

CURRICULUM VITAE

RICHARD MICHAEL SILVER

ADDRESSES:

Office:	Home:
Division of Rheumatology and Immunology	39 Rebellion Road
96 Jonathan Lucas Street, Suite 912	Charleston, SC 29407
P.O. Box 250637	Phone: (843) 571-5462
Charleston, SC 29425	E-mail: agheel@bellsouth.net
Phone: (843) 792-3484	
Fax: (843) 792-7121	
E mail: silverr@musc.edu	

PRESENT POSITIONS AT THE MEDICAL UNIVERSITY OF SOUTH CAROLINA:

Professor of Medicine and Pediatrics	1993 - present
Director, Division of Rheumatology & Immunology	1995 – present
Distinguished University Professor	2007 - present

EDUCATION:

BS, with High Honors, University of Tennessee, Knoxville	1971
MD, Vanderbilt School of Medicine, Nashville	1975
North Carolina Memorial Hospital, Chapel Hill	
Intern in Medicine	1975-1976
Resident in Medicine	1976-1978
Clinical Research Centre, Northwick Park, Harrow, England	
Fellow in Pediatric Rheumatology (Dr. Barbara Ansell)	1978-1979
University of California, San Diego	
Fellow in Adult Rheumatology (Dr. Nathan Zvaifler)	1979-1981

ACADEMIC APPOINTMENTS AT MUSC:

Assistant Professor of Medicine	1981-1986
Associate Professor of Medicine	1986-1993
Associate Professor of Pediatrics	1987-1993
Tenure	1991
Professor of Medicine and Pediatrics	1993
Director, Division of Rheumatology & Immunology	1995
Distinguished University Professor	2007

HOSPITAL APPOINTMENTS:

Medical University Hospital, Charleston (Attending)
Veterans Administration Hospital, Charleston (Consultant)
MUSC Children's Hospital, Charleston (Consultant)

MEDICAL LICENSURE AND CERTIFICATION:

Licensed in the State of South Carolina (10690)	1981-present
Certified by the American Board of Internal Medicine	
Internal Medicine	1978
Rheumatology	1982

HONORS AND AWARDS:

Phi Beta Kappa	1971
Alpha Omega Alpha	1975
Health Sciences Foundation Developing Scholar	1986
Faculty Excellence Award by Student Council	1988, 1989
Southern Society for Clinical Investigation	1988
American Society for Clinical Investigation	1994
Senior member	2000
Pearls Lecturer	1994,1997
"Best Doctors"	1994-2008
Arthritis Foundation, Carolinas Chapter	
Coastal Region Volunteer of the Year	1997
Speaker, Scleroderma Foundation National Meeting	1999,2007,2008
Ann Gilbert Memorial Visiting Professorship	2001
University of Miami School of Medicine	
Certificate of Recognition, Crisis Ministries	2004
Health Sciences Foundation Outstanding Clinician Award	2004
Scleroderma Foundation "Doctor of the Year"	2006
"Master Teacher" recognition, MUSC Board of Trustees	2007
Co-Chairman, Prof. E. Carwile LeRoy Memorial International	
Workshop on Scleroderma, Tokyo, Japan	2007
Kroc Lecturer, MUSC	2007
First Annual Joseph Korn Lecturer, Boston University	2008
Honorary Director, Dept of Rheumatology and Immunology,	
Nanjing Drum Tower Hospital, Nanjing, China	2009

PROFESSIONAL SOCIETIES AND ORGANIZATIONS:

American College of Physicians	
Member	1978-1986
Fellow	1986-present
American College of Rheumatology	
Member	1979-1986
Fellow	1986-present
Charleston County Medical Society	1981-present
American Federation for Medical Research	1994-present
SC Chapter of the Arthritis Foundation	
Board of Directors	1981-1992
Public Health Foundation, Washington, DC	
EMS Advisory Committee	1991-1992
Carolinas Chapter of the Arthritis Foundation	

Board of Directors
Association of Subspecialty Professors

1996-2002
2003-present

RESEARCH SUPPORT

S.C. Appropriation for Research	NK Cells in Rheumatoid Arthritis	\$12,000	1982-83
United Scleroderma Fdn	Bronchoalveolar lavage in scleroderma	10,000	1983-84
Upjohn Co,	Liquid Motrin vs. aspirin in JRA	24,000	1985-86
S.C. Appropriation for Research	Immunoregulatory Role of NK Cells in RA	8,500	1986-87
Scleroderma Res Fed	Role of the Alveolar Macrophage in the Pathogenesis of Scleroderma Lung Disease	25,000	1989-90
Showa Denko KK	Interaction of L-tryptophan and interferon-gamma in the regulation of fibrosis	90,400	1990-91
SC Res Approp	L-tryptophan and fibrosis	27,595	1990-91
Scleroderma Res Fed	Fibrogenic cytokines and scleroderma lung disease	44,000	1991-92
Showa Denko KK	A murine model of EMS	225,563	1992-94
NHLBI-HC-92-03 Co-I	Raynaud's treatment study - Clinical Units	473,204	1992-96
Showa Denko KK	Role of Mg deficiency in EMS	89,731	1993-94
Showa Denko KK Co-I	Treatment of EMS Syndrome	81,404	1994-95
DOE Subcontract	TCE exposure and scleroderma	133,008	10/94-9/01
Pfizer Pharm.	Pfizer/ACR Visiting Professorship - Carol Black, MD	5,000	1995
Scleroderma Res Fed Co-I	Role of PKC isoforms in regulating thrombin-induced ECM synthesis in SSc and normal lung fibroblasts	35,000	1996
RGK Foundation	Collaborative Studies of Scleroderma	595,000	1996-2001
Scleroderma Fdn Co-I	Role of thrombin in induction of the myofibroblast phenotype in SSc lung disease	100,000	1999-01
R01 HL607501 PI-BAL Core	Scleroderma lung study (multi-center)	608,152	7/99-6/05
Connetics	Relaxin in scleroderma	148,772	4/99-9/00
P20 AR46675-01	Planning grant for MCRC	100,000	9/99-9/00
Pfizer Pharm	Pfizer Visiting Professorship - Matthew Liang, M.D.	6,000	2000
Merck Co.	Rofecoxib in JRA	95,000	11/00-6/02
Knoll/Abbott Pharm Co-I	Clinical Fellowship in Rheumatology (2 yrs)	93,083	7/01-6/03
NIAMS P60 AR049459-01	MCRC for rheumatic diseases in African-Americans	5,900,000	4/03-3/08

RESEARCH SUPPORT

NCCAM R21 Co-I	Curcumin treatment of fibrosis	250,000	9/01-8/03
F32 HL69689 (mentor)	NRSA - G. Bogatkevich: PKC signaling in thrombin-activated lung fibroblasts	96,479	1/02-12/03
NIH N01 AR22265, Co-I	Atherosclerosis Prevention in Pediatric Lupus Erythematosus (APPLE) Study	36,000	4/03-3/08
Actelion, PI	BUILD-2 – Bosentan Use in Interstitial Lung Disease	85,000	6/03-8/05
R01 HL073718-01, Co-I	PKC epsilon-related proteins in lung fibrosis	1,000,000	9/03-8/07
Scleroderma Fdn (mentor)	New Investigator award (Bogatkevich) CTGF-interacting proteins in scleroderma lung fibrosis	150,000	1/05-12/07
K01 AR051052-01 (mentor)	CTGF-interacting proteins in scleroderma lung fibrosis	535,000	4/05-3/10
Actelion, PI	Effects of bosentan on a thrombin-induced cellular model of pulmonary fibrosis	25,000	7/06-12/07

COMMITTEES (DEPARTMENT AND COLLEGE):

Intern Selection Committee, Dept. of Medicine	1983-2000
Chairman	1989-1999
Rank and Tenure Committee, Dept. of Medicine	1986-2003
Housestaff Evaluation Committee, Dept. of Medicine	1988-2004
Outpatient Clinic Utilization Committee	1989-1999
General Clinical Research Center Advisory Committee	1990-1995
Search Committee for Director of the Office of the Library and Learning Resource Centers	1990
<i>Ad Hoc</i> Committee for the ABIM Clinical Investigator Pathway Program, Dept of Medicine	1990
ABIM/CIP Steering Committee, Dept of Medicine	1991-1998
CME Committee, College of Medicine	1990-1991
Faculty Senate, College of Medicine	1990-1992
<i>Ad Hoc</i> Reviewer, University Research Committee	1990-present
COM Review Committee of the Dept. of Pediatrics	1991-1992
Scientific Integrity Review Committee	
Chairman	1991-1994, 2005-
Member	1994-2004
Honor Council of the College of Medicine, Faculty Member	1992
UMA Marketing Taskforce	1995-1996
HSF Developing Scholars Committee, Chairman	1995-1996
Search Committee for Director, Division of General Internal Medicine, Chairman	1997
COM Review Committee of Dept. of Dermatology, Chairman	1997-1998
VP for Research Review Committee	1997
Department of Medicine Clinical Council	1998-1999
Bone and Joint Center Steering Committee	1998-present

UMA Clinical Operations Committee, Chairman	2000
Search Committee for Associate Provost for Research Co-Chairman	2001
Search Committee for Chair of Psychiatry	2001
MUSC Children's Research Institute Steering Committee	2001
COM Financial Advisory Committee	2001
COM Appointment, Promotion, and Tenure Committee	2003-2006
DOM Research Faculty Policy Committee, Chairman	2003
Children's Research Institute Steering Committee, Alternate	2003
DOM Space Allocation Committee	2004-2005
University Research Council	2005-2008
Institutional K12 Committee, Chairman	2007-2008
College of Health Professions Research Faculty Search Comm.	2008

COMMITTEES (INTERNATIONAL, NATIONAL AND REGIONAL):

Arthritis Foundation, SC and Carolinas Chapters	1983-2002
Scientific Program Committee, Regional ARA Meeting	1986
Taskforce on ARA-AHPA Relations	1986-1987
ARA Council on Education	1987-1990
Editorial Board, ACR News	1988-1991
Program Committee, SC Chapter of the ACP	1990-1992
Advisor, WHO Workshops on the Toxic Oil Syndrome and Eosinophilia-Myalgia Syndrome	1992
Scientific Program Committee, Regional ACR Meeting	1993
ACR Scleroderma Abstract Review Committee	1993
Scleroderma Collaborative Funding Grant Review Committee	1993-1996
ACR Southeast Region Council	1994-1996
ACR Scleroderma Study Group, Chairman	1995-1997
Delegate, SC Medical Association	1995-1997
Board of Medical Directors, Scleroderma Federation	1996-1998
GlaxoWellcome Flolan DSMB member	1996-1998
Scleroderma Clinical Trials Consortium member	1996-present
Board of Medical Directors, United Scleroderma Foundation	1997-1998
Medical Advisory Council, Scleroderma Foundation	1998-present
Actelion Scleroderma Advisory Board	2001-present
Genzyme anti-TGF-beta DSMB member	2001-2004
NIH/NIAMS Loan Repayment Program Reviewer	2003
ACR Scientific Session, Scleroderma, Moderator	2003
NIH/NHLBI Special Review Committee: Granulomatous Lung Inflammation in Sarcoidosis	2004
NIH/NIAMS Special Emphasis Panel: Clinical Trial Outcomes Instrument Development Grant Program	2004
Arthritis Foundation, ad hoc grant review panel	2005
Actelion Entelligence Young Investigators Award Program	2005-present
Scientific Committee, Italian Association Against SSc	2005-present
Grant Review Committee, Chairman, Scleroderma Foundation	2005-2007
Scientific Leadership Council, Pulmonary Hypertension Assoc	2008-present

ACR Annual Meeting Abstract Selection Committee

2008

TEACHING ACTIVITIES:

Rheumatology consultant and outpatient attending, 6 weeks per year	
Arthritis Clinic Attending	
Scleroderma Clinic, 1 session per week	
Pediatric Rheumatology Clinic, 2 sessions per week	
Departments of Medicine and Pediatrics Core Lecture series	
Medical education consortium lectures, Greenville Memorial Hospital	
and Spartanburg Regional Medical Center	1982-1998, 2002
College of Pharmacy annual lecture series: JRA and NSAIDs	1990-1996
Preceptor for Physical Diagnosis course for medical students	1981-95, 2005-06
Graduate Advisory Committee for Ph.D. Candidate	
R. Donnally	1986
Paul Nietert	1995-1997
Advisory committee for MS in Clinical Research (MSCR)	
Kristin Highland, MD	2006
Faye Hant, DO	2007
Thesis Committee for Liz Harper	
Academic Magnet High School	2001

<u>Postdoctoral Trainees</u>	<u>Fellowship Dates</u>	<u>Current Status</u>
Alan Nussbaum, M.D.	7/81-6/82	Private Practice
Gary Sultany, M.D.	7/81-6/82	Private Practice
Jonathan Witte, M.D.	7/81-6/82	Private Practice
Matthew O. Schwartz, M.D.	7/81-6/83	Private Practice
J. Eugene Huffstutter, M.D.	7/82-6/84	Private Practice
Edwin A. Smith, M.D.	7/82-6/84	Academic Medicine (MUSC)
Alexander P. Ruggieri, M.D.	7/83-6/85	Academic Medicine (Mayo)
Jeffrey A. Alper, M.D.	7/83-6/85	Private Practice
David B. Maxwell, M.D.	7/84-6/86	Private Practice
Michael C. Burnette, M.D.	7/84-6/86	Private Practice
Alan D. Croock, M.D.	7/85-6/87	Academic Medicine (UT/Houston)
Gary E. Fink, M.D.	7/85-6/87	Private Practice
Maggie Kinsella, M.D.	7/86-6/88	Private Practice
Mary Sue Spooner, M.D.	7/87-6/89	Private Practice
Rosalia Lomeo, M.D.	7/87-6/89	Private Practice
Michael Istfan, M.D.	7/88-6/90	Private Practice
Leslie S. Staudt, M.D.	7/89-6/91	Academic Medicine (OK)
Jay Warrick, M.D.	7/89-6/91	Private Practice

JoAnn Allen, M.D.	7/89-6/92	Academic Medicine (UWVA)
Anna Ludwicka-Bradley, Ph.D.	9/89-10/93	Academic Research (MUSC)
Takashi Ohba, M.D.	9/90-8/92	Academic Medicine (Japan)
Marcy B. Bolster, M.D.	7/91-6/93	Academic Medicine (MUSC)
Philip A. Waller, M.D.	7/91-6/93	Private Practice
Duncan Fagundus, M.D.	7/92-6/94	Private Pract/Academic (ECU)
A. Kimberly Leaird, M.D.	7/92-6/94	Private Practice
Georgia Roane, M.D.	7/93-6/95	Private Practice
Laura Summers, M.D.	7/93-6/95	Private Practice
Shuzo Suzuki, M.D., Ph.D.	7/94-6/96	Academic Medicine (Japan)
Elena Tourkina, Ph.D.	7/94-10/97	Academic Research (MUSC)
Joseph G. Renney, D.O.	7/94-6/96	Private Practice
Holly C. Mitchell, M.D.	7/95-6/96	Academic Medicine (MUSC)
Devashis Mitra, M.D.	10/95-12/97	Private Practice
James C. Oates, M.D.	7/96-6/97	Academic Medicine (MUSC)
Kelli Ellis-Emili, M.D.	7/96-6/98	Private Practice
Anna D. Senseney, M.D.	7/96-6/98	Academic Medicine (MUSC)
Marian H. Taylor, M.D.	7/97-6/99	Academic Medicine (MUSC)
Bruce S. Hill, M.D.	7/98-6/00	Private Practice
Betty J. Harmon, M.D.	7/98-6/00	Private Practice
Gregory W. Niemer, M.D.	7/98-6/00	Private Practice
J. Grant Taylor, M.D.	7/99-6/01	Private Practice
Alan N. Brown, M.D.	7/00-6/02	Academic Medicine (MUSC)
Margaret Y. Curran, M.D.	7/00-6/02	Private Practice
Keith A. Frick, M.D.	7/00-6/02	Private Practice
Galina Bogatkevich, M.D., Ph.D.	10/00-1/04	Academic Medicine (MUSC)
Glenn Douglas, M.D.	7/01-6/03	Clinical Practice (Vanderbilt)
Sean Fahey, M.D.	7/01-6/03	Private Practice
Kristin Bird, M.D.	7/01-6/03	Private Practice
Nicole Klett, M.D.	7/02-6/04	Private Practice
Sean Shannon, M.D.	7/02-6/05	Private Practice
Diane Kamen, M.D.	7/02-6/05	Academic Medicine (MUSC)
Jim Gore, M.D.	7/03-6/05	Clinical Practice (Vanderbilt)
Leah Triplett, D.O.	7/03-6/05	Private Practice
Kristin Highland, M.D.	7/03-6/06	Academic Medicine (MUSC)
David Caldwell, M.D.	7/04-6/06	Private Practice
Faye Hant, D.O., M.S.C.R.	7/04-6/07	Academic Medicine (MUSC)
Brent Flickinger, M.D.	7/05-6/07	Private Practice
Henda Bouali, M.D.	7/05-6/07	Private Practice
Emily Farrar, M.D.	7/05-7/08	Fulltime mom
Erica Anderson, D.O.	9/05-6/08	Private Practice
Rodney Daniel, M.D.	7/06-	Current Trainee
Ashley Beall, M.D.	7/06-6/08	Private Practice
Scott Lewis, D.O.	7/07-	Current Trainee
Will Chafin III, M.D.	7/07-	Current Trainee

Roneka Ravenell, M.D.	7/07-	Current Trainee
Corey Hatfield, D.O.	7/08-	Current Trainee
Melissa Cunningham, M.D.,Ph.D.	7/08-	Current Trainee

MANUSCRIPT REVIEWER (ad hoc, past and present):

American Journal of Medicine
American Review of Respiratory Diseases
Annals of Internal Medicine
Annals of Rheumatic Disease
Archives of Dermatology
Arthritis and Rheumatism
Arthritis Care and Research
Chest
Clinical Immunology and Immunopathology
Journal of Laboratory and Clinical Medicine
Journal of Clinical Rheumatology
Journal of Rheumatology
Journal of the American Academy of Dermatology
Pediatrics
Science
The Journal of Pediatrics
JAMA

MISCELLANEOUS:

Research cited in Program Highlights, National Center for Research Resources,
U.S. Dept. Of HHS, PHS, NIH, December 1990
Research cited in [ww.irma.od.nih.gov/multimedia/pds/biomedical/biomed1.html](http://www.irma.od.nih.gov/multimedia/pds/biomedical/biomed1.html)
Consultant, Consumer Reports, June 1996
Consultant, Total Health for Women, Michaud E. and Torg E., eds., Rodale
Press, Inc., Emmaus, PA, 1996
Consultant, Nature's Medicines, G.Malesky, ed., Rodale Press, Inc., Emmaus, PA, 1999
Consultant, Eastern Research Group, Web-based teaching program on drug-induced
lupus, 1999
Profiled in Best Doctors interview at www.healthcentral.com
NIAMS Extramural Roundtable: Rheumatic Diseases, 2001
Expert Panelist, EMS Diagnostic Criteria Study, cited in Hertzman PA, et al., Rigorous
new approach to constructing a "gold-standard" for validating new diagnostic
criteria, as exemplified by the eosinophilia-myalgia syndrome, Arch Int Med
2001; 161:2301-2306.
Consultant, American Board of Internal Medicine, Web-based PIER (Physicians'
Information and Education) module on scleroderma (with Dr. Marcy Bolster)
The Doctor is In, Scleroderma Voice, Issue No.1, 2002.
In Memoriam: E. Carwile LeRoy, Arthritis and Rheumatism, 2002.
Consultant, Arthritis Foundation Patient Literature (Scleroderma), 2002
Invited Commentary, J Clin Rheumatol 2002;8:247-250
Consultant, *In Motion* Magazine, Raynaud Phenomenon

Research cited in AHRQ Research Activities, November 2003 issue, p13
Lung Fibrosis in Scleroderma, Scleroderma Voice, Issue No. 1, 2004
Scleroderma Foundation Media Forum, New York City, 2004
Cited in Scleroderma Foundation Direct Connection, Vol. 6, Issue 2, 2004
Course Director, Pulmonary Arterial Hypertension, Charleston, SC, 2004
Co-Chairman, SLS:Lessons for ILD, American Thoracic Society, 2005
Co-Moderator, Update on Scleroderma, ACR Scientific Session, 2005
Moderator, Post-ACR Symposium, 2005-2007
Moderator, Stem Cell Transplantation, Scleroderma Foundation Annual Meeting, 2008
Tri-State Scleroderma Foundation, invited speaker, 2008
Pulmonary Hypertension Roundtable, Adv Pulm Htn 2008;7:301-8.

COMMUNITY SERVICE

Kahol Kadosh Beth Elohim	
Membership Committee, Chairman	1990-1994
Board of Trustees, Member	1992-1994
Vice-President for Programming	1993-1994
Member of Rabbinic Search Committee	1990
Volunteer, Crisis Ministries Homeless Shelter	1990-2000
Chairman, Arthritis Foundation Lifetime Achievement Award	
Dinner, Honoree Dr. James B. Edwards	2000
Net Proceeds \$72,480	
Scleroderma Foundation Local Chapter Speaker	
Palmetto	1999, 2000
Tennessee	2004
South Carolina	2004
Arthritis Foundation Coastal Region Annual Speaker	
Medical Volunteer, Cooper River Bridge Run	2001
Triangle Area Scleroderma Support Group, Raleigh, NC	2001
Carolinas Arthritis Foundation Charity Golf Tournament	2002
South Carolina Educational Radio Network Broadcasts	2002
Invited Speaker, Charleston Parkinson Disease Support Group	2002
SC School Nurse Conference, Childhood Rheumatic Diseases	2002
Volunteer Preceptor, Interfaith Crisis Ministries Student Clinic	2003-present
Workshops, Scleroderma Foundation National Meeting	1999, 2003, 2007
AF Lowcountry Leadership Luncheon, Hilton Head Island	2005
Scleroderma Patient Workshop, San Juan, Puerto Rico	2005
Annual Carolinas AF Walk, Quick Silver's Kids	2006-2008
Annual SC Scleroderma Foundation Walk, Clemson, SC	2006-2008
McClellanville Arts Council, "Paul Klee's Scleroderma"	2009

JOURNAL ARTICLES:

1. Silver, R., Lawton, S. and Ansell, B.M. A comparison of Vitratheone moulded with Tweeklon ready-made wrist work splints in juvenile chronic arthritis. *Int Rehabil Med* 4: 97-100, 1982.
2. Silver, R.M., Redelman, D., Zvaifler, N.J. and Naides, S. Studies of rheumatoid synovial fluid lymphocytes. I. Evidence for activated natural killer-(NK) like cells. *J Immunol* 128: 1758-1763, 1982.
3. Silver, R.M. The medical management of rheumatoid arthritis. *J SC Med Assoc* 78: 593-598, 1982.
4. Silver, R.M., Redelman, D. and Zvaifler, N.J. Studies of rheumatoid synovial fluid lymphocytes. II. A comparison of their behavior with blood mononuclear cells in the autologous mixed lymphocyte reaction and response to TCGF. *Clin Immunol Immunopathol* 27: 15-27, 1983.
5. Nussbaum, A.I., Silver, R.M. and Maricq, H.R. (Brief Report) Serial changes in nailfold capillary morphology in childhood dermatomyositis. *Arthritis Rheum* 26: 1169-1172, 1983.
6. Swartz, M.O. and Silver, R.M. D-penicillamine-induced polymyositis in juvenile rheumatoid arthritis. Report of a Case. *J Rheumatol* 11: 251-252, 1984.
7. Silver, R.M., Metcalf, J.F., Stanley, J.H. and LeRoy, E.C. Interstitial lung disease in scleroderma. Analysis by bronchoalveolar lavage. *Arthritis Rheum* 27: 1254-1262, 1984.
8. Chen, Z., Silver, R., Ainsworth, S.K., Dobson, R.L., Rust, P. and Maricq, H.R. Association between fluorescent antinuclear antibodies, capillary patterns and clinical features in scleroderma spectrum disorders. *Am J Med* 77: 812-822, 1984.
9. Chen, Z., Virella, G., Tung, H.E., Ainsworth, S.K., Silver, R.M., Wang, A-C., LaVia, M.F., Maricq, H.R. and Dobson, R.L. Immune complexes and antinuclear, antinucleolar, and anticentromere antibodies in scleroderma. *J Am Acad Dermatol* 11: 461-467, 1984.
10. Chen, Z., Dobson, R.L., Ainsworth, S.K., Silver, R.M. and Maricq, H.R. Epidermal nuclear immunofluorescence: serologic correlations supporting an in vivo reaction. *Br J Dermatol* 112:15-22, 1985.
11. Chen, Z., Fedrick, J.A., Pandey, J.P., Silver, R., Maricq, H.R., Fudenberg, H.H., Dobson, R.L. and Ainsworth, S.K. Anticentromere antibody and immunoglobulin allotypes in scleroderma. *Arch Dermatol* 121:339-344, 1985.
12. Chen, Z., Dobson, R.L., Ainsworth, S.K., Silver, R., Rust, P.F. and Maricq, H.R. Immunofluorescence in skin specimens from three different biopsy sites in patients with scleroderma. *Clin Exp Rheumatol* 3:11-16, 1985.
13. Chen, Z., Maricq, H.R., Pilia, P.A., Dobson, R.L., Silver, R.M. and Ainsworth, S.K. Fibronectin distribution in nailfold biopsies of scleroderma (systemic sclerosis) patients. *Acta Derm Venereol* 65:185-189, 1985.

14. Chen, Z., Maize, J.C., Silver, R.M., Dobson, R.L., Maricq, H.R. and Ainsworth, S.K. Direct and indirect immunofluorescent findings in dermatomyositis. *J Cutan Pathol* 12:18-27, 1985.
15. Silver, R.M., Metcalf, J.F. and LeRoy, E.C. Interstitial lung disease in scleroderma. Immune complexes in sera and bronchoalveolar lavage fluid. *Arthritis Rheum* 29:525-531, 1986.
16. Silver, R.M. Studies of rheumatoid synovial fluid lymphocytes. III. Phenotypic and functional analysis of natural killer-like cells. *Clin Immunol Immunopath* 39:159-167, 1986.
17. Maxwell, D.B., Silver, R.M. Laryngeal manifestations of drug-induced lupus. *J Rheumatol* 14:375-377, 1987.
18. Croock, A.D., Silver, R.M. Tumoral calcinosis presenting as adhesive capsulitis. A case report and literature review. *Arthritis Rheum* 30:455-459, 1987.
19. Takehara, K., Grotendorst, G., Silver, R. and LeRoy, E.C. Dipyridamole decreases PDGF levels in human serum. *Atherosclerosis* 7:152-158, 1987.
20. Silver, R.M. Nonsteroidal anti-inflammatory drugs in the management of juvenile arthritis. *J Clin Pharmacol* 28:566-570, 1988.
21. McGregor, A.R., Watson, B.A., Yunis, E., Pandey, J.P., Takehara, K., Tidwell, J.T., Ruggieri, A., Silver, R.M., LeRoy E.C., and Maricq, H.R. A familial clustering of scleroderma spectrum disease. *Am J Med* 84:1023-1032, 1988.
22. Gabrielli, A., Silver, R., Teti, G., et al. Mononuclear cells from rheumatoid arthritis patients exhibit a depressed IgM response to SRBC stimulation in vitro. *Diagn Clin Immunol* 5:266-268, 1988.
23. Gabrielli, A., Silver, R., Teti, G., Chiofalo S, Misefart A, Venza-Teti D, Virella G, LaVia M. Depression by Fc gamma receptor ligands of SRBC-induced IgM-PFC generation in human blood mononuclear cell cultures. *Diagn Clin Immunol* 5:304-308, 1988.
24. Silver, R.M. and Maricq, H.R. Serial microvascular studies in childhood dermatomyositis. *Pediatrics* 83:278-283, 1989.
25. Sahn, E.E., Maize, J.C., Garen, P.D., Mullins, S.C., and Silver, R.M. D-penicillamine induced elastosis perforans serpiginosa in a child with juvenile rheumatoid arthritis. Report of a case and review of the literature. *J Am Acad Dermatol*, 20:979-988, 1989.
26. LeRoy, E.C., Smith, E.A., Kahaleh, M.B., Trojanowska, M., and Silver, R.M. A strategy for scleroderma (systemic sclerosis): Is transforming growth factor beta the answer? *Arthritis Rheum* 32:817-825, 1989.

27. Kinsella, M.B., Smith, E.A., Miller, K.S., LeRoy, E.C., Silver, R.M. Spontaneous production of fibronectin by scleroderma alveolar macrophages. *Arthritis Rheum* 32:577-583, 1989.
28. Sahn, E.E., Maize, J.C., Silver, R.M. Erythema marginatum: An unusual histopathologic manifestation. *J Am Acad Dermatol* 21:145-147, 1989.
29. Lomeo, L., Silver, R.M., Brothers, M. Spontaneous dissection of the internal carotid artery in a patient with polyarteritis nodosa. *Arthritis Rheum* 32:1625-1626, 1989.
30. Lomeo, R.M., Cornella, R.J., Schabel, S.I., Silver, R.M. Progressive systemic sclerosis sine scleroderma presenting as pulmonary interstitial fibrosis. *Am J Med* 87:525-527, 1989.
31. Miller, K.S., Smith, E.A., Kinsella, M.B., Schabel, S.I., and Silver, R.M. Progressive systemic sclerosis associated lung disease: assessment of interlobar variation by bronchoalveolar lavage and comparison with non-invasive evaluation of disease activity. *Am Rev Respir Dis* 141:301-306, 1990.
32. Silver, R.M., Miller, K.S., Smith, E.A., Schabel, S.I. Evaluation and management of scleroderma lung disease using bronchoalveolar lavage. *Am J Med* 88:470-476, 1990.
33. Silver, R.M. The evaluation and management of pulmonary manifestations of systemic sclerosis (scleroderma). *J Musculoskel Dis* 7:33-46, 1990.
34. Silver, R.M., Heyes, M.P., Maize, J.C., Quearry, B., Vionnet-Fuasset, M., Sternberg, E.M. Scleroderma, fasciitis and eosinophilia associated with ingestion of L-tryptophan. *N Engl J Med* 322:874-881, 1990.
35. Silver, R.M. Lymphokine activated killer (LAK) cell activity in the peripheral blood lymphocytes of systemic sclerosis (SSc) patients. *Clin Exp Rheumatol* 8:481-486, 1990.
36. Sahn, E.E., Garen, P.D., Silver, R.M., Maize, J.C. Scleroderma following augmentation mammoplasty: report of a case and review of the literature. *Arch Dermatol* 126:1198-1202, 1990.
37. Sahn, E.E., Hampton, M.T., Garen, P.D., Warrick, J., Smith, D., and Silver, R.M. Preschool sarcoidosis masquerading as juvenile rheumatoid arthritis: two case reports and a review of the literature. *Ped Dermatol* 7:208-213, 1990.
38. Silver, R.M., Maize, J.C., Heyes, M.P., and Sternberg, E.M. Treatment of the eosinophilia-myalgia syndrome (letter). *N Eng J Med* 323:418, 1990.
39. Warrick, J.H., Bhalla, M., Schabel, S.I., and Silver, R.M. High resolution computed tomography in early scleroderma lung disease. *J Rheumatol* 18:1520-1528, 1991.
40. James, T.N., Kamb, M.L., Sandberg, G.A., Silver, R.M., and Kilbourne, E.M. Postmortem studies of the heart in three fatal cases of the eosinophilia-myalgia syndrome. *Ann Int Med* 115:102-110, 1991.

41. Silver, R.M. Unraveling the eosinophilia-myalgia syndrome (editorial). *Arch Dermatol* 127:1214-1216, 1991.
42. Silver, R.M. Clinical aspects of localized and systemic scleroderma (SSc). *Curr Opin Rheumatol* 3:973-978, 1991.
43. Silver, R.M., Sutherland, S.E., Carreira, P.E., and Heyes, M.P. Alteration of tryptophan metabolism in the toxic oil syndrome and in the eosinophilia-myalgia syndrome. *J Rheumatol* 19:69-73, 1992.
44. Feldman, S.R., Silver, R.M., and Maize, J.C. A histopathologic comparison of Shulman's syndrome (diffuse fasciitis with eosinophilia) and the fasciitis associated with the Eosinophilia-Myalgia syndrome. *J Am Acad Dermatol* 26:95-100, 1992.
45. Silver, R.M. The lung and scleroderma. *Bull Rheum Dis* 41 (2):3-5, 1992.
46. Ludwicka, A., Trojanowska, M., Smith, E.A., Baumann, M., Strange, C., Korn, J., Smith, T., LeRoy, E.C., and Silver, R.M. Growth and characterization of fibroblasts obtained from bronchoalveolar lavage of scleroderma patients. *J Rheumatol* 19:1716-1723, 1992.
47. Silver, R.M., McKinley, K., Smith, E.A., Quearry, B., Harati, Y., Sternberg, E.M., and Heyes, M.P. Tryptophan metabolism via the kynurenine pathway in patients with the eosinophilia-myalgia syndrome. *Arthritis Rheum* 35:1097-1105, 1992.
48. Silver, R.M. Eosinophilia-myalgia syndrome (EMS), toxic oil syndrome (TOS), and diffuse fasciitis with eosinophilia (DFE). *Curr Opin Rheumatol* 4 (6):851-856, 1992.
49. Silver, R.M., Sahn, E.E., Allen, J.A., Sahn, S., Greene, W., Maize, J.C., and Garen, P.D. Demonstration of silicon in sites of connective tissue disease in patients with silicone-gel breast implants. *Arch Dermatol* 129:63-68, 1993.
50. Silver, R.M., Warrick, J.H., Kinsella, M.B., Staudt, L.S., Baumann, M.H., and Strange, C. Cyclophosphamide and low-dose prednisone therapy in systemic sclerosis (scleroderma) patients with interstitial lung disease. *J Rheumatol* 20:838-844, 1993.
51. Sudduth, C.D., Strange, C., Cook, W.R., Miller, K.S., Baumann, M., Collop, N.A., and Silver, R.M. Failure of the circulatory system limits exercise performance in patients with systemic sclerosis. *Am J Med* 95:413-418, 1993.
52. Bhalla, M., Silver, R.M., Shepard, J.O., and McCloud, T.C. Chest CT in scleroderma: prevalence of asymptomatic esophageal dilatation and mediastinal adenopathy. *AJR* 161:269-272, 1993.
53. Silver, R.M. Eosinophilia-myalgia syndrome (EMS), toxic oil syndrome (TOS), and diffuse fasciitis with eosinophilia (DFE). *Curr Opin Rheumatol* 5:802-808, 1993.
54. Silver, R.M., Ludwicka, A., Hampton, M., Ohba, T., Bingel, S.A., Smith, T., Harley, R.A., Maize, J., and Heyes, M.P. A murine model of the eosinophilia-myalgia syndrome induced by 1,1'-ethylidenebis(L-tryptophan). *J Clin Invest* 93:1473-1480, 1994.

55. Ohba, T., McDonald, J.K., Silver, R.M., Strange, C., LeRoy, E.C., and Ludwicka, A. Scleroderma BAL fluid contains thrombin, a mediator of human lung fibroblast proliferation via induction of the PDGF alpha receptor. *Am J Resp Cell Mol Biol* 10:405-412, 1994.
56. Waller, P.A., Clauw, D., Cupps, T., Metcalf, J.S., Silver, R.M., and LeRoy, E.C. Fasciitis (not scleroderma) following prolonged exposure to an organic solvent (trichlorethylene): A report of two cases. *J Rheumatol* 21:1567-1570, 1994.
57. Bolster, M.B. and Silver, R.M. Eosinophilia-myalgia syndrome, toxic-oil syndrome, and diffuse fasciitis with eosinophilia. *Current Opinion in Rheumatology* 6:642-649, 1994.
58. Greene, W.B., Raso, D.S., Walsh, L.G., Harley, R.A., and Silver, R.M. Electron probe microanalysis of silicone and the role of the macrophages in proximal "capsule" and distant site migration in post-mammoplasty patients. *Plast Reconst Surg* 95:513-519, 1995.
59. Campbell, D.S., Morris, P.D., and Silver, R.M. Eosinophilia-myalgia syndrome: A long-term follow-up study. *South Med J* 88:953-958, 1995.
60. Hertzman, P.A., Clauw, D.J., Kaufman, L., Varga, J., Silver, R.M., Thacker, H.L., Mease, P., Espinosa, L., and Pincus, T. Eosinophilia-myalgia syndrome (EMS): Status of 205 patients and results of treatment two years after onset. *Ann Int Med* 122:851-855, 1995.
61. Ludwicka, A., Ohba, T., Trojanowska, M., Yamakage, A., Strange, C., Smith, E.A., LeRoy, E.C., and Silver, R.M. Elevated levels of TGF- β 1 and PDGF in scleroderma bronchoalveolar lavage fluid. *J Rheumatol* 22:1876-1883, 1995.
62. Hertzman, P.A., Kaufman, L.D., Love, L.A., Mease, P.J., Philen, R.M., Pincus, T., Rosenberg, N.L., Silver, R., Sternberg, E.M., Varga, J., and Clauw, D.J. The eosinophilia-myalgia syndrome - Guidelines for patient care. *J Rheumatol* 22:161-163, 1995.
63. Silver, R.M. Scleroderma: Diagnosis and Treatment, Circa 1995. *Bull Rheum Dis* 44:2-5, 1995.
64. Suzuki, S., Tourkina, E., Ludwicka, A., Hampton, M., Bolster, M., Maize, J., and Silver, R. A contaminant of L-tryptophan enhances expression of dermal collagen in a murine model of the eosinophilia myalgia syndrome. *Proc Assoc Am Phys* 108:315-322, 1996.
65. Middaugh, L.D., Nussbaum, R., Ludwicka, A., Bolster, M.B., and Silver, R.M. Cognitive deficits in a murine model of the eosinophilia-myalgia syndrome: A preliminary report. *Neurotoxicol Teratol* 18:595-601, 1996.
66. Silver, R.M. Pathophysiology of the eosinophilia-myalgia syndrome. *J Rheumatol* 23:26-36, 1996.
67. LeRoy, E.C. and Silver, R.M. Paul Klee and scleroderma. *Bull Rheum Dis* 45(6):4-6, 1996.

68. Bolster, M.B. and Silver, R.M. Therapy of scleroderma lung disease. *Clin Pulm Med* 3:314-322, 1996.
69. Bolster, M.B., Ludwicka, A., Sutherland, S.E., Strange, C., and Silver, R.M. Cytokine concentrations in bronchoalveolar lavage fluid of patients with systemic sclerosis. *Arthritis Rheum* 40(4):743-751, 1997.
70. Hitraya, E.G., Jimenez, S.A., Ludwicka, A., Silver, R.M., and Varga, J. Increased activity of the alpha1(I) procollagen promoter in skin fibroblasts from patients with chronic eosinophilia-myalgia syndrome. *Int J Biochem Cell Biol* 29:135-141, 1997.
71. Ward, M., Curé, J., Schabel, S., Smith, E.A., Schumacher, H.R. Jr., and Silver, R.M. Symptomatic spinal calcinosis in systemic sclerosis (scleroderma). *Arthritis Rheum* 40:1892-1893, 1997.
72. Carreira, P.E., Montalvo, M.G., Kaufman, L.D., Silver, R.M., Izquierdo, M., and Gomez-Reino, J.J. Antiphospholipid antibodies in patients with eosinophilia myalgia and toxic oil syndrome. *J Rheumatol* 24:69-72, 1997.
73. Legerton III CW, Silver RM. Psoriasis of the scalp and a swollen toe. Case and Comment. *Patient Care* 32(4):125,1998.
74. Legerton III CW, Silver RM. Case and Comment; Garden Variety Pain. *Patient Care* 32(11):222-224, 1998.
75. Nietert, P., Sutherland, S., Silver, R., Pandey, J., and Dosemeci, M. Is solvent exposure a risk factor for systemic sclerosis? *Arthritis Rheum* 41:1111-1118, 1998.
76. Bolster, M.B. and Silver, R.M. Lung disease in systemic sclerosis (scleroderma). *Sem Resp Crit Care Med* 20:109-120, 1999.
77. Tan, F.K., Arnett, F.C., Antohi, S., Saito, S., Mirarchi, A., Spiera, H., Sasaki, T., Shoichi, O., Takeuchi, K., Pandey, J.P., Silver, R.M., LeRoy, C., Postlethwaite, A.E., Bona, C.A. Autoantibodies to the extracellular matrix microfibrillar protein, fibrillin-1, in patients with scleroderma and other connective tissue diseases. *J Immunol* 163:1066-1072, 1999.
78. Bolster, M.B. and Silver, R.M. Assessment and management of scleroderma lung disease. *Curr Op Rheum* 11:508-513, 1999.
79. Nietert, P., Sutherland, S.E., Silver, R.M., Pandey, J.P., and Dosemeci, M. Solvent-oriented hobbies and the risk of systemic sclerosis. *J Rheumatol* 26:2369-2372, 1999.
80. Smith, E.A. and Silver, R.M. Can we improve outcome in systemic sclerosis? *Journal of Clinical Outcomes Management* 7:43-47, 2000.
81. Miller, F.W., Hess, E.V., Clauw, D.J., Hertzman, P.A., Pincus, T., Silver, R.M., Mayes, M.D., Varga, J., Medsger Jr., T.A., and Love, L.A. Approaches for identifying and defining environmentally associated rheumatic diseases. *Arthritis Rheum* 43:243-249, 2000.

82. Ludwicka-Bradley, A., Tourkina, E., Suzuki, S., Streett, E., Bonner, M., Fenton II, J.W., Hoffman, S., and Silver, R.M. Thrombin upregulates interleukin-8 in lung fibroblasts via cleavage of proteolytically activated receptor-I and protein kinase c-gamma activation. *Am J Respir Cell Mol Biol* 22:235-243, 2000.
83. Raynaud's Treatment Study Investigators. Comparison of sustained-release nifedipine and temperature biofeedback for treatment of primary Raynaud's phenomenon. *Arch Intern Med* 160:1101-1108, 2000.
84. Strange, C., Bolster, M., Mazur, J., Taylor, M., Gossage, J.R., Silver, R. Hemodynamic effects of epoprostenol in patients with systemic sclerosis and pulmonary hypertension. *Chest* 118:1077-1082, 2000.
85. Nietert, P. and Silver, R.M. Systemic sclerosis: Environmental and occupational risk factors. *Curr Opin Rheumatol* 12:520-526, 2000.
86. Pandey, J.P., Page, G. P., Silver, R.M., LeRoy, E.C., and Bona, C.A. Anti-fibrillin-1 autoantibodies in systemic sclerosis is GM and KM allotype-restricted. *Exp Clin Immunogenetics* 18:123-129, 2001.
87. Tourkina, E., Hoffman, S., Fenton II, J.W., Lipsitz, S., Silver, R.M., Ludwicka-Bradley, A. Depletion of PKC- ζ in normal and scleroderma lung fibroblasts has opposite effects on tenascin expression. *Arthritis Rheum* 44: 1370-1381, 2001.
88. Nietert, P., Silverstein, M.D., Silver, R.M. Hospital admissions, length of stay, charges, and in-hospital death among patients with systemic sclerosis. *J Rheumatol* 28:2031-2037, 2001.
89. Pandey, J., Nietert, P., Silver, R.M. Cytochrome P2 polymorphisms and susceptibility to scleroderma following exposure to organic solvents: comments on the article by Povey et al. (letter to the editor) *Arthritis Rheum* 44:2705-2706, 2001.
90. Bogatkevich, B.G.S., Tourkina, E., Silver, R.M., and Ludwicka-Bradley, A. Thrombin induces smooth muscle-alpha actin and differentiates normal lung fibroblasts to a myofibroblast phenotype via PAR-1 and PKC-epsilon dependent pathway. *J Biol Chem* 276:45184-45192, 2001.
91. Taylor, M.H., McFadden, J.A., Bolster, M.B. and Silver, R.M. Ulnar artery involvement in systemic sclerosis (scleroderma). *J Rheumatol* 29:102-6, 2002.
92. Brown, A., Silver, R.M. Fracture of soft tissue calcinosis in juvenile dermatomyositis - Radiological Case of the Month. *Applied Radiology* 31:35-36, 2002.
93. Silver, R.M. In Memoriam: E. Carwile LeRoy, MD, 1933-2002. *Arthritis Rheum* 46:2564. 2002.
94. Matucci-Cerinic, M., D'Angelo, S., Denton, C., Vlachoyannopoulos, P., and Silver, R. Assessment of lung involvement. *Clin Exp Rheumatol* 21(Suppl 29):S19-23, 2003.

95. Nietert, P. and Silver, R.M. Patterns of hospital admissions and emergency room visits among scleroderma patients in South Carolina. *J Rheumatol* 30:1238-1243, 2003.
96. Channick L. III, Douglas, G., Crater, S., and Silver, R. Nodular scleroderma: Case report and review of the literature. *J Rheumatol* 30:2500-2502, 2003.
97. Bogatkevich, G.S., Tourkina, E., Abrams, C.S., Harley, R.A., Silver, R.M. and Ludwicka-Bradley, A. Contractile activity and smooth muscle-alpha actin organization in thrombin-induced human lung myofibroblasts. *Am J Physiol: Lung Cell Mol Physiol* 285:L334-L343, 2003.
98. Kubo, M., Czuwara-Ladykowska, J., Smith, E., Silver, R.M., Jablonska, S., Blaszczyk, M., Watson, D.K., and Trojanowska, M. Fli1 is a specific negative regulator of collagen biosynthesis in healthy skin and is downregulated in systemic sclerosis (SSc) skin. *Am J Pathol*.163(2):571-81, 2003.
99. Douglas, G., Bird, K., Flume, P., Silver, R., and Bolster, M. Wegener's granulomatosis in patients with rheumatoid arthritis. *J Rheumatol* 30:2064-2069, 2003.
100. Kuwana, M, Pandey, J.P., Silver, R.M, Kawakami, Y., and Kaburaki, J.HLA class II alleles in systemic sclerosis patients with anti-RNA polymerase I/III antibody: associations with subunit reactivities. *J Rheumatol* 30:2392-2397, 2003.
101. Silver, R.M. Treatment of rheumatoid arthritis: Then and now. *J SC Med Assoc* 99:321, 2003.
102. Silver, R.M. and Clements, P.J. Scleroderma lung disease: Optimizing evaluation and management. *Scleroderma Care Res* 1:3-10, 2003.
103. Fahey, S. and Silver, R.M. Use of NSAIDs and COX-2 inhibitors in pediatric patients with musculoskeletal disorders. *J Ped Orthopaedics* 23:794-799, 2003.
104. Hudson, L.L., Silver, R.M., and Pandey, J.P. Ethnic differences in cytotoxic T-lymphocyte antigen 4 genotype associations with systemic sclerosis. *J Rheumatol* 31:85-87, 2004.
105. Tourkina, E., Gooz P., Oates, J.C., Ludwicka-Bradley, A., Silver, R.M., and Hoffman, S. Curcumin-induced apoptosis in scleroderma lung fibroblasts: role of protein kinase C-epsilon. *Am J Resp Cell Mol Biol* 31:28-35, 2004.
106. Ludwicka-Bradley, A., Bogatkevich, G., and Silver, R.M. Thrombin-mediated cellular events in pulmonary fibrosis associated with systemic sclerosis (scleroderma). *Clin Exp Rheumatol*, 22 (suppl 33):S38-S46, 2004.
107. O'Hanlon. T., Koneru, B., Bayat, E., Love, L., Targoff, I., Malley, J., Malley, K., and Miller, F., for the Environmental Myositis Study Group. *Arthritis Rheum* 50:3646-3650, 2004.

108. Beon, M.K., Harley, R.A., Wessels, A., Silver, R.M., and Ludwicka-Bradley, A. Myofibroblast induction and microvascular alteration in scleroderma lung fibrosis. *Clin Exp Rheumatol* 22:733-42, 2004.
109. Nietert, P., Mitchell, H., Bolster, M.B., Curran, M.Y., Tilley, B.C., and Silver, R.M. Correlates of depression, including overall and gastrointestinal functional status, among patients with systemic sclerosis. *J Rheumatol* 32:51-7, 2005.
110. Bogatkevich, G.S., Gustillo, E., Oates, J.C., Feghali-Bostwick, C., Harley, R.A., Silver, R.M., and Ludwicka-Bradley, A. Distinct PKC isoforms mediate cell survival and DNA synthesis in thrombin-induced myofibroblasts. *Am J Physiol: Lung Cell Mol Physiol* 288:L190-L201, 2005.
111. Khanna, D., Furst, D.E., Clements, P.J., Park, G.S., Hays, R.D., Yoon, J., Korn, J.H., Merkel, P., Rothfield, N., Wigley, F.W., Moreland, L.W., Silver, R., Steen, V.D., Weisman, M., Mayes, M.D., Collier, D., Medsger, T.A. Jr., Seibold, J.R. for the Relaxin Study Group and the Scleroderma Clinical Trials Consortium. Responsiveness of the SF-36 and the Health Assessment Questionnaire Disability Index (HAQ-DI) in a systemic sclerosis clinical trial. *J Rheum* 32:832-40, 2005
112. Khanna, D., Clements, P.J., Furst, D.E., Chon, Y., Elashoff, R., Roth, M.D., Sterz, M.G., Chung, J., FitzGerald, J.D., Seibold, J.R., Varga, J., Theodore, A., Wigley, F.M., Silver, R.M., Steen, V.D., Mayes, M.D., Connolly, M.K., Fessler, B.J., Rothfield, N.F., Mubarak, K., Molitor, J., and Tashkin, D.P., for the Scleroderma Lung Study Group. Correlation of the degree of dyspnea with health-related quality of life, functional abilities, and diffusing capacity for carbon monoxide in patients with systemic sclerosis and active alveolitis. Results from the Scleroderma Lung Study. *Arthritis Rheum* 52:592-600, 2005.
113. Tourkina, E., Gooz, P., Pannu, J., Bonner, M., Scholz, D., Hacker, S., Silver, R.M., Trojanowska, M. and Hoffman, S. Opposing effects of protein kinase C α and protein kinase C ϵ on collagen expression by human lung fibroblasts are mediated via MEK/ERK and caveolin-1 signaling. *J Biol Chem* 280: 13879-13887, 2005.
114. Kuwana, M., Okano, Y., Pandey, J.P., Silver, R.M., and Medsger, T.A., Jr. Enzyme-linked immunosorbent assay for detection of anti-RNA polymerase III antibody: Clinical usefulness in patients with systemic sclerosis. *Arthritis Rheum* 52:2425-2432, 2005.
115. Highland, K.B. and Silver, R.M. Clinical aspects of lung involvement: Lessons from idiopathic pulmonary fibrosis and the Scleroderma Lung Study. *Curr Rheum Reports* 7:135-141, 2005.
116. Gore, J. and Silver, R. Oral sildenafil for the treatment of Raynaud's phenomenon and digital ulcers secondary to systemic sclerosis (letter). *Ann Rheum Dis* 64:1387. 2005.
117. Highland, K.B. and Silver, R.M. New developments in scleroderma interstitial lung disease. *Curr Opin Rheum* 17:737-45, 2005.

118. Nietert P, Silver RM, Mitchell HC, Shaftman SR, Tilley BC. Demographic and clinical factors associated with in-hospital death among patients with systemic sclerosis. *J Rheumatol* 2005;32:1888-92.
119. Tashkin DP, Elashoff R, Clements PJ, Goldin J, Roth MD, Furst DE, Arriola E, Silver RM, Strange C, Bolster M, et al. for the Scleroderma Lung Study. Cyclophosphamide versus placebo in scleroderma lung disease. *NEJM* 354:2655-2666, 2006.
120. Nietert PJ, Mitchell HC, Bolster MB, Shaftman SR, Tilley BC, Silver RM. Racial variation in clinical and immunological manifestations of systemic sclerosis. *J Rheumatol* 33:263-268, 2006.
121. Silver, R.M. Labored breathing: Strategies to diagnose and manage dyspnea in the scleroderma patient. *The Rheumatologist*, Volume 1, Number 1, 2007.
122. Clements PJ, Roth MD, Elashoff R, Tashkin DP, Silver RM, Sterz M, Seibold JR, Schraufnagel D, Simms R, Bolster MB, Wise RA, Steen V, Mayes MD, Connolly MK, Metersky M, Furst DE, for the Scleroderma Lung Study Group. Scleroderma Lung Study (SLS): Differences in the presentation and course of patients with limited versus diffuse systemic sclerosis. *Ann Rheum Dis*. 7 May 2007.
123. Khanna D, Yan X, Tashkin DP, et al. Impact of oral cyclophosphamide on health-related quality of life in patients with active scleroderma lung disease. Results from the Scleroderma Lung Study. *Arthritis Rheum* 56:1676-84, 2007.
124. Bogatkevich GS, Ludwicka-Bradley A, Highland KB, Hant F, Nietert PJ, Singleton CB, Feghali-Bostwick CA, Silver RM. Impairment of the antifibrotic effect of hepatocyte growth factor in lung fibroblasts from African Americans: possible role in systemic sclerosis. *Arthritis Rheum* 56:2432-42, 2007.
125. Beall AD, Nietert PJ, Mitchell HC, Shaftman S, Silver RM, Smith EA, and Bolster MB. Ethnic disparities among patients with pulmonary hypertension associated with systemic sclerosis. *J Rheumatol* 34:1277-82, 2007.
126. Bogatkevich GS, Ludwicka-Bradley A, Highland KB, Hant F, Nietert PJ, Singleton CB, Silver RM. Hepatocyte growth factor down regulates expression of collagen and CTGF in Caucasian scleroderma lung fibroblasts via two distinct signaling pathways. *Arthritis Rheum* 56:3468-77, 2007.
127. Tashkin DP, Elashoff R, Clements PJ, Roth MD, Furst DE, Silver RM, Goldin J, et al. Effects of 1-Year Treatment with Cyclophosphamide on Outcomes at 2 Years in Scleroderma Lung Disease. *Am J Resp Crit Care Med* 176:1026-1034, 2007.
128. Ostojic P, Matucci Cerinic M, Silver R, Highland K, Damjanov N. Interstitial lung disease in systemic sclerosis. *Lung* 185:211-20, 2007.
129. Strange C, Bolster MB, Roth MD, Silver RM, et al, for the Scleroderma Lung Study Research Group. Bronchoalveolar lavage and response to cyclophosphamide in scleroderma interstitial lung disease. *Am J Respir Crit Care Med*. 2008;177:91-8.

130. Silver RM. Captive of art not disease. Paul Klee and his illness, scleroderma. The Pharos, Winter 2008, pp16-24.
131. Tourkina E, Richard M, Gooz P, Bonner M, Pannu J, Harley R, Silver RM, Hoffman S. Anti-fibrotic properties of caveolin-1 scaffolding domain in vitro and in vivo. *Am J Lung Cell Mol Physiol* 294:L843-61, 2008.
132. Distler O, Behrens F, Pittrow D, Huscher D, Denton C, et al. Defining appropriate outcome measures in pulmonary arterial hypertension related to systemic sclerosis: Delphi consensus study with cluster analysis. *Arthritis Care Res* 59:867-75, 2008.
133. Silver, RM. Endothelin and scleroderma lung disease. *Rheumatology* 47:v25-v26, 2008.
134. Silver RM and Wells AU. Histopathology and bronchoalveolar lavage. *Rheumatology* 47:v62-v64, 2008.
135. Bogatkevich GS, Ludwicka-Bradley A, Singleton CB, Silver RM. Proteomic analysis of CTGF-activated lung fibroblasts: identification of IQGAP1 as a key player in lung fibroblast migration. *Am J Physiol Lung Cell Mol Physiol* 295:L603-L611, 2008.
136. Avouac J, Kowal-Bielecka O, Landewe R BM, et al. EULAR Scleroderma Trial and Research Group (EUSTAR) recommendations for the treatment of systemic sclerosis: Methods of elaboration and results of systematic literature research. *Ann Rheum Dis*, published online 28 Oct 2008.
137. Garin MC, Highland KB, Silver RM, Strange C. Limitations to the six-minute walk test in interstitial lung disease and pulmonary hypertension in scleroderma. *J Rheum* 36:330-6, 2009.
138. Allanore Y, Meune C, Vonk MC, et al. Prevalence and factors associated with left ventricular dysfunction in the EULAR Scleroderma Trial and Research Group (EUSTAR) database of systemic sclerosis patients. *Ann Rheum Dis*, published online 10 Mar 2009.
139. Khanna D, et al. A randomized double-blind placebo-controlled trial of recombinant relaxin in the treatment of systemic sclerosis with diffuse scleroderma. *Arthritis Rheum*, in press.
140. Garin MC, Silver RM, Simpson KN, Woolson, RF, Strange C, Highland KB. Responsiveness of health-related quality of life questionnaires in pulmonary arterial hypertension. Submitted
141. Kowal-Bielecka O, Kowal K, Highland KB, Silver RM. Bronchoalveolar lavage (BAL) fluid in scleroderma interstitial lung disease (SSc-ILD): technical aspects and clinical correlations: review of the literature. *Semin Arthritis Rheum*, in press.
142. Hant FN, Ludwicka-Bradley A, Wang H-J, Li N, Elashoff R, Tashkin DP, Silver RM, for the Scleroderma Lung Study Research Group. Surfactant Protein D and KL-6 as Serum Biomarkers of Interstitial Lung Disease in Patients with Scleroderma. *J Rheumatol* 36:773-80, 2009..

143. Schanberg LE, Sandborg C, Barnhart HX, et al. Risk factors of increased carotid intima medial thickness (CMIT) in the Atherosclerosis Prevention in Pediatric Lupus Erythematosus (APPLE) cohort, submitted.
144. Tourkina E, Richard M, Oates J, Hofbauer A, Bonner M, Gooz P, Visconti R, Zhang J, Hatfield CM, Silver RM, and Hoffman S. Etiology and consequences of caveolin-1 deficiency in scleroderma leukocytes. Submitted.
145. Bogatkevich G, Silver RM, Highland KB. PPAR γ agonists are anti-fibrogenic for scleroderma lung fibroblasts with effects mediated in part by hepatocyte growth factor. Am J Resp Cell Mol Biol, submitted.

CHAPTERS:

1. Silver, R.M. and Zvaifler, N.J. Pathogenesis. Immunologic considerations. In: Rheumatoid Arthritis, Etiology, Diagnosis, Management, P.D. Utsinger, N.J. Zvaifler, G.E. Ehrlich (eds.), J.B. Lippincott, Philadelphia, 1985.
2. Zvaifler, N.J. and Silver, R.M. Cellular immune events in the joints of patients with rheumatoid arthritis. In: Immunology of Rheumatic Diseases (Chap. 19), S. Gupta and N. Talal (eds.), Plenum, New York, pp 517-542, 1985.
3. Silver R.M. and LeRoy, E.C. Systemic sclerosis (Scleroderma). In: Immunological Diseases, Chapter 60, M. Samter, et al. (eds), Little, Brown, Boston, pp 1459-1499, 1988.
4. Silver, R.M. Polymyalgia rheumatica and giant cell arteritis. In: Conn's Current Therapy, R.E. Rakel (ed.), W.B. Saunders Co., Philadelphia, pp 852-853, 1988.
5. Silver, R.M. An update on systemic sclerosis (scleroderma). In: The First Swiss Seminar in Advanced Rheumatology, Bad Ragaz, 1988, F. Hasler (ed.), Ciba-Geigy, Basel, Switzerland, 1989.
6. Silver, R.M., Miller, K.S. Lung involvement in systemic sclerosis. In: Rheumatic Disease Clinics of North America, E.C. LeRoy (ed.), W.B.Saunders Co., Philadelphia, pp 199-216, 1990.
7. Silver, R.M. Clinical Aspects of Systemic Sclerosis (Scleroderma). In: Heberden Papers Supplement on Systemic Sclerosis (Scleroderma), C.M. Black, ed., Annals of the Rheumatic Diseases, Volume 50, Supplement 4, pp 854-861, 1991.
8. Staudt, L. and Silver, R.M. The lung. In: Systemic Vasculitis. The Biologic Basis, E.C. LeRoy (ed.), Marcel Dekker, Inc., New York, pp 273-301, 1992.
9. Silver, R.M. Pulmonary hypertension secondary to systemic sclerosis (scleroderma). In: The Diagnosis and Treatment of Pulmonary Hypertension, E.K. Weir, S.L. Archer, and Reeves, J.T. (eds.), Futura Publishing Co., New York, pp 191-208, 1992.

10. Silver, R.M. The eosinophilia-myalgia syndrome: A report of 40 cases and a review of the literature. In: Scleroderma International Symposium - Current Topics in Scleroderma, Maeda, M. and Ogawa, I. (eds.), Seino Print Co., Ltd., Gifu City, Japan, 1992.
11. Bolster, M. and Silver, R.M. Systemic sclerosis. In: Lung Disease in Rheumatic Disorders, C. Kelly, ed., Bailliere Tindall, London, 1993.
12. Silver, R.M. and LeRoy, E.C. Systemic sclerosis (scleroderma). In: Primer on the Rheumatic Diseases, H.R. Schumacher, Jr., editor, Tenth Edition, pp. 118-120, 1993.
13. Silver, R.M. "Raynaud's Phenomenon" and "Eosinophilic Fasciitis". In: Internal Medicine, Stein J., editor, Fourth Edition, pp 2441-2443 and pp 2449-2451, 1994.
14. Kurent, J.E. and Silver, R.M. L-Tryptophan Eosinophilia Myalgia Syndrome, In: Current Diagnosis in Neurology, E. Feldmann, ed., pp. 158-161, 1994.
15. Silver, R.M. Raynaud's phenomenon. In: Trauma, Hirsh, H.L., ed., Matthew Bender, pp. 5-14, 1994.
16. Silver, R.M. Eosinophilia myalgia syndrome. In: Scleroderma: From Morphea to Systemic Sclerosis - Pathogenesis and Sclerodermalike Diseases. Clinics in Dermatology Lotti, T. and Matucci-Cerinic, M., eds., Elsevier, New York, 12:457-466, 1994.
17. Legerton, C.W. III, Smith, E.A., and Silver, R.M. Systemic sclerosis (scleroderma). In: Treatment-Resistant Rheumatic Disease, Rheumatic Disease Clinics of North America, J.Cash and R.Wilder, eds, W.B. Saunders Co., Philadelphia, pp 203-216, 1995.
18. Silver, R.M. Interstitial lung disease of systemic sclerosis. In: Immunopathogenesis of systemic sclerosis, International Reviews of Immunology, J. Korn and E.C. LeRoy, eds., Gordon and Breach Publ., Inc., Langhorne, PA, vol. 12, pp. 281-291, 1995.
19. Silver, R.M. Systemic sclerosis (scleroderma). In: Samter's Immunological Diseases, Fifth Edition, Chapter 42; Frank, Austen, Claman & Unanue (eds); Little, Brown & Co., Boston, pp 805-822, 1995.
20. Silver, R.M. Scleroderma and pseudoscleroderma: Environmental exposure. In: Systemic Sclerosis, P.J. Clements and D. Furst (eds.), Williams and Wilkins, Baltimore, pp 81-98, 1996.
21. Renney, J.G. and Silver, R.M. Polymyalgia rheumatica and giant cell arteritis. In: Conn's Current Therapy, R.E. Rakel, ed., W.B. Saunders Co., Philadelphia, pp. 956-957, 1996.
22. Silver, R.M. Clinical problems: The lungs. In: Scleroderma, Rheumatic Disease Clinics of North America, V.D. Steen, ed., W.B. Saunders Co., Philadelphia, pp 825-840, 1996.
23. Silver, R.M. Variant forms of scleroderma. In: Arthritis and Allied Conditions, 13th edition, W.J. Koopman, ed., Williams and Wilkins, Baltimore, pp. 1465-1480, 1996.

24. Silver, R.M. Systemic Sclerosis. In: Clinical Dermatology, D. Joseph Demis, ed., Lippincott-Raven Publishers, Philadelphia, Unit 5.2., 24th revision, pp. 1-18, 1997.
25. Silver, R.M. Scleroderma. In: Essence of Ambulatory Pediatrics, James A. Stockman III and Jacob Lohr, eds., W.B. Saunders Co., Orlando, p. 364, 2000.
26. Silver, R.M. and Bolster, M.B. Variant forms of scleroderma. In: Arthritis and Allied Conditions, 14th edition, W.J. Koopman, ed., Williams and Wilkins, Baltimore, pp. 1625-1642, 2001.
27. Silver, R.M. and Bolster, M.B. Systemic sclerosis (scleroderma). In: Samter's Immunological Diseases, Sixth Edition; Austen, Frank, Atkinson & Cantor, eds., Lippincott Williams & Wilkins, Baltimore, pp. 504-519, 2001.
28. Legerton, C.W. and Silver, R.M. Current management of systemic sclerosis. In: Modern Therapeutics in Rheumatic Diseases, Tsokos, G.C., et al., Humana Press, Inc., Totowa, NJ, pp. 323-335, 2001.
29. Brown, A. and Silver, R.M. Scleroderma. In: The Year in Rheumatic Disorders 2003, Cope, A. and Scott, D., eds., Clinical Publishing Services, Ltd, London, pp. 203-218, 2003.
30. Bolster, M.B. and Silver, R.M. Other fibrosing conditions. In: Systemic Sclerosis, second edition, Clements, P. and Furst, D., eds, Lippincott, Williams & Wilkins, Baltimore, MD, pp.121-127, 2003.
31. Silver, R.M., Medsger, T.A., Jr. and Bolster, M.B. Systemic Sclerosis and Scleroderma Variants: Clinical Aspects. In: Arthritis and Allied Conditions, 15th edition, W.J. Koopman, ed., Lippincott Williams & Wilkins, Baltimore, MD, pp. 1633-1680, 2005.
32. Bogatkevich, G.S., Ludwicka-Bradley, A., Nietert, P.J., and Silver, R.M. Scleroderma lung fibroblasts: Contractility and connective tissue growth factor. In: Tissue Repair, Contraction and the Myofibroblast, A. Desmouliere and G. Gabbiani, eds., Springer Science + Business Media, pp. 25-31, 2006.
33. Bolster MB, Silver RM. Clinical Features of Systemic Sclerosis. In: Rheumatology, 4th edition, Hochberg, Silman, Smolen, Weinblatt, and Weisman, eds. Elsevier Ltd., Edinburgh, pp. 1375-1385, 2007.

BOOKS:

Silver RM and Smith EA. Rheumatology Pearls, SA Sahn and JE Heffner, eds.; Hanley & Belfus, Inc., Philadelphia, 1997.

ABSTRACTS:

1. Silver, R.M. and Zvaifler, N.J. Natural killer activity in rheumatoid arthritis (RA). *Arthritis Rheum* 24: 337, 1981.
2. Silver, R.M., Redelman, D. and Zvaifler, N.J. Response of rheumatoid synovial fluid lymphocytes to lectin stimulation and to AMLR stimulation. *Clin Res* 30: 663a, 1982.
3. Swartz, M.O., DeLustro, F., Silver, R.M., LeRoy, E.C. and White, P.H. Antibodies to type II collagen in juvenile rheumatoid arthritis. *Arthritis Rheum* 26: S57, 1983.
4. Chen, Z., Ainsworth, S.K., Maricq, H.R., Silver, R.M. and Dobson, R.L. Immunofluorescence studies in scleroderma. *Clin Res* 31: 612a, 1983.
5. Silver, R.M., Metcalf, J.F., Stanley, J.H. and LeRoy, E.C. Bronchoalveolar lavage (BAL) analysis of scleroderma lung disease. *Arthritis Rheum* 27: S19, 1984.
6. Metcalf, J.F., Silver, R.M., Stanley, J.H. and LeRoy, E.C. Polymorphonuclear (PMN) leukocytes in bronchoalveolar lavage (BAL) fluid of patients with scleroderma - A possible marker of disease activity in the lung. *Am Rev Respir Dis* 129:A16, 1984.
7. Maricq, H.R. and Silver, R.M. Evolution of microangiopathy in childhood dermatomyositis. *Int J Microcirc Clin Exp* 3:562, 1984.
8. Chen, Z., Silver, R., Ainsworth, S.K., Dobson, R.L., Rust, P. and Maricq, H.R. Association between fluorescent antinuclear antibodies, capillary patterns and clinical features in scleroderma spectrum disorders. Third International Congress of Inflammation, Paris, France, 1984.
9. Maricq, H.R. and Silver, R.M. Nailfold microangiopathy in childhood dermatomyositis. A prospective study. Third International Congress of Inflammation, Paris, France, 1984.
10. Metcalf, J.M., Silver, R.M., Stanley, J.H. and LeRoy, E.C. Characterization of the interstitial fibrosis of scleroderma (systemic sclerosis) with bronchoalveolar lavage (BAL). International Conference on Bronchoalveolar Lavage, Columbia, MD, 1984.
11. Silver, R.M. Further analysis of the NK-like cells in rheumatoid synovial fluid. *Arthritis Rheum* 28:S93, 1985.
12. Price, W.A., Maricq, H.R., Lazarchick, J. and Silver, R.M. Nailfold capillary and endothelial cell product abnormalities in juvenile dermatomyositis. *Arthritis Rheum* 28:S72, 1985.
13. Silver, R.M., Metcalf, J.M. and LeRoy, E.C. Immune complexes in bronchoalveolar lavage fluid of patients with systemic sclerosis (scleroderma). *Arthritis Rheum* 28:S17, 1985.
14. Metcalf, J.F., Silver, R.M. and LeRoy, E.C. Relationship of percentage of neutrophils in lavage fluid to serial lung functions in patients with scleroderma. *Chest* 88(1):29S, 1985.
15. McGregor, A.R., Ruggieri, A.P., Silver, R.M., LeRoy, E.C. and Maricq, H.R. Familial clustering of scleroderma spectrum disorders. *Arthritis Rheum* 29(4):S51, 1986.
16. Maricq, H.R. and Silver, R.M. Follow-up of microangiopathic lesions in childhood dermatomyositis. *Arthritis Rheum* 29:S91, 1986.

17. McGregor, A.R., Ruggieri, A.P., Silver, R.M., LeRoy, E.C. and Maricq, H.R. Familial clustering of scleroderma spectrum disorders. *Arthritis Rheum* 29(1):S40, 1986.
18. Sahovic, E.A., Silver, R.M., Chiofalo, M.S., LaVia, M.F., Stuart, R.K. Inhibition of myelopoiesis by natural killer cells in a patient with lymphocytosis of large granular lymphocytes. *Blood* 68(1):99a, 1986.
19. Fink, G., Gresham, M., Silver, R., Marsh, W., Vukov, G., Gordon, L., Loadholt, B., LeRoy, E.C. Metoclopramide treatment of gastric and esophageal dysfunction in scleroderma. *Arthritis Rheum* 30(1):535, 1987.
20. Jain, S. and Silver, R.M. Immunoregulation by natural killer (NK) cells in rheumatoid arthritis. Student Research Day Program, Medical University of South Carolina, November, 1987.
21. Kinsella, M.B., Smith, E.A., Miller, S.K., LeRoy, E.C., Silver, R.M. Scleroderma alveolar macrophages spontaneously release increased amounts of fibronectin. *Arthritis Rheum* 31 (1 Suppl):R39, 1988.
22. Miller, K.S., Kinsella, M., Smith, E., and Silver, R. Alveolitis uniformity in scleroderma as assessed by bilobar bronchoalveolar lavage, gallium 67 scans, and fibronectin production. *Am Rev Respir Dis* 137:183, 1988.
23. Kinsella, M.B., Miller, S.K., Schabel, S.I., Smith, E.A., LeRoy, E.C., and Silver, R.M. Quantitative assessment of pulmonary status and bronchoalveolar lavage in systemic sclerosis. *Arthritis Rheum* 31(4 Suppl):550, 1988.
24. Silver, R.M., Miller, K.S., Smith, E.A., Kinsella, M.B., and Schabel, S.I. Bronchoalveolar lavage (BAL) findings predict the pulmonary course in scleroderma (Scl) lung disease. *Arthritis Rheum* 32(Suppl):R43, 1989.
25. Lomeo, R.M., Cornella, R.J., Schabel, S.I., and Silver, R.M. Progressive systemic sclerosis sine scleroderma presenting as pulmonary interstitial fibrosis. *Arthritis Rheum* 32(Suppl):R35, 1989.
26. Cook, W.R., Miller, K.S., and Silver, R.M. Circulatory impairment limits patients with scleroderma during maximal exercise. *Am Rev Respir Dis* 139:A191, 1989.
27. Miller, K.S., Smith, E.A., Schabel, S.I., and Silver, R.M. Scleroderma interstitial lung disease assessed via pulmonary function, gallium scanning, arterial blood gases, and bilobar bronchoalveolar lavage. *Am Rev Respir Dis* 139:A191, 1989.
28. Silver, R.M., Miller, K.S., Smith, E.A., Kinsella, M.B., Schabel, S.I. Bronchoalveolar lavage (BAL) findings predict the pulmonary course in scleroderma (Scl) lung disease. *Arthritis Rheum* 32(Suppl):S78, 1989.
29. Warrick, J.H., Bhalla, M., Schabel, S.I., and Silver, R.M. High resolution computed tomography in early scleroderma lung disease. *Arthritis Rheum* 33(Suppl):S158, 1990.
30. Ludwicka, A., Trojanowska, M., Smith, E., LeRoy, E.C., and Silver, R.M. Proliferative responses of scleroderma lung fibroblasts derived from bronchoalveolar lavage. *Amer Soc Cell Biol*, 1990.

31. Kurent, J., Silver, R.M., Garen, P., Heyes, M.P. and Gross, J. Tryptophan-associated eosinophilia myalgia syndrome: clinico-pathological and neurotoxicological correlations. *Amer Acad Neurol*, 1990.
32. Ludwicka, A., Trojanowska, M., Smith, E., LeRoy, E.C., Silver, R.M., Korn, J., and Piela, T. Expression of smooth muscle cell differentiation features in lung and skin fibroblasts from scleroderma patients. *Arthritis Rheum* 34:R30, 1991.
33. Silver, R.M., Heyes, M.P., and Carreira, P.E. Tryptophan metabolism via the kynurenine pathway in patients with the eosinophilia-myalgia syndrome and the toxic oil syndrome. *Arthritis Rheum* 34:R30, 1991.
34. Warrick, J.H., Strange, C., Baumann, M.H., Silver, R.M., and Kinsella, M.B. Oral cyclophosphamide therapy in scleroderma lung disease. *Arthritis Rheum* 34:R31, 1991.
35. Ludwicka, A., Trojanowska, M., Smith, E., LeRoy, C., and Silver, R. Proliferative responses of scleroderma lung fibroblasts to cytokines secreted by alveolar macrophages. *Arthritis Rheum* 34:R30, 1991.
36. Ludwicka, A., Trojanowska, M., Smith, E., LeRoy, E.C., and Silver, R. Mitogenic effect of cytokines secreted by alveolar macrophages on lung fibroblasts. *Keystone Symposia on Molecular and Cellular Biology. J. Cell. Biochem. (Suppl)* 15F:171, 1991.
37. Silver, R.M. Systemic sclerosis: clinical features. *International Meeting on Rheumatic Diseases in Pediatric Age. Rheumatismo* 43(Numero speciale 1):53, 1991.
38. Sudduth, C.D., Strange, C., Baumann, M., Collop, N.A., and Silver, R.M. Failure of the circulatory system limits exercise in patients with scleroderma. *Amer Thoracic Soc*, 1992.
39. Ludwicka, A., Trojanowska, M., Smith, E., LeRoy, E.C., and Silver, R.M. Proliferation of scleroderma lung fibroblasts: increased responsiveness to TGF-beta and PDGF. *FASEB J* 6(4):A1203, 1992.
40. Ludwicka, A., Trojanowska, M., Smith, E., LeRoy, E.C., and Silver, R.M. Characterization of lung fibroblasts: Increased responsiveness to TGF-beta and PDGF. *Seventh International Colloquium on Pulmonary Fibrosis, Cambridge, UK*, 1992.
41. Greene, W.B., Walsh, L.G., Silver, R.M., Allen, J., and Maize, J.C. Silicone gel in biological systems. *Proc EMSA ed: G.W. Bailey, San Francisco Press* 1992, 50:650-651.
42. Greene W.B., Walsh, L.G., Silver, R.M., and Maize, J.C. Silicone gel in biological systems. *Proc EMSA, ed. G.W. Bailey, San Francisco Press*, 50:650-651, 1992.
43. Silver, R., Ludwicka, A., Ohba, T., Bingel, S., Harley, R., Hampton, M., Maize, J., and Heyes, M. A murine model for the eosinophilia-myalgia syndrome (EMS). *Arthritis Rheum* 35(Suppl.):S66, 1992.
44. Silver, R., Ludwicka, A., Ohba, T., Hampton, M., Maize, J., and Heyes, M. Eosinophilia-myalgia syndrome: Additional studies of a murine model. *Arthritis Rheum* 36(Suppl.):R17, 1993.

45. Bolster, M., Allen, N., Heyes, M., and Silver, R. Kynurenine pathway of L-tryptophan metabolism in eosinophilic fasciitis. *Arthritis Rheum* 36(Suppl.):R17, 1993.
46. Hertzman, P., Clauw, D., Kaufman, L., Silver, R., Varga, J., Callahan, L., and Pincus, T. 18-24 month structured follow-up of 210 patients with eosinophilia-myalgia syndrome (EMS) in 12 states. *Arthritis Rheum* 36(Suppl.):R26, 1993.
47. Ohba, T., McDonald, J.K., Silver, R.M., Strange, C., LeRoy, E.C., and Ludwicka, A. Thrombin as an activator of fibroblasts in scleroderma lung disease. 8th Colloquium on Lung Fibrosis, Dijon, France, 1994.
48. Bolster, M.B., Ludwicka, A., Strange, C., LeRoy, E.C., and Silver, R.M. Cytokines in bronchoalveolar lavage (BAL) fluid of patients with systemic sclerosis (SSc). *Arthritis Rheum*. 37:S263, 1994.
49. Ludwicka, A., Ohba, T., Strange, C., LeRoy, E.C., and Silver, R.M. Cytokines in bronchoalveolar lavage (BAL) fluid of patients with systemic sclerosis. 8th Colloquium on Lung Fibrosis, Dijon, France, 1994.
50. Nietert, P., Sutherland, S., Silver, R., Pandey, J., and Dosemeci, M. Is solvent exposure a risk factor for systemic sclerosis? *Arthritis Rheum* 39 (suppl):R17, 1996.
51. Tourkina, E., Suzuki, S., Ludwicka, A., and Silver, R. The expression of collagen-I, collagen-III, collagen-VI and TGF-Beta-1 in a murine model of EMS. *FASEB J* 10:4471, 1996.
52. Mitra, D.A., Werner P.A., Giles, B., Arias, A.I., Pandey, J.P., and Silver, R.M. Interleukin 1 gene polymorphism in scleroderma. *Arthritis Rheum* 39(suppl):1232, 1996.
53. Velarde, V., Silver, R., Mayfield, R., and Jaffa, A. Bradykinin Stimulates Matrix Expression via Induction of TGF- β in Vascular smooth muscle cells: Effect of high glucose. *Diabetes*, suppl 1;46:211A, 1997.
54. Silver, R. Overview of scleroderma lung disease. *Clin Exp Rheumatol* 16(3):362, 1998.
55. Taylor, M., Bolster, M.B., McFadden, J., and Silver, R.M. Ulnar artery involvement in systemic sclerosis (scleroderma). *Arthritis Rheum* 41:S217, 1998.
56. McFall, T.L., Clayton, K., Middaugh, S., Silver, R.M., and Scudds, R. Efficacy of hand rehabilitation for scleroderma patients. 1999 AAP Annual Meeting, February 17-20, Orlando, FL.
57. Legerton III, C.W., Christensen, E.F., Pandey, J., Nietert, P.J., Sutherland, S.E., Silver, R.M., and Oates, J.C. Nitric oxide levels in systemic sclerosis: Correlation with clinical parameters. *Arthritis Rheum* 41:S324, 1998.
58. Senseney, J., Ludwicka, A., Bolster, M.B., and Silver, R.M. The effects of daily oral cyclophosphamide on BAL findings in active scleroderma lung disease. *Arthritis Rheum* 41:S101, 1998.
59. Nietert PJ, Sutherland SE, Silver RM, Pandey J, and Dosemeci M. Solvent-oriented hobbies and the risk of systemic sclerosis. NIEHS Conference "Linking Environmental Agents and Autoimmune Diseases, Sept. 1-3, 1998, Research Triangle Park, NC.

60. Strange C, Mazur J, Bolster M, Taylor M, and Silver R. Epoprostenol (Flolan) infusion in systemic sclerosis patients with interstitial lung disease. *Am J Respir Crit Care Med* 159:A51, 1999.
61. McFall TL, Clayton K, Middaugh S, Silver R, Scudds R. Efficacy of hand rehabilitation for patients with scleroderma. *Am J Phys Med Rehab* 78:179, 1999.
62. Tourkina E, Hoffman S, Ludwicka-Bradley A, and Silver RM. Dual role of thrombin in extracellular remodeling in scleroderma lung disease. *Arthritis Rheum* 42:S205, 1999.
63. Taylor MH, Usher BW, Bolster MB, and Silver RM. Detection of primary diastolic dysfunction of the right ventricle in systemic sclerosis. 1999 ACR 63rd Annual Scientific Meeting. *Arthritis Rheum* 42:S188, 1999.
64. Tourkina E, Silver RM, Hoffman S, Ludwicka-Bradley A, Black C. Altered regulation of tenascin expression in scleroderma lung fibroblasts involves PKC-epsilon. 1999 American Society for Cell Biology 39th Annual Meeting.
65. Pandey JP, Page GP, Silver RM, LeRoy EC, Bona CA. Autoimmunity to Fibrillin-1 in systemic sclerosis is GM and KM allotype-restricted. Immunology 2000 AAI/CIS Joint Annual Meeting. Submitted
66. Nietert PJ, Silverstein MD, Silver RM. Hospital admissions, length of stay, and charges among patients with systemic sclerosis. Society for Epidemiologic Research Meeting. Submitted.
67. Byeon M, Harley RA, Wessels A, Silver RM, Ludwicka-Bradley A. Myofibroblast induction and endothelial cell activation occur in scleroderma lung fibrosis. US and Canadian Academy of Pathology, Annual Meeting, 2001.
68. Ludwicka-Bradley A., Bogatkevich G.S., Byeon M.K., Tourkina E., Harley R.A., Wessels A., and Silver R.M. Thrombin induces myofibroblast phenotype by activating PKC in normal lung fibroblasts. 2001 FASEB Summer Conference, Whitefish, MT.
69. Seibold, J.R., Clements, PJ, Korn, JH, Ellman, M, Rothfield, NF, Wigley FM, Moreland, LW, Kim, Y, Silver, RM, et al. US phase III trial of relaxin in diffuse scleroderma. *ILAR* 2001, *J Rheumatol* 28 (Suppl 63):55 (T62), 2001.
70. Yamanaka, M., Smith, E., Silver, R., Bielawska, A., Obeid, L.N., Hannun, Y.A., and Trojanowska, M. Sphingosine kinase (SPHK) activity is upregulated by TGF- β in dermal fibroblasts and may be involved in elevated collagen production by scleroderma (SSc) fibroblasts. *J Invest Dermatol*, abst#150 (abstract supplement), 2002.
71. Bogatkevich, G.S., Tourkina, E., Abrams, C.S., Harley, R.A., Silver, R.M. and Ludwicka-Bradley, A. Thrombin-induced contractile activity of human lung fibroblasts. ASCB, submitted.
72. Bogatkevich, G.S., Ludwicka-Bradley, A., and Silver, R.M. Multiple signaling pathways of protease-activated receptor-1 in normal and scleroderma lung fibroblasts. American College of Rheumatology 2002 Annual Meeting, New Orleans, LA, accepted.
73. Tourkina, E.V., Hoffman, S., and Silver, R.M. Regulation of collagen accumulation through PKC epsilon/MAPK signaling is aberrant in scleroderma lung fibroblasts. American College of Rheumatology 2002 Annual Meeting, New Orleans, LA, accepted.

74. Clements, P.J., Tashkin D., Roth, M., Goldin, J., Silver, R., Sterz, M., Furst, D.E., Elashoff, R., and the SLS Investigators. Concordance of HRCT and BAL at entry into the Scleroderma Lung Study (SLS). American College of Rheumatology 2002 Annual Meeting, New Orleans, LA, accepted.
75. Khanna, D. Y. Chon, D.E. Furst, P.J. Clements, J. Fitzgerald, J. Goldin, M. Roth, R. Elashoff, M. Sterz and D.Tashkin for Scleroderma Lung Study group. Baseline correlates of SF-36 in Systemic Sclerosis (SSc) patients with active alveolitis- Preliminary results from 74 patients. American College of Rheumatology 2002 Annual Meeting, New Orleans, LA, accepted.
76. Pandey JP, Hudson LL, Silver RM. CTLA-4 genotypes in systemic sclerosis. FASEB J 2003; 17: C179
77. Strange, C., Silver, R., Bolster, M., Roth, M., Goldin, J., Elashoff, R., Clements, P.J., Tashkin, D., and the SLS Investigators. Concordance of BAL and HRCT in the Scleroderma Lung Study. Am Rev Respir Crit Care Med 167:A474, 2003.
78. Pandey, J.P., Hudson, L.L., and Silver, R.M. CTLA-4 genotypes in systemic sclerosis. Amer. Assoc. of Immunol. 2003 Meeting, submitted.
79. Bogatkevich, G., Tourkina, E., Silver, R.M., and Ludwicka-Bradley, A. Protein kinase C signaling in thrombin-activated lung fibroblasts. 2003, FASEB J., 17, A90, Abstr. 86.2.
80. Strange, C., Silver, R., Bolster, M., Roth, M., Goldin, J., Elashoff, R., Clements, P.J., Tashkin, D., and the SLS Investigators. Concordance of BAL and HRCT in the Scleroderma Lung Study (SLS). Amer Thoracic Society Meeting 2003, Seattle, WA, accepted.
81. Pandey, J.P., Hudson, L.L., and Silver, R.M. CTLA-4 genotypes in systemic sclerosis. Amer Assoc Immunol Immunology 2003, Denver, CO, accepted.
82. Hoffman, S., Bonner, M., Tourkina, E., Gooz, P., Harley, R., and Silver, R.M. Curcumin inhibits the progression of fibrosis in an in vivo model of scleroderma lung disease. American College of Rheumatology 2003 Annual Meeting, Orlando, FL, Arthritis Rheum 48:S355, 2003.
83. Mitchell, H.C., Nietert, P.J., Bolster, M.B., and Silver, R.M. Racial variation in clinical, serologic, and immunologic manifestations of systemic sclerosis (SSc). American College of Rheumatology 2003 Annual Meeting, Orlando, FL, Arthritis Rheum 48:S562, 2003.
84. Clements, P.J., Khanna, D., Furst, D.E., Sterz, M.G., Chon, Y., Liu, R., Tashkin, D., Elashoff, R., and the Scleroderma Lung Study Group, American College of Rheumatology 2003 Annual Meeting, Orlando, FL, Arthritis Rheum 48:S558, 2003.
85. Tourkina EV, Gooz P, Silver RM, Hoffman S. Caveolin-1-regulated MAPK cascade is hyperactivated in scleroderma lung fibroblasts. ASCB Meeting, San Francisco, CA, Dec 2003.
86. Tashkin D, Clements P, Goldin J, Strange C, Silver R, Elashoff, R, and the SLS Research Group. The Scleroderma Lung Study (SLS): Baseline features and dyspnea-lung function correlations. Am Thor Soc, May 2004.

87. Silver R, Goldin J, Strange C, Lynch D, Strollo R, Tashkin DP, Clements P, Kim G, Elashoff R, and the SLS Research Group. Alveolitis determination in scleroderma lung disease: CT or bronchoalveolar lavage (BAL)? Am Thor Soc, May 2004.
88. Bogatkevich GS, Gustillo E, Oates J, Feghali-Bostwick C, Harley RA, Silver RM, and Ludwicka-Bradley, A. Distinct PKC isoforms mediate DNA synthesis and cell survival in thrombin-induced myofibroblasts. Exp Biol, May 2004.
89. Tourkina, E, Bonner M, Gooz P, Silver R, Hoffman, S. Caveolin in lung fibrosis and resolution. 13th International Colloquium on Lung Fibrosis. Banff, Alberta, Canada, 2004.
90. Nietert PJ, Shaftman SR, Tilley BC, Bolster MB, Silver RM. Patterns of emergency room visits in a multi-ethnic population of patients with systemic sclerosis. Presented at the 2004 annual meeting of the American College of Rheumatology. Arthritis and Rheumatism; 50(9) (Suppl): S84-S85, 2004.
91. Nietert PJ, Silver RM, Bolster MB, Mitchell HC, Tilley BC, Shaftman SR. The influence of renal disease and race on in-hospital mortality among patients with systemic sclerosis. Presented at the 2004 annual meeting of the American College of Rheumatology. Arthritis and Rheumatism; 50(9) (Suppl): S421-S422, 2004.
92. Nietert PJ, Mitchell HC, Bolster MB, Curran MY, Silver RM. How do functional status and gastrointestinal function influence depression among patients with systemic sclerosis? Presented at the 2004 annual meeting of the American College of Rheumatology. Arthritis Rheum; 50: S464, 2004.
93. Gore J and Silver R. Oral sildenafil for treatment of Raynaud phenomenon and digital ulcers secondary to scleroderma (systemic sclerosis). Arthritis Rheum; 50; F15, 4085, 2004.
94. Bogatkevich, G.S., Ludwicka-Bradley, A., and Silver, R.M. Contractile activity of scleroderma lung myofibroblasts involves VWC domain of CTGF. Exp Biol 2005, submitted.
95. Clements P, Furst DE, Silver RM, Tashkin DP, Roth MD, Goldin J, Elashoff RM, Sterz MG, for the SLS Investigators. The Scleroderma Lung Study (SLS) Shows the Beneficial Effects of Cyclophosphamide (CYC) Over Placebo (PL) in Systemic Sclerosis (Sc) Patients with Active Alveolitis. 2005 ACR National Scientific Meeting. Arthritis Rheum;52:S257, 2005.
96. Bogatkevich GS, Ludwicka-Bradley A, Highland KB, Singleton CB, Nietert PJ, Shaftman SR, Silver RM. Differences in Cytokine Composition in Bronchoalveolar Lavage Fluid among African-American and Caucasian Populations: Implications for Scleroderma Lung Disease. 2005 ACR National Scientific Meeting. Arthritis Rheum; 52:S268, 2005
97. Nietert, PJ, Shaftman SR, Bolster MB and Silver RM. Clinical and demographic predictors of in- and out-of-hospital mortality among patients with systemic sclerosis. 2005 ACR National Scientific Meeting. ArthritisRheum; 52:S172, 2005.

98. Nietert, PJ, Shaftman SR, Bolster MB and Silver RM. Predictors of long-term adverse outcomes among patients seen in an emergency room with systemic sclerosis. 2005 ACR National Scientific Meeting. *Arthritis Rheum*; 52:S671-672, 2005.
99. Sandborg C, Schanberg L, McLendon C, APPLE Investigators Stanford, Stanford, CA, and Duke, Durham, NC. Barriers in NIH funded multicenter pediatric trials: Atherosclerosis Prevention in Pediatric Lupus Erythematosus (APPLE) case study. 2005 ACR National Scientific Meeting. *Arthritis Rheum*; 52:S537-538, 2005.
100. Hant FN, Ludwicka-Bradley A, Elashoff R, Silver RM. Serum levels of surfactant protein D and KL-6 as markers of interstitial lung disease in patients enrolled in the Scleroderma Lung Study. 2005 ACR National Scientific Meeting. *Arthritis Rheum*; 52:4054, 2005.
101. Tashkin D, Clements P, Roth M, Furst D, Strange C, Silver R, Goldin J, and Elashoff R, for the Scleroderma Lung Study Research Group. Oral Cyclophosphamide versus Placebo for the Treatment of Scleroderma-Related Interstitial Lung Disease (SScILD): Main Findings from the Scleroderma Lung Study. 2006 ATS Annual Meeting, San Diego, CA.
102. Tashkin D, Clements P, Roth M, Furst D, Strange C, Silver R, Goldin J, and Elashoff R, for the Scleroderma Lung Study Research Group. One Year Course of Scleroderma-Related Interstitial Lung Disease (SScILD) in Patients with Limited vs. Diffuse SSc Treated with Oral Cyclophosphamide versus Placebo: Findings from the Scleroderma Lung Study. 2006 ATS Annual Meeting, San Diego, CA.
103. Strange C, Bolster M, Roth M, Golden J, Clements P, Elashoff R, Tashkin DP, Smith E, Silver R, and the Scleroderma Lung Study Research Group. Bronchoalveolar lavage cellularity does not predict cyclophosphamide response in scleroderma interstitial lung disease. 2006 ATS Annual Meeting, San Diego, CA.
104. Bogatkevich GS, Ludwicka-Bradley A, Singleton CB, Silver RM. Structural Modules of Connective Tissue Growth Factor in Scleroderma Lung Disease. 2006 EULAR Annual Meeting, Amsterdam, Netherlands.
105. Hant FN, Li N, Hill EG, Elashoff R, Silver RM. Serum Levels of Surfactant Protein D and KL-6 and Pulmonary Function Testing in Patients Enrolled in the Scleroderma Lung Study. 2006 EULAR Annual Meeting. Amsterdam, Netherlands.
106. Furst DE, Elashoff R, Clements PJ, Silver RM, Tashkin, D, Roth MD, Goldin JJ. Predicting 24 month pulmonary function test (PFTs), modified Rodnan skin score (mRSS) and functional results from baseline measurements in the cyclophosphamide (CYC) versus placebo trial of systemic sclerosis (SSc) alveolitis. 2006 ACR National Scientific Meeting. *Arthritis Rheum*; 54:S477, 2006.
107. Clements PJ, Furst DE, Silver RM, Tashkin DP, Roth MD, Goldin J, Elashoff RM. Outcomes at 24-months are better for patients who received one-year of cyclophosphamide (CYC) therapy for SSc alveolitis than in those who received one-year of placebo (PBO) in the Scleroderma Lung Study. 2006 ACR National Scientific Meeting. *Arthritis Rheum*; 54:S522, 2006.

108. Beall AD, Shaftman SR, Neitert PJ, et al. Pulmonary Hypertension and Mortality in a Cohort of Patients with Systemic Sclerosis. 2007 Dr. LeRoy Memorial International Workshop on Scleroderma May, 2007.
109. Schioppa E, Hsu VM, Hummers L, et al. Pulmonary Hypertension Assessment and Recognition of Outcomes in Scleroderma (Systemic Sclerosis, SSc): PHAROS. American College of Rheumatology Annual Conference. Boston, MA, November, 2007.
110. Schanberg LE, Sandborg C, Ardoin S, Mieszkalski K, et al. Predictors of Increased Carotid Intima Medial Thickening (CIMT) in the Atherosclerosis Prevention in Pediatric Lupus Erythematosus (APPLE) Cohort. American College of Rheumatology Annual Conference. Boston, MA, November, 2007.
111. Kowal-Bielecka O, Landewe R, Avouac J, et al. Recommendations for the treatment of Systemic sclerosis (SSc). 2008 EULAR/ESTAR Annual Meeting.
112. Shanmugam VK, Li N, Tashkin D, Silver R, Clements P, Steen VD. Differences in the baseline characteristics of patients enrolled in the scleroderma lung study according to antibody profile. American College of Rheumatology Annual Conference. San Francisco, CA, October 2008. Accepted.
113. Nietert PJ, Brown R, Shaftman SR, Tilley BC, Mee L, Maxson B, Bonner M, Anthony K, Kral M, Connelly M, Schanberg L, Vogler LB, Wagner J, Silver RM. A randomized clinical trial to enhance adjustment and disease adaptation among adolescent females with lupus. American College of Rheumatology Annual Conference. San Francisco, CA, October 2008. Accepted.
114. Joseph K, Tholanikunnel BG, Highland KB, Silver RM. Regulation of endothelin-1 production by bradykinin in pulmonary hypertension. 2008 American Heart Association Scientific Session, submitted.

INVITED PRESENTATIONS (SELECTED):

Scleroderma Study Group, ARA National Meeting, Minneapolis	1984
Emory University School of Medicine, Atlanta	1986
Frontiers Symposium of the American College of Clinical Pharmacology, Johns Hopkins University, Baltimore	1987
University of South Carolina School of Medicine, Columbia	1988
Sixth Annual SE Regional Rheumatology on the Beach, Destin	1988
Seminar in Advanced Rheumatology. Bad Ragaz, Switzerland	1988
National Institute of Mental Health, Bethesda	1990
Medicine Grand Rounds, Medical College of Georgia, Augusta	1990
Medicine Grand Rounds, University of California, San Diego	1990
Symposium on Cell Biology of Scleroderma, SE Regional Meeting of the ACR, Richmond	1990
L-Tryptophan Investigators Meeting, Los Alamos	1990
Fifteenth Annual Westwood Dermatology Conference, Buffalo	1990
Grover Conference on Pulmonary Circulation, Sedalia, Colorado	1990
Workshop on Scleroderma Research, Chicago	1990

Harvard Medical School Rheumatology Course, Boston	1990
Meet the Professor Sessions, ACR National Meeting, Seattle	1990
Clinical Scholar Program, Duke University, Durham	1990
District of Columbia Rheumatism Society, Washington	1991
National Institutes of Health, Bethesda	1991
Rheumatology Grand Rounds, UNC, Chapel Hill	1991
Connective Tissue Diseases in Pediatrics, Florence, Italy	1991
International Conference on Systemic Sclerosis, Tokyo, Japan	1991
Rheumatology Grand Rounds, Georgetown University, Washington	1991
Rheumatology Grand Rounds, University of Kentucky, Lexington	1991
International Conference on Scleroderma and Scleroderma- like Diseases, Swierdow-Zdroj, Poland	1991
Medicine Grand Rounds, University of Texas, Galveston	1991
ACP Present Concepts in Internal Medicine, San Francisco	1991
Rheumatology Grand Rounds, Massachusetts General Hospital, Boston	1992
Northwest Rheumatism Society Annual Meeting, Portland	1992
WHO Toxic Oil Syndrome/Eosinophilia-Myalgia Syndrome Investigators Workshop, Madrid, Spain	1992
Harvard "Advances in Rheumatology", Boston	1992
Walter Reed Army Medical Center, Washington, DC	1992
Penny Riemer Second International Scleroderma Workshop, Chicago	1992
ACP, South Carolina Scientific Meeting, Charleston	1992
WHO Toxic Oil Syndrome/Eosinophilia-Myalgia Syndrome Investigators Workshop, Stony Brook, NY	1992
Rheumatology Grand Rounds, Ochsner Clinic, New Orleans	1992
Louisiana Medical Society	1992
Rheumatology Grand Rounds, University of Connecticut Health Center	1993
Meet the Professor Session, ACR Regional Meeting, Washington	1993
Med. Grand Rounds, Bowman Gray Sch of Medicine, Winston-Salem	1993
Scleroderma Clin. Symposium, ACR Natl Meeting, San Antonio	1993
Harvard "Advances in Rheumatology", Boston	1994
Boston University Rheumatology Rounds, Boston	1994
Medicine Grand Rounds, Medical College of Virginia, Richmond	1994
8th International Colloquium on Pulmonary Fibrosis, Dijon, France	1994
ACR Winter Rheumatology Symposium, Snowmass, Colorado	1995
SC Rheumatology Society, Charleston, SC	1995
DHEC 15th Annual School Nurse Conference, Columbia, SC	1995
Medicine Grand Rounds, St. Joseph's Hospital, Phoenix, AZ	1996
Scleroderma Federation Patient Education Seminar, Waltham, MA	1996
IVth Biennial Workshop on Scleroderma Research, Cambridge, England	1996
University of Illinois Rheumatology Seminar, Chicago	1996
Scleroderma Study Group, ACR National Meeting, Orlando, FL	1996
Premiere Professor Lecture Series, Clemson University, Clemson, SC	1997
Pediatric Grand Rounds, Trident Regional Medical Center, Charleston	1997
Medicine Grand Rounds, University of Louisville, KY	1997
SE Regional ACR Meeting, Savannah, GA	1997
International Conference on SSc, Montecatini Terme, Italy	1998
XII PANLAR meeting, Montreal, Canada	1998
Fifth International Workshop on Scleroderma Research, Boston, MA	1998

William K. Ishmael Lectureship and Oklahoma Rheumatology Association's Annual Scientific Meeting, Oklahoma City, OK	1999
Grand Rounds, Hilton Head Hospital, Hilton Head Island, SC	1999
17th Annual Carl M. Pearson Memorial Lecture, Santa Barbara	1999
Metropolitan Atlanta Rheumatism Society, Atlanta	1999
Emory University, Division of Rheumatology, Atlanta	1999
Medicine Grand Rounds, University of S.C., Columbia	1999
Medicine Grand Rounds, East Carolina University, Greenville, NC	1999
Medicine Grand Rounds, Eisenhower Army Medical Center, Augusta, Georgia	2000
Medicine Grand Rounds, MUSC, Charleston, SC	2000
Omega Kappa Rho, Charleston, SC	2000
Sixth International Workshop on Scleroderma Research, Oxford, England	2000
Medicine Grand Rounds, University of Virginia, Charlottesville	2000
Southeastern Dermatology Consortium, Charleston, SC	2000
Ann Gilbert Memorial Visiting Professorship, Univ. of Miami	2001
Visiting Professor, Arthritis Institute, University of Pittsburgh	2001
International League of Associations for Rheumatology, Edmonton, Alberta	2001
Rheumatology Division Rounds, UNC-Chapel Hill	2001
Rheumatology Division Rounds, Wake Forest School of Medicine	2002
Rheumatology Division Rounds, University of Colorado Health Sciences	2002
Rocky Mountain Rheumatism Society, Denver, CO	2002
West Virginia University Health Sciences Center, Morgantown, WV	2002
Annual European Congress of Rheumatology (EULAR), Stockholm	2002
VIII Congreso Guatemalteco de Reumatologia, Guatemala City	2002
Virginia Society of Rheumatologists, Charlottesville, VA	2002
Vth Annual Frontiers in Pediatrics Meeting, Charleston, SC	2002
Medicine Grand Rounds, Medical College of Georgia, Augusta, GA	2003
AaiPharma National Sales Meeting, Charleston, SC	2003
Student Medical History Club, MUSC, Charleston, SC	2003
Yale Rheumatology Symposium, New Haven, CT	2003
Maryland Rheumatic Disease Society, Baltimore, MD	2003
Scleroderma Foundation National Meeting, Alexandria, VA	2003
Medicine Grand Rounds, University of Tennessee, Knoxville, TN	2003
Early Identification and Management of Arthritis, MUSC, Charleston, SC	2003
PAH in CTD Patients, Florida PH Symposium, Sarasota, FL	2003
Gout: The King of Diseases and the Disease of Kings, MUSC	2004
Rheumatology Division Rounds, Vanderbilt, Nashville, TN	2004
NC Academy of Family Practice, Wrightsville Beach, NC	2004
Alabama Society for the Rheumatic Diseases, Birmingham	2004
Rheumatology Grand Rounds, UAB, Birmingham, AL	2004
Medicine Grand Rounds, Eisenhower Medical Center, Ft Gordon, GA	2004
Powiklania Plucne w Chorobach Reumatycznych, Bialowieza, Poland	2004
Scleroderma Study Group, ACR National Meeting, San Antonio	2004
Inside Scleroderma, Post-ACR Symposium, San Antonio, TX	2004
Scleroderma and Pulmonary Hypertension, Charleston, SC	2004
Rheumatology Grand Rounds, UNC, Chapel Hill, NC	2004
Research Grand Rounds, University of Tennessee, Memphis, TN	2004
First EULAR Course on Scleroderma, Budapest, Hungary	2005

15 th Annual Cleveland Review of Rheumatic Diseases, Cleveland, OH	2005
Gout: The King of Diseases and the Disease of Kings, Grand Rds, UT-Knox	2005
SLS: Lessons for ILD, American Thoracic Society, San Diego, CA	2005
Scleroderma Lung Disease, Georgia Society of Rheumatology	2005
Scleroderma: Emerging Concepts, Puerto Rico Rheumatism Society, San Juan	2005
Scleroderma PAH, Post-ACR Conference, San Diego, CA	2005
Raynaud's Phenomenon, Medicine Grand Rounds, UT-Chattanooga, TN	2005
Update on JRA, Pediatric Grand Rounds, Roper Hospital, Charleston, SC	2006
Raynaud's Phenomenon, Medicine Grand Rounds, EVMS, Norfolk, VA	2006
Scleroderma Potpourri, Georgia Society of Rheumatology, St Simon, GA	2006
SSc and RP, Advance in Rheumatology, Harvard University, Boston, MA	2006
Vascular Complications of Scleroderma, Post-ACR Conference, Washington	2006
Second EULAR/EUSTAR Course on Scleroderma, Bad Nauheim, Germany	2007
Rheumatology Grand Rounds, Emory University, Atlanta, GA	2007
Rheumatology Grand Rounds, UAB, Birmingham, AL	2007
Treatment of Scleroderma, Tennessee Rheumatism Society, Nashville, TN	2007
Update on Scleroderma, NC Rheumatology Association, Asheville, NC	2007
Juvenile Idiopathic Arthritis, NC Rheumatology Association, Asheville, NC	2007
Keynote Address, LeRoy International Workshop on Scleroderma, Tokyo	2007
Scleroderma ILD, LeRoy International Workshop on Scleroderma, Tokyo	2007
Scleroderma Lung Disease, Kanazawa University, Kanazawa, Japan	2007
SSc-PAH, University of South Florida, Tampa, FL	2007
Controversies in Connective Tissue Diseases, Florence, Italy	2007
Meet the Professor, 2007 ACR Meeting, Boston, MA	2007
Systemic Sclerosis, AHRP Clinical Update, Boston, MA	2007
SSc: Evolving Concepts, Medicine Grand Rounds, UVa, Charlottesville, VA	2008
SSc-PAH, Cedars-Sinai Medical Center, Los Angeles, CA	2008
SSc (Scleroderma), Medicine Grand Rounds, UNC, Chapel Hill, NC	2008
Art, Artists and Arthritis, SC Alpha Chapter, AOA Banquet, Charleston, SC	2008
Crystalline Diseases, ACP Annual Meeting, Washington, DC	2008
First Annual Dr. Joseph Korn Memorial Lecture, Boston University	2008
Pathogenesis of SSc-ILD, Rheumatology Grand Rounds, UCLA, Los Angeles	2008
SSc Interstitial Lung Disease, Trinity College, Cambridge, UK	2008
SSc: Evolving Concepts, Dartmouth Hitchcock Medical Center, NH	2008
SSc-PAH, Rhode Island General Hospital, Providence, RI	2008
SSc-ILD, 5 th International WASOG Conference, Charleston, SC	2009
Systemic Sclerosis, 6 th Jiangsu Rheumatology Meeting, Yangzhou, China	2009