

CURRICULUM VITAE

I. PERSONAL DATA

- A. Name Edward B. Holmes, MD, MPH
University of Utah
Department of Family and Preventive Medicine
Rocky Mountain Center for Occupational and
Environmental Health
Associate Professor, Clinical
391 Chipeta Way, Suite C
SLC, Utah 84108
801-581-5056
- B. Birthplace Salt Lake City, Utah
- C. Citizenship U.S.

II. EDUCATION

- A. 1989, University of Kentucky, Doctor of Medicine
- B. Certified Medical Review Officer (MRO), AAMRO, 1996.
- C. 1990, University of California San Francisco, Internship in Internal
Medicine
- D. 2000, University of Utah, Masters of Public Health
- E. 2001, University of Utah, Occupational Medicine Residency completion.
- F. 2007, Cardiff University, Wales, United Kingdom, Diploma in Medical
Toxicology

III. BOARD CERTIFICATION

- A. 2002, American Board of Preventive Medicine, Occupational Medicine

IV. PROFESSIONAL EXPERIENCE

- A. University of Utah, Rocky Mountain Center for Occupational and Environmental Health (RMCOEH), 2001-current
- Responsibilities have included:**
1. Occupational Medicine Program Director, RMCOEH
 2. Occupational Medicine Residency Program Director
 3. Occupational and Environmental Medicine Consult Clinic Director
 4. Developed and founded the OccMed Clinic at Redwood Health Center
 5. OccMed Medical Director, University of Utah, Full Service Occupational Medicine Clinic
 6. Confidential Litigation Consultant, Dioxin/PCB/HCB Cancer litigation

Holmes Company Consulting, LLC, Owner

1997-current

Responsibilities have included:

1. Consulting in all areas of Occupational Medicine
2. Salaried consultant for Social Security Disability in Utah and California, Chief Medical Consultant for the State of Utah Disability Determination Services for Social Security
3. Veteran's administration Compensation and Pension Consulting
4. Private Consulting in causation, toxicology, work-relatedness of injury and disease

Medical Director, Occupational Medicine, 1995-1997
COLUMBIA Cache Valley Medical clinic (Clinic sold)

Responsibilities included:

1. Full service Occupational/Industrial Medicine
2. Patient Care, Disability Evaluations, OSHA Surveillance Exams,
3. Organization of multiple treatment facilities
4. On site services coordination, Employer training seminars,
5. MRO, DOT Substance abuse recognition training,
6. Impairment Ratings, Case management
7. Multi-site clinic coordination and physician staff training
8. Multi-site procedural development and organization

Medical Director South Fresno office, 1990-1995
Occupational Health Associates

Responsibilities included:

1. Injury treatment
2. Personnel management
3. Occupational Medicine disability consultations
4. OSHA mandated exams: Asbestos, Lead, Organophosphates, and Hazardous waste/emergency response
5. Employer relations, Case Management
6. MRO-Medical Review of Drug Screen results
7. Medical Consultant, State of California, Department of Rehabilitation
8. Rehabilitation case review

B. RESEARCH AWARDS

Title: Upper Limb Musculoskeletal Disorders: Quantifying Risk
 Source: Centers for Disease Control and Prevention (NIOSH), 1 U
 01 OH007917-01
 Role: Investigator (Hegmann PI)
 Dates: September 30, 2002 – September 29, 2006
 Amount: \$1,997,930

Title: Upper Limb Musculoskeletal Disorders: Quantifying Risk
 Source: Centers for Disease Control and Prevention (NIOSH), 1 U
 01 OH007917-01
 Role: Investigator (Hegmann PI)
 Dates: September 30, 2006 –September 29, 2009
 Amount: \$1,445,000

Title: Low Back Pain: Quantifying Risk Factors
Source: Centers for Disease Control and Prevention (NIOSH), 1 U
01 OH008083-01
Role: Investigator (Hegmann PI)
Dates: September 30, 2003 – September 29, 2006
Amount: \$1,499,833

Title: Toxicological Causes of Cancer in Firefighters and Drug
interdiction officers
Source: Utah State Labor Commission
Role: Investigator (Hegmann PI)
Dates: September 30, 2006 –September 29, 2008
Amount: \$500,000

V. SCHOLASTIC HONORS

- A. University of Utah, College of Business scholarship, 1982-1983
- B. Member Delta Omega, Honorary Public Health Society
- C. Awarded honorarium for the Frontiers in Medicine section and invited to present at the American Occupational Health Conference, San Francisco, CA, April 25, 2001. *Motivation Determination (Sincerity of Effort): The Performance APGAR model.*

VI. ADMINISTRATIVE EXPERIENCE

- A. Administrative Duties
 1. Medical Director, OccMed, Occupational Medicine program, University of Utah Hospitals and Clinics 2003-Current
 2. Occupational and Environmental Health Consult Clinic Director, University of Utah, 2001-Current
 3. Occupational Medicine Residency Director, University of Utah, 2004-Current
 4. Occupational Medicine Program Director, 2005-Current
 5. Chief Medical Consultant, Utah Disability Determination Services for Social Security, 1999-Current.
 6. Medical Director, Columbia Health Care, 1995-1997.
 7. Medical Director, Occupational Health Associates, 1990-1995.
 8. Member of the DFPM Leadership Council, 2005-Current.
 9. Member Occupational Medicine Residency Advisory Council, 2001-Current.
 10. Member Rocky Mountain Center Executive Committee, 2006-Current.
 11. Member of the Occupational Medicine Residency Program Directors Committee, 2005-Current.
 12. Member Utah State Health Department Narcotic Task Force Advisory Committee, 2006-Current.

VII. PROFESSIONAL COMMUNITY ACTIVITIES

- A. Professional & Scientific Committees
1. Member American College of Occupational and Environmental Medicine, Evidence Based Practice Guidelines Committee for Hip and Knee, 2006-Current.
 2. Member American College of Occupational and Environmental Medicine, Evidence Based Practice Guidelines General Committee, 2006-Current.
 3. Member of the Utah State Labor Commission Advisory Committee on Spine Impairments, 2001-Current.
 4. Member of the Utah State Labor Commission Advisory Committee on Upper Extremity Impairments, 2001-Current.
 5. Member of the Utah State Labor Commission Advisory Committee on Lower Extremity Impairment, 2001-Current.
 6. Member of the Utah State Labor Commission Advisory Council, 2005-Current.
 7. Member of the Utah State Labor Commission Advisory Committee on Hearing and Vision Impairments, 2003-Current.
 8. Member of the Utah State Labor Commission Advisory Committee on Restorative Services (PT, Chiropractic, etc), 2005-Current.
 9. Member of the Utah State Labor Commission Committee on Spine Practice Guidelines, 2006-Current.
 10. Medical Panel Chairman, Utah Labor Commission, Division of Adjudication 1999-2005.
- B. Continuing Education Conferences (recent)
1. Chronic Fatigue Syndrome, Fibromyalgia and Chronic Pain: Current issues. Salt Lake City, Utah 2004.
 2. European Association of Poisons Centers and Clinical Toxicologists annual congress, Strasbourg, France June 2004.
 3. Independent Medical Evaluations and legal report writing, Alaska, August 2004.
 4. European Association of Poisons Centers and Clinical Toxicologists annual congress, Berlin, Germany May 2005.
 5. State of the Art Conference on Musculoskeletal Disorders, Salt Lake City, Utah, February 2006.
 6. IME Summitt, Falmouth, MA, August 2006.
- C. Invited Presentations
1. *DOT Required Substance Abuse Recognition Training for Supervisors*, Occupational Health Associates, Fresno, California 1992.
 2. *DOT Required Substance Abuse Recognition Training for Supervisors*, Occupational Health Associates, Fresno, California 1993.

3. *Asbestos Health Effects*, University of Utah, Rocky Mountain Center for Occupational and Environmental Health, Continuing Education seminar for professionals, SLC, Utah, 2000.
4. *Asbestos Health Effects*, University of Utah, Rocky Mountain Center for Occupational and Environmental Health, Continuing Education seminar for professionals, SLC, Utah, 2001.
5. *Social Security Disability; What is it?* Alliant Tech Systems, Magna, Utah January 5, 2001.
6. *The new MSHA noise standard: Is it enough?* Rocky Mountain Academy of Occupational and Environmental Medicine, Denver, CO, 1/25-26/2001.
7. *Motivation Determination (Sincerity of Effort): The Performance APGAR model*. Awarded honorarium for the Frontiers in Medicine section and invited to present at the American Occupational Health Conference, San Francisco, CA, April 25, 2001.
8. *Motivation Determination (Sincerity of Effort): The Performance APGAR model and impairment ratings*, Labor commission of Utah SLC, State capital Building, Seminar for workers compensation professionals, 2002.
9. *Rating Soft Tissue Spinal impairments*, Labor Commission of Utah Impairment Guides physician training seminar, SLC, Utah, January 17, 2002.
10. *Rating Soft Tissue Spinal impairments*, Labor Commission of Utah Impairment Guides physician training seminar, St. George, Utah, March 2002.
11. *Rating Surgical Spinal impairments*, Labor Commission of Utah Impairment Guides physician training seminar, St. George, Utah, March 2002.
12. *Reducing Workers' Compensation Costs*, American Occupational Health Conference, ACOEM, Chicago, IL, April 17, 2002.
13. *DOT Medical Examinations Update: Cardiovascular conditions and commercial drivers*, presented for the Rocky Mountain Center for Occupational & Environmental Health Continuing education seminar for physicians, SLC, UT, December 13, 2002.
14. *Rating Soft Tissue Spinal impairments*, Labor Commission of Utah Impairment Guides physician training seminar, SLC, Utah, February 14, 2003.
15. *Rating Surgical Spinal impairments*, Labor Commission of Utah Impairment Guides physician training seminar, SLC, Utah, February 14, 2003.
16. *Pesticides and the rural environment*, National rural healthcare association, 26th annual conference, "The changing rural Landscape", SLC, Utah, May 16, 2003.
17. *Environmental Medicine Issues*, National rural healthcare association, 26th annual conference, "The changing rural Landscape", SLC, Utah, May 15, 2003.

18. *Disability Evaluation*, University of Utah, Community physician's group, Greenwood Health Center, SLC, Utah, November, 23, 2005.
19. *Low Back Pain*, State of the Art Conference on Musculoskeletal Disorders, University of Utah, SLC, Utah February 24, 2006.
20. *Neck Pain and Muscle Tension Syndrome*, State of the Art Conference on Musculoskeletal Disorders, University of Utah, SLC, Utah February 24, 2006
21. *Continuing Disability Reviews*, Utah Disability Determination Services for Social Security, SLC, Utah April 20, 2006.
22. *Cardiovascular Disability Rating*, Utah Disability Determination Services for Social Security, SLC, Utah May 9, 2006.
23. *Spine Impairment Ratings and Apportionment Issues*, Utah Labor Commission Annual Workers Compensation Conference. SLC, Utah May 2, 2006.

D. Invited site visits-To Industrial and other employment settings for Job Analysis, Consultation, Research, etc. These demonstrate an important aspect of the breadth of Occupational Medicine Experience:

1. Zacky Farms Chicken, Fresno, California
2. Tyson Foods meat processing, Bakersfield, California
3. Southfield Beef, Slaughterhouse, Fresno, California
4. FMC corporation, fertilizer and pesticide production, Fresno, California
5. Rainbow Bread, Fresno, California
6. Duncan Ceramics, Clovis, California
7. Fresno County Public Works, Fresno, California
8. Miller Beef, Wellsville, Utah
9. Proform/ICON, Logan, Utah, Smithfield, Utah
10. Circle 4 Farms, Concentrated Hog farming, Beaver County, Utah.
11. Logan Coach, trailer manufacturing, Logan, Utah
12. Morton Airbag Division, Brigham City, Utah
13. Thiokol Aerospace, Brigham City, Utah
14. Alliant Tech Systems, Magna, Utah
15. Huntington Canyon Coal Mines, Castle Dale, Utah
16. OC Tanner Corporation, manufacturing, SLC, Utah
17. OC Tanner Corporation, metal refinery, SLC, Utah
18. Nucor Steel Corporation, Tremonton, Utah
19. Nishimbo Cotton, Fresno, California
20. General Cable Corporation, Sanger, California
21. WalMart loading dock and stocking, Price, Utah
22. Kmart loading dock and stocking, Price, Utah
23. Hydraulic Mining equipment, Price, Utah
24. Andalex Coal Mine, Price, Utah
25. Littleton/Englewood Wastewater treatment plant, Englewood, CO
26. Merit Medical Systems, Salt Lake City, Utah
27. Smithfield foods, Smithfield, Utah

28. Flemming Foods Distribution warehouse, Fresno, California
29. Bourne Integrated Circuits Sensors/controls, Logan, Utah
30. Electrostar circuits, Logan, Utah
31. Kimberly-Clark Corporation, Diaper Plant, Ogden, Utah
32. Pepperidge Farms, Smithfield, Utah
33. Gosners Cheese, Logan, Utah
34. Schreiber foods, Logan, Utah
35. ATK, Lightweight composites facility, Clearfield, Utah
36. Huntington Power Plant, Coal fired, Huntington, Utah
37. EA Miller Trucking, Logan, Utah
38. OK Produce corp., Fresno, California
39. Loomis Armored, Clovis, California
40. Ernest & Julio Gallo, Clovis, California
41. US Magnesium, Grantsville, Utah
42. University of Utah, Engineering department, Salt Lake City, Utah
43. Albertsons grocery, Logan, Utah
44. Brigham City Hospital, Brigham City, Utah
45. St. Marks Hospital, Salt Lake City, Utah
46. Technibody, Salt Lake City, Utah
47. Advanced Optical Systems, Salt Lake City, Utah
48. BSK and Associates, toxicology lab, Fresno, California
49. Container Corporation of America, Sanger, California
50. David and Sons packaging, Fresno, California
51. Superior Trailers, Fresno, California
52. LDS Church distribution services division, Salt Lake City, Utah
53. LDS Church Printing facility, Salt Lake City, Utah
54. Farmland Foods, meat packing, Salt Lake City Utah
55. Snow Cat Manufacturing company, Logan, Utah
56. Jacobson Trailers, Selma, California
57. Waste Management Inc, Fresno, California
58. Corn Nuts packaging company, Fresno, California
59. Ceramatec Corporation, Salt Lake City, Utah (8/19/05)
60. Pacificorp Natural Gas fired Generation Facility, SLC, Utah (March 2006)
61. Federal Express, Salt Lake City, Utah (10/10/06)
62. Select Comfort Bed Systems, Salt Lake City, Utah (7/19/07)
63. Karman Cabinets, Salt Lake City, Utah (11/13/07)
64. Brigham Young University, Food Services Administration Building, Provo, Utah (November 2007)

VIII. UNIVERSITY COMMUNITY ACTIVITIES

- A. Invited Presentations
 1. *Disability, impairment and chronic pain*, University of Utah, Pain Research Center, September 13, 2002.
 2. *Disability, impairment and chronic pain*, University of Utah, Department of Physical Medicine and Rehabilitation, September 2002.

3. *Childhood Disability under SSI*, Pediatric Genetics Department, University of Utah, November 2002.
4. *Sewage Treatment Plant Health Effects*, Rocky Mountain Center for Occupational & Environmental Health, January 2003.
5. *Social Security Disability; What is it?* University of Utah Pain Research Center, February 28, 2003.

B. Guest Lectures

1. *Medical Surveillance*, Environmental Toxicology, University of Utah, MSPH program, 2002, 2003.
2. *Disability and Impairment*, Public Health Issues, University of Utah, Public Health Program, 2002.
3. *Occupational Program Management*, Rocky mountain center for Occupational and environmental health, OEHS management course, 2002.
4. *Occupational Program Management*, Rocky mountain center for Occupational and environmental health, OEHS management course, 2003.
5. *Occupational Program Management*, Rocky mountain center for Occupational and environmental health, OEHS management course, April, 2004.
6. *Occupational Program Management*, Rocky mountain center for Occupational and environmental health, OEHS management course, April, 2005.
7. *Occupational Program Management*, Rocky mountain center for Occupational and environmental health, OEHS management course, February 13, 2006.
8. *Occupational Program Management*, Rocky mountain center for Occupational and environmental health, OEHS management course, February 2007.
9. *Occupational Program Management*, Rocky mountain center for Occupational and environmental health, OEHS management course, February 2008.

C. Graduate Student Committees

Supervisory Committee Chair

1. Darren Don, MPH (graduated summer 2002)

Supervisory Committee Member

1. Patrick Luedtke, MPH (graduate summer 2002)
2. Bin Yang, MPH (graduated summer 2002)
3. David Hazra, MPH (graduated spring 2003)
4. Ayesha Zaman, MPH (graduated summer 2006)
5. Gregory Ford, MSPH (graduated summer 2002). Published research: Associations of Body Mass Index with Meniscal Tears. *American Journal of Preventive Medicine*, 2005 April.

IX. MEMBERSHIP IN PROFESSIONAL SOCIETIES

- a. Member Delta Omega, Honorary Public Health Society
- b. Member American College of Occupational and Environmental Medicine
- c. Member European Association of Poisons Centers and Clinical Toxicologists
- d. Member Utah Medical Association
- e. Member Western Occupational Medicine Association

X. TEACHING RESPONSIBILITIES/ASSIGNMENTS

1. Course Director, *Fall 2001. FPMD 6758 Occupational Environmental Health Clinic, 3 graduate students.*
2. Course Director, *Spring 2002. FPMD 6701 Applied Environmental Physiology, 16 graduate students.*
3. Course Director, *Summer 2002. FPMD 6701 Applied Environmental Physiology, 1 graduate student.*
4. Course Director, *Fall 2002. FPMD 6758 Occupational Environmental Health Clinic, 6 graduate students.*
5. Course Director, *Fall 2003. FPMD 6758 Occupational Environmental Health Clinic, 6 graduate students.*
6. Course Director, *Spring 2004. FPMD 6701 Applied Environmental Physiology, 14 graduate students.*
7. Course Director, *Fall 2004. FPMD 6758 Occupational Environmental Health Clinic, 4 graduate students.*

Bibliography

I. ORIGINAL PUBLICATIONS

1. **Edward B. Holmes, MD, MPH.** *Impairment rating and disability determination.* eMedicine Journal [serial online]. 2002. Available at <http://www.emedicine.com/pmr/topic170.htm>.
2. Deberard, S, Masters, K, Colledge A, **Holmes E.** Presurgical biopsychosocial variables predict medical and compensation costs of lumbar fusion in Utah workers' compensation patients. *The Spine Journal*, Volume 3, 2003, pgs 420-429.
3. Ford G, Hegmann K, White G, **Holmes, Ed.** *Associations of Body Mass Index with Meniscal Tears.* *Am J Prev Med* 2005;28(4), April 2005.
4. Eric J. Esswein, CIH, **Edward B. Holmes, MD, MPH.** *NIOSH Health Hazard Evaluation Littleton/Englewood Wastewater Treatment Plant, Englewood, Colorado.* CDC. HETA 2000-0397-2863, EPHB Report No. 171-27a.
5. Barbuto J, White G, Porucznik C, **Holmes E.** *Chronic Pain: Second Do No Harm.* *Am. J. Phys. Med. Rehabil.* Vol. 87, No1, January 2008.

II. REVIEW ARTICLES

Invited Reviews

1. **Holmes, Edward B.** *Disability Revisited*, Curbside Consultation, *American Family Physician*, Volume 68, No.1, July 1, 2003, pgs 175-180.

III. BOOKS, BOOK CHAPTERS, VIDEOS, AND COMPUTER SOFTWARE

1. Richard E. Johns, MD, MPH, Alan Colledge, MD, **Edward B. Holmes, MD, MPH.** *Fitness For Duty Evaluations* chapter in *Disability Evaluation*, 2nd Edition, Edited by Stephen L. Demeter, Published by the American Medical Association and Mosby, 2003.
2. Colledge, A, **Holmes EB,** et al. *Management of Occupational Low Back injuries.* Chapter 34, *Low back syndromes: integrated clinical management*, Morris, Mcgraw-Hill, 2006.
3. **Holmes, Edward B.** *The Social Security Administration Disability System.* Chapter 20, "A Physician's Guide to Return to Work", Talmage, J and Melhorn, J, editors, AMA Press 2005.

IV. ABSTRACTS

1. Hegmann K , Garg A, Thiese M, **Holmes E**, Foster J, Wood E, Groth G, Deckow-Schaeffer G, Seseck R, Bloswick D, Kapellusch J, Drury D, Holmes EB. Prevalence of Periscapular Pain with Tenderness and Analyses of Associated Factors. 28th International congress on Occupational Health: Renewing a century of commitment to a healthy, safe and productive working life. Presented at Milan, Italy, 2006. (Proceedings p129).
2. Thiese MS, Hegmann KT, Garg A, **Holmes EB**, Deckow-Schaefer G, Groth G, Drury D. Shoulder Impingement in a Working Population. Presented at the Joint Meeting of the Society for Epidemiologic Research and the Canadian Society for Epidemiology and Biostatistics., Toronto, Canada, June 2005. Am J Epidemiol 2005;161 (Suppl):S87.

V. POSTER PRESENTATIONS

1. Hegmann KT, Garg A, Thiese MS, **Holmes EB**, Wood E, Wertsch JJ, , Kendall R, White K, Deckow-Schaefer G, Groth G, Kapellusch J, Foster J, Drury D. Median Nerve Paraesthesias in a Population. Presented at the 37th Annual Meeting of the Society for Epidemiologic Research, Salt Lake City, UT, June 17, 2004. Am J Epidemiol 2004;159(11):311-S.

VI. OTHER

1. Contributor and Reviewer: *Utah 2006 Impairment Guides*. Utah Labor Commission. June 2006.
2. Alan Colledge, MD, **Edward B. Holmes, MD, MPH**, Richard E. Johns, MD, MPH, et al. *Motivation Determination (Sincerity of Effort): The Performance APGAR model*. Disability Medicine, Vol 1, No 2, September-December 2001, ABIME.

VII. ORAL PRESENTATIONS

Meeting Presentations

National

1. *Motivation Determination (Sincerity of Effort): The Performance APGAR model*. Awarded honorarium for the Frontiers in Medicine section and invited to present at the American Occupational Health Conference, San Francisco, CA, April 25, 2001.
2. *Reducing Workers' Compensation Costs*, American Occupational Health Conference, ACOEM, Chicago, IL, April 17, 2002.

3. *DOT Medical Examinations Update: Cardiovascular conditions and commercial drivers*, presented for the Rocky Mountain Center for Occupational & Environmental Health Continuing education seminar for physicians, SLC, UT, December 13, 2002.
4. *Pesticides and the rural environment*, National rural healthcare association, 26th annual conference, "The changing rural Landscape", SLC, Utah, May 16, 2003.
5. *Environmental Medicine Issues*, National rural healthcare association, 26th annual conference, "The changing rural Landscape", SLC, Utah, May 15, 2003.
6. *Low Back Pain*, State of the Art Conference on Musculoskeletal Disorders, University of Utah, Salt Lake City, Utah February 24, 2006.
7. *Neck Pain and Muscle Tension Syndrome*, State of the Art Conference on Musculoskeletal Disorders, University of Utah, Salt Lake City, Utah February 24, 2006.
8. *Low Back Pain Risk Factors from a Cohort Study and Evidence based Treatment Approaches*. State of the Art Conference on Musculoskeletal Disorders, University of Utah, Salt Lake City, Utah April 2, 2007.

Regional

1. *The new MSHA noise standard: Is it enough?* Rocky Mountain Academy of Occupational and Environmental Medicine, Denver, CO, 1/25-26/2001.
2. *Motivation Determination (Sincerity of Effort): The Performance APGAR model and impairment ratings*, Labor commission of Utah SLC, State capital Building, Seminar for workers compensation professionals, 2002.
3. *Rating Soft Tissue Spinal impairments*, Labor Commission of Utah Impairment Guides physician training seminar, SLC, Utah, January 17, 2002.
4. *Rating Soft Tissue Spinal impairments*, Labor Commission of Utah Impairment Guides physician training seminar, ST. George, Utah, March 2002.
5. *Rating Surgical Spinal impairments*, Labor Commission of Utah Impairment Guides physician training seminar, ST. George, Utah, March 2002.
6. *Rating Soft Tissue Spinal impairments*, Labor Commission of Utah Impairment Guides physician training seminar, SLC, Utah, February 14, 2003.
7. *Rating Surgical Spinal impairments*, Labor Commission of Utah Impairment Guides physician training seminar, SLC, Utah, February 14, 2003.

8. *Spine Impairment Ratings and Apportionment Issues*, Utah Labor Commission Annual Workers Compensation Conference. Salt Lake City, Utah May 2, 2006.

Grand Rounds Presentations

1. *Disability Evaluation*, University of Utah, Community physician's group, Greenwood Health Center, Salt Lake City, Utah, November, 23, 2005.

Industrial Presentations

1. *DOT required substance abuse recognition training for supervisors*, Occupational Health Associates, Fresno, California 1992.
2. *DOT required substance abuse recognition training for supervisors*, Occupational Health Associates, Fresno, California 1993.
3. *Continuing Disability Reviews*, Utah Disability Determination Services for Social Security, Salt Lake City, Utah April 20, 2006.
4. *Cardiovascular Disability Rating*, Utah Disability Determination Services for Social Security, Salt Lake City, Utah May 9, 2006.
5. *Digestive Impairments*, Utah Disability Determination Services for Social Security, Salt Lake City, Utah December 12, 2007.
6. *Digestive Impairments*, Utah Disability Determination Services for Social Security, Salt Lake City, Utah December 18, 2007.
7. *Eye, vision and visual field Impairments*, Utah Disability Determination Services for Social Security, Salt Lake City, Utah March 6, 2008.

Outreach Presentations

1. *Asbestos health effects*, University of Utah, Rocky Mountain Center for Occupational and Environmental Health, Continuing Education seminar for professionals, SLC, Utah, 2000.
2. *Asbestos health effects*, University of Utah, Rocky Mountain Center for Occupational and Environmental Health, Continuing Education seminar for professionals, SLC, Utah, 2001.
3. *Social Security Disability; What is it?* Alliant Tech Systems, Magna, Utah January 5, 2001.

University Community

1. *Disability, impairment and chronic pain*, University of Utah, Pain Research Center, September 13, 2002.
2. *Disability, impairment and chronic pain*, University of Utah, Department of Physical Medicine and Rehabilitation, September 2002.
3. *Childhood Disability under SSI*, Pediatric Genetics Department, University of Utah, November 2002.
4. *Sewage Treatment Plant Health Effects*, Rocky Mountain Center for Occupational & Environmental Health, January 2003.
5. *Social Security Disability; What is it?* University of Utah Pain Research Center, February 28, 2003.
6. *Disability, impairment and chronic pain*, University of Utah, Family Medicine Residency, February 28, 2007.
7. *Impairment and Social Security Disability, and chronic pain*, University of Utah, Department of Physical Medicine and Rehabilitation, November 2007.

Guest Lectures

1. *Medical Surveillance*, Environmental Toxicology, University of Utah, MSPH program, 2002, 2003.
2. *Disability and Impairment*, Public Health Issues, University of Utah, Public Health Program, 2002.
3. *Occupational Program Management*, Rocky mountain center for Occupational and environmental health, OEHS management course, 2002.
4. *Occupational Program Management*, Rocky mountain center for Occupational and environmental health, OEHS management course, 2003.
5. *Occupational Program Management*, Rocky mountain center for Occupational and environmental health, OEHS management course, April, 2004.
6. *Occupational Program Management*, Rocky mountain center for Occupational and environmental health, OEHS management course, April, 2005.
7. *Occupational Program Management*, Rocky mountain center for Occupational and environmental health, OEHS management course, February 13, 2006.
8. *Disability and Impairment: Advanced Topics in Occupational and Environmental Health*, FPMD 6702, February 23, 2007.
9. *The radiation spectrum: Introduction to Industrial Toxicology and Physiology*, FPMD 6752, University of Utah, March 26, 2007.
10. *High and Low pressure work environments and health risks: Introduction to Industrial Toxicology and*

Physiology, FPMD 6752, University of Utah, March 28, 2007.

11. *Occupational Program Management*, Rocky mountain center for Occupational and environmental health, OEHS management course, April 2007.
12. *Herbal Remedies and Adverse Health Outcomes: Advanced Topics in Occupational and Environmental Health*, FPMD 6702, April 13, 2007.
13. *The radiation spectrum: Introduction to Industrial Toxicology and Physiology*, FPMD 6752, University of Utah, March 5, 2008.
14. *High and Low pressure work environments and health risks: Introduction to Industrial Toxicology and Physiology*, FPMD 6752, University of Utah, March 5, 2008.