

## **CURRICULUM VITAE**

NAME Edwin A. Smith, M.D.

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### PRIMARY EDUCATION

1967-1971 Northern Cambria High School  
Barnesboro, Pennsylvania

1971-1975 Washington and Jefferson College  
Washington, Pennsylvania

### MEDICAL TRAINING

1975-1979 University of Pittsburgh  
School of Medicine  
Pittsburgh, Pennsylvania

1979-1982 Residency (Internal Medicine)  
North Carolina Memorial Hospital  
Chapel Hill, North Carolina

7/1/82-6/30/84 Fellowship (Rheumatology)  
Medical University of South Carolina  
Department of Medicine  
Charleston, South Carolina

### POSITIONS HELD

7/1/84-6/30/91 Assistant Professor of Medicine  
Medical University of S.C.  
Division of Rheumatology  
Charleston, South Carolina

7/1/91-6/30/00 Associate Professor of Medicine  
Medical University of S.C.

Division of Rheumatology  
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7/1/00-present

Professor of Medicine  
Medical Univerisity of S.C.  
Division of Rheumatology  
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CERTIFICATION

1980 National Board of Medical Examiners  
1981 State of North Carolina (No. 25656)  
1982 State of South Carolina (No. 11040)  
1982 American Board of Internal Medicine (No.86264)  
1984 American Board of Internal Medicine  
(Rheumatology)

HONORS AND AWARDS

Phi Beta Kappa  
Summa cum laude  
Washington and Jefferson College  
  
Alpha Omega Alpha  
Cum laude  
University of Pittsburgh

ASSOCIATIONS

American College of Rheumatology -  
Founding Fellow  
American Federation for Clinical Research  
American Association for the Advancement of  
Science  
American College of Physicians-Fellow  
Southern Medical Association  
Charleston County Medical Association  
Epworth United Methodist Church

PUBLICATIONS

(Journals and Text)

**Peer Reviewed**

1. Smith, E., Harper, F.E. and LeRoy, E.C. Raynaud phenomenon of a single digit following local intradermal bleomycin sulfate injection. *Arthritis Rheum* 28(4):459-461, 1985.
2. Mohrland, J.S., Porter, J.M., Smith, E.A., Belch, J. and Simms, M. A multiclinic, placebo-controlled, double-blind study of prostaglandin E1 in Raynaud's syndrome. *Ann Rheum Dis* 44:754-760, 1985.
3. Smith, E.A., Kahaleh, M.B. and LeRoy, E.C. The acute phase response in scleroderma. Differing responses to intravenous PGE1. *Clin Exp Rheumatol* 4:341-345, 1986.
4. Kahaleh, M.B., Sultany, G.L., Smith, E.A., Huffstutter, J.E., Loadholt, C.B. and LeRoy, E.C. A modified scleroderma skin scoring method. *Clin Exp Rheumatol* 4:367-369, 1986.
5. Kahaleh, M.B., Smith, E.A., Soma, Y. and LeRoy, E.C. Effect of lymphotoxin and tumor necrosis factor on endothelial and connective tissue cell growth and function. *Clin Immunol Immunopathol* 49:261-272, 1988.
6. Kinsella, M.B., Smith, E.A., Miller, K.S., LeRoy, E.C., and Silver, R.M. Spontaneous production of fibronectin by scleroderma alveolar macrophages. *Arthritis Rheum* 32:577-583, 1989.
7. Maricq, H.R., Weinrich, M.C., Keil, J.E., Smith, E.A., Harper, F.E., Nussbaum, A.I., LeRoy, E.C., McGregor, A.R., Diat, F., and Rosal, E.J. Prevalence of scleroderma spectrum disorders in the general population of South Carolina. *Arthritis Rheum* 32:998-1006, 1989.
8. Maricq, H.R., McGregor, A.R., Diat, F., Smith, E.A., Maxwell, D.B., LeRoy, E.C., and Weinrich, M.C. Major clinical diagnosis found among patients with Raynaud phenomenon from the general population. *J Rheum* 17:1171-1176, 1990.
9. Miller, K.S., Smith, E.A., Kinsella, M., Schabel, S.I., and Silver, R.M. Lung disease associated with progressive systemic sclerosis. Assessment of interlobar variation by bronchoalveolar lavage and comparison with noninvasive evaluation of disease activity. *Am Rev Respir Dis* 141:301-306, 1990.

10. Silver, R.M., Miller, K.S., Kinsella, M.B., Smith, E.A., and Schabel, S.I. Evaluation and management of scleroderma lung disease using bronchoalveolar lavage. *Am J Med* 88:470-476, 1990.
11. Xu, W., LeRoy, E.C., Smith, E.A. Fibronectin reelease by systemic sclerosis and normal dermal fibrosis in response to TGF- $\beta$ . *J Rheum* 18:241-246, 1991.
12. LeRoy, E.C., Trojanowska, M., and Smith, E.A. The pathogenesis of scleroderma (systemic sclerosis, SSc). *Clin Exp Rheumatol* 9:173-177, 1991.
13. Yamakage, A., Kikuchi, K., Smith, E.A., LeRoy, E.C., and Trojanowska, M. Upregulation of PDGF  $\alpha$  receptors by TGF- $\beta$  in scleroderma fibroblasts. *J. Exp. Med.* 175:1227-1234, 1992.
14. Kikuchi, K., Yamakage, A., Smith, E.A., LeRoy, E.C., Trojanowska, M. Differential modulation of bFGF receptors by TGF- $\beta$  in adult skin, scleroderma skin, and newborn foreskin fibroblasts. *J. Invest. Derm.* 99(2):201-205, 1992.
15. Kikuchi, K., Hartl, C.W., Smith, E.A., LeRoy, E.C., Trojanowska, M. Direct demonstration of transcriptional activation of collagen gene expression in systemic sclerosis fibroblasts: insensitivity to TGF $\beta$ 1 stimulation. *BBRC* 187:145-50, 1992.
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17. 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.
18. Feldman SR, Trojanowska M, Smith EA, and LeRoy EC. Differential responses of human papillary and reticular fibroblasts to platelet-derived growth factor. *Am J Med Sci* 305:203-207,1993.
19. Lubinus, M., Meier, K.E., Smith, E.A., Gause, K.C., LeRoy, E.C., and Trojanowska, M. Independent effects of platelet-derived growth factor isoforms on mitogen-activated protein kinase activation and mitogenesis in human dermal fibroblasts. *J Biol Chem* 269:9822-9825, 1994.

20. Ichiki, Y., Smith, E.A., LeRoy, E.C., Trojanowska, M. Different effects of basic fibroblast growth factor and transforming growth factor- $\beta$  on the two platelet-derived growth factor receptors' expression in scleroderma and healthy human dermal fibroblasts. *J Invest Dermatol* 104:124-127, 1995
  
21. Ludwicka, A., Ohba, T., Trojanowska, M., Yamakage, A., Strange, C., Smith, E.A., LeRoy, E.C., Sutherland, S., Silver, R.M. Elevated levels of platelet derived growth factor and transforming growth factor- $\beta$ 1 in bronchoalveolar lavage fluid from patients with scleroderma. *J. Rheumatol.* 22:1876-1883, 1995.
  
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23. Pollison, RP, Gilkeson, G.S., Pyun, E.H., Pisetsky, D.S., Smith, E.A., and Simon, L.S. A multicenter trial of recombinant human interferon gamma in patients with systemic sclerosis: Effects on cutaneous fibrosis and interleukin 2 receptor levels. *J Rheum* 23(4):654-658, 1996.
  
24. Arnett FC, Reveille JD, Goldstein R, Pollard KM, Leaird K, Smith EA, LeRoy EC, Fritzler. Autoantibodies to fibrillar in systemic sclerosis (scleroderma): an immunogenetic, serological, and clinical analysis. *Arthritis Rheum.* 39(7):1151-1160, 1996.
  
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- signaling to scleroderma phenotype. *J Invest Derm* 110(1):47-51, 1998.
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42. Pannu J, Gardner H, Shearstone JR, Smith E, Trojanowska M. Increased levels of transforming growth factor  $\beta$  receptor type I and up-regulation of matrix gene program. A model of scleroderma. *Arthritis Rheum* 54: 3011-3021, 2006.
43. Mikuls TR, Holers VM, Parrish L, Kuhn KA, Conn DL, Gilkeson G, Smith EA, Kamen DL, Jonas BL, Callahan LF, Alarcon GS, Howard G, Moreland LW, Bridges SL Jr. Anti-cyclic citrullinated peptide antibody and rheumatoid factor isotypes in African Americans with early rheumatoid arthritis. *Arthritis Rheum*. 2006 Sep; 54 (9):3057-9.
44. Pannu J, Nakerakanti S, Smith E, ten Dijke P, and Trojanowska M. TGF- $\beta$  receptor type I dependent fibrogenic program is mediated via activation of Smad1 and ERK1/2 pathways, *J Biol Chem* 2007 Apr;282(14):10405-13. PMID: 1731765
45. Hughes LB, Morrison D, Kelley JM, Padilla MA, Vaughan LK, Westfall AO, Dwivedi H, Mikuls TR, Holers VM, Parrish LA, Alarcón GS, Conn DL, Jonas BL, Callahan LF, Smith EA, Gilkeson GS, Howard G, Moreland LW, Patterson N, Reich D, Bridges SL, Jr. The HLA-DRB1 shared epitope is associated with susceptibility to rheumatoid arthritis in African Americans through European genetic admixture *Arthritis Rheum*. 2008 Feb; 58 (2): 349-358).
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### **Invited**

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2. Smith, E.A. and LeRoy, E.C. Therapy of connective tissue disease. Comp Ther 12:24-29, 1986.
3. Smith, E.A. and LeRoy, E.C. Scleroderma (systemic sclerosis). In: Internal Medicine (2nd ed.), J. Stein (ed.), Little, Brown, Boston, pp. 1289-1294, 1987.
4. LeRoy EC, Smith EA, Kahaleh MB, Trojanowska M, Silver RM. A strategy for scleroderma (systemic sclerosis): Is transforming growth factor beta the answer? Arthritis Rheum 32:817-825, 1989.
5. LeRoy, E.C., Trojanowska, M., and Smith, E.A. Cytokines and human fibrosis. Eur Cytokine Net 1(4):215-219, 1990.
6. Smith, E.A. and LeRoy, E.C. A possible role for TGF- $\beta$  in systemic sclerosis. J Invest Derm 95(Suppl):1255-1275, 1990.
7. Smith, E.A. Connective tissue disorders: lupus erythematosus, dermatomyositis, and scleroderma. In: Conn's Current Therapy, Rakel, R.E. (ed.), Saunders, Philadelphia, pp. 727-731, 1992.
8. Smith, E.A. and LeRoy, E.C. The cellular and molecular basis of fibrosis in scleroderma. In: Polli EE, eds. Proceedings of the International Meeting on Molecular Bases of Human Diseases. Milan, Italy. 1993:59-66.
9. Smith, E.A. and LeRoy E.C. Systemic sclerosis--etiology and pathogenesis. In:Rheumatology, Klippel, J.H. and Dieppe P.A. (eds.), Mosby, St. Louis, pp. 6.9.1-10, 1994
10. Legerton, C.W., Smith, E.A., Silver, R.M. Systemic sclerosis (scleroderma):Clinical Management of its major complications. Rheum Dis Clin North America 21:203-216, 1995

11. Legerton, C.W. and Smith E.A. Diagnosis and Management of Raynaud's Phenomenon. Bull Rheum Dis 45(7):6-8, 1996.
12. Smith, E.A. and LeRoy, E.C. Scleroderma (systemic sclerosis) and morphea. In: Principles of Molecular Medicine, Jameson J.L. (ed.), Humana Press, Totawa, NJ, pp. 829-838, 1998.
13. Smith, E.A. and LeRoy, E.C. Systemic sclerosis-etiology and pathogenesis. In: Rheumatology (Second Edition), Klippel J.H. and Dieppe P.A. (eds), Mosby, St. Louis, pp. 6(9.1)-6(9.10).
14. Smith, E.A. Polymyalgia rheumatica and giant cell arteritis. In: Conn's Current Therapy (51st ed.), Rakel R.E. (ed.), W.B. Saunders, Philadelphia 1999
15. Smith E.A. Systemic sclerosis-etiology and pathogenesis. In: Rheumatology (Third Edition), Hochberg M.C., Silman A.J., Smolen J.S., Weinblatt M.E., Weisman M.H.(eds), Mosby, New York, pp.1481-1492.
16. Smith E.A. Several entries. In: Rheumatology and Immunology Therapy-A to Z Essentials, Moreland L.W. (ed.) Springer, New York, 2004.
17. Smith, E.A. Connective tissue disorders: lupus erythematosus, dermatomyositis, and scleroderma. In: Conn's Current Therapy, Rakel, R.E. (ed.), Saunders, Philadelphia, 2005
18. Smith E.A. and Kahaley M.B. Systemic sclerosis-etiology and pathogenesis. In: Rheumatology (Fourth Edition), Hochberg M.C., Silman A.J., Smolen J.S., Weinblatt M.E., Weisman M.H.(eds), Mosby, New York.
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### **Books**

1. Silver, R.M. and Smith, E.A. Rheumatology Pearls (Sahn, S.A. and Heffner, J.E, Series eds.) Hanley and Belfus. Philadelphia, 1997.