

Curriculum Vitae

Harvey Babich

Stern College for Women
Yeshiva University

New York, NY
1969-1970: Teaching Fellow, Department of Biology, Long Island University, Brooklyn,
NY
1969: Laboratory Assistant, Laboratory of Histology, Osborne Laboratories of
Marine Sciences, Coney Island Aquarium, Brooklyn, NY

Courses Taught:

New York University: Principles of Biology (majors)

Aquatic Toxicology

1997: Schering-Plough Research Institute, \$20,000;
Gillette Medical Evaluation Laboratories, \$5,000;

The Johns Hopkins University, Center for Alternatives to Animal Testing, *In vitro* cytotoxicity assays with human skin cell types,” 1 year, \$19,000, H. Babich (PI) and E. Borenfreund (Co-PI), 1987-1988.

U.S. Environmental Protection Agency, Carcinogenic transformation studies *in vitro* with fish embryos and cell cultures,” 3 years, \$273,460, H. Babich (PI) and E. Borenfreund (Co-PI), 1987-1990.

Schering Corporation funding in general support of the Laboratory for *In Vitro* Toxicologic Assay Development, \$15,000, 1986-1987.

Hoffmann LaRoche, funding in general support of the Laboratory for *In Vitro* Toxicologic Assay Development, \$5,000, 1987.

At: New York University

U.S. Environmental Protection Agency, “Toxicity of heavy metals to microbes and microbe-mediated ecologic processes: effect of chemical and environmental factors,” 3 years, \$352,197, terminated 1984, G. Stotzky (PI) and H. Babich (Co-PI).

Listed In:

American Men and Women in Science
Who’s Who in the East
Who’s Who in American Education
Who’s Who Among America’s Teachers

Publications

Books:

Babich, H., LoBue, J., Goodenough, J. and H.G. Dowling, 1975, **Principles of Biology – I, A Laboratory Manual**, HISS Publications, NY, NY (addition of microfiche, 1976)

Goodenough, J., Babich, H., LoBue, J. and H.G. Dowling. 1975, **Principles of Biology – II, A Laboratory Manual**, HISS Publications, NY, NY

Babich, H., LoBue, J. and H.G. Dowling, 1979, **Principles of Biology, A Laboratory Manual**, Avery Publishing Corporation Group, Inc., Wayne, NJ (revised, 1987).

Research:

Babich, H. and G. Stotzky, 1972, Ecologic ramifications of air pollution, *In Proceedings of the International Conference on Transportation and the Environment*, Society of Automotive Engineers, Inc., NY, NY, pp.198-214 (reprinted in: **Society of Automotive Engineers, Transactions**, 81:1955-1971).

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Babich, H. and G. Stotzky, 1977, Sensitivity of various bacteria, including actinomycetes, and fungi to cadmium and the influence of pH on sensitivity, **Appl. Environ. Microbiol.**, 33:681-695.

Babich, H. and G. Stotzky, 1977, Reductions in the toxicity of cadmium to microorganisms by clay minerals, **Appl. Environ. Microbiol.**, 33:696-705.

Babich, H. and G. Stotzky, 1977, Effect of cadmium on fungi and on interactions between fungi and bacteria in soil: influence of clay minerals and pH, **Appl. Environ. Microbiol.**, 33:1059-1066.

Babich, H. and G. Stotzky, 1978, Influence of pH on inhibition of bacteria, fungi, and coliphages by bisulfite and sulfite, **Environ. Res.**, 15:405-414.

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Babich, H. and G. Stotzky, 1978, Toxicity of zinc to fungi, bacteria, and coliphages: influence of chloride ions, **Appl. Environ. Microbiol.**, 36:904-913.

Babich, H. and G. Stotzky, 1978, Effects of cadmium on the biota: influence of environmental factors, **Adv. Appl. Microbiol.**, 23:55-117.

Babich, H., Davis, D.L. and R. Adler, 1982, Updating federal standards for toxicants: n-hexane as the model, **Environ. Monit. Assess.**, 2:287-299.

Stotzky, G. and H. Babich, 1983, Physicochemical environmental factors influence the toxicity of heavy metals to microbes, *In Les Feuilles de L'Unite Etudo Recherche, Physique-Chimie-Biologie, 1981-1982*, Universite de Nancy, France, 5:104-141.

Babich, H. and G. Stotzky, 1983, Nickel toxicity to estuarine/marine fungi and its amelioration by magnesium in sea water, **Water, Air, Soil Pollut.**, 19:193-202.

Babich, H. and G. Stotzky, 1983, Influence of chemical speciation on the toxicity of heavy metals to the microbiota, *In Aquatic Toxicology, Advances in Environmental Science and Technology*, Nriagu, J.O. (ed.), Wiley and Sons, Inc., NY, NY, pp.1-46.

Babich, H. and G. Stotzky, 1983, Developing standards for environmental toxicants: the need to consider abiotic environmental factors and microbe-mediated ecologic processes, **Environ. Health Perspect.**, 49:247-260.

Babich, H., Schiffenbauer, M. and G. Stotzky, 1983, Sensitivity of coliphage T1 to nickel in fresh and salt waters, **Curr. Microbiol.**, 8:101-105.

Babich, H., Bewley, R.J.F. and G. Stotzky, 1983, Application of the "ecological dose" concept to the impact of heavy metals on some microbe-mediated ecologic processes in soil, **Arch. Environ. Contam. Toxicol.**, 12:421-426.

Babich, H. and G. Stotzky, 1983, Physicochemical factors of natural reservoirs affect the transformation and exchange of heavy metals toxic to microbes, *In Environmental Biogeochemistry, Proc. 5th Int. Sym. Biogeochemistry (ISEB)*, Hallberg, R.O. (ed.), **Ecol. Bull. (Stockholm)**, 35:315-323.

Babich, H. and G. Stotzky, 1983, Temperature, pH, salinity, hardness, and particulates mediate nickel toxicity to eubacteria, an actinomycete, and yeasts in lake, simulated estuarine, and sea waters, **Aquat. Toxicol.**, 3:195-208.

Babich, H. and G. Stotzky, 1983, Further studies on environmental factors that modify the toxicity of nickel to microbes, **Reg. Toxicol. Pharmacol.**, 3:82-99.

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Babich, H. and G. Stotzky, 1983, Synergism between nickel and copper in their toxicity to microbes: mediation by pH, **Ecotoxicol. Ecotoxicol. Saf.**, 7:576-587.

Stotzky, G. and H. Babich, 1984, Fate of genetically-engineered microbes in natural environments, **Recomb. DNA Tech. Bullet.**, 7:163-188.

Babich, H., Devanas, M.A. and G. Stotzky, 1985, The mediation of the mutagenicity and clastogenicity of heavy metals by physicochemical factors, **Environ. Res.**, 37:253-286.

Babich, H. and G. Stotzky, 1985, Heavy metal toxicity to microbe-mediated ecologic processes: a review and potential application to regulatory policy, **Environ. Res.**, 36:111-137.

Babich, H and G. Stotzky, 1985, A microbial assay for determining the influence of physicochemical environmental factors on the toxicity of organics: phenol, **Arch. Environ. Contam. Toxicol.**, 14:409-415.

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- Babich, H. and E. Borenfreund, 1987, *In vitro* cytotoxicity of organic pollutants to bluegill sunfish (BF-2) cells, **Environ. Res.**, 42:229-237.
- Babich, H. and E. Borenfreund, 1987, Cultured fish cells for the ecotoxicity testing of organic pollutants, **Toxic. Assess.**, 2:119-133.
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- Committee on Multimedia Approaches to Pollution Control, 1987, **Multimedia Approaches to Pollution Control: A Symposium Proceedings**, Board on Environmental Studies and Toxicology, National Research Council, National Academy Press, Washington, DC (committee member).
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- Babich, H. and E. Borenfreund, 1988, *In vitro* cytotoxicity of polychlorinated biphenyls (PCBs) and toluenes to cultured bluegill sunfish BF-2 cells, **In Aquatic Toxicology and Hazard Assessment**, 10th volume, ASTM STP 971, Adams, W.J., Chapman, G.A. and W.G. Landis (eds.), American Society for Testing and Materials, Philadelphia, PA, pp. 454-462.
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Borenfreund, E. and H. Babich, 1993, The neutral red (NR) assay, *In Cell and Tissue Culture: Laboratory Procedures*, Griffith, J.B., Doyle, A. and D.G. Newell (eds.), Wiley and Sons, Ltd., England, pp.4B:7.1-7.7.

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- Babich, H., 2017, Babich, H., Dinosaurs and woolly mammoths - is there a Torah viewpoint? **Derech HaTeva, a Journal of Torah and Science**, 21:67- 73.
- Babich, H., 2018, Environmental pollution in the *Ta'nach* and in the Talmud, **Derech HaTeva, a Journal of Torah and Science**, 22: 53-58.
- Babich, H., 2019, Scientific thoughts on specific Talmudic passages, **Derech HaTeva, a Journal of Torah and Science**, 23:80-87.
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