

BIOGRAPHICAL SKETCH

Provide the following information for the key personnel and other significant contributors in the order listed on Form Page 2.
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NAME Kheifets, Leeka	POSITION TITLE Professor of Epidemiology in Residence		
eRA COMMONS USER NAME			
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of Yerevan, USSR	B.S.E.	1971-1975	Mathematics
University of California, Berkeley	M.A.	1976-1977	Statistics
University of California, Berkeley	Ph.D.	1984-1986	Epidemiology

A. Positions and Honors**Positions and Employment**

1978-1980 Statistician, UCLA Neuropsychiatric Institute
 1980-1981 Senior Statistician, UCLA School of Public Health
 1981-1984 Biostatistician, Environmental Health Associates
 1986-1988 Manager, Occupational Health Programs, Syntex, Inc.
 1988-1995 Manager, Epidemiology
 1995-2001 Area Mgr, EMF Effects Assessment & Management; Product Line Leader, Occupational Health
 1997-2001 Technical Executive (Director level position)
 1988-2001 Positions reflecting a steady progression of increasing responsibility, Electric Power Research Institute
 2001-2003 Head of Radiation Program, World Health Organization
 2003-present Professor of Epidemiology in Residence, UCLA, School of Public Health

Other Experience and Professional Memberships

1992-1998 National Academy of Sciences/National Research Council (NAS/NRC) Commission on Life Sciences Board on Radiation Effects Research: Committee on Assessment of Center for Disease Control (CDC) Radiation Studies
 1998 National Institute of Environmental Health Sciences (NIEHS), Working Group
 2001 International Agency for Research on Cancer (IARC) Monograph on the Evaluation of Carcinogenic Risk to Humans, working group member Vol. 80
 2001-2002 Programme Committee Member for International Conference on Occupational Protection: Protecting Workers Against Exposure to Ionizing Radiation (ILO)
 2001-2004 Board of Directors Bioelectromagnetics Society (BEMS)
 2001-2003 Radiation Standards Safety Committee (RASSC), International Atomic Energy Agency (IAEA)
 2001-present International Committee on Non-Ionizing Radiation Protection (ICNIRP), Member of the Standing Committee on Epidemiology
 2002-present Independent Scientific Advisory Group to Swedish Radiation Protection Authority (SSI)
 2003-present Adviser, Radiation Programme, World Health Organization (WHO)

Honors and Awards

1985 Merit Scholarship, UC Berkeley
 1990 Innovation and Achievement in Environmental Research
 1995 EPRI Performance Recognition Award
 1996 EPRI Performance Recognition Award
 1996 Chauncey Starr Award

B. Selected peer-reviewed publications (in chronological order).

Selected peer-reviewed publications

1. **Kheifets L**, Ahlbom A, Feychting M, "EMF and Health", Invited Contribution to Annual Review of Public Health, Vol 26, 2004
2. Mezei **G**, **Kheifets L** "Selection Bias in EMF – Childhood Leukemia Epidemiologic Studies", *In preparation*
3. Ahlbom A, Green A, **Kheifets L**, Savitz D, Swerdlow A. "Epidemiology of health effects of radiofrequency exposure", *In preparation*
4. **Kheifets L**. "Perspectives on 3-4 mG", *In preparation*
5. Ahlbom A, Feychting M, Johansen C, **Kheifets L**, Sahl J, Savitz D "Extremely low-frequency electromagnetic fields and heart disease", *In preparation*
6. Ahlbom A, Feychting M, Gustavsson A, Hallqvist J, Johansen C, **Kheifets L**, Olsen JH. "Occupational magnetic field exposure and myocardial infarction incidence in the SHEEP study" *Epidemiology*, *accepted*
7. **Kheifets L**, Repacholi M, Saunders R, "Thermal Stress and Radiation Protection Principles", *Int. J. of Hyperthermia*, 2003; Vol. 19
8. Goldstein L, Dewhirst M, Repacholi M, **Kheifets L**. Summary, "Conclusions and Recommendations: Adverse Temperature Levels in the Human Body", *Int. J. of Hyperthermia*, 2003; Vol. 19, pp. 373-384
9. **Kheifets L**, Thrall N. Electromagnetic Fields and Health, Macmillians Guide to Pollution, *in press*
10. Sahl J, Mezei G, Kavet R, McMillan A, Silvers A, Sastre A, **Kheifets L**. Occupational magnetic field exposures and cardiovascular mortality in a cohort of electric utility workers, *Am J Epidemiol*, 2002; 156:913-918.
11. Mezei G, **Kheifets L**. Clues to the possible viral etiology of childhood leukemia. *Technology*, 2002; Vol. 9, pp 3-14
12. **Kheifets L**, Greenberg R., Neutra R., Hester G., Poole C., Rall D., Banerjee G. "From epidemiology to policy: An EMF case study," *American Journal of Epidemiology*, 2001 154(12):S50-59.
13. **Kheifets L**, Hester G., Banerjee G. "The Precautionary Principle and EMF: Implementation and Evaluation," *Journal of Risk Research*, 2001 4(2):113-125.
14. **Kheifets L**. "Electric and magnetic field exposure and brain cancer" *Bioelectromagnetics* 2001;5:5120-5131.
15. Mezei G., **Kheifets L.I.**, Nelson L.M., Mills K.M., Iriye R., Kelsey J.L., "Household appliance use and residential exposure to 60-Hz electric and magnetic fields," *Journal of Exposure Analysis and Environmental Epidemiology*, 2001; Jan-Feb; 11(1):41-9.
16. Kaune W.T., Davis S., Stevens R.G., Mirick D.K., **Kheifets L.**, "Measuring short-term temporal variability of residential magnetic field exposures," *Bioelectromagnetics*, 2001; 22:232-245.
17. Mills K., **Kheifets L.**, Nelson L., Bloch D., Takemoto-Hambleton R., Kelsey J. "Reliability of proxy-reported and self-reported household appliance use" *Epidemiology*, 2000; September; 11(5):581-8.
18. Stevens R.G., Davis S., Mirick D., **Kheifets L.**, Bates D., Kaune W., "Alcohol consumption and urinary concentration of 6-sulphatoxymelatonin in healthy women," *Epidemiology*, 2001; 11(6):660-5.
19. Ebi K., **Kheifets L.**, Pearson R., Wachtel H. "Possible evidence for control selection bias in the Savitz et al. childhood cancer study" *Bioelectromagnetics* 2000, 21:346-353.
20. Cook M., Graham C., Kavet R., Stevens R., **Kheifets L**, Davis, S. (2000) "Urinary assessment of pineal melatonin production in women" *Journal of Pineal Research*, 28:41-47.
21. Kelsh M., **Kheifets L.**, Smith R. (2000) "Assessing the impact of work environment, utility and sampling design on occupational exposure summaries: A case study of magnetic field exposures among electric utility workers" *American Industrial Hygiene Association Journal* 61:174-182.
22. Brainard C, Kavet R., **Kheifets L**. (1999) "MINI REVIEW: The relationship between electromagnetic field and light exposures to melatonin and breast cancer risk: A review of the relevant literature" *Journal of Pineal Research*, Vol. 26:65-100.
23. **Kheifets L**. (1999) "Occupational exposure assessment in epidemiologic studies of EMF" *Radiation Protection Dosimetry*, Vol 83, Nos 1-2, pp 61-69.
24. **Kheifets L.**, Gilbert E., Sussman S., Guenel P., Sahl J., Savitz D., Theriault G. (1999) "Comparative analysis of the studies of magnetic fields and cancer in electric utility workers: studies from France, Canada, and the United States" *Occupational Environmental Medicine*, 56:567-574.

25. **Kheifets L.**, Matkin C. (1999) "Industrialization, electromagnetic fields and breast cancer risk" *Environmental Health Perspectives*, 2/99, Vo.. 107 Sup 1, 145-154.
26. **Kheifets L.**, Sussman S., Preston-Martin S., (1999) "Childhood brain tumors and residential electromagnetic fields (EMF)" *Environmental Contamination Toxicology*, 159:111-129.
27. McCann J., **Kheifets L.**, Rafferty C. (1998) "Cancer risk assessment of extremely low frequency electric & magnetic fields: A critical review of methodology" *Environmental Health Perspectives*, Vol. 106 #11, 11/98, p 701-717.
28. **Kheifets, L.**, Afifi, A., Buffler, P., Zhang, Z., Matkin, C. (1997) "Occupational EMF Exposure and Leukemia: A Meta-Analysis," *Journal of Occupational and Environmental Medicine*, Vol 39 #11, 11/97, p 1074.
29. **Kheifets, L.**, Kavet, R., Sussman, S. (1997) "Wire Codes, Magnetic Field and Childhood Cancer", *Bioelectromagnetics*, Vol. 18, p 99-110.
30. **Kheifets, L.**, London, S., Peters, J. (1997) "Leukemia Risk and Occupational Electric field Exposure in Los Angeles County", *American Journal of Epidemiology*, Vol. 146, #1, p 87-90.
31. **Kheifets, L.**, (1996) "Adverse Reproductive Outcomes in Families of Atomic Veterans: The Feasibility of Epidemiologic Studies". *Health Physics*, 70(2): 275-276.
32. **Kheifets, L.**, Afifi, A., Buffler, P., Zhang, Z. (1995) "Occupational EMF Exposure and Brain Cancer: A meta-Analysis", *Journal of Occupational and Environmental Medicine*, Vol. 37 p1-15.
33. Bracken, T., **Kheifets, L.** and Sussman, S., (1993), "Exposure assessment for power frequency electric and magnetic fields (EMF) and its application to epidemiologic studies", *Journal of Exposure Analysis and Environmental Epidemiology*, Vol 3, p 1-22.
34. Jacquez, G. and **Kheifets, L.**, (1993), "Synthetic cancer variables and the construction and testing of synthetic risk maps", *Statistics in Medicine*, Vol 12, p 1931-1943.
35. **Kheifets, L.**, (1993), "Cluster analysis: A perspective", *Statistics in Medicine*, Vol 12, p 1755-1757.
36. Morgan, Wong, Whorton, Gordon, and **Kheifets** (1989): "An ecological analysis and a case-control study of gastric cancer and DBCP in drinking water in Fresno County, California," *British Journal of Industrial Medicine*. 46.
37. Wong, Mogan, Bailey, Swenzecki, Claxton, and **Kheifets** (1986). "An epidemiologic study of petroleum refinery employees," *British Journal of Industrial Medicine*. Vol 43, p 6-17.
38. Cooper, Wong, **Kheifets** (1985), "Mortality among employees of lead battery plants and lead-producing plants, 1947-1980," *Scandinavian Journal Work of Environmental Health*, Vol 11, p 331-345.
39. Wong, Morgan, **Kheifets**, and Larson (1985), "Comparison of SMR, PMR, and PCMR in a cohort of union members potentially exposed to diesel exhaust emissions," *British Journal of Industrial Medicine*. Vol 42, p 449-460.
40. Wong, Morgan, **Kheifets**, Larson, and Whorton (1985), "Mortality among members ora heavy construction equipment operators union with potential exposure to diesel exhaust emissions," *British Journal of Industrial Medicine*. Vol 42, p. 435-448.
41. Morgan, **Kheifets**, Obrinsky, Whorton, and Foliart (1984), "Fetal loss and work in waste water treatment plants," *American Journal of Public Health*, Vol 7, p 499-501.
42. Sinclair and **Kheifets** (1982), "Use of clustering techniques in deriving psychoeducation profiles," *Contemporary Educational Psychology*, Vol 7, p. 81-89.

Book

van Deventer E, **Kheifets L**, Repacholi M, et.al.. (2002) Establishing a Dialogue on Risks from Electromagnetic Fields, WHO, ISBN9241545712

Chapter in Books

1. **Kheifets L.** , C. Roy (2002), " Radiation Emergencies", *Environmental Health in Emergencies and Disasters*, WHO. Geneva.
2. **Kheifets L.** (2001), "Electric and Magnetic Fields and Occupational Health, "*Patty's Industrial Hygiene and Toxicology*", Fifth Edition,;100:141-198.
3. **Kheifets, L.I.** (2000), "*Extremely low frequency electric and magnetic fields (EMF)*" Hunter's Disease of Occupations. 9th edition, Arnold Publishers (Co-published by Oxford University Press) Part 3, #21, p439-450.

4. **Kheifets L** and Kelsey J. (1997) "Epidemiologic studies of electric and magnetic fields and cancer", In: Advances In Electromagnetic Fields in Living Systems. JC Lin, ed., Plenum, New York, NY.
5. Schull, W., et. al. Dose Reconstruction for Epidemiologic Uses, National Academy Press, 1995.

C. Research Support

Major Research Interest

Environmental and Occupational Epidemiology, Epidemiologic methodology, Methodologic issues in capturing environmental exposure, Public Health Policy Development, Non-ionizing (static, extremely low frequency and radiofrequency electromagnetic field exposures) and Ionizing Radiation, Epidemiology of chronic diseases including cancer (particularly breast, leukemia and brain), cardiovascular and neurodegenerative disease.

Current Research Interest

International Health, use of Epidemiology for evidence-based health policy, applications of precautionary principle, experimental and non-experimental inference, 60 Hz EMF exposure and childhood leukemia, mobile cell phone and base station health effects, Mitigation of, preparedness for, and response to the natural occurrence, accidental release, or the deliberate use of radiation.

Ongoing and Completed Research Support

- 2004 UK Department of Health and Industry
Prospective cohort study on mobile phone use and health: Extension of pilot.
Role: Co-Principal Investigator
- 2004 EPRI
Incorporating uncertainty in Analysis of EMF data for Public Health evaluation
Role: Principal Investigator
- 2003 Swiss Research Foundation
Feasibility Study of Environmental RF Exposures
Role: Co-Investigator
- 2003 EPRI
Health Initiative
Role: Principal Investigator
- 2003 WHO
Environmental Health Criteria
Role: Principal Investigator
- 2003 EPRI
Use of Cut-points in Epidemiology
Role: Principal Investigator
- 2003 European Commission
Precautionary Principle, WHO
Role: Principal Investigator
- 2002 Government Funding (UK, Germany, Ireland)
Radiation Program, WHO
Role: Head
- 2002 NIEHS
Environmental Health Criteria, WHO
- 2002 Industry Funding
Radiation Program, WHO
Role: Head
- 2001 Electric Power Research Institute, various projects
EMF Research
Role: Area Manager