

CURRICULUM VITAE

NAME William Samuel Silvers, M.D.

DATE OF BIRTH August 13, 1949

PLACE OF BIRTH Indianapolis, Indiana

PRESENT POSITION Allergy, Asthma & Immunology Clinic of Colorado

PRESENT ADDRESS Greenwood Medical Center
 7180 E. Orchard Road, Suite 208
 Englewood, Colorado 80111-1726
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 E-mail office: skiersnoz@silversmd.com
 Website: www.AllergyAsthmaColorado.com
 Consultation Clinics: Vail, Summit County

FAMILY One child, Molly

EDUCATION 1967-1970 Indiana University – Bloomington, Indiana
 Degree: B.A. – 1971

1970-1974 Indiana University School of Medicine, Indianapolis, Indiana
 Degree: M.D. – 1974

INTERNSHIP 1974-1975 Internal Medicine-Grady Memorial Hospital
 Emory University Affiliated Hospitals, Atlanta, Georgia

RESIDENCY 1975-1977 Junior and Senior Medical Resident-Grady Memorial Hospital
 Emory University Affiliated Hospitals, Atlanta, Georgia

FELLOWSHIP 1977-1979 Allergy and Clinical Immunology
 National Jewish Hospital, Denver, Colorado

BOARD CERTIFICATION **Diplomate:** American Board of Internal Medicine-1977,
 Certificate #60921

Diplomate: American Board of Allergy and Immunology, A conjoint
 Board of the American Board of Internal Medicine and the
 American Board of Pediatrics-1979, Certificate #1986

LICENSURE 1974 Indiana #25449
 1975 Georgia #1743
 1977 Colorado #21277
 1978 Wyoming #2723A

WILLIAM S. SILVERS, M.D.**Curriculum Vitae**

Clinical Professor of Medicine, 2002 - Present
University of Colorado School of Medicine

Adjunct Clinical Professor, 2008 – Present
Touro University California College of Osteopathic Medicine

Associate Clinical Professor, 1991 - 2002
 Division of Allergy & Clinical Immunology
 University of Colorado Health Sciences Center, Denver, CO

Assistant Clinical Professor, 1985-1991
 Division of Allergy & Clinical Immunology
 University of Colorado Health Sciences Center, Denver, CO

Instructor, 1982-1985
 University of Colorado Health Sciences Center, Denver, CO

Consultant Staff, 1986-1998
 National Jewish Center for Immunology & Respiratory Medicine, Denver, CO

PREVIOUS POSITIONS

1979-1980 Research Fellow
 Department of Medicine, Research Laboratory for Autoimmune Disease
 Hadassah Medical Center, Jerusalem, Israel

1979-1980 Instructor, Allergy Unit, Department of Medicine “A”
 Hadassah Medical Center, Jerusalem, Israel

1980-1981 Emergency Room Physician, Aspen Valley Hospital, Aspen, CO

PROFESSIONAL SOCIETY MEMBERSHIPS

1970 Phi Beta Kappa
 1978 American College of Physicians – Fellow 1990
 1981 American Academy of Allergy, Asthma & Immunology – Fellow 1988
 1982 American College of Allergy, Asthma & Immunology – Fellow 1982
 1982 Colorado Medical Society
 1982 Colorado Allergy & Asthma Society
 1990 American Thoracic Society
 1990 American College of Chest Physicians – Fellow

MAJOR SCIENTIFIC INTERESTS

- ❑ The “Skier’s Nose” - cold-induced rhinitis: mechanisms and “novel” therapeutic modalities
- ❑ Asthma – mechanisms and mediators, pharmacology, cardiovascular parameters of pulmonary disease
- ❑ Exercise-induced anaphylaxis/allergies
- ❑ Exercise-induced rhinitis

- Integrative Medicine: Complementary and Alternative Medicine within a traditional Allergy practice

WILLIAM S. SILVERS, M.D.
Curriculum Vitae

PROFESSIONAL ACTIVITIES

COLORADO ALLERGY SOCIETY

President 1988 to 1990
 Secretary/Treasurer 1986 to 1988

COLORADO MEDICAL SOCIETY

Committee on the Environment 1986 to 1998
 Delegate for Colorado Allergy Society 1989 to 1993

AMERICAN COLLEGE OF ALLERGY, ASTHMA AND IMMUNOLOGY

Public Relations Council; 1988 to Present
 Children's Asthma Camps, ad hoc committee, co-founder 1988
 Children's Asthma Camps Consortium with ACAAI, AAAAI, & ATS 1989-1995
 Committee on Therapeutics 1984 to 1987
 Continuing Medical Education Committee 1994 to 1997
 Committee on Public Education 1997 to 2000
 Committee on Sports Medicine 2000 to Present

AMERICAN ACADEMY OF ALLERGY, ASTHMA AND IMMUNOLOGY

Practice Standards Council 1988 to 1991
 Allied Health Professionals Committee, Member 1988 to 1992
 Remote Practice Subcommittee, Member 1988 to 1993
 Committee on Rehabilitation & Sports Medicine, Subgroup for Asthma Camps 1988 to 1993
 Asthma Camps Subcommittee, Member 1989 to 1991
 Audio-Visual and Media Committee, Member 1991 to 1994
 Quality of Care for Asthma Committee, Member 1992 to 1999
 Remote Practice Committee, Member 1993
 Sports Medicine Committee, Member 1995 to Present
 Rhinitis Committee, Member 1996 to 1998
 Sinusitis Committee, Member 2001 to Present
 Practice, Diagnostics and Therapeutics Committee, Member 2001 to Present

ROSE MEDICAL CENTER, Denver, CO

Chief, Division of Allergy & Immunology, Department of Medicine 1992 to 1994
 Continuing Medical Education Committee 1990 to 1993

BLUE CROSS/BLUE SHIELD OF COLORADO

Medicare Utilization Review Board, Physician Advisor/Medical Reviewer 1993

AMERICAN LUNG ASSOCIATION OF COLORADO

Medical Director for "Champ Camp" 1986 to 1988
 Volunteer Physician for "Champ Camp" numerous years

WILLIAM S. SILVERS, M.D.**Curriculum Vitae****ASTHMA SKI FOUNDATION**

Founder, Medical Director for Annual “Asthma/Allergy Ski Day” at Vail/Beaver Creek, 1987- to 1998, Breckenridge, Colorado, 1999 to Present

Organizer and Director, “Allergy, Asthma, and Sports in the Rockies: A Focus on the Allergic Athlete in Recreation and Competition”. State of the Art speakers and Interactive Roundtables for Physicians, Parents, and Patients. April 2001, 2000 (CME), 1999, 1998, 1997.

Organizer and Director, “The Role of Exercise and Cold Air on the Nose and Lungs”. April, 1996 (CME)

ALLERGISTS FOR ISRAEL

Founder and Chairman, Endowment Fund 1984 to 2000

Affiliated with the American Physicians Fellowship for Medicine in Israel 1997

UNIVERSITY OF DENVER

Center for Judaic Studies, Holocaust Awareness Institute, Board Member, 1987 to Present

BOY SCOUTS OF AMERICA

Chairman, Denver Council Medical Explorers, 1992 to 1994

Eagle Scout Recognition Board-Arapahoe County

National Eagle Scout Association

AWARDS

Community Service Award, Department of Medicine, University of Colorado School of Medicine, 2003

Alumni Hall of Fame, Carmel High School, Carmel, Indiana, 2003

Denver’s Top Doctors, 5280 Magazine, 2010, 2009, 2008, 2007, 2006, 2005, 2004, 2003, 2002, 2001, 2000, 1998, 1996

PUBLICATIONS

1. Epstein, M., Pins, D.S., Silvers, W.S., et al: “Failure of Water Immersion to Influence Parathyroid Hormone Secretion and Renal Phosphate Handling in Normal Man”. J. Lab. Clin. Med., 87:2, pp 218-226, 1976.
2. Sherman, N.A., Morris, H.G., Silvers, W.S., et al: “Divergent Responses to an Oral Adrenergic Bronchodilator.” J. Allergy & Clinical Immunology, 65:173, 1980.
3. Morris, H.G., Sherman, N.A., Silvers, W.S., et al: “Timed Effects of an Oral Adrenergic Bronchodilator on Pulmonary Function and Measurements of Plasma and Leukocyte Cyclic

- AMP: Divergence in Duration of Drug Action and Development of Tolerance.” J. Allergy Clinical Immunology, 71:3, pp 266-276, 1983.
4. Silvers, W.S., Essember, L.J., Williams, P.B., Selner, J.C., Dolen, W.K.: “Anaphylaxis Due to Diclofenac Sodium (Voltaren): Evidence of Mast Cell Mediator Release.” Immunology & Allergy Practice, 8:5, pp 193-196, 1991.
 5. Silvers, W.S., “‘Skier’s Nose’: A Model of Cold-Induced Rhinorrhea”. Annals of Allergy, 67:1, pp 32-36, 1991.
 6. Silvers, W.S., “Exercise-Induced Allergies: The Role of Histamine Release.” Annals of Allergy, 68:1, pp 58-63, 1992.
 7. Silvers, W.S., Holbreich, M., Buckley, J.M., et al: “‘Champ Camp’: The Colorado Children’s Asthma Camp Experience.” Journal of Asthma, 29:2, pp 121-135, 1992.
 8. Silvers, W.S., LeDoux, R.S., Dolen, W.K., Morrison, M.R., Nelson, H.S., Weber, R.W.: “Aerobiology of the Colorado Rockies: Pollen Count Comparisons between Vail and Denver, Colorado.” Annals of Allergy, 69:5, pp 421-426, 1992.
 9. Silvers, W.S., Cohen, R., D’Alonzo, G., Fishken, D., Lim, J.C., Stokes, A.L., McNally, D.F.: “Comparative Taste Evaluation of Aerosolized Formulations of Triamcinolone Acetonide, Flunisolide, and Flunisolide with Menthol.” Clinical Therapeutics, 15:6, pp 988-993. 1993.
 10. Silvers, W.S., Morrison, M., Weiner, M., “Asthma Ski Day: Cold Air Sports Safe with Peak Flow Monitoring”. Annals of Allergy, 73:2, pp 105-108, 1994.
 11. Fink, J.N., Forman, S., Silvers, W.S., Soifer, M.M., Tashkin, D.P., Wilson A.F. “A Double-Blind Study of the Efficacy of Nedocromil Sodium in the Management of Asthma in Patient Using High Doses of Bronchodilators”. J. Allergy and Clinical Immunology, 94:3(1), pp 473-481, 1994.
 12. Grant, J., Findlay, S., Nicodemus, C.F., Findlay S.R., Glovsky, M., Grossman, J., Kaiser, H., Meltzer, E.O., Mitchell, D.Q., Pearlman, D., Selner, J., Seppipane, G., Silvers, W.: “Clinical Aspects of Allergic Disease: Cetirizine in Patients with Seasonal Rhinitis and Concomitant Asthma: Prospective, Randomized, Placebo-controlled Trial.” J.Allergy and Clinical Immunology. 95:5(1), pp 923-32, 1995.
 13. Banov, C.H., Silvers, W.S., Green, A., et al: “A Double-Blind Study of the Efficacy of Triamcinolone Acetonide Aerosol Nasal Inhaler in Pediatric Patients with Seasonal Allergic Rhinitis.” Clinical Therapeutics. 18:2, pp 265-272 March/April 1996.

CHAPTERS

1. Lindzon, R.L., Silvers, W.S., “Anaphylaxis”. Emergency Medicine Concepts and Clinical Practice, 2nd edition, Rosen, P., et al., editors. C.V. Mosby Company, St. Louis, MO. pp 203-231, 1988.
2. Lindzon, R.L., Silvers, W.S., “Allergy, Hypersensitivity, and Anaphylaxis.” Emergency Medicine Concepts and Clinical Practice, 3rd edition, Rosen, P., et al., editors. C.V. Mosby Company, St. Louis, MO. pp. 1042-1059, 1992.

3. Muelleman, R.L., Lindzon, R.L., Silvers, W.S., "Allergy, Hypersensitivity and Anaphylaxis". Emergency Medicine: Concepts and Clinical Practice, 4th edition, Rosen, P., et al., editors. C.V. Mosby Company, St. Louis, MO. pp 2759-2776, 1998.
4. Silvers, W.S., "Skiing and Other Winter Sports". Allergic and Respiratory Disease in Sports Medicine, Weiler, J.W., editor. Marcel Dekker, Inc. New York. pp 345-351 1997.
5. Peter, M.M., Silvers, W.S., Thompson, F.L., et al. "Case Studies of Asthma in Elite and World-class Athletes: The Roles of the Athletic Trainer and Physician". Allergic and Respiratory Disease in Sports Medicine. Weiler, J.W., editor. Marcel Dekker, Inc., New York. pp 353-366, 1997.
6. Silvers, W.S., "Allergic Rhinitis". Integrative Medicine. Rakel, D., editor. Harcourt Health Sciences, W.B. Saunders Company, Philadelphia PA. pp 217-223, 2003.

ABSTRACTS

1. Silvers, W.S., Hall, W.D., Haynes, R.L.: "Blood Pressure in Acute Asthma" (abstract) Chest 72:412, 1977.
2. Morris, H.G., Sherman, N.A., Silvers, W.S.: "Radioimmunoassay of Thromboxane B2 in Plasma of Normal and Asthmatic Subjects." (abstract) *International Prostaglandin Conference*, May 1979.
3. Morris, H.G., Sherman, N.S., Silvers, W.S., et al: "Timed Effect of an Oral Adrenergic Bronchodilator on Plasma and Leukocyte Cyclic AMP." (abstract) Advances in Cyclic Nucleotide Research 12, 1979.
4. Silvers, W.S., Nathan, R.A., Spector, S.L.: "The Influence of Aminophylline on Cardiac Rate and Rhythm in Asthmatic and Normal Subjects." (abstract). *Tenth International Congress on Allergy*. Jerusalem, Israel. November 1979.
5. Sherman, N.A, Morris, H.G., Silvers, W.S., et al: "Plasma and Serum Prostaglandins in Patients with Asthma." (abstract) J. Allergy & Clinical Immunology. March 1980.
6. Sherman, N.A., Morris, H.G., Silvers, W.S.: "Divergent Responses to an Oral Adrenergic Bronchodilator." J. Allergy & Clinical Immunology. 65:3 p173, 1981.
7. Lutsky, I., Bar-Sela, S., Silvers, W.S., et al: "Occupationally Related Hypersensitivity Disease: A Pilot Study of Symptomatic Poultry Farmers in Israel." (abstract) *International College of Chest Physicians*. Tel Aviv, Israel. June 1981.
8. Lutsky, I., Bar-Sela, S., Silvers, W.S., et al: "Allergic Respiratory Diseases in Poultry Farmers." (abstract). *American Academy of Allergy*. Montreal, Canada. March 1982.
9. Sherman, N.A., Morris, H.G., Silvers, W.S.: "Influence of Pulmonary Dysfunction on Plasma Prostaglandins and Thromboxane." (abstract) *American Academy of Allergy*. Montreal, Canada. March 1982.
10. Errington, G.W., Mekori, Y.A., Silvers, W.S., Schocket, A.L.: "Altered Mast Cell Threshold in Exercise-Induced Anaphylaxis." (abstract) *American Academy of Allergy and Immunology*. New York, New York. March 1985.
11. Silvers, W.S.: "The 'Skier's Nose'." (abstract) *American College of Allergists, Annual Congress*. Phoenix, Arizona. January 1986.
12. Silvers, W.S.: "The 'Skier's Nose'— an *In Vivo* Model for Cold-Induced Upper Airway Hyper-reactivity." (abstract) *European College of Chest Physicians*. Tel Aviv, Israel. June, 1986.

13. Silvers, W.S., Weber, R.W., LeDoux, B.S., et al: "Aerobiology of the Colorado Rockies: Pollen Patter comparison of Denver and Vail" (abstract) *American College of Allergists, Annual Congress*. Las Vegas, Nevada. January 1987.
14. Silvers, W.S., Weber, R.W., LeDoux, B.S., et al: "Paradise Lost: Pollen Counts of Aspen, Vail and Denver." (abstract) *Aspen Allergy Conference*, Aspen, Colorado. July 1987.
15. Silvers, W.S., Holbreich, M., Buckley, J.M., et al.: "'Champ Camp': the Colorado Children's Asthma Camp Experience" (abstract) *American College of Allergy and Immunology, Annual Congress*. Boston, Massachusetts. November, 1987.
15. Silvers, W.S., Weiner, M.B., Wood, C.C., Paluck, E., et al.: "The 'Skier's Nose': A Randomized Double-blind Placebo-Controlled Study of Ipratropium Bromide (Atrovent), Administered Intranasally for the Prevention of Cold-Induced Rhinorrhea (CIR)." (abstract) *American Academy of Allergy and Immunology, Annual Meeting*. Anaheim, California. March 1988.
16. Jarmoszuki, A., Blumenthal, M., Slivers, W.S., Aaornson, D., et al.: "Nedocromil Sodium 2% ophthalmic solution in the Treatment of Ragweed Seasonal Allergic Conjunctivitis." (abstract) *American Academy of Allergy and Immunology, Annual Meeting*. Anaheim California. March 1988.
17. Silvers, W.S., Wolk, M.: "Asthma Ski Day" *Annals of Allergy*, Vol 64. P 107. 1990.
18. Silvers, W.S., Weiner, M.B.: "The 'Skier's Nose': Cold-Induced Rhinorrhea Influenced by Topical Anticholinergics." (abstract) *Trans-Pacific Allergy and Immunology Society*. Hawaii. January, 1990.
19. Silvers, W.S., Lutsky, B.N., Mooney, J.J., Weiner, M.B.: "'Rhinitis Medicamentosa': Topical Nasal Decongestants Evaluated Objectively." (abstract) *Aspen Allergy Conference*. Aspen, Colorado. July 1990.
20. Silvers, W.S., Lutsky, B.N., Mooney, J.J., Shapiro, H., Lezotte, D., Weiner, M.B.: "Topical Nasal Decongestants (TNDs) Evaluated Using Rhinoscopy (RS) and Rhinomanometry (RMM): SCH 40054 Vs Oxymetazoline." (abstract) *American College of Allergy and Immunology, Annual Congress*. San Francisco, California. November 1990.
21. Silvers, W.S., Essember, L.J., Williams, P.B., Selner, J.C., Dolen, W.K.: "Anaphylaxis due to Diclofenac Sodium (Voltaren): Evidence for Mast Cell Mediator Release." (abstract) *American College of Allergy and Immunology, Annual Congress*. San Francisco, California. November 1990.
23. Silvers, W.S., Morrison, MR., Wiener, M.B.: "the 'Skier's Nose': Evaluation of Terfenadine in Cold-Induced Rhinorrhea (CIR)." *Annals of Allergy*. Vol 68, p 87. 1992
24. Silvers, W.S., Morrison, M.R., Benninger, M.S.: "Exercise-Induced Rhinitis (EIR): A Population Survey." (abstract) *J. Allergy and Clinical Immunology*. 89:305,1992.
25. Silvers, W.S., Morrison, M.R., Wiener, M.B., Shapiro, H.: "Asthma Ski Day: Cold Air Sports Safe with Peak Flow Meter Monitoring." (abstract) *Annals of Allergy*, 70:75, 1993.
26. Silvers, W.S., Weiner, M.B., Feiss, G, Smith, J.: "Inhaled Corticosteroid (IC) Withdrawal in Patients with Moderate Asthma: The Time, Course, and Effective IC Doses for Reversal of an Induced Exacerbation." (abstract) *J. Allergy and Clinical Immunology*, 91:164. 1993.
27. Silvers, W, Stevenson, L., Hutcheson-Tipton, D., Laronn, C.: "Experience with a Clinical Nutritionist in a Private Allergy Practice." (abstract) *Presented at VIII International Food Allergy Symposium, Annals of Allergy*, July 10, 1993.
28. Silvers, W.S., Cohen, R., D'Alonzo, Jr., Egan, E., Fishken, D., Lim, J., Marsh, L., Wiener, M.: "A Taste Evaluation of Azmacort Vs Aerobid and Aerobid M." (abstract) *Annals of Allergy*, 72:87, 1994.
27. Silvers, W.S.: "The 'Skier's Nose': The Pediatric Experience." (abstract) *Annals of Allergy*. 74:100, 1995.
28. Welch, M., Silvers, W.S., Smith, J., Bagchi, P., Wehrle, L., Caluchie, L., Levy, S.: "Clinical Dose Response Study of Azmacort HFA-134a in Adult Asthmatics." (abstract) *J. of Allergy and Clinical Immunology*, 99:1, p S323. January 1997.

29. Weinstein, S., Galant, S., Silvers, W., Lanier, B., Grossman, J., Brown, A., Hamedani, A., House, K., Clements, D., Harding, S.: "Inhaled Fluticasone Propionate Dry Powder Administered Either Once Daily or Twice Daily Via the Diskus is Safe and Effective to Pediatric Patients with Chronic Asthma." (abstract). J. of Allergy and Clinical Immunology, 99:1, p S322, January 1997.
30. Silvers, W., Kraemer, M., Walton-Bowen, K., Cruz-Rivera, M.: "The Efficacy of Budesonide Nebulizing Suspension (BNS: Pulmicort Respules), Compared to Placebo (PBO) in Young Asthmatic Children Previously Using Inhaled Glucocorticosteroids (iGCS)." (abstract) J. of Allergy and Clinical Immunology, 101:1, p S5. January 1998.
31. Silvers, W.S., Graham, P.H., Riddle, J.M.: "Alternative Medicine Questionnaire in a Private Allergy/Asthma Practice." (abstract) J. of Allergy and Clinical Immunology, 103:1, p 308, 1999.
32. O'Connell, M, Silvers, W.: "Malic Acid Food Hypersensitivity." (abstract) J. of Allergy and Clinical Immunology, 105:1, p S137. 2000
33. Silvers, W.S., Ivker, R.S., Kirkpatrick, C.H.: "Assessing the Therapeutic Benefit of a Holistic Integrative Medical Approach to Treating Chronic Sinusitis." (abstract) Annals of Allergy, Asthma, and Immunology. 86:1 pg 132. 2000
34. Silvers, W.S., Levine, J.S., Weber, R.W. "Chronic Cough and Vocal Cord Dysfunction (VCD) Related to Chronic Rhinitis and not Gastroesophageal Reflux (GER), but due to Inlet Patch (IP) of Acid Secreting Heterotopic Gastric Mucosa Below the Upper Esophageal Sphincter (UES). (abstract) J. of Allergy and Clinical Immunology, 111:2, pS295. 2003
35. O'Connell, M.A., Silvers, W.S., Engler, R.J., "Delayed PressureUrticaria Successfully Controlled with Sulfasalazine." (abstract) International Congress of Allergology and Immunology, Vancouver, B.C., Canada. Sept 2003

PRESENTATIONS-Recent

- 1 Co-presenter "Cold-Air Rhinitis and Other Nonallergic Rhinitis Syndromes", Presented at AAAAI Annual Meeting. March, 1996.
- 2 Co-presenter "Cold-Air Rhinitis and Other Nonallergic Rhinitis Syndromes." Presented at AAAAI Annual Meeting. March, 1997.
- 3 Co-presenter, "Assessing the Therapeutic Benefit of a Holistic Integrative Medical Approach to Treating Chronic Sinusitis." Presented at ACAAI Annual meeting. November, 2000.
- 4 Co-presenter "Alternative and Complementary Approaches to Allergy and Asthma" Presented at AAAAI Annual Meeting. March, 2001
- 5 Speaker: "Screening and Management of Allergy and Asthma in the Recreational Athlete." Presented at AAAAI Annual Meeting. March, 2001.
- 6 Co-presenter "Complementary and Alternative Medicine in the 21st Century: Basics and Beyond." Presented at AAAAI Annual Meeting. November 2009.
- 7 Speaker: "The Environmental Impact of Air Pollution on Non-allergic Respiratory Disorders." Presented at World Allergy Congress, Argentina 2009. December 2009.
- 8 Chairperson: "Rhinitis: A Global Perspective." Presented at World Allergy Congress, Argentina 2009. December 2009.