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Professional Profile

Dr. Fedoruk holds subspecialty board certification in Medical Toxicology and primary board certification in Occupational Medicine from the American Board of Preventive Medicine. There are fewer than 50 physicians in the U.S. who hold both these certifications.

Dr. Fedoruk is also a Diplomate of the American Board of Toxicology (DABT) and is also certified by the American Board of Industrial Hygiene as a Certified Industrial Hygienist (CIH).

Dr. Fedoruk maintains an active clinical practice and is engaged in teaching and research at the University of California, Irvine, where he is Clinical Professor of Health Sciences and Medical Director at the UCI Center for Occupational and Environmental Health Clinic.

Dr. Fedoruk has extensive experience in the assessment of exposure and related health effects for a broad range of chemical and biological hazards. His 25-year experience involves evaluating health significance from environmental, occupational, and product related exposures. His assessments have involved mercury, lead, arsenic, cadmium, nickel, polychlorinated biphenyl (PCBs), benzene, volatile organic hydrocarbons, isocyanates, pesticides, combustion products, talc, silica, and other dusts. He has designed, developed, and implemented medical monitoring programs for workers in several industries including hazardous waste, energy, asbestos, and electronics, and directed a course on medical surveillance. He performed an assessment of health needs for military and civilian personal involved in chemical weapons destruction in Johnson Atoll, in Micronesia. His work has involved assessment of air quality problems in homes, offices, schools, and work environments including assessments for microbial hazards.

Dr. Fedoruk has served as an advisor on occupational and environmental health matters to both government and industry. He served as a member of an expert panel convened by EPA and the U.S. Department of Labor to develop national priorities for educating health care providers about the adverse health effects of pesticides. Dr. Fedoruk has served as an advisor to NFPA for developing medical guidelines for the Nation’s firefighters. He has assisted health and fire departments in evaluating public health impacts associated with accidental chemical releases. He has also been involved in developing occupational medical programs and guidelines for several jurisdictions, including the City of New York.

Dr. Fedoruk has conducted studies and published articles in the areas of occupational and environmental medicine. He authored chapters in several books, including the World Health Organization’s Encyclopedia of Occupational Safety and Health, the Encyclopedia of Toxicology, and textbooks in occupational lung diseases and thoracic oncology. He was most recently designated as a Fellow of the American College of Medical Toxicology, the society for board certified medical subspecialists.

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Academic Credentials & Professional Honors

M.D., University of Alberta, 1978

Fellow American College of Medical Toxicology, 2007

2001 Recipient of The Jean Spencer Felton Award for Excellence in Scientific Writing awarded by The Western Occupational and Environmental Medical Association

1995 Adolph G. Kammer Merit in Authorship Award from The American College of Occupational and Environmental Medicine

Licenses and Certifications

Diplomate of the American Board of Toxicology (DABT)

Medical Toxicology, Subspecialty, Certification by the American Board of Preventive Medicine

Occupational Medicine, Specialty, Certification by the American Board of Preventive Medicine

Toxicology Aspects Certification

Academic Appointments

University of California - Irvine, School of Medicine, Department of Medicine, Clinical Professor of Medicine, 2002 - Current

Professional Affiliations

Fellow of the American College of Occupational and Environmental Medicine

Publications

Fedoruk M, Hong S. Musculoskeletal system. In: Encyclopedia of Toxicology, 3rd edition, Vol. 3. Wexler P (ed.), Elsevier Inc., Academic Press, pp. 403-406, 2014.

Fedoruk M, Hong S. Gastrointestinal system. In: Encyclopedia of Toxicology, 3rd edition, Vol. 2. Wexler P (ed.), Elsevier Inc., Academic Press, pp. 702-705, 2014.

Gujral J, Proctor D, Su S, Fedoruk MJ. Water adherence factors for human skin. Poster Presentation, Society of Toxicology Annual Meeting, Baltimore, MD, March 2009.

Fedoruk MJ, Isreal L, Fuller J, Hong S. Mercury toxicity from Mexican cosmetic skin rejuvenating cream. Poster Presentation, Society of Toxicology Annual Meeting, Baltimore, MD, March 2009.

Richter RO, Kerger BD, Hoyt S, Fedoruk MJ. Influence of hydrocarbon composition on benzene vapor emissions in mixed products. Abstract selected for platform presentation at 17th International Society for Exposure Analysis Annual Meeting, Proceedings, Durham RTP, NC, October 21, 2007.

Fedoruk MJ, Kerger BD, Bronstein R, Richter RO. Airborne dust exposure assessment for automotive body shop work involving resin fillers and abrasives. Platform presentation at the Annual Meeting of the Society of Toxicology, Charlotte, NC, 2007. Toxicological Sciences 96(1):147.

Seltzer JM, Fedoruk MJ. Health effects of mold in children. Pediatr Clin North Am 2007; 54(2):309-333.

Fedoruk MJ, Smalstig T, Richter RO, Bronstein R, Kerger BD. Modeling residential exposure to xylenes and ethylbenzene from window sealant application based on laboratory mass flux measurements. Presented International Society of Exposure Analysis 15th Annual Meeting, Tucson, AZ, November 2005. Proceedings Abstract Book, p. 173.

Fedoruk MJ, Smalstig T, Tran J, Shum M, Richter RO, Bronstein R, Kerger BD. Diesel-related benzene exposures during refueling operations at two grocery distribution centers. Toxicological Sciences 84(S-1):83, Abstract #412. Presented at Society of Toxicology (SOT) 44th Annual Meeting, New Orleans, LA, April 2005.

Fedoruk M, Bronstein R, Kerger D. Ammonia exposure and hazard assessment for selected household cleaning product uses. Journal of Exposure Analysis and Environmental Epidemiology 2005; 15:534-544.

Fedoruk MJ, Bronstein R, Kerger BD. Volatile organic compound exposure assessment for government inspectors at gas stations. Toxicological Sciences 78(1-S):106(516). Presented at 43rd Society of Toxicology Annual Meeting, Baltimore, MD, March 2004.

Kerger BD, Bronstein R, Fedoruk MJ. Exposure assessment of volatile organic compounds and metals for government inspectors at auto body Repair Facilities. Toxicological Sciences 78(1-S):106-107(517). Presented at 43rd Society of Toxicology Annual Meeting, Baltimore, MD, March 2004.

Fedoruk M, Kerger B. Pitfalls of broad-based chemical screening of fire responders in California: A false alarm on cyanazine herbicide. Presented at 42nd Society of Toxicology Annual Meeting, Baltimore, MD, March 2004. Toxicology Sciences 72(S-1):241, 2003.

Fedoruk M, Bronstein R, Kerger B. Benzene exposure assessment of use of Mineral spirits-based degreaser. Applied Occupational and Environmental Hygiene 2003; 18:764-771.

Kerger B, Fedoruk M. Ammonia exposure and dose response assessment for household cleaning uses. Abstract No. 1693, Society of Toxicology Annual Meeting, Nashville, TN, March, 2002.

Fedoruk M, Kerger B. Assessment of toluene and ethyl acetate exposure from wearing a costume mask bonded with contact cement. Abstract No. 1692, Society of Toxicology Annual Meeting Nashville, TN, March 2002.

Jones P, Greaney P, Fedoruk M. A model medical surveillance program. Presented at National Institute of Occupational Health and Safety (NIOSH) symposium Best Practices in Workplace Surveillance: Identification and Tracking of Workplace Injury, Illness, Exposures, and Hazards, Cincinnati, OH, November 7-9, 2001.

Fedoruk M, Kerger B. Measurement of volatile organic compounds in vehicles. Toxicologist Suppl 2001; 1:97.

Kerger B, Fedoruk M. Benzene exposure assessment for the use of petroleum naphtha in a metal parts cleaner. Toxicologist Suppl 2000; 54(1):21.

Carmean G, Chase W, Fedoruk M. Empirical validation of New York City police officer visual acuity requirements. Abstract, 19th UOEH and 3rd IIES International Symposium, Kitakyushu, Japan, October 1999.

Fedoruk M, Carmean G. Development of job-related medical screening criteria for New York City police officers. Abstract, 19th UOEH and 3rd IIES International Symposium, Kitakyushu, Japan, October 1999.

Fedoruk M, Kerger B D. Polychlorinated biphenyls (PCBs) measured in a grade school following a fluorescent light ballast failure. Toxicologist Suppl 1999; 48(1-S):279.

Fedoruk M, Uhlman S, Baker D. Microbial contamination of a ventilation system detected by microbial volatile organic compound (MVOC) analysis. Abstract, presented at the 3rd International Conference on Bioaerosols, Fungi and Mycotoxins, Sarasota Springs, NY, September 1998.

Chester T, Fedoruk M, Langely R, Wilkinson C. The hazards of working in health care. Patient Care 1996; February 15.

Chester T, Fedoruk M, Langely R, Wilkinson C. Caution: Work can be hazardous to your health. Patient Care 1996; February 15.

Fedoruk M. ACOEM Reproductive and developmental hazard guidelines. J Occup Environ Med 1996; 38:1.

Harber P, Fedoruk M. Work placement and work fitness: Implications of the Americans with Disabilities Act for pulmonary medicine. Chest 1994; 105:1564-1571.

Harber P, Hsu P, Fedoruk M. Personal risk assessment under the Americans with Disability Act: A decision analysis approach. J Occup Med 1993; 35:1000-1010.

Harber P, Fedoruk M, Goldberg R. Accommodation of respiratory handicaps. Seminars in Respiratory Medicine 1993, 14:240-249.

Fedoruk M, Lee L. Positive pre-employment urine drug screen caused by foreign manufactured vitamin formulation. West J Med 1991; 155:663.

Sargent E, Adolph J, Clemmons M, Kird G, Pena B, Fedoruk M. The evaluation of flu-like symptoms in workers handling xanthan gum powder. J Occup Med 1990; 32:625-630.

Guidotti T, Alexander R, Fedoruk M. Epidemiologic features that may distinguish between illness due to chemical exposure and of psychogenic origin in building-associated outbreaks. J Occup Med 1987; 29:148-150.

Book Chapters

Fedoruk M, Hong S. Gastrointestinal toxicology. In: Information Resources in Toxicology, 4th Edition. Wexler P (ed), Elsevier, in press.

Fedoruk J, Miller JD. Health effects of bioaerosols. In: Field Guide for the Determination of Biological Contaminants in Environmental Samples, 2nd edition. Hung LL, Miller JD, Dillon HK (eds), American Industrial Hygiene Association, Fairfax, VA, 2005.

Fedoruk M, Guidotti T. Gastrointestinal system. In: Encyclopedia of Toxicology 2nd Edition. Wexler P, Anderson B, de Peyster A, Gad S, Hakkinen PK, Kamrin M, Locey B, Mehendale H, Pope C, Shugart L (eds), Elsevier Sciences, 2005.

Fedoruk M, Guidotti T. Skeletal system. In: Encyclopedia of toxicology 2nd Edition. Wexler P, Anderson B, de Peyster A, Gad S, Hakkinen PK, Kamrin M, Locey B, Mehendale H, Pope C, Shugart L (eds), Elsevier Sciences, 2005.

Fedoruk M, Uhlman S, Baker D, Yang H. Analysis of microbial contamination of a ventilation system detected by measurement of microbial volatile organic compounds. pp. 386-395. In: Bioaerosols, Fungi, and Mycotoxins: Health Effects, Assessment, Prevention and Control. Johanning E (ed), Boyd Printing Company, Inc., New York, NY, 1999.

Fedoruk M. Gastrointestinal system. pp. 44-50. In: Encyclopedia of Toxicology, Volume 2. Wexler P (ed),

Academic Press, 1998.

Fedoruk M. Hazardous response personnel. In: Encyclopedia of Occupational Health and Safety, 4th Edition, Vol. 3. International Labour Office, World Health Organization, Geneva Switzerland, 95.19-95.21, 1997.

Hughson WG, Fedoruk MJ. Occupational and environmental causes of lung cancer and esophageal cancer. pp. 66-89. In: Comprehensive Textbook of Thoracic Oncology. Green M, Perry M, Martini N, Arriagada R (eds), Williams and Wilkins, New York, NY, 1996.

Harber P, Fedoruk M. Job demand, preplacement evaluation, and accommodation. pp. 857-867. In: Occupational and Environmental Respiratory Disease. Harber P, Schenker M, Balmes J (eds), Mosby, 1996.

Guidotti, Fedoruk MJ. The private alternative in providing occupational health care: Options, objectives, and object lessons. pp. 94-103. In: Occupational Health Services. In Canada through the Year 2000 (Proc. Conference Organized by the Canadian Occupational Health Association, Calgary, November 1986). Gibbs GW, Markham JW (eds), University Press of Canada, North York, Ontario, 1988.

Medical and Scientific Presentations

Fedoruk M. The toxicology of mold—Review of the literature. Presented at UCLA/UCI MOLD: State of the Medical and Environmental Science conference, February 27, 2008.

Fedoruk M. Health effects of bioaerosols. Presented at annual AIHce (American Industrial Hygiene Association) Professional Development Conference, Philadelphia, PA, May 5, 2007.

Fedoruk M. Building associated health problems 2007: What are the issues? Presented at Grand Rounds, Center for Occupational and Environmental Health, UCI, Irvine, CA, August 22, 2006.

Fedoruk M. Building-related health problems: The 2006 perspective. Presented at UCLA Occupational-Environmental Preventive Medicine Conference Los Angeles, CA, May 30, 2006.

Fedoruk M. Exposure assessment. Presented at the California Industrial Hygiene Council, 14th Annual Conference, Redondo Beach, CA, December 2, 2004.

Fedoruk M. Industrial toxicology. Presented at Internal Medicine Rounds, UCI Medical Center, Orange, CA, December 2004 and Veterans Administration Hospital, Long Beach, CA, December 2004.

Fedoruk M. National strategies for health care providers: Pesticide initiative. Presented at American Occupational Health Conference, Kansas City, MO, May 4, 2004.

Fedoruk M. Fungal-related health issues for the integrated waste industry. Integrated Waste Services Association (IWSA) Health and Safety Conference, Charleston, SC, April 20 2004.

Fedoruk M. Molds and mycotoxic effects. Presented at Pulmonary Medical Round, Newport Beach CA, February 2004.

Fedoruk M. Industrial hygiene and exposure assessment issues. Presented at Internal Medicine rounds, UCI Medical Center, Orange, CA, December 2003 and Veterans Administration Hospital, Long Beach, CA, December 2003.

Fedoruk M. Mold remediation: medical toxicological considerations. Presented at the American Conference of Industrial Hygienist (ACGIH) symposium entitled, "Mold Remediation: The National Quest for Uniformity Symposium," Orlando, FL, November, 2003.

Fedoruk M. Indoor health effects associated with residential mold exposure: Science versus public perception. Presented at the UCI Medical Center, Department of Medicine Grand Rounds, Orange, CA, October 29, 2002.

Fedoruk M. Home assessments: How are they done? Presented at the 60th Annual Meeting of the American College of Allergy, Asthma and Immunology, San Antonio, TX, November 16, 2002.

Fedoruk M. Fungi: Measurement and medicine. Presented at American Occupational Health Conference, American College of Occupational and Environmental Medicine, April 2001.

Fedoruk M. Fungi and mycotoxic effects. Presented at Allergy Medical Round, UCI Medical Center, Orange CA, March 2001.

Fedoruk M. Fungi: Exposure and health effects update. Presented at the 10th Annual Conference of the California Industrial Hygiene Council, Redondo Beach, CA, December 4, 2000.

Fedoruk M. Industrial hygiene and exposure assessment issues for internal medicine residents. Presented at UCI Medical Center, December 2000, and Veterans Administration Hospital, Long Beach, CA, December 2000.

Fedoruk M. Acute exposure and health issues related to Hazmat incidents. Presented at the ACOEM State of the Art Conference (SOTAC), Nashville, TN, October 28, 2000.

Fedoruk M. Industrial hygiene and environmental exposure assessment issues. Presented for the ACOEM Basic Curriculum in Occupational Medicine, Segment 3 at the State of the Art Conference (SOTAC), Nashville, TN, October 25-26, 2000.

Fedoruk M. Industrial hygiene and environmental exposure assessment issues. Presented for the ACOEM Basic Curriculum in Occupational Medicine, Segment 3, San Diego, CA, June 8-9, 2000.

Fedoruk M. Industrial toxicology. Presented to Residents in Internal Medicine at weekly rounds at UC Irvine Medical Center and Long Beach Veterans Administration Hospital, CA, January 1999.

Fedoruk M. Tuberculosis in workplace. Presented at UMA Pacific Section, American Industrial Hygiene Association, San Diego, CA, January 27, 1997.

Fedoruk M. Bioaerosol update. Presented at the University of California, Irvine, Center for Occupational and Environmental Health, January 1997.

Fedoruk M. Occupational lead toxicity: ethical aspects. Presented at the 39th Western Occupational Health Conference, Monterey CA, April 15, 1995.

Fedoruk M. Medical surveillance for reproductive hazards. Presented at American Occupational Health Conference, American College of Occupational and Environmental Medicine, Chicago, IL, May 7, 1994.

Fedoruk M. Biological monitoring methods for industrial chemical exposure. Presented at Orange County Section of the Industrial Hygiene Association Annual Conference, Norwalk CA, October 12, 1993.

Fedoruk M. Sick building syndrome: An update. 36th Annual Western Occupational Health Conference, San Diego, IL, October 25, 1992.

Fedoruk M. Environmental assessment. 58th Annual Scientific Assembly, American College of Chest Physicians, Chicago, IL, October 25, 1992.

Fedoruk M. Hazardous waste workers. American Occupational Health Conference, American College of Occupational and Environmental Medicine, Washington, DC, May 7, 1992.

Fedoruk M. Building-related illnesses. Presented at Occupational Medicine Rounds, University of California, Irvine, November, 1991.

Fedoruk M. The fire department medical program. Presented at the Symposium on the Occupational Health and Hazards of the Fire Service, International Association of Firefighters, 20th John P. Redmond Foundation Conference, Las Vegas, NV, September 20, 1991.

Fedoruk M. Environmental medicine: Consulting. Presented at the American Occupational Health Conference at the American College of Occupational Medicine, San Francisco, CA, May 3, 1991.

Fedoruk M. Sick building syndrome: Health effects. Presented at University of California, San Diego, California, School of Medicine, Pulmonary Rounds, California, March 17, 1991.

Fedoruk M. Sick building syndrome perceived risks and case studies. Presented at UCLA Occupational Medicine Rounds, Los Angeles, CA, February 27, 1991.

Fedoruk M, Levine S. Hazardous waste workers. Presented at the American College of Occupational Medicine Annual State of the Art Conference on Fitness for Work, Pittsburgh, PA, October 8, 1990.

Fedoruk M. Occupational/environmental concerns associated with use of Ribaviron and Pentamidine. Presented at the American Lung Association of Orange County meeting entitled Issues In Neonatal And Pediatric Pulmonary Care, Orange, CA, May 5, 1990.

Fedoruk M. Man-made mineral fibers. Presented at the 21st Annual Technical Symposium, American Industrial Hygiene Association-Southern California Section, Long Beach, CA, November 16, 1989.

Fedoruk M. Indoor air pollution. Presented at Occupational Medicine Symposium, AMI Tarzana Regional Medical Center, Tarzana, CA, June 6, 1989.

Fedoruk M. Occupational medicine in the hazardous waste industry: Regulatory aspects. Presented at American Occupational Health Conference, Boston, MA, May 1989.

Fedoruk M. Toxicologic risk assessment, a mechanism for establishing environmental standards. Presented at 32nd Annual Western Occupational Health Conference, Irvine, CA, October 1988.

Fedoruk M, Thorne D, and Yang M. Toxicology and health effects of asbestos fibre exposure. Proc. Third Annual Hazardous Material Management Conference—West, Long Beach, CA, December 1987.

Yang M, Thorne D, Fedoruk M, and Turl E. Assessment of exposure and public health risks during the excavation of a refinery waste contaminated site. Presented at the Air Pollution Control Association meeting, New York, NY, June 1987.

Fedoruk M. Asbestos—Perceived risks and interactive effects. Presented at the 6thUniversity of California, Irvine, Symposium on Environmental Psychology, May 14-15, 1987.

Fedoruk M. Walk-through assessment. Rohm and Haas, Corporate Occupational Health Conference, Philadelphia, PA, April, 1987.

Fedoruk M. Medical surveillance for hazardous waste workers. Presented at Occupational Medicine, Grand Rounds, School of Medicine, University of California, Irvine, March, 1987.

Fedoruk M. Lead and mercury—hazardous exposures. Occupational Health and Preventive Medicine Seminar, Naval Medical Clinic, San Diego, CA, April 6, 1986.

Fedoruk M. Health hazards and toxicology. Presented at 9th Annual Pacific Southwest Safety and Health

Workshop/Seminar, San Diego, CA, April 16, 1986.

Fedoruk M. Worker "Right to Know Laws" health hazard training and industrial hygiene practice. Presented at the Occupational Medicine and Health Symposium, American Lung Association, San Diego, CA, March, 1986.

Fedoruk M. Heavy metal toxicology. Presented at the course: Industrial Toxicology Workers Right to Know, University of California, Irvine, CA, August 15, 1985.

Fedoruk M. Chemical exposures in the work place. Presented at St. Joseph's Medical Center, Burbank, CA, August 6, 1985.

Fedoruk M. Reproductive issues in the hospital setting. Presented at the Annual Conference Meeting of the Association of Hospital Employee Health Professional, San Diego, CA, October 17, 1984.

Fedoruk M. Asbestos diseases: An epidemic? Mercy Hospital and Medical Center, Medical Grand Rounds, San Diego, CA, August 9, 1983.