#### Robert Andrew Chase Cohen, M.D., F.C.C.P. Curriculum Vitae

#### **MEDICAL EDUCATION:**

Fellowship: Pulmonary Medicine and Critical Care Medicine, Cook County Hospital, Chicago Illinois, 1985-1988

Residency: Internal Medicine, Cook County Hospital Chicago, Illinois, 1983-1985

Internship: Internal Medicine, Cook County Hospital Chicago, Illinois, 1982-1983

Six-Year Honors Program in Medical Education, Northwestern University, Evanston Illinois 1976-1981

Doctor of Medicine, 1981 Northwestern University Medical School, Chicago, Illinois

Bachelor of Science in Medical Sciences, 1980, Northwestern University, Evanston Illinois

#### **ACADEMIC APPOINTMENTS:**

Honorary Professor, Minerals Industry Safety and Health Centre, The University of Queensland, Australia November 2018 to Present

Professor of Medicine, Northwestern University Feinberg School of Medicine October 1, 2013 to Present

Clinical Professor of Environmental and Occupational Health Sciences University of Illinois School of Public Health. September 23, 2013 to Present.

Associate Professor of Environmental and Occupational Health and Sciences University of Illinois School of Public Health. 2005 to 2013

Assistant Professor of Environmental and Occupational Health and Sciences University of Illinois School of Public Health 1994 – 2005

Professor of Medicine, Rush University College of Medicine March 6, 2012 to October 1, 2013.

Associate Professor of Medicine Rush University College of Medicine. July 1, 2002 to March 6, 2012 Assistant Professor of Medicine Rush University College of Medicine. October 1, 1995 – June 30, 2002.

#### **CONSULTING POSITIONS:**

Queensland Department of Natural Resources and Mining, Queensland, Australia October 2015 to Present.

Intergovernmental Program Agreement – Department of Health and Human Services, Centers for Disease Control, National Institute for Occupational Safety and Health, Division of Respiratory Disease Studies, Surveillance Branch – December 23, 2013 to Present.

National Institutes of Health, John E. Fogarty Center International Center for Advanced Study in the Health Sciences. 2000 – Present.

U.S. Mine Safety and Health Administration, 2000 - Present Consultant on Coal Miner's Health – American International Health Alliance, United States Agency for International Development. 1999 – 2005.

Consultant on Coal Miner's Health – American International Health Alliance, United States Agency for International Development, 1999 – 2005

Primary Consultant Reviewer – Department of Health and Human Services – Bureau of Primary Health Care – Office of Rural Health Policy – Black Lung Clinics Program, 1998 – Present.

Medical Legal Consultant – United States Attorney's Office, Northern District of Illinois. 6/14/13 - 6/14/14.

Medical Director of the National Coalition of Black Lung and Respiratory Disease Clinics, Inc. May 1995 – Present.

### **CERTIFICATIONS AND LICENSURE:**

Certified B-Reader. U.S. Department of Health and Human Services CDC, NIOSH, ALOSH. 5/1/98 - 4/30/2022

Board Certified, American Board of Internal Medicine Certificate of Special Competence in Critical Care, November 1989- November 2019

Diplomate, American Board of Internal Medicine in the subspecialty of Pulmonary Disease - November 1988. Certificate Valid Indefinitely.

Diplomate, American Board of Internal Medicine – 1986. Certificate Valid Indefinitely.

Licensed Physician and Surgeon - State of Illinois 036-066947

#### HONORS AND AWARDS:

Public Health Service Award. American Lung Association of Metropolitan Chicago. June 2006.

Recipient of the Chicago Thoracic Society's Outstanding Clinician of the Year Award, May 2007.

Featured in Who's Who at ATS. Vol. 33, No. 10, October 2007.

Health and Medicine Policy Research Group Award for Health Care Visionary, 2009.

Stroger Hospital of Cook County, Department of Medicine, Quentin Young Award, June 2010.

Respiratory Health Association of Metropolitan Chicago, Making a Difference Award for Lung Health Leader, December 1, 2011.

Cook County Health and Hospitals System, "Doctor of the Year" March 2013.

The West Virginia Association of Black Lung Clinics "Donald L. Rasmussen Award" for passionate advocacy to improve the life of our nation's coal miners, June 8, 2016.

National Coalition of Black Lung and Respiratory Disease Clinics, National Black Lung Association, and United Mine Workers of America - Mike South Award -2018. September 26, 2018

#### **SOCIETY MEMBERSHIPS:**

Fellow, American College of Chest Physicians

Member, American Thoracic Society, American Lung Association

Member Society for Occupational and Environmental Health

Member American Public Health Association, Section of Occupational Health and Safety

### **TEACHING:**

#### University of Illinois School of Public Health:

Occupational Diseases Course: Two to ten contact hours annually 1994 to present. MPH students, including physicians, nurses, industrial hygiene students, and other MPH candidates.

#### **Other Teaching:**

Course Director – NIOSH Spirometry Certification: Thirty-two to forty-eight contact hours annually. Occupational health providers including physicians, nurses, and respiratory therapists. 1999 to Present.

Course Director – American Heart Association, Advanced Cardiac Life Support 1989 - 2000

### COMMITTEES, BOARDS OF DIRECTORS, AND ADMINISTRATIVE SERVICES

Co-Chair, Technical Meeting on the Revision of the ILO International Classification of Radiographs of Pneumoconiois. Turin, Italy. September 11-13, 2018.

Chair, American Thoracic Society Committee on the Proposed OSHA Silica Standard. September 2013 to March 2014

Member Board of Directors, Gift of Hope, Organ and Tissue Donation Network for Illinois and Northwest Indiana, Itasca, Illinois. February 2012 to 2014

Member – State of Illinois Chronic Disease Prevention and Health Promotion Task Force. September 2010 to 2014.

Member - Special Advisory Committee to Governor Joe Manchin, III of West Virginia to Investigate the Upper Big Branch Mine Disaster. August 2010.

Member and working group chair: Illinois COPD Coalition – Illinois State COPD Plan. September 2007 to March 2009.

Institute of Medicine of the National Academies of Science, Committee on Personal Protective Equipment for Healthcare Workers to Prevent Transmission of Pandemic Influenza and Other Viral Respiratory Infections. 2010-2012.

Institute of Medicine of the National Academies of Science, Standing Committee on Personal Protective Equipment. Term of service: 2008-2013.

Respiratory Health Association of Metropolitan Chicago. Illinois COPD State Plan. Chair of Working Group on Prevention, Early Detection, Surveillance, and Data Collection. November 8, 2007 to 2009. Board of Directors, and Member of Executive Board. Respiratory Health Association of Metropolitan Chicago. October 2007 to 2014

Member - Special Advisory Committee to Governor Joe Manchin, III of West Virginia to Investigate the Sago Mine Disaster. January to July 2006.

Member COPD Advisory Committee. Respiratory Health Association of Metropolitan Chicago. 2005 to 2014.

Department of Health and Human Services Mine Safety and Health Research Advisory Committee of the Centers for Disease Control and Prevention – Appointed from March 3, 2004 – December 27, 2009.

Chair, Critical Care Committee – John H. Stroger, Jr. Hospital of Cook County. 2008 to May 17, 2013.

## SCIENTIFIC AND SCHOLARLY ACTIVITIES Membership or Offices in Professional Societies

Fellow, American College of Chest Physicians

Member, American Thoracic Society American Lung Association

Member, Chicago Thoracic Society, Chicago Lung Association

Member, Society of Critical Care Medicine

Member Society for Occupational and Environmental Health

Member American Public Health Association, Section of Occupational Health and Safety

### Funding History of Consulting Research and Contracts

Principal Investigator. Department of Natural Resources and Mining, Queensland, Australia. Training Course for Nominated Medical Advisors and Examining Medical Officers. 7/24/17-7/24/2022.

Principal Investigator. Monash University – Evaluation of the Coal Mine Workers Health Scheme, Queensland Australia. 5/1/16-11/30/16.

Principal Investigator. U.S. Department of Labor, Office Of Workers Compensation Programs, Division of Coal Mine Workers Compensation. Training of 413B Medical Examiners. 7/7/14-7/6/18.

Principal Investigator. U.S. Department of Labor, Office Of Workers Compensation Programs, Division of Coal Mine Workers Compensation. Evaluation of the Black Lung Program Office Pilot Project of New Procedures and Practices. 9/30/14 - 3/29/16. Principal Investigator. U.S. Department of Labor, Mine Safety and Health Administration. Evaluation of the Completeness of of Injury and Illness Reporting in the Illinois Mining Industry: Comparing Workers' Compensation Claims to the MSHA Part 50 Program. 9/30/14-9/29/15.

### **Funding History of Peer Reviewed Grants**

Co-Principal Investigator. American Association of Clinical Chemists. 12/94 - 6/95 for Rapid Diagnosis of Tuberculosis.

Co-Principal Investigator. Agency for Health Care Policy and Research. 12/94 - 12/95 for Rapid Diagnosis of Tuberculosis

Principal Investigator. Great Lakes Center for Occupational and Environmental Health and Safety – Occupational Lung Disease in Ukrainian Coal Miners. 7/5/2000 – 6/30/2002. NIOSH Pilot Projects Grant.

Principal Investigator - American Lung Association of Metropolitan Chicago. Community Spirometry Initiative for the Greater Chicago Region. 7/1//05 - 6/30/06.

Consultant. Chicago Initiative to Raise Asthma Health Equity. 5/1/03 - 8/30/05.

Project Director and Medical Director, Black Lung Clinics Grant Program, Department of Health and Human Services, Office of Rural Health Policy, Black Lung Clinics Program - 4/1993 - 6/30/2020.

Project Director and Medical Director, Black Lung Clinics Center of Excellence, Department of Health and Human Services, Office of Rural Health Policy, Black Lung Clinics Program – 7/1/2014 - 6/30/2020.

Principal Investigator, Alpha Foundation for the Improvement of Mining Safety and Health. Clarifying Distribution, Trends, and Determinants of Adverse Health in United States Miners: Exploration and Integration of Existing Data Systems. 11/1/2013-10/31/2015.

Principal Investigator, Black Lung Disability and Claims Training Project. United States Department of Labor, Office of Workers Compensation Programs, Division of Coal Mine Workers Compensation Programs. 7/7/14 - 7/8/18.

Principal Investigator, Evaluation of the Completeness of Injury and Illness Reporting in the Illinois Mining Industry: Comparing Workers' Compensation Claims to the MSHA Part 50 Program. United States Department of Labor, Mine Safety and Health Administration. 9/30/14 - 9/29/15.

Principal Investigator, Alpha Foundation for the Improvement of Mining Safety and Health. Linkage of Active Miner Surveillance, Former Miner Disability Evaluations, and Mortality Data Sets to Evaluate and Prevent Lifetime Risk of Cardiopulmonary Disease in U.S. Miners. 12/1/2016-11/30/2018.

Principal Investigator, Alpha Foundation for the Improvement of Mining Safety and Health. "Characteristics of Dust and Risk Factors Associated with the Development of Rapidly Progressive Pneumoconiosis and Progressive Massive Fibrosis". 1/16/18-1/15/21.

Co-Principal Investigator, Alpha Foundation for the Improvement of Mining Safety and Health. "Elucidating the individual and combined toxicity of coal mine dust constituents and their contribution to disease in modern US coal miners." 9/1/19-8/31/22

Co-Principal Investigator, Alpha Foundation for the Improvement of Mining Safety and Health. "Continued Epidemiologic Analyses of Large Data Sets of Health Data on US Coal Miners." 11/16/20-11/15/22.

### **Reviewer for Funding Agencies**

Primary Consultant Reviewer – Department of Health and Human Services – Office of Rural Health Policy– Black Lung Clinics Program. 1998 – Present.

Wellcome Trust of the United Kingdom

Alpha Foundation for the Improvement of Mine Safety and Health, 2013 to present.

# **Reviewer for Professional Journals and Societies:**

**Journal of Thoracic Disease** – 2018 to present.

American Journal of Public Health – 2018 to present.

**International Journal of the Environment** – 2018 to present.

Archives of the American Thoracic Society – 2018 to present.

National Academies of Science – 2018 to present.

**Toxicology Mechanisms and Methods** – 2018 to present.

Lung – 2018 to present.

**Respirology Reviews** – 2017 to present.

**Journal of Occupational and Environmental Medicine** – 2017 to present.

Journal of Occupation and Applied Toxicology – 2017 to present.

# American Journal of Respiratory and Critical Care Medicine – 2016 to present.

American Journal of Industrial Medicine - 2009 to present

**Occupational and Environmental Medicine** – 2008 to present

Archives of Environmental and Occupational Health – 2006 to present.

American Medical Association – 2001 to present.

Reviewer for AMA Guides to the Evaluation of Permanent Impairment Cocchiarella L, Andersson G, ed. AMA Guides to Evaluation of Permanent Impairment, ed 5. Chicago, American Medical Association, 2001.

American Medical Association – Guides to the Evaluation of Permanent Impairment, 6<sup>th</sup> Edition. Robert D. Rondinelli Editor, Chicago, American Medical Association, 2008.

Chest - 1994 – Present

# **Reviewer for Government Agencies:**

National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention.

National Personal Protective Technologies Laboratory - 2007 to present.

Respiratory Health Division – 2000 to Present.

Current Intelligence Bulletin, "A review of information published since 1995 on coal mine dust exposures and associated health outcomes." September, 2010.

Spirometry Quality Control Documents. March, 2011

Department of Natural Resources, Mining, and Energy, Queensland State Government, Queensland, Australia - 2017 to present.

# Invited Presentations at Regional National, and International Meetings

 "Pulmonary Disability Evaluation" Presented at Occupational Medicine for the Primary Practitioner. Sponsored by the Illinois Occupational Health and Safety Educational Resource Center and The University of Illinois at Chicago College of Medicine Section on Environmental and Occupational Medicine. September 12-13 1990.

- 2. "Respiratory Failure" Presented for Illinois Academy of Family Physicians "Medicine for Today" Postgraduate Program. February 12, 1992.
- 3. "Exercise Physiology and Clinical Application" Presented at the National Center for Advanced Medical Education (Formerly the Cook County Graduate School) Specialty Review in Pediatric Cardiology. June 9, 1992.
- 4. "Tuberculosis: Meeting the Public Health Challenge". Workshop Leader for this conference at The University of Illinois Occupational Health and Safety Center. May 22, 1993.
- 5. "The Epidemiology of Occupational Tuberculosis". Presented at Occupational TB: Protection of Health Care Workers. A conference sponsored by the University of Illinois Occupational Health and Safety Center, June 17 and 18th, 1993.
- 6. "Strategies for Early Identification of Persons with Infectious TB". Workshop Leader for Occupational TB: Protection of Health Care Workers. A conference sponsored by the University of Illinois Occupational Health and Safety Center. June 17 and 18th, 1993.
- "Tuberculosis Update Occupational Exposures to Tuberculosis, the Experience at Cook County Hospital". Chicago Medical Society's 50th Anniversary Midwest Clinical Conference. February 11-13, 1994.
- 8. "Tuberculosis What the Family Physician Needs to Know". Illinois Academy of Family Practice's Medicine for Today Series. March 2, 1994.
- 9. "Evaluating Claimants for Black Lung Disability The Pulmonologists Point of View". Panel Discussion at the West Virginia Black Lung Clinics Program Sixth Annual Conference. Mullens, West Virginia. June 2, 1994.
- 10. "Pulmonary Function and Cardiopulmonary Exercise Testing for Disability Evaluation." Presented at the annual convention of the National Coalition of Black Lung and Respiratory Disease Clinics. Chicago, Illinois November 9-11, 1994.
- 11. Cohen RA, Muzaffar S, Capellan J, Azar H, Chinikamwala M. "The value of classical symptoms and CXR configuration in the modern era of resurgent tuberculosis." CDC sponsored conference "Tuberculosis control in the workplace: Science, implementation and prevention polity." Rockville, Maryland. December 1, 1994.
- Trainor, W., Muzaffar, S., Cohen, R.A., "An Approach to Triaging Scarce Isolation Resources in a Large Public Hospital." US Centers for Disease Control 1994 National TB Controllers Workshop, 1994 Annual Meeting.
- "Conducting and interpreting pulmonary function tests and cardiopulmonary exercise tests." Southern Illinois Conference on Black Lung Disease and Disability. Southern Illinois University at Carbondale. March 3-4, 1995.

- 14. "Occupational Lung Disease and Tuberculosis." 7th Annual West Virginia State Black Lung Conference. Charleston West Virginia. May 10, 1995
- 15. "Pulmonary Function Testing and Related Equipment" Midwest Biomedical Society, September 20, 1995.
- 16. "Tuberculosis and Aids." 13th Annual Convention of the National Coalition of Black Lung and Respiratory Disease Clinics. Knoxville, Tennessee. November 9, 1995.
- "Disability Evaluation for Occupational Pneumoconiosis." 13th Annual Convention of the National Coalition of Black Lung and Respiratory Disease Clinics. Knoxville, Tennessee. November 9, 1995.
- 18. "Pulmonary Function Testing for Occupational Lung Disease" Southern Illinois conference on Black Lung Disease and Disability, Carbondale Illinois. March 14, 1997.
- 19. "Obstructive Lung Disease and Exposure to Coal Dust" Central States Occupational Medical Association Conference, Chicago. March 13, 1997
- "The new pneumoconiosis." West Virginia Black Lung Clinics Program and National Coalition of Black Lung and Respiratory Disease Clinics Black Lung Conference. Morgantown, WV. April 2nd, 1998.
- 21. "Pulmonary Function Testing for the Occupational Medicine Practitioner" Central States Occupational Medical Association Conference, Chicago, Illinois. March 18, 1999
- "Diagnosis of Occupational Lung Disease" 11<sup>th</sup> Annual West Virginia Black Lung Clinics Conference. U.S. Mine Academy, Mine Safety and Health Administration. Beaver, West Virginia. April 8-9, 1999.
- 23. "Diagnosis of Tuberculosis Using Modern Rapid Testing Techniques" Medical Society of El Salvador. Santa Ana, El Salvador. May 7, 1999.
- 24. "Occupational Lung Disease" Medical Society of El Salvador. Santa Ana, El Salvador. May 8, 1999.
- 25. "Diagnosis of Occupational Lung Disease History, Physical Exam, and Physiological Evaluation" National Coalition of Black Lung and Respiratory Disease Clinics Black Lung Conference, Chicago, Illinois October 7<sup>th</sup>, 1999.
- "Obstructive Lung Disease and Occupational Exposure to Dust" National Coalition of Black Lung and Respiratory Disease Clinics Black Lung Conference, Chicago, Illinois October 8<sup>th</sup>, 1999.
- 27. "Pulmonary Function Testing for the Occupational Medicine Practitioner" Central States Occupational Medical Association Conference, Chicago, Illinois. March 16, 2000

- "The Role of the Diffusion Capacity in the Diagnosis of Occupational Lung Disease" 12<sup>th</sup> Annual West Virginia Black Lung Clinics Conference. Huntington, West Virginia. May 17<sup>th</sup>, 2000.
- 29. "Guidelines for Pulmonary Rehabilitation" 12<sup>th</sup> Annual West Virginia Black Lung Clinics Conference. Huntington, West Virginia. May 18<sup>th</sup>, 2000.
- 30. "Acute Respiratory Distress Syndrome" American Academy of Physician Assistants 28<sup>th</sup> Annual Conference. Chicago, Illinois. May 31<sup>st</sup>, 2000.
- 31. "Evaluating Patients with Pleural Disease" American Academy of Physician Assistants 28<sup>th</sup> Annual Conference. Chicago, Illinois. May 31<sup>st</sup>, 2000.
- "Confounding factors in the diagnosis of occupational lung disease." National Coalition of Black Lung and Respiratory Disease Clinics Annual Conference. Bristol, Virginia. October 13<sup>th</sup>, 2000.
- 33. "Occupational disease and injury in Ukrainian coal miners." 128<sup>th</sup> Annual American Public Health Association Meeting, November 13<sup>th</sup>, 2000, Boston, Massachusetts.
- 34. "Beyond Pills and Inhalers The Case for Pulmonary Rehabilitation." Chicago Medical Society, Midwest Clinical Conference, February 22-25, 2001, Chicago, Illinois.
- 35. "The Role of Pulmonary Testing In Occupational Medicine." Central States Occupational Medicine Association, 77<sup>th</sup> Annual Spring Seminar, March 16-17, 2001, Chicago, Illinois.
- 36. "Pulmonary Function Testing Sixteen Hour Review Course" State of West Virginia Black Lung Clinics Program, May 11-12, 2001. Scarbro, West Virginia.
- "Diagnosis of Occupational Lung Disease" American International Health Alliance and United States Agency for International Development – Public Health Conference. June 20<sup>th</sup>, 2001. Donetsk, Ukraine.
- 38. "Diagnosis and Treatment of Occupational Lung Disease" National Coalition of Black Lung and Respiratory Disease Clinics, Inc and the Alabama Primary Care Association Annual Meeting, September 6<sup>th</sup>, 2001. Orange Beach, Alabama.
- "Occupational Lung Disease" American Association of Cardiovascular and Pulmonary Rehabilitation Annual Meeting. September 13<sup>th</sup>, 2001. Minneapolis, Minnesota.
- 40. "Pulmonary Toxicity of Coal Mine Dust" State of Ohio Black Lung Conference. December 7<sup>th</sup>, 2001, Columbus, Ohio.

- "Modern techniques for the Diagnosis and Treatment of Pulmonary Tuberculosis" American International Health Alliance/United States Agency for International Development, January 17<sup>th</sup>, 2002. Donetsk, Ukraine.
- 42. "Setting Up a Pulmonary Rehabilitation Program" Turkish Thoracic Society 5<sup>th</sup> International Meeting. April 25<sup>th</sup>, 2002, Antalya, Turkey.
- 43. "Approach to Pneumoconiosis" Turkish Thoracic Society 5<sup>th</sup> International Meeting. April 25<sup>th</sup>, 2002, Antalya, Turkey.
- 44. "Developing a reasoned medical opinion for occupational lung disease." National Coalition of Black Lung and Respiratory Disease Clinics, Inc. National Conference. October 2, 2002. Gatlinburg, Tn.
- 45. "Panelist Consensus Conference on Guidelines for Diagnosis, Treatment, and Rehabilitation of Black Lung Disease" U.S. Department of Health and Human Services, Health Resources and Services Administration. January 29-30<sup>th</sup>, 2003. Bethesda, Md.
- 46. "Advances in Pulmonary Function Testing for Occupational Medicine." Central States Occupational Medicine Association, 79<sup>th</sup> Annual Spring Seminar, March 13-16, 2003, Chicago, Illinois.
- 47. "Office Spirometry and Technology" Chicago Medical Society Midwest Clinical Conference 2003. March 22, 2003, Chicago, Illinois
- 48. "Update on Pneumoconiosis" X Congreso Medico, Asociacion Medica De Occidente, El Salvador. May 14-17, 2003, Santa Ana, El Salvador.
- 49. "Pulmonary Rehabilitation" X Congreso Medico, Asociacion Medica De Occidente, El Salvador. May 14-17, 2003, Santa Ana, El Salvador.
- 50. "Pulmonary Toxicity of Coal Mine Dust" National Coalition of Black Lung and Respiratory Disease Clinics, Inc, September 18, 2003. Pittsburgh, Pa.
- 51. "Confounding Factors in the Diagnosis of Occupational Lung Disease." National Coalition of Black Lung and Respiratory Disease Clinics, Inc, September 19, 2003. Pittsburgh, Pa.
- 52. "Cardiopulmonary exercise testing in fitness evaluation and diagnosis of occupational lung disease." International Association of Fire Fighters, John H. Redmond Symposium. October 7, 2003. San Francisco, Ca.
- "Pulmonary Function Testing for Occupational Medicine Clinicians" Occupational Medicine." Central States Occupational Medicine Association, 80<sup>th</sup> Annual Spring Seminar, March 11-13, 2004, Chicago, Illinois.

- 54. "Performance and Interpretation of Spirometry for the Office Practitioner" Chicago Medical Society 60<sup>th</sup> Annual Midwest Clinical Conference 2004. March 25, 2004, Chicago, Illinois
- 55. "Pulmonary Rehabilitation Outside of the Hospital" West Virginia State Black Lung Conference. May 14, 2004, West Virginia.
- 56. "Pulmonary Function Testing for Occupational Medicine Clinicians" Occupational Medicine." Central States Occupational Medicine Association, 80<sup>th</sup> Annual Spring Seminar, March 17, 2005, Naperville, Illinois.
- 57. "Working With and Understanding the OSHA Respiratory Protection Standard" Central States Occupational Medicine Association, 80<sup>th</sup> Annual Spring Meeting, March 18, 2005, Naperville, Illinois.
- 58. "Preoperative Evaluation of Patients with Pulmonary Disease." XI Congreso Medico, Asociacion Medica De Occidente, El Salvador. May 12-14, 2005, Santa Ana, El Salvador.
- 59. "Spirometry in the Practitioners Office." XI Congreso Medico, Asociacion Medica De Occidente, El Salvador. May 12-14, 2005, Santa Ana, El Salvador.
- 60. "The role of CT scanning in the imaging of occupational pneumoconiosis." West Virginia State Black Lung Conference. June 15-17, 2005. Beckley, West Virginia.
- 61. "Evaluation of the United States Social Security Standards for Respiratory Disability from COPD" Invited Panelist. Social Security Administration Policy Conference Respiratory Disorders in the Disability Programs. August 25-26<sup>th</sup>, Chicago, Illinois.
- 62. "Disability evaluation for Occupational Lung Disease" National Coalition of Black Lung and Respiratory Disease Clinics, and National Jewish Medical and Research Center, September 27, 2005, Denver, Colorado.
- 63. "Pulmonary Function Testing for Occupational Medicine Clinicians" Occupational Medicine." Central States Occupational Medicine Association, 81<sup>st</sup> Annual Spring Seminar, March 16, 2006, Naperville, Illinois.
- 64. "Evaluation of Occupational Lung Disease" American Academy of Physician Assistants 34<sup>th</sup> Annual Conference. May 28, 2006. San Francisco, Ca.
- 65. "Cardiopulmonary Exercise Testing" Illinois Society for Respiratory Care Annual Conference. June 16, 2006. Oak Brook Terrace, Illinois.
- 66. "Performance and Interpretation of Spirometry" Illinois Society for Respiratory Care Annual Conference. June 16, 2006. Oak Brook Terrace, Illinois.
- 67. "The History of Black Lung What is the prognosis for the future?" West Virginia State Black Lung Conference. June 21-23, 2006. Pipestem, West Virginia.

- 68. "Arterial Blood Gases and Cardiopulmonary Exercise Tests Utility in the Diagnosis of Occupational Lung Disease." National Coalition of Black Lung and Respiratory Disease Clinics, Inc. September 22, 2006. Nashville, Tennessee.
- 69. "Spirometry in the Diagnosis of COPD" 2006 Frontline Care in COPD: Advances in COPD for Primary Care Practices. American Lung Association of Metropolitan Chicago. October 28, 2006.
- 70. "Directly Observed Therapy for Tuberculosis Control The Experience at Cook County Hospital" Pan American Health Organization Conference on Tuberculosis Control, Santa Fe, Argentina, November 27-December 1, 2006.
- 71. "Chest Imaging" XII Congreso Medico, Asociacion Medica De Occidente, El Salvador. May 17-19, 2007, Santa Ana, El Salvador.
- 72. "Bronchial Asthma State of the Art Diagnosis and Treatment" XII Congreso Medico, Asociacion Medica De Occidente, El Salvador. May 17-19, 2007, Santa Ana, El Salvador.
- 73. "Pleural Diseases" XII Congreso Medico, Asociacion Medica De Occidente, El Salvador. May 17-19, 2007, Santa Ana, El Salvador.
- 74. "Occupational COPD" West Virginia State Black Lung Conference. June 6-9, 2007. Pipestem, West Virginia.
- 75. "Patterns of Pulmonary Impairment" National Coalition of Black Lung and Respiratory Disease Clinics, Inc. Wheeling, WVA. September 11, 2007.
- 76. "COPD and the 2006 GOLD Guidelines" National Coalition of Black Lung and Respiratory Disease Clinics, Inc. Wheeling, WVA. September 12, 2007.
- 77. "Lung Function Testing for Occupational Lung disease" West Virginia State Black Lung Conference. June 11-13, 2008. Pipestem, West Virginia.
- 78. "Lung Function Testing for Occupational Lung disease" West Virginia State Black Lung Conference. June 17-19, 2009. Pipestem, West Virginia.
- 79. "Tips for the Expert Witness Deponent in Occupational Lung Disease Cases" National Coalition of Black Lung and Respiratory Disease Clinics, Inc. September 28, 2010. Pigeon Forge, Tennessee.
- 80. "Forumulating Reasoned Medical Opinions in Cases of Occupational Lung Disease" West Virginia State Black Lung Conference. June 8-9, 2011. Pipestem, West Virginia.
- 81. "Arterial Blood Gases and Cardiopulmonary Exercise Testing" West Virginia State Black Lung Conference. June 8-9, 2011. Pipestem, West Virginia.

- 82. "Designing a Pulmonary Rehabilitation Program". 15<sup>th</sup> Annual Meeting of the Turkish Thoracic Society. April 13, 2012. Antalya-Side, Turkey.
- 83. "Preventing Complications and Quality Control in the Intensive Care Unit". 15<sup>th</sup> Annual Meeting of the Turkish Thoracic Society. April 14, 2012. Antalya-Side, Turkey.
- 84. "The Role of Personal Protective Equipment in Preventing Lung Disease and Death in Coal Miners" West Virginia State Black Lung Conference. June 5-7, 2012. Pipestem, West Virginia.
- 85. "International Pneumoconiosis" U.S. Department of Health and Human Services Health Resources and Services Administration The Office Of Rural Health Policy. Black Lung Clinics Program Meeting. September 24-26, 2012. Bethesda, Maryland.
- 86. "Coal Mine Dust Lung Disease, New Lessions from An Old Exposure". West Virginia State Black Lung Conference. June 5-7, 2013. Pipestem, West Virginia.
- "Radiologic–Pathologic Correlations in Occupational and Environmental Medicine: A Case-Based Interactive Session" American College of Chest Physicians International Conference, CHEST 2013. October 27, 2013. Chicago, Illinois.
- 88. "Imaging of the Lung and the Diagnosis of Pneumocconiosis: State of the Art. An Important Competency for the Occupational Physician" Occupational Medicine Medical Directors Club of Chicago. May 1, 2014. Chicago, Illinois.
- 89. "Clarifying the Distribution, Trendes, and Determinants of Adverse Health in US Miners: Exploration and Integration of Existing Data Systems" West Virginia Black Lung Clinics Program, 2014 Black Lung Conference. June 5, 2014. Pipestem, West Virginia.
- 90. "Current Topics in Surveillance of Disease in Mining Populations" Epidemiology Conference On Occupational Health, 2014. June 24, 2014. Chicago, Illinois.
- 91. "USA NIOSH B-Reader Certification and Surveillance Strategy" Asian Conference On Occupational Health 2014. September 2, 2014. Fukuoka, Japan.
- 92. "COPD and Lung Function Impairment, the Effect of Aging, Tobacco Smoke, and Dust" National Coalition of Black Lung and Respiratory Disease. September 11, 2014. Pittsburgh, Pennsylvania.
- 93. Facillitator: "Occupation, Obesity, and Lung Health" ATS International Conference. Denver, Colorado. May 17, 2015.
- 94. "University of Illinois and National Jewish Health Black Lung Centers of Excellence Collaborative. West Virginia Black Lung Clinics Program National Conference. Pipestem, West Virginia, June 3, 2015.

- 95. "Clarifying Distribution, Trends and Determinants of Adverse Health In US Miners-Update on Alpha Foundation Funded Research" West Virginia Black Lung Clinics Program National Conference. Pipestem, West Virginia, June 3, 2015.
- 96. "New Lessons in Pneumoconiosis" National Coalition of Black Lung and Respiratory Disease Clinics National Conference. Bristol, Va. September 8, 2015.
- "New Advances in Diagnostic Imaging of Occupational Pulmonary Disease" XVI Congress of Pulmonary Medicine and Thoracic Surgery of Colombia. Pereira, Colombia October 7, 2015.
- 98. "Pneumoconiosis in the 21<sup>st</sup> Century: New Lessons from an Old Exposure" XVI Congress of Pulmonary Medicine and Thoracic Surgery of Colombia. Pereira, Colombia October 9, 2015.
- 99. "Use of National and State Compensation and Surveillance Compliance Data Sets to Better Understand Miners' Health" American Public Health Association Annual Meeting and Expo. Chicago, Illinois, November 3, 2015.
- 100. "Pneumoconiosis in the 21<sup>st</sup> Century" 43<sup>rd</sup> Argentine Congress of Respiratory Medicine. Buenos Aires, Argentina, December 7, 2015.
- 101. "Emerging Occupational Lung Diseases" Occupational Medicine Medical Directors Club. Chicago, Illinois, January 7, 2016.
- 102. "The Re-Emergence of Black Lung in Australia" West Virginia Black Lung Clinics Association Annual Meeting. Pipestem, West Virginia. June 8, 2016.
- 103. "Use of National and State Compensation and Surveillance Compliance Data Sets to Better Understand Miners' Health." American Public Health Association Annual Meeting and Expo. Chicago, Illinois. November 3, 2016.
- 104. "Coal Workers' Pneumoconiosis Resurfaces in Australia: The Failure of a Public Health Surveillance Program." West Virginia Black Lung Clinics Association Annual Meeting. Pipestem, West Virginia. June 7, 2017.
- 105. "Occupational COPD" VII International Course of Occupational Pulmonary Medicine. Colombian Society of Occupational Medicine. Barranquilla, Colombia. August 3, 2017.
- 106. "New Lessons in Coal Workers' Pneumoconiosis" XVII Conference of the Colombian Society of Pulmonology and thoracic Surgery. Barranquilla, Colombia. August 4, 2017
- 107. "Medical Surveillance for Pneumoconiossis in the United States" XVII Conference of the Colombian Society of Pulmonology and thoracic Surgery. Barranquilla, Colombia. August 4, 2017

- 108. "Review of Recent Medical Literature on Black Lung." National Coalition of Black Lung and Respiratory Disease Clinics National Conference. Salt Lake City. September 28, 2017.
- 109. "Black Lung Evaluation Training for Providers for the US Department of Labor, Black Lung Program" National Coalition of Black Lung and Respiratory Disease Clinics National Conference. Salt Lake City. September 29, 2017.
- 110. "The Lifecycle of Respiratory Disease in Coal Miners" Session B87. Paying Too High a Price. The Lung Health Cost of Energy Extraction. ATS International Conference. San Diego, California. May 21, 2018.
- 111. "Lessons Learned About PMF and Black Lung from DOL Black Lung Data" West Virginia Black Lung Clinics Association Annual Meeting. Pipestem, West Virginia. June 6, 2018.
- 112. "Lessons Learned from US and Auistralian Surveillance of Black Lung" 2018 Queensland Mining Industry Health and safety Conference. Gold Coast, Australia. August 20, 2018.
- 113. "Coal Mine Dust Lung Disease An International Perspective" National Coalition of Black Lung and Respiratory Disease Clinics National Conference. Chicago, Illinois. September 27, 2018.
- 114. "Black Lung Evaluation Training for Providers for the US Department of Labor, Black Lung Program" National Coalition of Black Lung and Respiratory Disease Clinics National Conference. Chicago, Illinois. September 28, 2018.
- 115. "Lung Doctors, Lawyers, and Labor –advocating so that workers might breathe." American Thoracic Society International Conference. Dallas, Texas. May 20, 2019.
- 116. "Developing an Updated B Reader Training Syllabus and Certification Examination." American Thoracic Society International Conference. Dallas, Texas. May 20, 2019.
- 117. "Trends in Mortality Patterns among U.S. Coal Miners Filing for Federal Black Lung Program Benefits, 1970 to 2016." West Virginia Black Lung Conference, Pipestem, West Virginia –June 6, 2019.
- 118. "Lung Disease, Miners, and Mining Communities, a Global Population at Risk" West Virginia Black Lung Conference. Pipestem, West Virginia June 6, 2019
- 119. "Rapidly Progressive Pneumoconiosis in Appalachian Coal Miners: Clinical and Pathology Findings." Society of Toxicologic Pathology, Raleigh, North Carolina June 24, 2019.
- 120. "Actualización de los nuevos estándares de neumoconiosis digital de la OIT. Programas revisados de capacitación y pruebas para certificar a los médicos. Asociación Argentina de Medicina Respiratoria. Buenos Aires, Argentina. August 15, 2019

- 121. "El uso de las pruebas de función pulmonar en las enfermedades pulmonares ocupacional" Asociación Argentina de Medicina Respiratoria. Buenos Aires, Argentina. August 15, 2019.
- 122. "Silicosis de piedra artificial." Asociación Argentina de Medicina Respiratoria. Buenos Aires, Argentina. August 15, 2019.
- 123. "Controles periódicos en Neumoconiosis.legislación en EEUU." Asociación Argentina de Medicina Respiratoria. Buenos Aires, Argentina. August 15, 2019.

# **Invited Seminars and Lectures**

- 1. "Cardiopulmonary Exercise Testing" Presented at Medicine Grand Rounds. Cook County Hospital. January 4, 1991.
- 2. "A 47 year old man with a neck mass and interstitial infiltrates". Cook County Hospital Department of Medicine Clinical Pathological Conference. December 12, 1992.
- 3. "Occupational Tuberculosis The Experience at a Public Hospital". Grand Rounds at Oak Forest Hospital of Cook County. Oak Forest Illinois. September 19, 1994.
- 4. "Rapid Diagnosis of Tuberculosis." Department of Medicine Grand Rounds. Cook County Hospital, Chicago. February 10, 1996.
- 5. "Pulmonary toxicities due to coal dust exposure" Pulmonary Medicine Grand Rounds. Northwestern University Medical School, Chicago. February 25, 1997
- 6. "Tuberculosis in the Homeless" Given at Centennial Year Social Work Celebration Fantus Health Center of Cook County Hospital entitled - Working With the Homeless Population. Chicago, April 16th, 1998.
- 7. "Rapid Diagnosis of Tuberculosis Using Direct Amplification Testing" Special Lecture, Cook County Hospital, Illinois Department of Public Health, Chicago Department of Health. Chicago. April 27, 1999.
- 8. "Occupational Lung Disease Due to Coal Mine Dust Exposure" National Institute of Occupational Health of Ukraine, Kiev, Ukraine. March 31<sup>st</sup>, 2000.
- 9. "Occupational Lung Disease in Ukrainian Coal Miners" Divisions Of Pulmonary Medicine and Occupational Medicine, Cook County Hospital and Great Lakes Center for Occupational and Environmental Safety, University of Illinois. May 15, 2000.
- 10. Course Director, NIOSH Certified Spirometry Course International Version. Donetsk, Ukraine. September 25<sup>th</sup> and 26<sup>th</sup>, 2000.
- "Respiratory Disease in Ukrainian Coal Miners" University of Illinois School of Public Health Deans Lecture. Chicago, Illinois. October 18<sup>th</sup>, 2000.

- 12. "The Science Behind Pulmonary Rehabilitation." Grand Rounds, Cook County Hospital, January 19<sup>th</sup>, 2001, Chicago, Illinois.
- 13. "Surveillance of Respiratory Disease in Ukrainian Coal Miners" University of Illinois Great Lakes Center for Occupational and Environmental Health and Safety. February 27, 2002, Chicago, Illinois.
- 14. "Update on Lung Disease Due to Coal Mine and Silica Dust Exposure" Pulmonary Grand Rounds, Northwestern University, June 3, 2003, Chicago, Illinois
- 15. "Rapid diagnosis of pulmonary tuberculosis and treatment of drug sensitive and drug resistant tuberculosis." November 19-20, 2003. Municipal Hospital #25, Donetsk, Ukraine.
- "Evaluation of patients with Pneumoconiosis caused by coal mine dust, silica, and asbestos." Seminar in Occupational Lung Disease, University or Leon. July 21-23, 2005. Leon, Nicaragua.
- 17. Invited Panelist NIOSH sponsored scientific workshop on the B-Reader Certification Program. March 5<sup>th</sup>, 2004, McClean, Virginia.
- 18. "Chest Imaging for Pneumoconiosis." Seminar in Occupational Lung Disease, University or Leon. July 21-23, 2005 Leon, Nicaragua.
- 19. "The Use of Spirometry in Occupational Lung Disease." Seminar in Occupational Lung Disease, University or Leon. July 21-23, 2005 Leon, Nicaragua.
- 20. "Back to the Mines. Pneumoconiosis in the 21<sup>st</sup> Century" Department of Medicine Grand Rounds, University of Illinois. August 23, 2005. Chicago, Illinois.
- 21. "Cardiopulmonary Exercise Testing" University of Illinois Department of Pulmonary, Critical Care, and Sleep Medicine. September 11, 2008. Chicago, Illinois.
- 22. "Coal Worker's Pneumoconiosis in the 21<sup>st</sup> Century" Department of Medicine Grand Rounds, John H. Stroger Jr. Hospital of Cook County. October 17, 2008. Chicago, Illinois.
- 23. "Coal Worker's Pneumoconiosis The Recent Experience in the United States" The Chinese State Agency for Worker's Safety. April 18, 2011. Beijing, China.
- 24. "Resurgent Pneumoconiosis in the United States" Research Institute for Occupational Safety and Health, State Agency for Worker's Safety. April 19, 2011. Beijing, China.
- 25. "United States Black Lung Clinics Program" Rehabilitation Center for Pneumoconiosis, State Administration of Coal Mine Safety, Beidaihe Sanatorium of Chinese Coal Miners. April 21, 2011. Beidaihe, China.

- 26. "High Attitude and Underwater Pulmonary Physiology" Pulmonary Medicine Grand Rounds, Rush University Medical College. June 6, 2011. Chicago, Illinois
- 27. "Panel: Protecting the Public With Diminishing Funds" World TB Day 2012, Respiratory Health Association of Metropolitan Chicago. March 23,2012. Chicago, Illlinois.
- 28. "Physiologic Aspects of Changing Self Contained Self Rescuers in an Immediately Dangerous to Life and Health Atmosphere". National Institute for Occupational Safety and Health, National Personal Protective Technologies Laboratory Stakeholders Meeting. March 20, 2012. Pittsburgh, Pennsylvania.
- 29. "Physiologic Aspects of Switching Self Contained Self Rescuers in an Atmosphere Immediately Dangerous to Life and Health" Institute of Medicine, National Academies of Science Committee on Mine Safety. April 24, 2012. Washington, D.C.
- 30. "Prevention of Black Lung Disease in the United States" Seminar in Public Health Policy, University of Illinois School of Public Health. December 6, 2013.
- 31. "Short of Breath Because of Where You Work? New Exposures and Presentations of Occupational Lung Disease" Grand Rounds, Department of Medicine, Northwestern University Feinberg School of Medicine. February 4, 2014. Chicago, Illinois
- 32. "Pathology of Lung Diseases" Illinois Workers' Compensation Commission In-House Judicial Training Program, April 29, 2014. Chicago, Illinois.
- 33. "Short of Breath Because of Where You Work? New Exposures and Presentations of Occupational Lung Disease" Department of Medicine Grand Rounds, Lutheran General Hospital, Park Ridge, Illinois. January 28, 2015.
- 34. "Excavating the Cardiopulmonary Health Effects of Mining: From National Datasets to Lung Pathology" Department of Environmental and Occupational Health Sciences Grand Rounds, National Jewish Health, Denver, Colorado. February 26, 2015.
- 35. "Pneumoconiosis in the 21<sup>st</sup> Century: New Lessons From an Old Exposure" University of California, San Franciso, Cardiovascular Health and Disease: Occupational and Environmental Factors *and* Updates in Occupational and Environmental Medicine. San Francisco, California. March 13, 2015.
- 36. "Update on Coal Mine Dust Lung Disease" United Mine Workers of American, Constitutional Convention, Las Vega, Nevada, July 27, 2015
- 37. "Approach to the Patient With Occupational Lung Disease" Northwestern University Pulmonary Symposium. Chicago, Illinois, November 20, 2015.
- 38. "Pneumoconiosis in the 21<sup>st</sup> Century" Wesley Hospital Pulmonary and Radiology Departmental Conference. Brisbane, Australia, February 27, 2016.

- 39. "Emerging Occupational Lung Disease" Occupational Medicine Directors Grand Rounds, Chicago, Illinois. January 6, 2016.
- 40. "The Spectrum Of Coal Mine Dust Lung Disease" Wesley Hospital Pulmonary and Radiology Grand Rounds, Brisbane, Australia. February 29, 2016.
- 41. "New Approaches to the Evaluation of Occupational Lung Disease." American Occupational Health Conference, Chicago, Illinois. April 10-13, 2016.
- 42. "Bronchiolitis Obliterans, the New Occupational Lung Disease." American Occupational Health Conference, Chicago, Illinois. April 10-13, 2016.
- 43. "Pulmonary Physiology for Rheumatologists" Rheumatology Grand Rounds. Northwestern University. October 13, 2016.
- 44. "Pneumoconiosis in the 21<sup>st</sup> Century: New Lessons from an Old Exposure" James P. Keogh Memorial Lecture. University of Maryland, Baltimore, Maryland. November 16, 2016.
- 45. "Silica Exposure, Disease and Prevention: Old and New" University of California, San Franciso, Occupational and Environmental Respiratory Disease *and* Updates in Occupational and Environmental Medicine. San Francisco, California. March 9, 2017.
- 46. "Short of Breath Because of Where You Work? New Exposures and Presentations of Occupational Lung Disease" Department of Medicine Grand Rounds, Stroger Hospital of Cook County, Chicago, Illinois. October 6, 2017.
- 47. "Coal Workers' Pneumoconiosis in Australia" Presentation before the Coal Workers' Pneumoconiosis Select Committee of the Queensland Parliament. Brisbane, Australia. March 15, 2017.
- 48. "Coal Mine Dust Lung Disease" Workshop Sponsored by Work Cover Queensland. Brisbane, Australia. March 16, 2017.
- 49. "NIOSH B-Reading Course and Certification Exam" Sponsored by NIOSH and The Department of Natural Resources, Mining, and Energy, Queensland Australia. Brisbane, Australia. December 4-8, 2017.
- 50. "The Evaluation of Coal Miners for Black Lung Disease" Black Lung Training Workshop Sponsored by The Department of Natural Resources, Mining, and Energy, Queensland Australia. Brisbane, Australia. December 10, 2017.
- 51. "Medical Surveillance for Coal Mine Dust Lung Disease" Stakeholders Meeting Sponsored by The Department of Natural Resources, Mining, and Energy, Queensland Australia. Brisbane, Australia. December 11, 2017.

- 52. "Short of Breath Because of Where You Work? New Exposures and Presentations of Occupational Lung Disease" DuPage Medical Group, Lombard, Illinois. April 3, 2018
- 53. "The Spectrum of Coal Mine Dust Lung Disease" Black Lung Workshop Sponsored by The Department of Natural Resources, Mining, and Energy and the Construction, Forestry, Mining, and Energy Workers Union, Queensland Australia. Brisbane, Australia. December 13, 2017.
- 54. "Occupational and Environmental Lung disease: Something Old, Something New, Something Unbreakable, and Something Blue" University of California, San Franciso, Emerging and Re-Emerging Occupational and Environmental Exposure and Disease and Updates in Occupational and Environmental Medicine. San Francisco, California. March 8, 2018.
- 55. "Important Image Characteristics and Challenges Faced Obtaining New Digitally Acquired Images." Technical Meeting on the Revision of the ILO International Classification of Radiographs of Pneumoconiois. Turin, Italy. September 11, 2018.
- 56. "Silicosis, The Spectrum of Disease and Role of Medical Surveillance" Silicosis Workshop Sponsored by Work Cover Queensland. Brisbane, Australia. November 9, 2018.
- 57. "Epidemiology and Spectrum of Coal Mine Dust Lung Disease" Black Lung Training Workshop Sponsored by The Department of Natural Resources, Mining, and Energy, Queensland Australia. Brisbane, Australia. November 10, 2018.
- 58. "Pathology and Mineralogy of Coal Mine Dust Lung Disease" University of Queensland Dust and Respiratory Health Forum. University of Queensland, Brisbane, Australia. November 12, 2018.
- 59. "Silicosis Spectrum of Disease, Recent Outbreaks, and Prevention." Workshop Sponsored by The Department of Natural Resources, Mining, and Energy and the Construction, Forestry, Mining, and Energy Workers Union, Queensland Australia. Brisbane, Australia. November 14, 2018.
- 60. "Resurgence of Coal Workers' Pneumoconiosis in the US" The Sydney Partnership for Health, Education, Research, and Enterprise (SPHERE). Sydney Technical University, Sydney, Australia. November 16, 2018.
- 61. "Lung Disease, Miners, and Mining Communities, a Global Population at Risk" University of California, San Franciso, Vulnerable Workers and Communities at Environmental Risk *and* Updates in Occupational and Environmental Medicine. San Francisco, California. March 14-16, 2019.
- 62. "Research to Study Rapidly Progressive Pneumoconiosis." Coal Miner Health and Safety Summit, Stone Mountain Health Services, St. Charles, Virginia. April 5, 2019.

- 63. "NIOSH B-Reading Course and Certification Exam" Sponsored by NIOSH and the Education and Resource Center, University of Kentucky. Lexington, Kentucky. June 17-19,
- Education and Resource Center, University of Kentucky. Lexington, Kentucky. June 17-19, 2019.
- 64. "Testimony for House Committee Conference: Breathless and Betrayed: What is MSHA Doing to Protect Miners from the Resurgence of Black Lung Disease" Subcommittee on Workforce Protections, Committee on Education and Labor, U.S. House of Representatives. Washington, D.C. June 20, 2019.
- 65. "NIOSH B-Reading Course and Certification Exam" Sponsored by NIOSH and Queensland X-Ray. Brisbane, Australia. October 31-November 3, 2019.
- 66. "Returning Miners With Early CMDLD to Work." Queensland State Government, Office of Industrial Relations Forum. Brisbane, Australia. November 2, 2019.
- 67. "Silicosis and Return to Work –A Literature Review and Recommendations." Work Cover Queensland Forum, Brisbane, Australia. November 7, 2019.
- "Can I Still Work in Mining? Risk of Mine Dust Lung Disease Progression" Dust and Respiratory Health Forum –University of Queensland, Brisbane, Australia. November 11, 2019.
- 69. "What lung function study should I order and why?" University of California, San Franciso, Division of Occupational and Environmental Medicine. Being an Occupational and Environmental Health Detective *and* Updates in Occupational and Environmental Medicine. San Francisco, California. March 5, 2020.
- 70. "Recognition of Black Lung disease in the US: The partnership between physicians and labor." Global Cut the Dust Conference. Goal Coast, Australia. February 25, 2020.
- 71. "Low Dust Levels from Mine sampling does not replace the need for Medical Surveillance: The role of Health Screening and Secondary Prevention." Global Cut the Dust Conference. Goal Coast, Australia. February 25, 2020.
- 72. "Dust Management System FailuresLessons from the Australia and the US –Why we still have Black Lung Disease in Coal Mine Workers in the 21<sup>st</sup> Century." Global Cut the Dust Conference. Goal Coast, Australia. February 25, 2020.
- 73. "The Role of Silica in Coal Mine Dust Lung disease." University of Queensland Sustainable Minerals Institute. Virtual Presentation. December 3, 2020.
- 74. "The Role of Silica in Coal Mine Dust Lung disease." West Virginia Association of Black Lung Clinics. Virtual Presentation. June 3, 2020.

- 75. "The Role of Silica in Coal Mine Dust Lung disease." University of Kentucky Center for Appalachian Research in Environmental Sciences Health Seminar. Virtual Presentation. July 15, 2020.
- 76. "The Role of Silica in Coal Mine Dust Lung disease." Icahn School of Medicine at Mount Sinai, Division of Occupational Medicine Grand Rounds. Virtual Presentation. March 19, 2021.
- 77. "The Role of Silica in Coal Mine Dust Lung disease." State University of New York, Stony Brook, Division of Pulmonary Medicine Grand Rounds. Virtual Presentation. August 23, 2021.
- 78. "The Role of Silica in Coal Mine Dust Lung disease." National Coalition of Black Lung and Respiratory Disease Clinics – National Conference. Virtual Presentation. September 22, 2021.
- 79. "The Role of Silica in Coal Mine Dust Lung disease." West Virginia University, Division of Pulmonary and Critical Care Medicine Grand Rounds. Virtual Presentation. October 1, 2021.

### BIBLIOGRAPHY

### **Original Manuscripts**

- 1. **Cohen R**, Chung S, Roel L. Inhibition of Protein Synthesis in Rat Striatum by Amphetamine Treatment, Partial Reversal by Haloperidol Pretreatment. Neuroscience 6:794, 1980.
- 2. Cooper R, **Cohen R**., Amiry A. Is the Period of Rapidly Declining Adult Mortality in the United States Coming to an End? American Journal of Public Health 73:1091-1093, 1983.
- 3. **Cohen RA**, Muzaffar S, Capellan J, Azar H, Chinikamwala M. Predictors of Infectiousness: The value of classical symptoms and CXR configuration in the modern era of resurgent tuberculosis. Infect Contrl and Hosp Epidemiol 1994. 15:12 p 766.
- 4. Cocchiarella, L., **Cohen, R.**, Wurtz R, Conroy L. Occupational tuberculosis infection of Housestaff at a public hospital in the era of resurgent tuberculosis. Infect Contrl and Hosp Epidemiol 1994. 15:12 p 766.
- 5. Muthuswamy P, Tan T, **Cohen R**. Sudden onset of large pericardial diffusion in a 27-year old man with AIDS. CHEST 1995; 108:1739-41.
- 6. **Cohen RA**, Muzaffar S, Capellan J, Azar H, Chinikamwala M. The validity of classical symptoms and CXR configuration in predicting pulmonary tuberculosis. CHEST 1996; 109:420-23.
- 7. Cocchiarella, L., **Cohen, R.**, Wurtz R, Conroy L. Occupational tuberculosis infection of Housestaff at a public hospital in the era of resurgent tuberculosis. Am J Infect Control. 1996;24:7-12.
- 8. **Cohen R,** Murphy D, Muzaffar S, Schwartz D, Hu TC. Rapid sequence versus conventional sputum collection for AFB smear and culture in patients admitted to rule out tuberculosis. American Journal of Respiratory and Critical Care Medicine 1996. 153:4 pA34.
- 9. Cohen R, Kaul K, Muzaffar S, Schwartz D, Murphy D, Bashir S, Hu TC. Direct sputum analysis for tuberculosis by PCR in patients admitted to rule out tuberculosis. American Journal of Respiratory and Critical Care Medicine 1996. 153:4 pA38.
- 10. **Cohen R,** Muzaffar S. Tuberculosis Patients: Who should we isolate?" Chest 1996. 11:4 p1129.
- Cohen R, Muzaffar S, Schwartz D, Bashir S, Luke S, McGartland L, Kaul K. Diagnosis of pulmonary tuberculosis using PCR assays on sputum collected within 24 hours of hospital admission. American Journal of Respiratory and Critical Care Medicine 1998. 157:1 pp. 156-161.

- 12. Stahl C, **Cohen R**. Abnormal Bone Scan in an Adolescent with Sarcoidosis. Arch Pediatr Adolesc Med. Vol 154, p. 1055-1056. October, 2000.
- 13. Cohen R, Orbana M. Occupational Lung Diseases: Coal and Silica Dust Exposures. Hospital Physician: Pulmonary Disease Board Review Manual. April 2000. Volume 7, Part 2 pp 1-12.
- 14. Cohen R. Velho V. Update on Respiratory Disease from Coal Mine and Silica Dust. Clinics in Chest Medicine 2002; Volume 23, Issue 4; pages 811--826.
- 15. Cohen R, Patel A, Green FHY. Lung Disease Caused by Exposure to Coal Mine and Silica Dust. Seminars In Resp And Crit Care Med 2008. 29:651-661.
- Zubieta IX, Brown G, Cohen R, Medina E. Cananea Copper Mine. An International Effort to Improve Hazardous Working Conditions in Mexico. Int J Occup Environ Health 2009;15:14–20
- 17. **Cohen RA**. Commentary: Is the increasing prevalence and severity of coal workers' pneumoconiosis in the United States due to increasing silica exposure? Occup Environ Med 2010;67:649-650
- 18. Graber JM, Cohen RA, Basanets A, Stayner LT, Kundiev Y, Conroy L, Mukhin VV, Lysenko O, Zvinchuk A, and Hryhorczuk DO. Results From a Ukrainian-US Collaborative Study: Prevalence and Predictors of Respiratory Symptoms Among Ukrainian Coal Miners. Am J Ind Med 2012; 55:1099
- 19. Petsonk EL, Rose C, Cohen R. Coal Mine Dust Lung Disease. New Lessons from an Old Exposure. Am J Respir Crit Care Med. 2013;187(11):1178–1185.
- Graber JM, Stayner LT, Cohen RA, Conroy LM, Attfield MD. Respiratory disease mortality among US coal miners; results after 37 years of follow-up. *Occup Environ Med*. 2014;71(1):30-39.
- 21. Graber JM, Stayner L, Cohen RA, Conroy LM. The need for continued investigation of lung cancer risk in coal miners. *Occup Environ Med.* 2014;71(7):523-524.
- Blackley DJ, Laney AS, Halldin CN, Cohen RA. Profusion of opacities in simple coal workers' pneumoconiosis is associated with reduced lung function. *Chest.* May 2015. doi:10.1378/chest.15-0118.
- 23. J. Schroedl C, H.T. Go L, A. Cohen R. Coal Mine Dust Lung Disease: The Silent Coal Mining Disaster. *Curr Respir Med Rev* 2015;11:1–1.
- 24. Mabila SL, Gracia G, Cohen R, Almberg K, Friedman LS. Injury and illness data for Illinois mining industry employees, 1990 to 2012. *J Occup Environ Med.* 2015;57(12):1305–1310.

- 25. Cohen RA, Petsonk EL, Rose C, et al. Lung Pathology in U.S. Coal Workers with Rapidly Progressive Pneumoconiosis Implicates Silica and Silicates. *Am J Respir Crit Care Med*. 2016;193(6):673-680. doi:10.1164/rccm.201505-1014OC.
- 26. Cohen RA. Resurgent coal mine dust lung disease: wave of the future or a relic of the past? *Occup Environ Med.* 2016;73(11):715-716. doi:10.1136/oemed-2016-103737.
- 27. Go LHT, Krefft SD, Cohen RA, Rose CS. Lung disease and coal mining: what pulmonologists need to know. *Curr Opin Pulm Med* 2016;22:170–178.
- 28. Cohen RA, Rose C, Petsonk EL, Abraham JL, Green FH, Churg A. Reply: Coal Mine Dust Lung Disease That Persists below the Surface of Surveillance: Down Under. *Am J Respir Crit Care Med* 2016;194:773–774.
- 29. Graber JM, Delnevo CD, Manderski MTB, Rose CS, Ahluwalia JS, **Cohen RA**. Cigarettes, Smokeless Tobacco, and Poly-Tobacco Among Workers in Three Dusty Industries. J Occup Environ Med 2016;58(5):477–484.
- Graber JM, Worthington K, Almberg KS, Meng Q, Rose CS, Cohen RA. High Cigarette and Poly-Tobacco Use Among Workers in a Dusty Industry: New Jersey Quarry Workers. J Occup Environ Med 2016;58(4):e133–e139.
- Blackley DJ, Halldin CN, Cohen RA, Cummings KJ, Storey E, Laney AS. Misclassification of occupational disease in lung transplant recipients. J Heart Lung Transplant Off Publ Int Soc Heart Transplant 2017;36(5):588–90.
- 32. Graber JM, Wackowski OA, Bover Manderski MT, Rose CS, **Cohen RA**, Delnevo CD. Assessing Tobacco Use Among Working Adults in the United States: the Need to Consider Poly-tobacco Use. J Occup Environ Med 2017;59(5):e100.
- 33. Graber JM, Harris G, Almberg KS, Rose CS, Petsonk EL, Cohen RA. Increasing Severity of Pneumoconiosis Among Younger Former US Coal Miners Working Exclusively Under Modern Dust-Control Regulations. J Occup Environ Med. 2017;59(6):e105–e111.
- 34. Almberg KS, Cohen RA, Blackley DJ, Laney AS, Storey E, Halldin CN. Linking Compensation and Health Surveillance Data Sets to Improve Knowledge of US Coal Miners' Health. J Occup Environ Med. 2017; 59:930-934
- 35. Almberg KS, Friedman LS, Swedler D, **Cohen RA**. Mine Safety and Health Administration's Part 50 program does not fully capture chronic disease and injury in the Illinois mining industry. *Am J Ind Med.* 2018;61(5):436-443. doi:10.1002/ajim.22826
- 36. Mandrioli D, Schlünssen V, Ádám B, Cohen RA, Colosio C, Chen W, Fischer A, Godderis L, Göen T, Ivanov ID, Leppink N, Mandic-Rajcevic S, Masci F, Nemery B, Pega F, Prüss-Üstün A, Sgargi D, Ujita Y, van der Mierden S, Zungu M, Scheepers PTJ. WHO/ILO workrelated burden of disease and injury: Protocol for systematic reviews of occupational

exposure to dusts and/or fibres and of the effect of occupational exposure to dusts and/or fibres on pneumoconiosis. *Environ Int.* 2018;119:174-185. doi:10.1016/j.envint.2018.06.005

- 37. Almberg KS, Halldin CN, Blackley DJ, Laney A, Storey E, Rose C, Go L, Cohen R. Progressive Massive Fibrosis Resurgence Identified in U.S. Coal Miners Filing for Black Lung Benefits, 1970–2016. Ann Am Thorac Soc. 2018;15(12):1420-1426.
- 38. Mabila, S.L., Almberg, K.S., Friedman, L., Cohen, R., Ndlovu, N., Vorajee, N., Murray, J. Occupational emphysema in South African miners at autopsy; 1975–2014. *Int Arch Occup Environ Health*. 2018;91(8):981-990. doi:10.1007/s00420-018-1335-2
- Mabila SL, Almberg KS, Friedman L, Cohen R. High exposure mining occupations are associated with obstructive lung disease, National Health Interview Survey (NHIS), 2006-2015. Am J Ind Med. July 2018. doi:10.1002/ajim.22890
- 40. Friedman LS, Almberg KS, **Cohen RA**. Injuries associated with long working hours among employees in the US mining industry: risk factors and adverse outcomes. *Occup Environ Med*. 2019;76(6):389-395. doi:10.1136/oemed-2018-105558
- 41. Halldin CN, Hale JM, Weissman DN, Attfield MD, Parker JE, Petsonk EL, Cohen RA, Markle T, Blackley DJ, Wolfe AL, Tallaksen RJ, Laney AS. The National Institute for Occupational Safety and Health B Reader Certification Program—An Update Report (1987 to 2018) and Future Directions: *J Occup Environ Med*. 2019;61(12):1045-1051. doi:10.1097/JOM.00000000001735
- 42. Mabila, S.L., Almberg, K.S., Friedman, L., **Cohen, R.A.**, Ndlovu, N., Vorajee, N., Murray, J. Effects of commodity on the risk of emphysema in South African miners. *Int Arch Occup Environ Health*. 2020;93(3):315-323. doi:10.1007/s00420-019-01483-8
- 43. Almberg KS, Friedman LS, Rose CS, Go LHT, **Cohen RA**. Progression of coal workers' pneumoconiosis absent further exposure. *Occup Environ Med*. 2020;77(11):748-751. doi:10.1136/oemed-2020-106466
- 44. De S, Almberg KS, Cohen RA, Friedman LS. Injuries during the first hour at work in the U.S. mining industry. *Am J Ind Med.* 2020;63(12):1124-1133. doi:https://doi.org/10.1002/ajim.23186
- 45. **Cohen RA**, Go LHT. Artificial Stone Silicosis. Removal From Exposure is Not Enough. *Chest.* 2020;158(3):862-863. doi:10.1016/j.chest.2019.11.029
- 46. Perret JL, Miles S, Brims F, Newbigin K, Davidson M, Jersmann H, Edwards A, Zosky G, Frankel A, Johnson AR, Hoy R, Reid DW, Musk AW, Abramson MJ, Edwards B, Cohen R, Yates DH. Respiratory surveillance for coal mine dust and artificial stone exposed workers in Australia and New Zealand: A position statement from the Thoracic Society of Australia and New Zealand\*. *Respirology*. 2020;25(11):1193-1202. doi:https://doi.org/10.1111/resp.13952

- Page 29
- 47. Go LHT, **Cohen RA**. Coal Workers' Pneumoconiosis and Other Mining-Related Lung Disease. *Clin Chest Med*. 2020;41(4):687-696. doi:10.1016/j.ccm.2020.08.002
- 48. Friedman LS, De S, Almberg KS, Cohen RA. Association Between Financial Conflicts of Interest and ILO Classifications for Black Lung Disease. *Ann Am Thorac Soc.* Published online March 29, 2021. doi:10.1513/AnnalsATS.202010-1350OC

# **PUBLISHED REPORTS AND BOOK CHAPTERS:**

- 1. **Cohen, RA** Contributor in: J. Davitt McAteer and Associates. Report of Special Advisory Committee to Governor Joe Manchin, III of West Virginia to Investigate the Sago Mine Disaster. January to July 2006.
- Cohen, RA Contributor in: Elaine L. Larson and Catharyn T. Liverman, Editors; Committee on Personal Protective Equipment for Healthcare Personnel to Prevent Transmission of Pandemic Influenza and Other Viral Respiratory Infections: Current Research Issues; Institute of Medicine. Preventing Transmission of Pandemic Influenza and Other Viral Respiratory Diseases. Personal Protective Equipment for Healthcare Personnel Update 2010. Institute of Medicine of the National Academies. The National Academies Press, Washington D.C. March 2011.
- Graber J., Cohen R., Miller B, and Stayner L. Increased morbidity and mortality among coal workers: lessons learned from well-designed epidemiological research programmes. In: Current Topics In Occupational Epidemiology, Venables KM. ed. Oxford University Press, 2013.
- 4. **Cohen R,** Go L, Green, FHY. Coal Mine Dust Lung Disease. Parkes' Occupational Lung Disorders, Fourth Edition. CRC Press. Published November 7, 2016. Newman Taylor A, Cullinan P, Blanc P, Pickering A, ed.
- Go LHT, Cohen RA. Coal mine dust lung disease. In: Feary J, Suojalehto H, Cullinan P, eds. Occupational and Environmental Lung Disease. European Respiratory Society; 2020:176-189. doi:10.1183/2312508X.10034919
- Go LHT, Cohen RA. The Pneumoconioses. In V.Courtney Broaddus Joel Ernst Talmadge E King, Jr Stephen Lazarus Kathleen F. Sarmiento Lynn M. Schnapp Renee Stapleton Michael B. Gotway, eds. Murray & Nadel's Textbook of Respiratory Medicine. Elsevier. May 17, 2021. ISBN: 9780323655873

# Peer Reviewed Abstracts

- Arias, A., Antonio, M., Rajendran, R., Salgia, R., Cohen R., Muthuswamy, P. Diagnosis of Tuberculous Pleurisy by Pleural Biopsy. American Review of Respiratory Disease. 143:4 p. A110, 1991.
- 2. Cocchiarella, L., **Cohen R**, Muzaffar, S. PPD Conversion Among Housestaff In A Public Hospital. American Review of Respiratory Disease. 145:4 p. A102, 1992.

- 3. **Cohen R**, Muzaffar, S. Exercise Response of Patients With Pulmonary Parenchymal Sarcoidosis and the Predictive Value of Resting PFTs. American Review of Respiratory Disease. 145:4 p. A586, 1992.
- 4. Flexible Fiberoptic Bronchoscopy in Mechanically Ventilated Patients. Muthuswamy, P., Samuel, J., Arias, A. Rajendran, R., **Cohen R**, Salgia, R. American Review of Respiratory Disease. 145:4 p. A785, 1992.
- Wurtz, R., Cocchiarella, L., Cohen R, Efficacy of Infection Control Measures to Limit Occupational Exposure to Tuberculosis. Society of Hospital Epidemiologists of America, 1994 Annual Meeting, Abstract #015.
- 6. Lugo, A., **Cohen R,** Pilloff, A., Sequeira, W. The Effect Of Low Dose Methotrexate On The Diffusion Capacity Of Patients With Rheumatoid Arthritis. Abstract Submitted to The American College Of Rheumatology 1994 Regional Meetings.
- 7. **Cohen RA**, Muzaffar S, Capellan J, Azar H, Chinikamwala M, Piller S. Managing limited isolation resources in the era of resurgent TB: The efficacy of a TB isolation service in a public hospital. AJRCCM 1994. 149:4 A854.
- 8. **Cohen R**, Muzaffar S, Tan T, Faselis CJ, Ahsan S, Rijwani S, Mohiuddin A, Al-Skaf S. Use of cough counting to predict infectiousness of patients at high risk for pulmonary tuberculosis. AJRCCM 1995. 151:4 p. A515.
- 9. Schwartz DN, Khan JS, Ahuja J, Kocka F, Muzaffar S, **Cohen R**. Sputum quality does not explain variability in smear and culture results in pulmonary tuberculosis. American Journal of Respiratory and Critical Care Medicine 1996. 153:4 pA485.
- Kaul K, Luke S, Pfouts L, Cohen R, Schwartz D, Muzaffar S, Dranove D, Hu T. Direct detection of mycobacterium tuberculosis by PCR in sputa from patients admitted to rule out tuberculosis. Abstract Submitted for Association of Science in Medicine Meetings 1996 General Meeting in New Orleans.
- 11. **Cohen R.** Occupational disease and injury in Ukrainian coal miners. American Public Health Association. 2000 APHA Annual Meeting and Exposition Abstracts. Page 93.
- 12. **Cohen R**. Kennedy K. Mukhin V. Conroy L. Levels Of Respirable Coal Mine Dust Ukrainian Coal Mines. Amer J Respir Crit Care Med 165: Suppl 8: A532, 2002
- Cohen R. Basanets A. Besonova N. Latishef E. Oliynyk I. Shulzhenko I. Velho V. Kundiev Y. Prevalence Of Radiologic Pneumoconiosis In Active Ukrainian Coal Miners. Amer J Respir Crit Care Med 165: Suppl 8: A529, 2002

- Cohen E. Dyson D. Harris G. Cohen R. Effectiveness Of Pulmonary Rehabilitation Among Indigent Patients At A Large Inner City County Hospital. Amer J Respir Crit Care Med 165: Suppl 8: A735, 2002
- 15. Cohen R, Basanets, A.; Besonova, N.; Latishef, E.; Lysenko, O.; Kundiev, Y. Prevalence Of Respiratory Disease In Ukrainian Coal Miners. 27<sup>th</sup> ICOH International Congress on Occupational Health, Iguassu Falls, Brazil, February 23-28, 2003. Abstract.
- Cohen R, Kennedy, K.; Mukhin, V.; Conroy, L. Respirable Coal And Silica Dust Levels In Ukrainian Coal Mines. 27<sup>th</sup> ICOH International Congress on Occupational Health, Iguassu Falls, Brazil, February 23-28, 2003. Abstract.
- Manadan AM, Velho V, Parekh S, Cohen R, Sequeira, W. Use of Spirometric Indices Alone Overestimates Prevalence of Restrictive Lung Disease in Systemic Sclerosis Patients. Arthritis Rheumatism 2003. 48, S558
- 18. **Cohen R,** Hackbarth, D. Chronic obstructive pulmonary disease: Findings from a community-based spirometry program. American Public Health Association Annual Conference. November 8, 2006.
- Cohen R, Hackbarth D, Solinski J, Williams R, McKee C, Donnelly K, Younker L, Li Y, Hill C. Prevalence of COPD Detected in a Community Spirometry Screening Program. Chest Meeting Abstracts, Oct 2006; 130: 84S
- 20. Cohen R, Angulo D, Hackbarth D, Solinski J, Williams R, McKee C, Younker L, Li Y, Donnelly K, Interpretability of Spirometry in Community Based Studies. Chest Meeting Abstracts, Oct 2006; 130: 247S.
- 21. Hackbarth D, Cohen R, Preckwinkel L, Younker L, McKee C, Solinski J, Williams R, Donnelly K, Ernst D, Campbell C. Spirometry Screening And An Invitation to Quit From A State Tobacco Quit Line As Motivators for Smoking Cessation Among Community Dwelling Adults. Chest Meeting Abstracts, Oct 2006; 130: 145S
- 22. Graber, JM, Stayner, LT, Basanets, A, Kundiev, Y, Hryhorczuk D, Cohen RA. Do prevalence and predictors of respiratory symptoms among Ukrainian ex-coal miners vary by reason for leaving mining? Presented at the 2010 annual meeting of the Scientific Committee on Epidemiology in Occupational Health (EPICOH), Taipei, Taiwan, April 2010
- 23. Cohen RA, Green FHY, Abraham JL, Churg A, Petsonk EL, MacNeill SK, Tramma S, and McAteer D. Coal Mine Dust Lung Disease Among Miners Killed In The Upper Big Branch Disaster - A Systematic Review Of Lung Pathology. Chapter DOI: 10.1164/ajrccmconference. 2013.187.1\_MeetingAbstracts. A6063.
- 24. Najmuddin A, Petsonk EL, Regier M, Young B, Tramma S, **Cohen RA**, MacNeill S, Green F, Abraham J, Churg A. Lung Pathology in Coal Workers with Rapidly Progressive

Pneumoconiosis: A Preliminary Report. Inhaled Particles XI, Nottingham, UK, September 23, 2013.

- 25. Cohen RA, Graber J, Basanets A, Kundiev Y, Mukhin V, Lysenko O, Zvinchuk A, Hryhorczuk D. Prevalence Of Radiologic Pneumoconiosis In Current And Former Underground Ukrainian Coal Miners. ATS 2014. May 20, 2014. San Diego, California
- 26. Najmuddin A, **Cohen RA**, Petsonk EL, Young B, MacNeill S, Tramma S, Regier M, Abraham JL, Churg A, Green F. Lung pathology in coal workers with rapidly progressive pneumoconiosis emphasizes the importance of silica and silicates in addition to carbon. San Diego, California. ATS 2014. May 20, 2014. San Diego, California.
- 27. Graber JM, **Cohen RA**, Basanets A, et al. Can workplace chest X-ray surveillance programs shed light on workers' injuries? Prevalence and predictors of rib fractures among active and former Ukrainian coal miners. *Occup. Environ. Med.* 2014;71 Suppl 1:A95-96. doi:10.1136/oemed-2014-102362.298.
- Gottschall EB, Robinson M, Silveira L, Almberg KS, Cohen, RA, Graber JM, Rose C. Occupational Lung Disease In Navajo And Non-Navajo Western Miners. *Am J Respir Crit Care Med* 191;2015:A1746.
- 29. Almberg KS, Friedman L, Graber JM, Petsonk EL, Rose C, Go LHT, **Cohen RA**. Cardiopulmonary Disease Among Illinois Miners, Results Of An Analysis Of State Workers' Compensation Data. *Am J Respir Crit Care Med* 191;2015:A1748.
- 30. Graber JM, Manderski MT, **Cohen RA**, Almberg KS, Rose C, Delnevo CD. Tobacco Use Patterns Among Us Working Age Men: High Rates In The Mining Industry And Among The Unemployed. *Am J Respir Crit Care Med* 191;2015:A4032
- 31. Cohen RA, Rose C, Graber JM, Petsonk EL, Ibrahim N, Almberg KS, Robinson M, Go LHT. Use of National and State Compensation and Surveillance Compliance Data Sets to Better Understand Miners' Health. American Public Health Association Annual Meeting and Exposition. Chicago, Illinois. October 31-November 4, 2015.
- 32. Graber JM, Manderski MT, **Cohen RA**, Almberg KS, Rose CS, Delnevo CD. Tobacco Use Patterns Among US Working Age Men: High Rates in the Mining Industry and Among the Unemployed. American Thoracic Society International Conference Abstracts. American Thoracic Society; 2015:A4032
- 33. Almberg KS, Friedman L, Graber JM, Petsonk EL, Rose CS, Go LH, Cohen RA. Cardiopulmonary Disease Among Illinois Miners, Results of an Analysis of State Workers' Compensation Data. American Thoracic Society International Conference Abstracts. American Thoracic Society; 2015:A1748.

- 34. Graber JM, Harris G, Almberg K, Petsonk EL, Rose C, **Cohen RA**. Increased severity of radiologic pneumoconiosis among former US coal miners; Federal Black Lung Program data 2001 to 2013. Oral presentation. Session 267 Sep 5, 2016
- 35. Volk L, Harris G, **Cohen R**, Almberg K, Graber JM. O36-1 Higher noise levels are associated with increased injury rates in us coal miners. *Occup Env Med* 2016;73:A67–A68.
- 36. **Cohen RA,** Graber J, Harris G, et al. Spirometry and Chest Radiographs in US Coal Miners: Analysis of Data from the Federal Black Lung Program. American Thoracic Society International Conference Abstracts. American Thoracic Society; 2016:A2996-A2996.
- 37. Almberg K, Friedman L, Swedler D, Graber J, Rose C, Petsonk EL, Cohen RA. Completeness of Respiratory Injury and Illness Reporting in the Illinois Mining Industry: Comparing Workers' Compensation Claims to the MSHA Part 50 Program. American Thoracic Society International Conference Abstracts. American Thoracic Society; 2016:A5442–A5442.
- 38. Almberg KS, Go LH, Rose CS, Petsonk EL, Graber JM, Harris G, and Cohen RA. Progression of Radiographic Coal Workers Pneumoconiosis Absent Further Exposure Among Former U.S. Coal Miners Applying for Federal Black Lung Benefits, 2000 - 2013. American Thoracic Society International Conference Abstracts. American Thoracic Society; 2017:A7313-A7313. doi:10.1164/ajrccm-conference.2017.195.1\_MeetingAbstracts.A7313
- 39. Mabila SL, Almberg K, Friedman L, Ndlovu, N, Vorajee N, Murray J, and **Cohen R.** Emphysema in South African Miners at Autopsy, 1975-2014. American Thoracic Society International Conference Abstracts. American Thoracic Society; 2017:A1747-A1747. doi:10.1164/ajrccm-conference.2017.195.1\_MeetingAbstracts.A1747
- 40. Cohen RA, Go LH, Almberg K, et al. Coal Workers' Pneumoconiosis Resurfaces in Queensland Australia: A Report of Chest Imaging from the Coal Mine Workers' Health Scheme for the Queensland Department of Natural Resources and Mines. American Thoracic Society International Conference Abstracts. American Thoracic Society; 2017:A7310-A7310. doi:10.1164/ajrccm-conference.2017.195.1\_MeetingAbstracts.A7310
- Blackley DJ, Halldin CN, Cohen RA, Cummings KJ, Storey E, Laney AS. Misclassification of Occupational Lung Disease in a U.S. Organ Transplant Registry. American Thoracic Society International Conference Abstracts. American Thoracic Society; 2017:A3846-A3846. doi:10.1164/ajrccm-conference.2017.195.1\_MeetingAbstracts.A3846
- 42. Gandhi S, Ferguson K, Muszynski L, Cohen RA. Hard Metal Lung Disease Presenting in a Surface Coal Miner. American Thoracic Society International Conference Abstracts. American Thoracic Society; 2018:A3533-A3533. doi:10.1164/ajrccmconference.2018.197.1\_MeetingAbstracts.A3533
- 43. Gandhi S, Abraham J I., Muszynski L, Sanyal S, **Cohen RA**. Idiopathic Pulmonary Fibrosis in a Rail Yard Worker. American Thoracic Society International Conference Abstracts.

American Thoracic Society; 2018:A1552-A1552. doi:10.1164/ajrccmconference.2018.197.1\_MeetingAbstracts.A1552

- 44. Gandhi S, Almberg K, Go L, Cohen RA. Lung Function Declines in Former Coal Mine Workers Absent Further Exposure. American Thoracic Society International Conference Abstracts. American Thoracic Society; 2018:A6069-A6069. doi:10.1164/ajrccmconference.2018.197.1\_MeetingAbstracts.A6069
- 45. Almberg K, Halldin CN, Blackley DJ, Laney S, Storey E, Rose CS, Go L, and Cohen RA. Resurgence of Progressive Massive Fibrosis in U.S. Coal Miners Filing for Federal Black Lung Program Benefits. American Thoracic Society International Conference Abstracts. American Thoracic Society; 2018:A6064-A6064. doi:10.1164/ajrccmconference.2018.197.1 MeetingAbstracts.A6064
- 46. Yates D, Sameh S, Silverstone E, Cohen RA, Abraham JL, Sanyal S, Smith TA. A case of unsuspected hard metal lung disease in a thermal sprayer in NSW, Australia. *Eur Respir J*. 2018;52(suppl 62). doi:10.1183/13993003.congress-2018.PA1219
- 47. De S, Cohen RA, Almberg KS, Friedman L. Risk Factors Associated with Early Shift Injuries Among U.S. Miners, 1983-2015. In: A51. PULMONARY HEALTH EFFECTS CAUSED BY OCCUPATIONAL EXPOSURES. American Thoracic Society; 2019:A1857-A1857. doi:10.1164/ajrccm-conference.2019.199.1\_MeetingAbstracts.A1857
- 48. Cohen RA, Almberg KS, Friedman LS. Injuries Associated with Long Working Hours: Risk Factors and Adverse Outcomes. In: A51. PULMONARY HEALTH EFFECTS CAUSED BY OCCUPATIONAL EXPOSURES. American Thoracic Society; 2019:A1856-A1856. doi:10.1164/ajrccm-conference.2019.199.1\_MeetingAbstracts.A1856
- 49. Almberg KS, Halldin CN, Go LHT, Laney AS, Rose CS, Storey E, Cohen RA. Trends in Mortality Patterns Among U.S. Coal Miners Filing for Federal Black Lung Program Benefits, 1970 to 2016. In: *B25. OCCUPATIONAL EXPOSURES INCLUDING DEPLOYMENT RELATED, MINING, AND AGRICULTURE.* American Thoracic Society International Conference Abstracts. American Thoracic Society; 2019:A2759-A2759. doi:10.1164/ajrccm-conference.2019.199.1\_MeetingAbstracts.A2759
- 50. Cohen RA, Orandle M, Hubbs AF, Almberg KS, Go LHT, Clingerman S, Fluharty K, Dodd T, Rose CS, Abraham JL, Sanyal S, Franko A, Murray J, Forajee N, Zell-Baran L, Petsonk EL, Zulfikar R, Green FHY. Pathologic Type of Progressive Massive Fibrosis in the National Coal Workers? Autopsy Study (NCWAS) 1971-1996. In: *B25. OCCUPATIONAL EXPOSURES INCLUDING DEPLOYMENT RELATED, MINING, AND AGRICULTURE.* American Thoracic Society International Conference Abstracts. American Thoracic Society; 2019:A2758-A2758. doi:10.1164/ajrccm-conference.2019.199.1\_MeetingAbstracts.A2758
- 51. Gandhi S, **Cohen RA**, Rasmussen DL, Almberg KS, Go LHT. Impact of Diffusion Capacity Measurement in the Evaluation of Former Coal Miners for Coal Mine Dust Lung Disease. In: *C15. OCCUPATIONAL EXPOSURES OF THE 21ST CENTURY.* American Thoracic

Society; 2019:A4260-A4260. doi:10.1164/ajrccm-conference.2019.199.1\_MeetingAbstracts.A4260

- 52. Go L, Lowers HA, Sanyal S, Abraham JL, Green FHY, Franko A, Murray J, Vorajee NI, Rose CS, Zell-Baran L, Petsonk EL, Zulfikar R, Thomas L, Almberg KS, Cohen RA. Mineralogic Analysis of Lung Tissue from a Former Coal Miner with Rapidly Progressive Pneumoconiosis and Progressive Massive Fibrosis. In: A49. CASE REPORTS IN LUNG DISEASE ASSOCIATED WITH INHALATIONAL EXPOSURES. American Thoracic Society; 2019:A1820-A1820. doi:10.1164/ajrccm-conference.2019.199.1\_MeetingAbstracts.A1820
- 53. Go L, Abraham JL, Lowers H, Sanyal S, Almberg KS, Cool C, Franko A, Green FHY, Murray J, Petsonk EL, Rose CS, Ruybal D, Sarver E, Vorajee N, Zell-Baran L, Zulfikar R, Cohen RA. Mineralogic Analysis of Lung Tissue from Us Coal Miners Demonstrates Greater Silica Burden in Modern Cases of Progressive Massive Fibrosis. In: *A105. SILICA, INORGANIC DUST, AND MINING.* American Thoracic Society International Conference Abstracts. American Thoracic Society; 2020:A2631-A2631. doi:10.1164/ajrccmconference.2020.201.1\_MeetingAbstracts.A2631
- 54. Gandhi S, Cohen RA, Blanc PD, Rasmussen (posthumous) Dl, Go L. Coal Mine Jobs with High Silica Exposure Predict Abnormal Gas Exchange During Exercise. In: A105. SILICA, INORGANIC DUST, AND MINING. American Thoracic Society International Conference Abstracts. American Thoracic Society; 2020:A2633-A2633. doi:10.1164/ajrccmconference.2020.201.1\_MeetingAbstracts.A2633
- 55. Sarver E, Keles C, Lowers H, Zulfikar R, Zell-Baran L, Vorajee N, Sanyal S, Rose CS, Petsonk EL, Murray J, Green FHY, Go L, Franko A, Cool C, Abraham JL, Almberg KS, Cohen RA. Mineralogic Analysis of Respirable Dust from 24 Underground Coal Mines in Four Geographic Regions of the United States. In: *A105. SILICA, INORGANIC DUST, AND MINING*. American Thoracic Society International Conference Abstracts. American Thoracic Society; 2020:A2635-A2635. doi:10.1164/ajrccm-conference.2020.201.1\_MeetingAbstracts.A2635
- 56. Almberg KS, Zell-Baran L, Abraham JL, Cool C, Franko A, Green FHY, Murray J, Sanyal S, Vorajee N, Go L, Rose CS, Petsonk EL, Hubbs A, Orandle M, Clingerman S, Liguori D, Kennedy K, Zulfikar R, Cohen RA. Intra- and Inter-Rater Reliability of Pathologic Classification of Type of Progressive Massive Fibrosis Among Deceased U.S. Coal Miners. In: *A105. SILICA, INORGANIC DUST, AND MINING*. American Thoracic Society International Conference Abstracts. American Thoracic Society; 2020:A2632-A2632. doi:10.1164/ajrccm-conference.2020.201.1\_MeetingAbstracts.A2632
- 57. Hua J T., Zell-Baran L, Go L H T., Kramer M R., van Bree J B., Chambers D C., Deller D N., Newbigin K, Matula M A., Fireman E M., Dahbash M, Martinez-Gonzalez C, León-

Jimenez A, Sack C S., Almberg K S., **Cohen R A.**, Rose C S. Occupational Exposure and Clinical Characteristics Among Engineered Stone Fabrication Workers with Silicosis in an International Registry. *TP61 TP061 Resid Occup Expo WE LIVE WORK BREATHE* American Thoracic Society; 2021. p. A3039–A3039.doi:10.1164/ajrccmconference.2021.203.1\_MeetingAbstracts.A3039.

- 58. Go L, Abraham J L., Almberg K S., Cool C, Franko A, Green F H Y., Murray J, Rose C S., Sanyal S, Vorajee N, Zell-Baran L, Hubbs A, Orandle M, Clingerman S, Richardson D, Lowers H, Sarver E, Cohen R A. Increase in the Proportion of Silica-Type Progressive Massive Fibrosis Suggested Over the History of the National Coal Workers? Autopsy Study. *TP61 TP061 Resid Occup Expo WE LIVE WORK BREATHE* American Thoracic Society; 2021. p. A3038–A3038.doi:10.1164/ajrccmconference.2021.203.1\_MeetingAbstracts.A3038.
- 59. Almberg K S., Friedman L, Go L, Harris D A., Mastel K, Rose C S., Tomann M, Vonhof W, Weems Jr. D, Zell-Baran L, Cohen R A. Substantial Burden of Lung Obstruction Observed Among Former U.S. Coal Miners Who Never Smoked. *TP61 TP061 Resid Occup Expo WE LIVE WORK BREATHE* American Thoracic Society; 2021. p. A3037– A3037.doi:10.1164/ajrccm-conference.2021.203.1\_MeetingAbstracts.A3037.
- 60. Almberg K S., Halldin C N., Friedman L, Go L, Rose C S., Cohen R A. Excess Mortality from Chronic Lower Respiratory Disease, Lung Cancer, and Pneumoconiosis Is Increasing in US Coal Miners. *TP61 TP061 Resid Occup Expo WE LIVE WORK BREATHE* American Thoracic Society; 2021. p. A3036–A3036.doi:10.1164/ajrccmconference.2021.203.1\_MeetingAbstracts.A3036.
- 61. Zell-Baran L, Almberg K S., Go L, Cohen R A., Iwaniuk C, Halldin C N., Abraham J L., Cool C, Franko A, Green F H Y., Murray J, Sanyal S, Vorajee N, Sarver E, Lowers H, Rose C S. Contemporary Coal Miners with Progressive Massive Fibrosis Have Shorter Mining Tenures Compared to Their Historic Counterparts. *TP61 TP061 Resid Occup Expo WE LIVE WORK BREATHE* American Thoracic Society; 2021. p. A3035–A3035.doi:10.1164/ajrccmconference.2021.203.1\_MeetingAbstracts.A3035.
- 62. Cohen R A, Rose C S, Go L H T., Zell-Baran L, Almberg K S., Sarver E, Lowers H, Iwaniuk C, Clingerman S, Richardson D, Abraham J L, Cool C, Franko A, Hubbs A F, Murray J, Orandle M, Sanyal S, Vorajee N, Green F H Y. Pathologic Findings of Progressive Massive Fibrosis in Contemporary Coal Miners Show Features of Accelerated Silicosis Compared to Historical Cases. *TP61 TP061 Resid Occup Expo WE LIVE WORK BREATHE* American Thoracic Society; 2021. p. A3034–A3034.doi:10.1164/ajrccmconference.2021.203.1\_MeetingAbstracts.A3034.

63. Go L, Almberg K S, Rose C S, Zell-Baran L, Harris D, Tomann M, Vonhof W, Weems D, Friedman L, Mastel K, Cohen R A. Clinically Significant Lung Function Abnormalities Among US Former Coal Miners with and Without Radiographic Coal Workers' Pneumoconiosis. *TP61 TP061 Resid Occup Expo WE LIVE WORK BREATHE* American Thoracic Society; 2021. p. A3033–A3033.doi:10.1164/ajrccmconference.2021.203.1 MeetingAbstracts.A3033.