

## Michael A. Kelsh, Ph.D., M.P.H., M.A.

SENIOR CONSULTANT

### CONTACT INFORMATION

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EpidStrategies, A BlueRidge Life Sciences Company  
190 T C Jester Blvd, Suite 420  
Houston, TX 77007  
Phone (541) 327-9925  
Mobile (805) 625-4529  
[mkelsh@epidstrategies.com](mailto:mkelsh@epidstrategies.com)

### PROFESSIONAL PROFILE

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Dr. Michael Kelsh formerly directed a major pharmaceutical company's efforts on the use of observational research applied to novel large- and small-molecule therapeutics. In this role, he oversaw epidemiologic research that addressed the development, efficacy, and safety of oncology therapeutics. He provided leadership and mentoring to professional staff and collaborated with numerous cross-functional clinical, developmental, safety, and regulatory teams. Dr. Kelsh was a member of the observational research department's senior leadership team and chaired its "Observational Research Review Group," a scientific committee that reviewed and approved all the company's observational research protocols. In this work and previous consulting experience, he has participated in various meetings with the United States Food and Drug Administration (FDA) and the European Medicines Agency (EMA).

With specialized expertise in epidemiology and biostatistics in the areas of pharmaceutical, occupational, and environmental health research, Dr. Kelsh has extensive experience designing, implementing, analyzing, and interpreting epidemiologic studies. His research has included studies of cancer, cardiovascular disease, respiratory and neurological disease, injury/musculoskeletal conditions, and numerous occupational and environmental exposures. These studies are published in more than 80 peer-reviewed scientific articles.

In the consulting arena, Dr. Kelsh has provided technical and epidemiologic guidance on pharmaceutical and occupational/ environmental health projects, served as an expert witness in occupational and environmental health litigation, and designed and conducted a variety of health studies.

Dr. Kelsh has served as an Adjunct Professor at the UCSF Department of Epidemiology and Biostatistics and the UCLA School of Public Health. He also has international public health experience gained through consulting, research projects, and volunteer work in Latin America. He has served on scientific advisory panels covering a variety of environmental health issues for the California Department of Health Services, the New York Department of Environmental Health, and the Oregon Department of Human Services.

## EDUCATION AND DEGREES EARNED

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- 1993 Ph.D., Epidemiology, University of California, Los Angeles
- 1986 M.A., Latin American Studies, University of California, Los Angeles
- 1984 M.P.H., Epidemiology, University of California, Los Angeles
- 1981 B.A., Cellular Biology/Spanish, University of California, Santa Barbara

## PROFESSIONAL HONORS/AWARDS

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- Former employer, Nominee for Leader of the Year (2022)
- Fellow, InterAmerica Foundation
- Traineeship, National Institutes of Health, Occupational/Environmental Epidemiology, UCLA

## PROFESSIONAL ASSOCIATIONS

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- International Society for Pharmacoepidemiology

## SELECTED PROFESSIONAL EXPERIENCE

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Managed a corporate program of observational research aimed at evaluating the development, efficacy, and safety of biotechnology and pharmaceutical products. Collaborated with a wide range of medical and biological scientists in coordinating epidemiologic research applicable to development and safety evaluation of oncology therapeutics.

Served as Course Director for a UCSF graduate-level seminar series on epidemiologic study design and analysis, drug safety evaluation, regulatory perspectives, health economics, and ethics in pharmacoepidemiologic research.

For the UCLA School of Public Health, taught graduate-level seminars to students in epidemiology, environmental sciences, statistics, nursing, and other public health specialties. Seminars focused on exposure assessment strategies for epidemiologic research and epidemiologic analysis methods, with an emphasis on occupational, environmental, and injury epidemiology.

Supervised staff in providing occupational and environmental health consulting services and conducting occupational health research. Published multiple analytical epidemiologic studies and methodological papers in the course of this work.

Project manager and research epidemiologist for health studies of electric utility workers. Coordinated all aspects of the cancer epidemiology and injury studies and developed an injury surveillance system designed to monitor the health and safety of the workers.

Provided research assistance for several projects, including a study of cultural factors and epilepsy among Latinos in Los Angeles. Performed epidemiologic analysis and SAS programming for a community health survey.

For a non-profit organization, directed supervisory staff and volunteers in public health programs in Latin America. Initiatives included sanitation improvements and health education in Mexico. As Assistant Project Director, managed staff and volunteers in a rabies vaccination program in Ecuador, which included developing a data monitoring system that evaluated vaccination coverage and targeted locations that required a vaccination campaign.

## MANUSCRIPTS

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- Schenfeld J, Gong T, Henry D, **Kelsh M**, Gawade P, Peng Y, Bradbury BD, Li S. 2022. Patterns of primary prophylactic granulocyte colony-stimulating factor use in older Medicare patients with cancer receiving myelosuppressive chemotherapy. *Support Care Cancer* 30(7):6327–6338; doi: 10.1007/s00520-022-06967-x.
- Danese MD, Schenfeld J, Shaw J, Gawade P, Balasubramanian A, **Kelsh M**, et al. 2022. Association between granulocyte colony-stimulating factor (G-CSF) use and myelodysplastic syndrome (MDS) or acute myeloid leukemia (AML) among elderly patients with breast, lung, or prostate cancer. *G Adv Ther* 39(6):2778–2795; doi:10.1007/s12325-022-02141-1.
- McGrath LJ, Nielson C, Saul B, Breskin A, Yu Y, Nicolaisen SK, ... **Kelsh M**, et al. 2021. Lessons learned using real-world data to emulate randomized trials: A case study of treatment effectiveness for newly diagnosed immune thrombocytopenia. *Clin Pharmacol Ther* 110(6):1570–1578; doi: 10.1002/cpt.2399.
- Snell Taylor SJ, Nielson CM, Breskin A, Saul B, Yu Y, Alam N, ... **Kelsh M**, et al. 2021. Effectiveness and safety of romiplostim among patients with newly diagnosed, persistent and chronic immune thrombocytopenia in European clinical practice. *Adv Ther* 38(5):2673–2688.
- Ravandi F, Pierce S, Garcia-Manero G, Kadia T, Jabbour E, Borthakur G, ... **Kelsh M**, et al. 2020. Salvage therapy outcomes in a historical cohort of patients with relapsed or refractory acute myeloid leukemia. *Clin Lymphoma Myeloma Leuk* 20(11):e871–e882.
- Locatelli F, Whitlock JA, Peters C, Chen-Santel C, Chia V, Dennis RM, ... **Kelsh MA**, et al. 2020. Blinatumomab versus historical standard therapy in pediatric patients with relapsed/refractory Ph-negative B-cell precursor acute lymphoblastic leukemia. *Leukemia* 34(9):2473–2478.
- Hawkins A, Murphy A, McNamara M, Gawade PL, Belani R, **Kelsh MA**. 2020. A survey of oncologists' perceptions and opinions regarding the use of granulocyte colony-stimulating factors. *J Cancer Edu* 35(1):178–186.
- Gawade PL, Li S, Henry D, Smith N, Belani R, **Kelsh MA**, et al. 2020. Patterns of granulocyte colony-stimulating factor prophylaxis in patients with cancer receiving myelosuppressive chemotherapy. *Support Care Cancer* 28(9):4413–4424.
- Li S, Peng Y, Liu J, Li S, Raskin L, **Kelsh MA**, et al. 2020. Variations in hospitalization and emergency department/observation stays using the oncology care model methodology in Medicare data. *Curr Med Res Opin* 36(9):1519–1527.
- Li S, Liu J, Gong T, Guo H, Gawade PL, **Kelsh MA**, et al. 2020. Duration of short-acting granulocyte colony-stimulating factor for primary prophylaxis and risk of neutropenia-related hospitalization in older patients with cancer. *J Geriatr Oncol* 11(8):1309–1315.
- Bylsma LC, Gillezeau C, Garawin TA, **Kelsh MA**, Fryzek JP, Sangaré L, et al. 2020. Prevalence of RAS and BRAF mutations in metastatic colorectal cancer patients by tumor sidedness: A systematic review and meta-analysis. *Cancer Med* 9(3):1044–1057.
- Danese MD, Katz A, Cetin K, Chia V, Gleeson ML, **Kelsh M**, et al. 2019. Treatment patterns, survival, and hospitalization in adult patients with acute lymphoblastic leukemia: an observational cohort study using SEER Medicare data. *Leuk Lymphoma* 60(8):2015–2024.
- Gökbuget N, **Kelsh M**, Chia V, Advani A, Bassan R, Dombret H, et al. 2016. Blinatumomab vs historical standard therapy of adult relapsed/refractory acute lymphoblastic leukemia. *Blood Cancer J* 6(9):e473.
- Gökbuget N, Dombret H, Ribera JM, Fielding AK, Advani A, Bassan R, ... **Kelsh M**, et al. 2016. International reference analysis of outcomes in adults with B-precursor Ph-negative relapsed/refractory acute lymphoblastic leukemia. *Haematologica* 101(12):1524–1533; doi: 10.3324/haematol.2016.144311.

- Erichsen R, **Kelsh MA**, Oliner KS, Nielsen KB, Frøslev T, Lænkholm AV, et al. 2016. Prognostic impact of tumor MET expression among patients with stage IV gastric cancer: A Danish cohort study. *Ann Epidemiol* 26(7):500–503.
- Hummel HD, Topp MS, Chang ET, Chia VM, **Kelsh MA**, Doemland ML, et al. 2016. Adverse events in adults with relapsed or refractory acute lymphoblastic leukemia (ALL): A literature review of recent clinical trials. *J Leuk* 4(1):100028; doi: 10.4172/2329-6917.1000208.
- Lowe KA, Danese MD, Gleeson ML, Langeberg WJ, **Kelsh MA**. 2016. Racial and ethnic variability in the prevalence and incidence of comorbidities associated with gastric cancer in the United States. *J Gastrointest Cancer* 47(2):168–181; doi: 10.1007/s12029-016-9809-5.
- Garabrant DH, Alexander DD, Miller PE, Fryzek JP, Boffetta P, Teta MJ, ... **Kelsh MA**, et al. 2016. Mesothelioma among motor vehicle mechanics: An updated review and meta-analysis. *Ann Occup Hyg* 60(1):8–26.
- Katz AJ, Chia VM, Schoonen WM, **Kelsh MA**. 2015. Acute lymphoblastic leukemia: An assessment of international incidence, survival, and disease burden. *Cancer Causes Control* 26(11):1627–1642.
- Lowe KA, Chia VM, Taylor A, O'Malley C, **Kelsh M**, Mohamed M, et al. 2013. An international assessment of ovarian cancer incidence and mortality. *Gynecol Oncol* 130(1):107–114.
- Kuehn S, **Kelsh MA**, Kuster N, Sheppard AR, Shum M. 2013. Analysis of mobile phone design features affecting radiofrequency power absorbed in a human head phantom. *Bioelectromagnetics* 34(6):479–488; doi: 10.1002/bem.21784.
- Chia VM, O'Malley CD, Danese MD, Lindquist KJ, Gleeson ML, **Kelsh MA**, et al. 2013. Prevalence and incidence of comorbidities in elderly women with ovarian cancer. *Gynecol Oncol* 129(2):346–352; doi: 10.1016/j.ygyno.2013.02.014.
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- Gatto N, **Kelsh MA**, HaMai D, Suh M, Proctor DM. 2010. Occupational exposure to hexavalent chromium and cancers of the gastrointestinal tract: A meta-analysis. *Cancer Epidemiol* 34(4):388–399.
- Fordyce TA, Morimoto L, Coalson J, **Kelsh MA**, Mezei G. 2010. Neck injuries among electric utility workers, 1995–2007. *J Occup Environ Med* 52(4):441–449.
- Kelsh MA**, Alexander DD, Mink PJ, Mandel JH. 2010. Occupational trichloroethylene exposure and kidney cancer: A meta-analysis. *Epidemiology* 21(1):95–102.
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- Alexander DD, **Kelsh MA**, Mink PJ, Mandel JH, Basu R, Weingart W. 2007. A meta-analysis of occupational trichloroethylene exposure and liver cancer. *Int Arch Occup Environ Health* 81(2):127–143.
- Kelsh MA**, Craven VA, Teta MJ, Mowat FS, Goodman, M. 2007. Mesothelioma in vehicle mechanics: Is the risk different for Australians? *Occup Med* 57(8):581–589.
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- Mezei G, Cher D, **Kelsh M**, Edinboro C, Chapman P, Kavet R. 2005. Occupational magnetic field exposure, cardiovascular disease mortality, and potential confounding by smoking. *Ann Epidemiol* 15(8):622–629.
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- Kelsh MA**, Lu ET, Ramachandran K, Jesser C, Fordyce T, Yager JW. 2004. Occupational injury surveillance among electric utility employees. *J Occup Environ Med* 46(9):974–984.
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- Kelsh MA**, Bracken TD, Sahl JD, Shum M, Ebi KL. 2003. Occupational magnetic field exposures of garment workers: Results of personal and survey measurements. *Bioelectromagnetics* 24(5):316–326.
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- Cher DJ, Mrad RJ, **Kelsh MA**. 1999. Cellular telephone use and fatal traffic collisions: A commentary. *Accid Anal Prev* 31(5):599.
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- Morgenstern H, **Kelsh MA**, Kraus JF, Margolis W. 1991. A cross-sectional study of hand/wrist symptoms in female grocery checkers. *Amer J Ind Med* 20(2):209–218.

## BOOK CHAPTERS

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- Kelsh MA**, Alexander DD. 2007. Occupational and environmental epidemiology. In: Boslaugh S (ed.), *Encyclopedia of Epidemiology*. Sage Publications.
- Morimoto L, **Kelsh MA**. 2007. Biomarkers. In: Boslaugh S (ed.), *Encyclopedia of Epidemiology*. Sage Publications.
- Mowat F, Shum M, **Kelsh MA**. 2007. Exposure assessment in epidemiology. In: Boslaugh S (ed.), *Encyclopedia of Epidemiology*. Sage Publications.

## PRESENTATIONS

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- Broome C, Hausrath D, Jaworski J, Fernandez S, Edwards T, Catlett J, Shah R,..., **Kelsh M**, et al. Survival outcomes of patients with secondary hemophagocytic lymphohistiocytosis at two academic medical centers in the United States. Poster 905, *Blood* 146(Sup 1):6243; doi: 10.1182/blood-2025-6243. 67<sup>th</sup> American Society of Hematology (ASH) Annual Meeting and Exposition, Orlando, FL, November 2025.
- Johnson W, Covert K, Mitchell M, **Kelsh M**, Mangal B, Bose M, Dong K, Dao K-H. Real-world outcomes with available therapies in secondary hemophagocytic lymphohistiocytosis (sHLH): A natural history study with an embedded historical control arm. Poster 19, Histiocyte Society 41<sup>st</sup> Annual Meeting, Seattle, WA, September 2025.

Shaw J, Hsu H, Tu H, Chia V, Aggarwal S, Carrigan G, **Kelsh MA**. Immortal time bias impacts time-to-time event outcomes in cohort with genomic testing. Abstract 6F-03, International Society for Pharmacoepidemiology (ISPE) 41<sup>st</sup> Annual Meeting, Washington, DC, August 22-26, 2025.

**Kelsh M**, Bylsma LC, Jiang X, Movva N, Sacks NC. To be an orphan disease or not to be: An evaluation of prevalence estimates for cancers near the orphan status threshold and implications for orphan drug planning. International Society for Pharmacoepidemiology (ISPE) 40th Annual Meeting, Berlin, Germany, August 24-28, 2024.

**Kelsh MA**. Evaluating biosimilars in observational data: Some methodological considerations. Presented at International Conference on Pharmacoepidemiology and Therapeutic Risk Management (ICPE), Dublin, Ireland, August 25–28, 2016.

**Kelsh MA**, Chia VM. Historical comparator studies: Strengths, limitations, and analytical considerations in using historical pooled clinical data for evaluating efficacy and safety of new therapies. Presented at International Conference on Pharmacoepidemiology and Therapeutic Risk Management (ICPE) Boston, MA, August 25, 2015.

Erichsen R, **Kelsh MA**, Oliner KS, Nielsen KB, Frøslev T, Lænkholm AV, et al. Prognostic impact of tumor MET expression among patients with stage IV gastric cancer: A Danish cohort study. Presented at International Conference on Pharmacoepidemiology and Therapeutic Risk Management (ICPE), Taipei, Taiwan, October 28–30, 2014.

Chia VM, Lowe KA, O'Malley CD, **Kelsh MA**, Taylor A, Mowat F, et al. An updated assessment of global ovarian cancer trends. Presented at International Gynecological Cancer Society Annual Meetings, Vancouver, Canada, October 13–16, 2012.

Chia VM, O'Malley CD, Danese M, Lindquist K, Gleesen M, **Kelsh MA**, et al. Comorbid conditions in elderly women with and without ovarian cancer. Presented at International Gynecological Cancer Society Annual Meetings, Vancouver, Canada, October 13–16, 2012.

Mitchell M, Taylor A, Lowe K, Langeberg W, Alexander D, **Kelsh M**, et al. Breast cancer bone metastasis prevalence and survival outcomes: A quantitative review of the literature. Presented at the 34th Annual San Antonio Breast Cancer Symposium, San Antonio, TX, December 6–10, 2011.

Mitchell M, Taylor A, Lowe K, Langeberg W, Alexander D, **Kelsh M**, et al. Prevalence of bone metastasis after breast, lung, and prostate cancers: A systematic and quantitative review of the literature. Presented at the 27th Annual Meetings of International Conference on Pharmacoepidemiology and Therapeutic Risk Management, Chicago, IL, August 14–17, 2011.

Mowat FS, Lau EC, **Kelsh MA**, Legg JC, Engel-Nitz NM, Watson HN, Collins HL, et al. Assessing the comparability of EMR information to patient registry and health claims data. Presented at the 27th Annual Meetings of International Conference on Pharmacoepidemiology and Therapeutic Risk Management, Chicago, IL, August 14–17, 2011.

Lau EC, Steffey D, Legg JC, Watson HN, Mowat FS, **Kelsh MA**. The problem of missing data: Using imputation methods to facilitate oncology outcomes research. Presented at the 27th Annual Meetings of International Conference on Pharmacoepidemiology and Therapeutic Risk Management, Chicago, IL, August 14–17, 2011.

Taylor A, Kanas G, Primrose JN, Langeberg WJ, Alexander DD, **Kelsh MA**, et al. Survival after surgical resection of hepatic metastases from colorectal cancer: An updated review and meta-analysis. Presented at 13th World Congress on Gastrointestinal Cancer, Barcelona Spain, June 22–25, 2011.

**Kelsh MA**, Kucera G, Erdreich L. Meta-analysis of acoustic neuroma and mobile phone use. Presented at BEMS 33rd Annual Meetings, Halifax, Canada, June 12–17, 2011.

**Kelsh MA**, Kucera G, Erdreich L. Updated meta-analysis of mobile phone use and brain tumors. Presented at BioEM, San Diego, CA, June 8–12, 2008.

**Kelsh MA.** Optimal dosimetry for mobile phone studies: Factors influencing exposure and implications for epidemiologic research. Dosimetry meets Epidemiology Workshop, Swiss Science Foundation, Zurich, Switzerland, January 11, 2008 (*invited speaker*).

**Kelsh MA,** Weingart M, Mandel JH, Mink PJ, Alexander D, Basu R, et al. Occupational TCE exposure and kidney cancer and non-Hodgkin's lymphoma: A meta-analysis. Presented at the 2nd North American Congress of Epidemiology, Seattle, WA, June 21–24, 2006.

Mink P, Alexander D, BarraJ L, **Kelsh M,** Tsuji J. Meta-analysis of low level arsenic exposure and bladder cancer. A poster presentation at the 2nd North American Congress of Epidemiology, Seattle, WA, June 21–24, 2006.

Mink PJ, Alexander DD, BarraJ LM, **Kelsh MA,** Tsuji JS. Meta-analysis of low level arsenic exposure and bladder cancer: Implications for risk assessment in the United States. A poster presentation at the 45th Annual Meeting of the Society of Toxicology, San Diego, CA, March 5–9, 2006.

Weingart M, **Kelsh MA,** Shum M, Sheppard AR, Kuster N. Statistical analysis of the influences of technology, antenna, mobile phone shape and position on SAR measurements from FCC compliance testing data. Presented at BioEM, University College, Dublin, Ireland, June 19–24, 2005.

Shum M, **Kelsh MA,** Zhao K, Erdreich LS. A comparison of recall of mobile phone use with billing record data. Presented at BioEM, University College, Dublin, Ireland, June 19–24, 2005.

**Kelsh MA,** Sulser C, Shum M, McNeely M, Kuster N, Froehlich J, et al. Evaluation of mobile phone handset exposures using software modified phones and field phantom systems. Presented at BioEM, University College, Dublin, Ireland, June 19–24, 2005.

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**Kelsh MA,** Yager JA. Workplace injuries and illness trends in the electric energy industry: Initial results from a comprehensive occupational health and safety surveillance system. Presented at the National Occupational Injury Research Symposium, Pittsburg, PA, October 28–30, 2003.

**Kelsh MA.** What can we learn about TCE from epidemiologic studies? Presented at the Toxicology Forum, Aspen, CO, July 13–17, 2003.

Mezei G, Cher D, **Kelsh M**, Chapman C, Kavet R. Cardiovascular deaths and occupational exposure to magnetic fields in the national mortality followback survey. Presented at the Bioelectromagnetics Society Annual Meetings, Wailea, Maui, HI, June 22–26, 2003.

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**Kelsh MA**. Evidence linking environmental agents to breast cancer: A review of research on electric and magnetic fields and light at night exposures. Presented at the International Summit on Breast Cancer and the Environment: Research Needs, Charminade, Santa Cruz, CA, May 22–25, 2002.

Exuzides KA, Lau E, **Kelsh MA**, Ebi KL. Association of weather variables with hospital admissions for asthma in Northern and Southern California regions, 1983–1998. Presented at the 13th Conference of the International Society for Environmental Epidemiology, Garmisch-Partenkirchen, Germany, Sept 2–5, 2001.

**Kelsh MA**, Bracken TD, Sahl JD, Shum M, Ebi K. Magnetic field exposures of garment workers: Results of personal and survey measurements and a pilot survey. Presented at the Bioelectromagnetics Society Annual Meetings, St. Paul, MN, June 10–14, 2001.

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Bracken TD, **Kelsh MA**, Sahl JD, Rankin R. Comparing exposures among garment workers to electric utility workers for designing a study of occupational 60 Hz magnetic field exposures and female breast cancer. Presented at the Bioelectromagnetics Society Annual Meetings, Munich, Germany, June 16, 2000.

**Kelsh MA**, Zhao K, Yager J. Developing a surveillance database for epidemiologic analysis of occupational injuries: Experience with the electric utility industry. Presented at the American Industrial Hygiene Conference & Exposition, Orlando, FL, May 20–25, 2000.

**Kelsh MA**, Chapman P, Bracken TD. Assessing exposure comparability for a study of occupational 60 Hz electromagnetic fields exposure and female breast cancer. Presented at the American Industrial Hygiene Conference & Exposition, Orlando, FL, May 20–25, 2000.

**Kelsh MA**, Deubner D, Maier L, Kent M, Smith B, Chapman P, et al. Medical monitoring survey results at a beryllium mine and extraction facility. Presented at the Society of Toxicology Annual Meeting, Philadelphia, PA, March 19–24, 2000.

Paustenbach D, Deubner D, **Kelsh MA**, Lowney Y. Consideration of alternate exposure pathways in the possible relation to prevalence beryllium disease. Presented at the Society of Toxicology Annual Meeting, Philadelphia, PA, March 19–24, 2000.

Yager J, **Kelsh MA**, Zhao K, Mrad R. Development of an occupational illness and injury surveillance database for the electric utility sector. Presented at ACGIH Symposium: Occupational Exposure Databases and Their Application for the Next Millennium, London, England, November 1–3, 1999.

**Kelsh MA**, Sahl JD, Atherton M, Shih J. History of previous injury as a risk factor for future severe injury: An analysis among utility workers. Presented at American College of Epidemiology Annual Meeting, Bethesda, MD, October 3–4, 1999.

Greenland S, Sheppard AR, **Kelsh MA**, Kaune WT. A pooled analysis of magnetic fields, wire codes, and childhood leukemia. Presented at Society of Epidemiologic Research 32nd Annual Meeting, Baltimore, MD, June 10–12, 1999.

**Kelsh MA**. Radiofrequency exposure assessment for occupational studies: Overview and future directions. Invited speaker at the 5th Annual COST244bis Zagreb, Croatia, Workshop, November 21–22, 1998.

**Kelsh MA**. Injury and illness surveillance database pilot study. Invited speaker at EPRI Health and Safety Advisory Meetings, Chicago, IL, October 1, 1998.

Sheppard AR, **Kelsh MA**, Greenland S, Kaune WT. Pooled analysis of childhood leukemia and residential power frequency magnetic field exposures: Dose response and influence studies. Presented at the 1998 Annual Review of Research on Biological Effects of Electric and Magnetic Fields from the Generation, Delivery and Use of Electricity, Tucson, AZ, September 14–17, 1998.

Sheppard AR, **Kelsh MA**, Kaune WT, Greenland S. Estimated attributable fraction for childhood leukemia in association with residential power frequency magnetic field exposures. Presented at Bioelectromagnetics Society Annual Meeting, St. Petersburg, FL, June 1998.

**Kelsh MA**, Kheifets L, Smith RW. The impact of work location on occupational summaries of magnetic field exposures among electric utility workers. Presented at the 1997 Annual Review of Research on Biological Effects of Electric and Magnetic Fields from the Generation, Delivery and Use of Electricity, San Diego, CA, November 9–13, 1997.

**Kelsh MA**. Health and safety research among electric utilities. Invited speaker at EPRI Environmental Group Advisory Meetings, October 6–9, 1997.

**Kelsh MA**. Epidemiology methods and case studies. Presented at UCLA—Sociedad Mexicana del Mexicana del Trabajo Collaborative Conference on Occupational Medicine, September 12–14, 1997.

Bowman JD, **Kelsh MA**, Kaune WT. A manual of methods for measuring occupational electric and magnetic field exposures. Presented at the 1996 Annual Review of Research on Biological Effects of Electric and Magnetic Fields from the Generation, Delivery and Use of Electricity, San Antonio, TX, November 1996.

**Kelsh MA**, Sheppard AZ, Florig K, Atherton MA, Bernstein BB. Estimating potential health costs for cost–benefits analysis of policy options for school exposures to electric and magnetic fields. Presented at the 1996 Annual Review of Research on Biological Effects of Electric and Magnetic Fields from the Generation, Delivery and Use of Electricity, San Antonio, TX, November 1996.

**Kelsh MA**, Kheifets LI, Smith RW, Haines KD, Senior R, Bracken TD, et al. Comparative analyses of occupational magnetic field exposure data among electric utility workers. Presented at Bioelectromagnetics Society Annual Meeting, Victoria, British Columbia, June 1996.

**Kelsh MA**, Sheppard AR, Kaune WT, Atherton MJ. Pooling measures of magnetic field exposures across childhood leukemia studies: Implications for meta–analysis and attributable risk estimation. Presented at Bioelectromagnetics Society Annual Meeting, Victoria, British Columbia, June 1996.

Sheppard AR, **Kelsh MA**, Florig HK, Bernstein BB. Disease endpoints pertinent to cost–benefit analysis for school exposures to power frequency electric and magnetic fields. Presented at Bioelectromagnetics Society Annual Meeting, Victoria, British Columbia, June 1996.

**Kelsh MA**, Sahl JD. Mortality among a cohort of electric utility workers, 1960–1991. Presented at American Public Health Association Annual Meeting, San Diego, CA, October 1995.

Ryan MG, **Kelsh MA**. Work–related injuries among county workers: Assessing impacts and identifying high-risk occupations. Presented at American Public Health Association Annual Meeting, San Diego, CA, October 1995.

**Kelsh MA**, Scott R. A strategy for monitoring magnetic field exposures among an electric utility workforce. Presented at Bioelectromagnetics Annual Meeting, Boston, MA, June 1995.

Del Razo LM, Garcia-Vargas G, Ahlores A, Cebrian ME, Montero R, Ostrowsky P, **Kelsh MA**. Chronic high exposure alters the profiles of urinary arsenic metabolites in humans. Presented at Society of Toxicology 34<sup>th</sup> Annual Meeting, Baltimore, MD, 1995.

**Kelsh MA**, Ostrosky-Wegman P, Cebrian M, Gonsebatt M, Del Razo L, Garcia-Vargas G, et al. Comparative analysis of biomarkers for arsenic exposure and early health effects among populations of Northern Mexico. Presented at SEGH Second International Conference on Arsenic Exposure and Health Effects, San Diego, CA, June 1995.

**Kelsh MA**, Sahl JD. Misclassification of electrical worker occupations from death certificate data: An analysis among electric utility workers. Presented at DOE/EPRI Contractors Review Meeting, Albuquerque, NM, November 1994.

Sahl JD, Aseltine DA, Senior RS, Rankin R, **Kelsh MA**, Riege LE, et al. An analysis of alternate summaries of magnetic field exposure data. Presented at DOE/EPRI Contractors Review Meeting, Albuquerque, NM, November 1994.

**Kelsh MA**, Sahl JD. Sex differences in work-related injury rates among electric utility workers. Presented at the Society for Epidemiologic Research Annual Meeting, Miami, FL, June 1994.

Sheppard AR, Kaune WT, **Kelsh MA**, Greenland S, Sahl JD. Development of a model for estimating attributable fractions for childhood leukemia and residential exposures to power frequency magnetic fields. Presented at 16th Annual Bioelectromagnetics Society Meeting, Copenhagen, Denmark, June 1994.

**Kelsh MA**, Sahl JD, Smith RW, Aseltine DA. Sampling design for ELF magnetic field exposure assessment. Presented at the DOE/EPRI Annual Contractors Review Meeting, Savannah, GA, November 1993.

Ryan MG, **Kelsh MA**. Work related injuries among county firefighters, 1987–1992. Presented at the American Public Health Association Annual Meeting, San Francisco, CA, October 1993.

**Kelsh MA**, Sahl JD, Sorenson S. Sex differences in injury rates among electric utility workers. Presented at the American Public Health Association Annual Meeting, San Francisco, CA, October 1993.

**Kelsh MA**, Ke D, Morgenstern H. Shoulder, neck, and back pain among trade and office workers. Presented at the American Public Health Association Annual Meeting, San Francisco, CA, October 1993.

**Kelsh MA**, Ke D, Morgenstern H. The importance of non-occupational risk factors in the assessment of occupationally-related carpal tunnel syndrome. Presented at Society for Epidemiologic Research Annual Meeting, Keystone, CO, June 1993.

**Kelsh MA**, Sahl JD, Smith R. The next generation of work exposure assessments. Presented at Bioelectromagnetics Society Annual Meeting, Los Angeles, CA, June 1993.

Sahl JD, Scarfuto J, Pineo J, **Kelsh MA**, Aseltine D. Magnetic field exposures among electric utility workers: Consideration of occupation, job task and facility type. Presented at Bioelectromagnetics Society Annual Meeting, Los Angeles, CA, June 1993.

**Kelsh MA**. A review of occupational health research in power frequency electric and magnetic fields. Invited speaker at Pacific Gas and Electric Company EMF Update Conference, January 14, 1993.

**Kelsh MA**, Morgenstern H, Ke D. A cross-sectional study of carpal tunnel syndrome symptoms among trade and office workers. Presented at the Ninth International Symposium, Epidemiology in Occupational Health, Cincinnati, OH, September 1992.

**Kelsh MA**, Sahl JD. Work related injuries among electric utility workers. Presented at the Society for Epidemiologic Research Annual Meeting, Minneapolis, MN, June 1992.

Sahl JD, **Kelsh MA**. Exposure assessment for power frequency magnetic fields among electrical utility workers. Presented at First World Congress for Electricity and Magnetism in Biology and Medicine, Orlando, FL, June 1992.

**Kelsh MA**, Sahl JD, Greenland S. Improving study design and exposure assessment procedures in the analyses of the health effects of occupational exposures to electromagnetic fields. Presented at First World Congress for Electricity and Magnetism in Biology and Medicine, Orlando, FL, June 1992.

**Kelsh MA**, Guggenheim DE, Sahl JD. Application of epidemiologic methods to occupational injury prevention. Presented at National Safety Congress, New Orleans, LA, October 1991.

**Kelsh MA**, Sahl JD, Greenland S, Guggenheim DE. An analysis of cancer mortality among utility electrical workers. Presented at Bioelectromagnetics Society Annual Meeting, Salt Lake City, UT, June 1991.

Sahl JD, **Kelsh MA**, Guggenheim DE. Characteristics of minor injuries that predict the occurrence of severe injury. Presented at Society for Epidemiologic Research Annual Meeting, Buffalo, NY, June 1991.

**Kelsh MA**, Sahl JD, Greenland S, Guggenheim DE. Influence of study design, analytical decisions and data sources in occupational mortality. Presented at Bioelectromagnetics Society Annual Meeting, Salt Lake City, UT, June 1991.

Rock AR, **Kelsh MA**, Faeder EJ. Information management approach for databases required for hazard assessment in the aerospace industry. Presented at Society for the Advancement of Material and Process Engineering, San Diego, CA, May 1991.

Sahl JD, **Kelsh MA**, Guggenheim DE. Injury coding for occupational injury surveillance. Presented at Society for Epidemiologic Research Annual Meeting, Salt Lake City, UT, June 1990.

Sahl JD, **Kelsh MA**. Exposure models in retrospective cohort studies. Presented at American Statistical Association Eighth Conference on Radiation and Health, Copper Mountain, CO, July 1989.

Morgenstern H, Kraus J, **Kelsh MA**, Margolis W. A cross-sectional study of carpal-tunnel syndrome in female grocery checkers. Presented at Society for Epidemiologic Research Annual Meeting, Vancouver, British Columbia, June 1988.

**Kelsh MA**. Health impacts of a latrine-sanitation project on rural villages of Michoacan, Mexico. Presented at American Public Health Association Annual Meeting, New Orleans, LA, October 1987.

Locke GE, Levy DA, Hauser WA, Lampert DI, Forsythe S, **Kelsh MA**, et al. Prevalence of epilepsy in an urban minority community. Presented at American Epilepsy Society Meeting, New York, NY, November 1986.

Lampert DI, Locke GE, **Kelsh MA**. Head injury in an urban minority community. Presented at American Public Health Association Annual Meeting, Washington, DC, November 1985.

**Kelsh MA**, Iverson E, Scrimshaw SW. Differences in perception and treatment of asthma and epilepsy among Latino and Anglo children and adolescents in Los Angeles. Presented at American Public Health Association Annual Meeting, Dallas, TX, November 1983.