthita Chaiamnuay	Thailand
05/91-06/91	Lt. Arunee Thongrit	Thailand
06/91	Dr. Bryan Burcitt	Grenada
06/92	Dr. Benjamin Tanner	Louisville, KY
07/92	Dr. Defzi Stikovac	Yugoslavia
06/92	Dr. Xin Fang	China
10/92	Dr. Alejandro Alvarellos	Argentina
11/92	Dr. Sanja Krnic	Bosnia

ANTIIPHOSPHOLIPID STANDARDIZATION LABORATORY (cont'd)

1993-1994	Andrew Campbell	Louisville, KY
	Carlos Rodriguez	Argentina
6-7/94	Hope Luney	Louisville, KY

*The Antiphospholipid Standardization Laboratory continues to operate at the University of Texas in Galveston under the direction of Dr. Silvia Pierangeli, a long term collaborator of Dr. E. Nigel Harris. The laboratory continues to attract international fellows.

Bibliography
Peer-Reviewed Publications:

1. Harris EN, Rodney B. Arsenic poisoning in glass factory in Kingston, Jamaica. *West Indian Medical Journal*, 1982;31:213-216.
2. *Harris EN, Gharavi AE, Boey M L, Patel, BM, Mackworth-Young CG, Loizou S, Hughes GRV anticardiolipin antibodies: detection by radioimmunoassay and association with thrombosis. *Lancet* 1983;ii:1211-1214.

***Summary of this paper also republished under the headings:**

- a) *Radioimmunoassay aids the diagnosis of thrombosis in SLE. Internal medicine News* 1984;17:53.
- b) *Radioimmunoassay seems predictive of thrombosis in SLE. Skin and Allergy* 1984;15:16.
- c) *Paper also abstracted in Modern Medicine of Canada (1984); Current medical Literature (Rheumatology), Feb. 1984; Current Contents (1984); Year Book of Medicine (1984).*
- d) *This work has been discussed extensively in four editorials:*
 - Hughes GRV - *Thrombosis, abortion, cerebral disease and the lupus anticoagulant. Br Med J* 1983;287:1088-1089.
 - Editorial - *The Lupus Anticoagulant. Lancet* 1984;i:1157-1158.
 - Williams RC - *Cerebral infarction in systemic lupus: association with anti-cardiolipin antibodies. Cline Exp Rheum* 1984;2:3-4.
 - Editorial - *Anti-cardiolipin antibodies: a risk factor for venous and arterial thrombosis. 1984; Lancet I(8434):912-913.*

Peer-Reviewed Publications (cont'd):

3. Hull R., Harris EN, Morgan S, Hughes GRV. Anti-Ro antibodies and abortions in women with SLE. *Lancet* 1983;ii:1138.
4. Harris EN, Englert H, Derue G, Gharavi AE, Hughes GRV. Antiphospholipid antibodies in the Guillain-Barre Syndrome. *Lancet* 1983;ii:1361.
5. Harris EN, Loizou S, Englert H, Derue G, Chan JK, Gharavi AE, Hughes GRV. Anticardiolipin antibodies and the lupus anticoagulant. *Lancet* 1984;ii:1099.
6. Harris EN, Gharavi AE, Hughes GRV. Comment on Isenberg article. *Arthritis Rheum* 1984;27:1318
7. Hughes GRV, Mackworth-Young CG, Harris EN, Gharavi AE. Venous-occlusive disease in systemic Lupus erythematosus: possible association with anticardiolipin antibodies? *Arthritis Rheum* 1984;27:1071.
8. Harris EN, Gharavi AE, Asherson RA, Boey ML, Hughes GRV. Cerebral infarction in systemic lupus: association with anticardiolipin antibodies. *Clin Exp Rheumatol* 1984;2:47-52.
9. Hull RG, Harris EN, Gharavi AE, et al. Anticardiolipin antibodies: Occurrence in Behcet's syndrome. *Ann Rheum Dis* 1984;43:746-748.
10. Asherson RA, Harris EN, Bernstein RM, Mackworth-Young CG, Hughes GRV. Immunological studies in primary idiopathic pulmonary hypertension. *Eur J Rheum Inflamm* 1984;7(3):75-9.
11. Englert H, Hawkes CH, Boey ML, Derue GJ, Loizou S, Harris EN, Gharavi AE, Hughes GRV. Degos disease: association with anticardiolipin antibodies and the lupus anticoagulant. *Br Med J* 1984;289:576.
12. Asherson RA, Harris EN, Gharavi AE, et al. Aortic arch syndrome associated with anticardiolipin antibodies and the lupus anticoagulant: comment on Ferrante paper. *Arthritis Rheum* 1985;28:594-5.
13. Asherson RA, Morgan SH, Harris EN, Gharavi AE, Hughes GRV. Pulmonary hypertension and chronic cutaneous lupus erythematosus: association with the lupus anticoagulant. *Arthritis Rheum* 1985;28:118.
14. Asherson RA, Mackworth-Young CG, Harris EN, Gharavi AE, Hughes GRV. Multiple venous and arterial thrombosis associated with the lupus anticoagulant and antibodies to cardiolipin in the absence of SLE. *Rheumatol Int* 1985;5:91-93.

Peer-Reviewed Publications (cont'd):

15. Derue G, Englert H, Harris EN, Gharavi AE, Morgan AE, Hull RG, Elder MG, Hawking DF, Hughes GRV. Fetal loss in systemic lupus: association with anticardiolipin antibodies. *J Obstet Gyn* 1985;5:207-209.
16. Harris EN, Asherson RA, Gharavi AE, Morgan SH, Derue G, Hughes GRV. Thrombocytopenia in SLE and related autoimmune disorders: association with anticardiolipin antibody. *Br J Haematol* 1985;59:227-230.
17. Harris EN, Gharavi AE, Hegde U, Derue G, Morgan SH, Englert H, Chan JKH, Asherson RA, Hughes GRV. Anticardiolipin antibodies in autoimmune thrombocytopenia purpura. *Br J Haematol* 1985;59:231-234.
18. Harris EN, Gharavi AE, Loizou S, Derue G, Chan JKH, Patel BM, Mackworth-Young CG, Bunn CC, Hughes GRV. Cross reactivity of antiphospholipid antibodies. *J Clin Lab Immunol* 1985;16:1-6.
19. Loizou S, McCrea JD, Rudge AC, Reynolds R, Boyle CC, Harris EN. Measurement of anticardiolipin antibodies by an enzyme linked immunosorbent assay (ELISA). Standardization and quantization of results. *Clin Exp Immunol* 1985;62:738-745.
20. Asherson RA, Chan JKH, Harris EN, Gharavi AE, Hughes GRV. Anticardiolipin antibody, recurrent thrombosis and warfarin withdrawal. *Ann Rheum Dis* 1985;44:823-825.
21. Harris EN, Gharavi AE, Tincani A, Chan JKH, Englert H, Mantelli P, Allegro F, Ballestrieri G, Hughes GRV. Affinity purified anticardiolipin and anti-DNA antibodies. *J Clin Lab Immunol* 1985;17:155-162.
22. Harris EN, Gharavi AE, Mackworth-Young CG, Derue G, Patel BM, Hughes GRV. Lupoid sclerosis: a possible pathogenetic role for antiphospholipid antibodies. *Ann Rheum Dis* 1985;44:281-3.
23. Asherson RA, Hackett D, Gharavi AE, Harris EN, Kennedy HG, Hughes GRV. Pulmonary hypertension in systemic lupus erythematosus: a report of three cases. *J Rheumatol* 1986;13:416-420.
24. Asherson RA, Mackay IR, Harris EN. Myocardial infarction in SLE associated with deep vein thrombosis and antiphospholipid antibodies. *Brit heart J*. 1986;56:190-193.
25. Mackworth-Young CG, Melia WH, Harris EN, Gharavi AE, Sivathondan Y, Derue G, Sherlock S, Hughes GRV. The Budd-Chiari syndrome. Possible pathogenetic role of antiphospholipid antibodies. *J Hepatol* 1986;3:83-86.

Peer-Reviewed Publications (cont'd):

26. Asherson RA, Derksen RHMW, Harris EN, Bingley PJ, Hoffbrand BJ, Gharavi AE, Kater L, Hughes GRV. Large vessel occlusion and gangrene in SLE and lupus-like disease-report of six cases. *J Rheum* 1986;13:740-747.
27. Harris EN, Chan JKH, Asherson RA, Aber VR, Gharavi AE, Hughes GRV. Thrombosis and recurrent fetal loss. *Arch Intern Med* 1986;146:2153-56.
28. Chan JKH, Harris EN, Hughes GRV. Successful pregnancy following suppression of anticardiolipin antibody and lupus anticoagulant with azathioprine in systemic lupus erythematosus. *J. Obstet Gynaecol* 1986;7:16-17.
29. Asherson RA, Harris EN, Hughes GRV, Ritter JMG, Barrow SE, Jones M. Prostacyclin in systemic lupus and anticardiolipin syndrome. *Ann Rheum Dis* 1987;46:422-3.
30. Gharavi AE, Harris EN, Asherson RA, Hughes GRV. Anticardiolipin (aCL) isotypes: a study of their clinical relevance. *Ann Rheum Dis* 1987;46:1-6.
31. Asherson RA, Derksen RHMW, Bouma BN, Harris EN, Gharavi AE, Kater L, Hughes GRV. Chorea in systemic lupus erythematosus and lupus-like diseases; association with antiphospholipid antibodies. *Sem Arthritis Rheum* 1987;16:253-9.
32. Meroni PL, Harris EN, Brucato A, Tincani A, et al. Antimitochondrial type M5 and anticardiolipin antibodies in autoimmune disorders: studies on their association and cross-reactivity. *Clin Exp Immunol* 1986;67:484-91.
33. Harris EN, Hughes GRV. Standardizing the anticardiolipin antibody test. *Lancet* 1987;1:277.
34. Harris EN, Gharavi AE, Patel SP, Hughes GRV. Evaluation of the anticardiolipin antibody test: report of an international workshop held in 1986. *Clin Exp Immunol* 1987;68:215-222.
35. Harris EN, Gharavi AE, Hughes GRV. Anticardiolipin antibody testing: the need for standardization. *Arthritis Rheum* 1987;30:835-7.
36. Valesini G, Tincani A, Harris EN, Mantelli P et al. Use of monoclonal antibodies to identify shared idiotypes on anticardiolipin and anti-DNA antibodies in human sera. *Clin Exp Immunol* 1987;70:18-25.
37. Mackworth-Young CG, Chan J, Harris EN, Walport M, Bernstein R, Batchelor R, Hughes GRV, Gharavi AE. High evidence of anticardiolipin antibodies in relatives of patients with systemic lupus erythematosus. *Ann Rheum Dis* 1987;14:723-26.

Peer-Reviewed Publications (cont'd):

38. Asherson RA, Mercey D, Phillips G, Sheehan N, Gharavi AE, Harris EN, Hughes GRV. Recurrent stroke and multi-infarct dementia in systemic lupus erythematosus: association with antiphospholipid antibodies. *Ann Rheum Dis* 1987;46:605-11.
39. Gharavi AE, Harris EN, Lockshin MD, Hughes GRV, Elkou KB. IgG subclass and light chain distribution of anticardiolipin and anti-DNA antibodies in systemic lupus erythematosus. *Ann Rheum Dis* 1988;47:286-90.
40. Asherson RA, Harris EN, Hughes GRV, Farquharson RG. Complications of oral contraceptives and antiphospholipid antibodies: Reply to letter by Breineau et al. *Arthritis Rheum* 1988;31:575.
41. Harris EN, Gharavi AE, Wasley GD, Hughes GRV. Use of an enzyme linked immunosorbent assay and of inhibition studies to distinguish between antibodies to cardiolipin from patients with syphilis or autoimmune disorders. *J Infect Dis* 1988;157:23-31.
42. Mackworth-Young CG, Harris EN, Steere AC, et al. Anticardiolipin antibodies in Lyme disease. *Arthritis Rheum* 1988;31(8):1052-6.
43. Khamashta MA, Harris EN, Gharavi AE, et al. Immune mediated mechanism for thrombosis: antiphospholipid antibody binding to platelet membranes. *Ann Rheum Dis* 1988;47:849-54.
44. Vismara A, Meroni PL, Tincani A, Harris EN, et al. Relationship between anticardiolipin and anti-endothelial cell antibodies in systemic lupus erythematosus. *Clin Exp Immunol* 1988;74(2):247-53.
45. Harris EN, Anticardiolipin versus lupus anticoagulant tests: no final judgment (letter). *Ann Rheum Dis* 1989;48(1):84-5.
46. Staub HL, Harris EN, Khamashta MA, et al. Antibody to phosphatidylethanolamine in a patient with lupus anticoagulant and thrombosis. *Ann Rheum Dis* 1989;48(2):166-9.
47. Harris EN, Williams EK, Shah DJ, DeCeulaer K. Mortality of Jamaican patients with systemic lupus erythematosus. *Br J Rheumatol* 1989;28(2):113-7.
48. Asherson RA, Merry P, Acherson JF, Harris EN, Hughes GR. Antiphospholipid antibodies: a risk factor for occlusive ocular vascular disease in systemic lupus erythematosus and the 'primary' antiphospholipid syndrome. *Ann Rheum Dis* 1989;48:358-61.

Peer-Reviewed Publications (cont'd):

49. Harris EN, Pierangeli S. What is the “true” antigen for antiphospholipid antibodies
Lancet 1990;336:1550.
50. Harris EN. (Coordinator, KAPS anticardiolipin Standardization Committee). Second
International Anti-Cardiolipin Standardization Workshop. Am J Cline Pathol
1990;94:476-484.
51. Exner T, Triplett DA, Tabernes DA, Howard MA, Harris EN. Comparison of Test
Methods for the Lupus Anticoagulant: International Survey on Lupus Anticoagulant-I
(ISLA-1). Thromb. Haemostasis 1990;64:478-484.
52. Harris EN, Pierangeli S, Barquinero J, Ordi-Ros J. Anticardiolipin antibodies and
binding of anionic phospholipids and serum proteins. Lancet 1990;336:505-6.
53. Harris EN, Gleason CB. Diagnosing the Antiphospholipid Syndrome. Internal
Medicine for the Specialist 1991;12:45-49.
54. Harris EN, Spinnato J. Should anticardiolipin tests be performed in otherwise healthy
pregnant women? Am J Obstet General 1991;165:1272-1277.
55. Harris EN, Spinnato JA, Pierangeli S. Antiphospholipid antibodies and fetal loss.
NEJM 1992;14:953.
56. Harris EN. Serological detection of antiphospholipid antibodies in stroke. Stroke
(supplement). 1992;23:15-17.
57. Del Papa N, Meroni PL, Tincani A, Harris EN, Pierangeli SS, Barcellini W, Borghi MO,
Balestrieri G, Zanussi C. Relationship between antiphospholipid and antiendothelial cell
antibodies: further characterization of the reactivity on resting and cytokine-activated
endothelial cells. Cline Exp Rheumatol 1992;10:37-42.
58. Pierangeli SS, Harris EN, Davis S, DeLorenzo G. (β_2 -GPI) enhances cardiolipin
binding activity but is not the antigen for antiphospholipid antibodies. Br J Haematol
1992;82:565-70.
59. Harris EN, Pierangeli SS. Antiphospholipid antibodies-method of detection. Am J
Reproductive Immunol 1992;28:208-210.
60. Gleason CB, Stoddard MF, Wagner SG, Longaker RA, Pierangeli S, Harris EN. A
comparison of cardiac valvular involvement in the primary antiphospholipid syndrome
versus anticardiolipin negative systemic lupus erythematosus. American Heart J
1993;125(4):1123-29.

Peer-Reviewed Publications (cont'd):

61. Harris EN, Pierangeli S, Spinnato J, Branch DW. Testing for anticardiolipin antibodies. *Am J Obstet Gyn* 1993;169:232-233.
62. Pierangeli SS, Vigo-Pelfrey C, Harris EN. Comparison of a fluorometric test with the standard ELISA test for the detection of anticardiolipin antibodies. *Clin Exp Rheumatol* 1993;11:349-50.
63. Pierangeli SS, Harris EN. Induction of phospholipid binding antibodies in mice and rabbits by immunization with human β_2 -glycoprotein 1 or anticardiolipin antibodies alone. *Clin Exp Immunol* 1993;93(2):269-72.
64. Pierangeli SS, Harris EN, Gharavi AE, Goldsmith G, Branch DW, and Dean WL. Are immunoglobulins with lupus anticoagulant specific for phospholipids? *Br J Haematol* 1993;85:124-132.
65. Gharavi AE, Harris EN, Sammaritano LR, Pierangeli SS, and Wen J. Do patients with antiphospholipid syndrome have autoantibodies to β_2 -glycoprotein? *J Lab Clin Med* 1993;122(4):426-431.
66. Harris EN. The Antiphospholipid Syndrome: A variant of Lupus that can affect men. *Lupus News* 1994;14(2):8-9.
67. Harris EN. Le syndrome des anticorps antiphospholipides. *Les anticorps antiphospholipids* 1994:898-93.
68. Harris EN, Pierangeli SS, Birch D. An Anticardiolipin Wet Workshop: 7th International Symposium on Antiphospholipid Antibodies. *Am J Clin Pathol* 1994;101(5):616-624.
69. Pierangeli SS, Barker JH, Stikovac D, Ackerman D, Anderson G, Barquinero J, Acland R, Harris EN. Effect of human IgG antiphospholipid antibodies on an in vivo thrombosis model in mice. *Thromb Haemostas.* 1994;71(5):670-74.
70. Pierangeli SS, Goldsmith GH, Krnic S, Harris EN. Differences in functional activity of anticardiolipin antibodies from patients with syphilis and the Antiphospholipid syndrome. *Infect Immun.* 1994;62(9):4081-84.
71. Campbell AL, Pierangeli SS, Wellhausen S, Harris EN. Comparison of the effects of anticardiolipin antibodies from patients with the antiphospholipid syndrome and with syphilis on platelet activation and aggregation. *Thromb Haemost* 1995;73:(3)529-34.

Peer-Reviewed Publications (cont'd):

72. Goldsmith G, Pierangeli SS, Branch DW, Gharavi AE, Harris EN. Inhibition of prothrombin activation by antiphospholipid antibodies and β_2 -glycoprotein 1. *Br J Haematol* 1994;87:548-554.
73. Harris EN. Clinical implications of the Antiphospholipid Syndrome. *Int Med* 1994;15:(10)56-69.
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78. Walton SP, Pierangeli Ss, Campbell A, Klein E., Burchitt B., Harris EN. Demonstration of antiphospholipid antibodies heterogeneity by phospholipid column chromatography and salt gradient elution. *Lupus* 4:263-271(1995).
79. Olee T, Pierangeli SS, Handley HH, Novotny W, En J, Harris EN, Woods L, Chen PP. Generation and characterization of Monoclonal IgG Anticardiolipin Antibodies from a patient with the antiphospholipid syndrome. *Proc Nat Sci (USA)*. 1996;93:8606-8611.
80. Pierangeli SS, Liu, XW, Anderson G, Barker JH, Harris EN. Thrombogenic properties of murine anticardiolipin antibodies induced by β_2 glycoprotein 1 and human IgG antiphospholipid antibodies. *Circulation*. 1996;94:1746-1751.
81. Merkel PA, Chang YC, Pierangeli SS, Convery K, Harris EN and Polisson RP. The prevalence and clinical associations of anticardiolipin antibodies in a large inception cohort of patients with connective tissue diseases. *Am J Med* 1996;101:576-583.

Peer-Reviewed Publications (cont'd):

82. Pierangeli SS, Dean J, Gharavi AE, Goldsmith GH, Branch DW, Harris EN. Studies on the interaction of placental anticoagulant protein (PAP-1), β_2 -glycoprotein 1 (β_2 GP1) and antiphospholipid (aPL) antibodies in the prothrombinase reaction and in solid phase anticardiolipin assays. *J Lab Cline Med.* 1996;128(2):194-201.
83. Silver RM, Pierangeli SS, Edwin SS, Umar F, Harris EN, Scott JR, Branch DW. Pathogenic antibodies in women with obstetric features of antiphospholipid syndrome who test negative for lupus anticoagulant and anticardiolipin antibodies. *Am J Obstet General* 1996;176(3):628-632.
84. Branch DW, Silver RM, Pierangeli SS, Van Leeuwen I, Harris EN. Antiphospholipid antibodies in women with recurrent pregnancy loss, fertile controls and antiphospholipid syndrome. *Obstet General* 1997;89(4):549-555.
85. Pierangeli S, Goldsmith GH, Branch DW, Harris EN. Antiphospholipid antibody: functional specificity for inhibition of prothrombin activation by the prothrombinase complex. *Br J Haematol.*1997;97(4):768-774.
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87. Krnic-Barrie S, O'Connor CR, Looney SW, Pierangeli SS, Harris EN. A retrospective review of 61 patients with antiphospholipid syndrome. *Arch Intern Med* 1997;157:2101-2108.
88. Harris EN, Pierangeli SS, Gharavi A, Branch W. Phospholipid Binding Antibodies Warrant Continued Investigation. *Blood* 1995;85(8):2276-2277.
89. Pierangeli SS, Stewart M, Silva LK, Harris EN. Report of an anticardiolipin wet workshop during the VIIth International Symposium on antiphospholipid antibodies. *J Rheumatol* 1998;25:156-162.
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Peer-Reviewed Publications (cont'd):

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16. Harris EN. The Antiphospholipid Syndrome. Primer on the Rheumatic Diseases, 10th Edition. Edited by H.R. Schumacher, John H. Klippel, William J. Chipman, Arthritis Foundation, Atlanta. 1993;116-117. (Republished in 11th Edition)
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 29. Harris EN, Wilson WA, Pierangeli SS. Haematologic and coagulation abnormalities of SLE and the Antiphospholipid Syndrome. In: Systemic Lupus Erythematosus: A companion to rheumatology. ed by George C. Tsokos, Caroline Gordon and Josef S. Smolen. London 2006.
 30. Khamashta MA, Pierangeli S, Harris EN. Antiphospholipid Syndrome: overview of pathogenesis, diagnosis and management. Section 10: pages 1351-1359. In: Rheumatology. Fifth Edition. Ed by Hochberg, Silman, Smolen, Weinblatt and Weisman. Elsevier pub. 2010 Philadelphia, PA

Books

Harris EN, Exner R, Asherson RA, Hughes GRV (Editors) Phospholipid Binding Antibodies, CRC Press, Boca Raton, Florida, 1991.

This is the first book on phospholipid binding antibodies. It consists of four different sections covering all areas of current work on these antibodies. There are 26 chapters with contributions from many of the leading basic scientists and clinicians involved in the study of phospholipid binding antibodies.

Selected Presentations and Visiting Professorships (1984-1995)

- 09/84 Rheumatology Unit, Spedali Civili di Brescia, Brescia, Italy.
- 04/85 Association of Physicians Meeting of Great Britain and Ireland, Birmingham.
- 04/85 XXXII Annual Colloquium - Protides of the Biological Fluids (Plenary Session), Brussels, Belgium.

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- 05/85 Multipurpose Arthritis Center, Brigham and Women's Hospital (Harvard), Boston, USA.
 - 05/85 Division of Rheumatology and Immunogenetics, Health Science Center in Houston, University of Texas, USA.
 - 05/85 Rheumatology Unit. Health Science Center in Dallas, University of Texas, USA.
 - 06/85 Biochemistry and Rheumatology Departments, University of Virginia, School of Medicine, Charlottesville, Virginia, USA.
 - 06/85 Division of Rheumatology. Good Samaritan Hospital (John Hopkins), Baltimore, Maryland, USA.
 - 09/85 Department of Internal Medicine. University of Milan, Milan, Italy.
 - 10/85 Rheumatology Unit, Guy's Hospital, London, Great Britain.
 - 10/85 Royal Northern Hospital, London, Great Britain.
 - 10/85 British SLE Aid Group - London, Great Britain.
 - 5-6/86 Department of Obstetrics, Yale University, New Haven, Conn., USA.

Selected Presentations and Visiting Professorships (1984-1995) (cont'd)

- 5-6/86 Department of Medicine-Rheumatology, University of Connecticut, Hartford, Connecticut, USA.
- 5-6/86 Cardeza Foundation, Jefferson University, Philadelphia, Pennsylvania, USA.
- 5-6/86 Department of Medicine-Rheumatology, University of Louisiana, New Orleans.
- 5-6/86 American Arthritis and Rheumatism Assoc. Meeting, New Orleans, Louisiana
- 5-6/86 Department of Medicine, University of Cincinnati, Cincinnati, Ohio, USA.
- 01/87 Department of Medicine, University of Louisville, Louisville, Kentucky, USA.
- 04/87 Guest Chairman: Antiphospholipid Session of IIIrd Spanish Thrombosis and Haemostatis Meeting. Mallorca, Spain.
- 05/87 Department of Medicine, La Paz Hospital, University of Madrid, Madrid, Spain.
- 5-6/87 University of Milan, Milan, Italy.
- 5-6/87 University of Rome, Rome, Italy.
- 5-6/87 Facts and Fiction in Some Rheumatic Diseases, Bari, Italy.
- 09/87 "The Anticardiolipin Test - Its Importance in Recognizing the Antiphospholipid Syndrome." Invited participant in NIH sponsored symposium on Antiphospholipid Antibodies and Thrombosis. Washington, D.C., Sept. 17, 1987.
- 10/87 "Antiphospholipid Antibodies and Fetal Loss." Participant in 18th Royal College of Obstetrics and Gynecology Meeting on Early Pregnancy: Physiology, Diagnosis and Failure. London, Great Britain, Oct. 5, 1987.
- 10/87 University of Leeds (Cline Immunol), Leeds, United Kingdom.
- 11/87 "Pregnancy in Lupus: Clinical and Serological Findings." Central Regional Meeting, Amer. Arthritis and Rheumatism Assoc., Chicago, IL. Nov. 13, 1987.
- 03/88 "Miscarriages, Thrombosis and Anticardiolipin Antibodies." Wilford Hall USAF Medical Center, San Antonio, Tex., March 3, 1988.
- 06/88 Round Table Discussion. American Society of Immunology & Reproduction. Portland, ME, June 16, 1988.

Selected Presentations and Visiting Professorships (1984-1995) (cont'd)

- 07/88 "Miscarriages, Thrombosis and Anticardiolipin Antibodies." Lupus Foundation of America Annual Meeting, Louisville, KY, July 21, 1988.
- 09/88 "The Antiphospholipid Syndrome." Grand Rounds. Ball Memorial Hospital, University of Indiana, Muncie, IN., September 8, 1988.
- 10/88 "Clotting and Miscarriages; The aCL Story." Grand Rounds. Department of Medicine, University of Cincinnati, Cincinnati, OH, October 19, 1988.
- 10/88 "Antiphospholipid Syndrome" & "Specificity of Antiphospholipid Antibodies", Annual Retreat for Alumni of Department of Rheumatology. University of Alabama, Birmingham, AL. October 28-29, 1988.
- 11/88 "Progress in KAPS Anticardiolipin Standardization Study" Working Party on the Lupus Anticoagulant: International Committee on Thrombosis and Hemostasis, Washington, D.C. November 17 & 18, 1988.
- 12/88 "Specificity of the Antiphospholipid Antibodies." Symposium on Antiphospholipid Antibodies and Vasculitis. London, England, December 17, 1988.
- 02/89 "Antiphospholipid Antibodies" and "Overlap Syndrome." Arthritis Update, Featured speaker of the meeting. Northeastern OH Universities, School of Medicine, Akron, OH. February 1, 1989.
- 03/89 "An Update on the Antiphospholipid Syndrome." Guest speaker of Spanish Society of Thrombosis and Hemostasis. Barcelona, Spain, March 2, 1989.
- 05/89 "An Update on Anticardiolipin Antibodies in Rheumatic Disease." Temple University, Philadelphia. PA, May 31, 1989.
- 05/89 "Phospholipid Antibodies in Connective Tissue Disease." Guest speaker, American Society for Microbiology, New Orleans, LA. May 18, 1989.
- 05/89 Howard University (Washington, D.C. Grand Rounds: Department of Medicine, Howard University; Grand Rounds: D.C. General Hospital)
- 06/89 Guest Speaker, Cleveland Clinic (Cleveland, Ohio). Vascular Medicine and Hematology Group. June, 1989.
- 08/89 School of Medicine, Utah (Salt Lake City) Guest Speaker/Visiting Professor, Department of Obstetrics and Gynecology, August 31, 1989.

Selected Presentations and Visiting Professorships (1984-1995) (cont'd)

- 09/89 "Overview - XVIIth International Congress of Rheumatology." Rio De Janeiro, Brazil, September 17-23, 1989.
- 10/89 Rheumatology Update-University of Pennsylvania, Guest Faculty & Guest Lecturer, October 1, 1989.
- 01/90 Guest Speaker, University of Connecticut, Division of Rheumatology (Hartford, Connecticut). January 3-6, 1990.
- 03/90 Guest Speaker and Faculty Member, Update Course in Rheumatology, University of Oklahoma (Oklahoma City, Oklahoma), March 1, 1990.
- 03/90 Guest Speaker, Jackson Society of Internists (Jacksonville, MS), March 18, 1990.
- 03/90 Visiting Professor, Medicine Grand Rounds, University of Mississippi (Jacksonville, MS), March 19, 1990.
- 03/90 Guest Speaker, D.C. Rheumatism Society (Washington, DC), March 20, 1990.
- 03/90 Visiting Professor, Walter Reed Army Medical Center, Division of Rheumatology (Washington, DC), March 21, 1990.
- 04/90 Guest Faculty Member, Baxter Dade Hemostasis Seminar (Miami, Florida), April 12-14, 1990.
- 05/90 Guest Faculty, American Society of Microbiology Meeting, Session: "Host Modification of Antigens and Antigenic Mimicry" (Anaheim, California) May 14-18, 1990.
- 06/90 Guest Faculty, Tenth Anniversary Meeting of the American Society for the Immunology of Reproduction (Chicago, Illinois), June 22-23, 1990.
- 08/90 Guest Faculty, Association of Medical Laboratory Immunologists (third annual meeting, Washington, D.C., August 1-7, 1990.
- 08/90 Visiting Professor, University of Guyana Medical School, Guyana, South America, August 7-12, 1990.
- 09/90 Guest Faculty, 8th Annual "Rheumatology on the Beach" Meeting. Awarded "Outstanding Speaking Award", Coral Gables, Florida, September 5-15, 1990.

Selected Presentations and Visiting Professorships (1984-1995) (cont'd)

- 10/90 Visiting Professor, 3M Diagnostic Systems, San Francisco, California, October 28-29, 1990.
- 11/90 Guest Faculty, Clinical Symposium - Physicians Health Plan (Fort Wayne, Indiana), November 8, 1990.
- 11/90 Co-organizer and Guest Speaker. Workshop on Antiphospholipid Antibodies: and other presentations, American College of Rheumatology Meeting (Seattle, Washington), November 29-30, 1990.
- 12/90 Guest Faculty. American Academy of Dermatology, Advanced Immunology Course (Atlanta, Georgia), December 1, 1990.
- 03/91 Grand Rounds. Department of Internal Medicine, University of South Alabama (Mobile, Alabama).
- 04/91 Grand Rounds. Fitzsimmons Army Medical Center (Denver, Colorado).
- 04/91 Guest Speaker, Rocky Mountain Rheumatism Association (Denver, Colorado).
- 04/91 Guest Speaker, University of Colorado Rheumatology Department (Denver, Colorado).
- 05/91 Guest Speaker, National Institute of Health, Division of Blood Diseases and Transfusion Medicine (Bethesda, Maryland).
- 06/91 Guest Speaker, 11th Summer Program in Methods of Immunology (Buffalo, NY).
- 06/91 Speaker, Subcommittee on Standardization of Lupus Anticoagulant XIIIth Congress of the International Society on Thrombosis and hemostasis (Amsterdam, the Netherlands).
- 07/91 Guest Speaker. Autoantibody and Rheumatology Sessions of the National Medical Association (Indianapolis, Indiana).
- 07/91 Participant, National Institute of Health Antiphospholipid antibody/lupus anticoagulant workshop.
- 07/91 Keynote Speaker, Second Reunion of the Medical Alumni Association, University of the West Indies (Bridgetown, Barbados).

Selected Presentations and Visiting Professorships (1984-1995) (cont'd)

- 10/91 Guest Speaker, Conference on β_2 -glycoprotein-1 (Milan, Italy).
- 10/91 Speaker, Norman O. Rothermich Seminar on Rheumatic Diseases (Columbus, Ohio).
- 11/91 Speaker, Ninth Annual Meeting of the Ligand Society (St. Louis, MO).
- 11/91 Keynote Speaker, Symposium of the Lupus Foundation of Jamaica (Kingston, Jamaica).
- 12/91 Keynote Speaker, Reunion Internacional d'Obstetricia I Ginecologia (Barcelona, Spain).
- 02/92 Grand Rounds. Department of Medicine, Illinois Masonic Medical Center (Chicago, IL).
- 03/92 Faculty, New York University Course in Advanced Rheumatology (NY).
- 03/92 Medicine Grand Rounds, Department of Medicine, College of Medicine, Northeastern Ohio Universities (Canton, Ohio).
- 04/92 Speaker, Texas Rheumatism Association (Corpus Crista, Texas).
- 05/92 Guest Speaker. Pregnancy in the Rheumatic Diseases Symposium, Jerusalem, ISRAEL.
- 07/92 Keynote Speaker. Symposium on Anticardiolipin Antibodies, Tokyo, Japan.
- 09/92 Guest Speaker 5th International Symposium on Antiphospholipid Antibodies Meeting. San Antonio, Texas.
- 10/92 Guest Speaker "Meet the Professor," American College of Rheumatology meeting San Antonio, Texas.
- 12/92 Honorary Chairman and Guest Speaker, French workshop on Anticardiolipin Antibody Testing, Paris, France.
- 01/93 Guest Speaker to the Texas Medical Center Rheumatology Group, "The Antiphospholipid Syndrome: Diagnosis, Treatment, and Pathogenesis." Houston, Texas.

Selected Presentations and Visiting Professorships (1984-1995) (cont'd)

- 04/93 Guest Speaker Georgia Rheumatism Society Annual Meeting. "History and Clinical Features of Antiphospholipid Syndrome" and "Pathogenesis and Treatment of Antiphospholipid Syndrome." Atlanta, Georgia.
- 05/93 Guest Speaker. "Antiphospholipid Syndrome," Massachusetts General Hospital and Lahey Clinic, Boston, Massachusetts.
- 05/93 Guest Speaker seminar "The Use and Interpretation of Laboratory tests in the Diagnosis and Management of Rheumatologic Diseases", Madisonville, Kentucky.
- 06/93 Guest Speaker Grand Rounds. "The Antiphospholipid Syndrome," St. Luke's Hospital, Houston, TX.
- 07/93 Guest Speaker. Lupus Anticoagulant Phospholipid Dependent Antibody Sessions, New York, NY.
- 08/93 Guest Speaker. "Practical Rheumatologic Update." Opryland Hotel and Theme Park, Nashville, TN.
- 09/93 Guest Speaker. Virginia Rheumatology Society Meeting. "Antiphospholipid Antibodies Syndrome Update," Lynchburg, VA.
- 10/93 Guest Speaker. American Academy of Family Physicians 1993 Fall Seminar. The Use of laboratory Tests in Rheumatologic Diseases" and "Anticardiolipin Syndrome and Systemic Lupus," Jamestown, KY.
- 11/93 Guest Speaker. 6th International Symposium on Antiphospholipid Antibodies Meeting. San Antonio, Texas.
- 11/93 Guest Speaker. "Meet the Professor," American College of Rheumatology meeting San Antonio, Texas.
- 12/93 Guest Speaker. "Various Manifestations of the Antiphospholipid Syndrome." Austin, Texas.
- 12/93 Guest Speaker. "Antiphospholipid Syndrome," St. Louis, Missouri.
- 01/94 Guest Speaker. Westwood Winter Skin Seminar, "Evaluation of the Patient with a Positive Serologic Test," Vail, Colorado, January 1994.

Selected Presentations and Visiting Professorships (1984-1995) (cont'd)

- 04/94 Guest Speaker. 9th Annual Conference on Clinical Immunology, Anaheim, CA.
- 10/94 American College of Rheumatology Meeting. "Meet the Professor," Minneapolis, MN.
- 10/94 Guest Speaker. Academic Minority Physicians, Washington, DC.
- 02/95 Guest Speaker. "Antiphospholipid Syndrome." Kirkwood, MO.
- 02/95 Guest Speaker. 1995 Perinatal Conference, "The Diagnosis and Management of the Antiphospholipid Syndrome." Sarasota, FL.
- 02/95 St. Louis Arthritis Association, St. Louis, Missouri.
- 03/95 Guest Speaker. 4th International Conference on Systemic Lupus Erythematosus, "Approaches to Diagnosis of the Antiphospholipid Syndrome." Jerusalem, Israel.
- 05/95 Educational Workshop. "Recent Advances in the Mechanism and Detection of Thrombosis," Buenos Aires, Argentina.
- 05/95 Guest Speaker. CNS Lupus Symposium, San Antonio, Texas.