

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).

ListedIn:

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, 81:195-197).

Babich, H. and G. Stotzky, 1974, Air pollution and microbial ecology, CRC Crit. Rev. Environ. Contr, 4:353- 421.

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.

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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, PhysiqueChimie-Biologie*, 1981-1982, Universite de Nancy, France, 5:104-111.

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*, Triagu, 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, Procth Int. Sym. Biogeochemistry (ISEB)*, Hallberg, R.O. (ed.), *Ecol. Bull. (Stockholm)*, 35:313-323.

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.

Babich, H. and G. Stotzky, 1983, Toxicity of nickel to microbes: environmental aspects, *Adv. Appl. Microbiol*, 29:195-265.

Babich, H. and G. Stotzky, 1983, Synergism between nickel and copper in their toxicity to microbes: mediation by pH, *Ecotoxicol. Ecotoxicol. Saf.*, 7:578-587.

Stotzky, G. and H. Babich, 1984, Fate of genetically-engineered microbes in natural environments, *Recomb. DNATech. 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.

Garcia-Toledo, A., Babich, H. and G. Stotzky, 1985, Adaptation of *Rhizopus stolonifer*

- 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.
- Babich, H. and E. Borenfreund, 1987, Structure-activity relationship (SAR) models established in vitro with the neutral red cytotoxicity assay, *Toxicol. In Vitro*, 1:3-9.
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- Borenfreund, E. and H. Babich, 1987, In vitro cytotoxicity of heavy metals, acrylamide, and organotin salts to neural cells and fibroblasts, *Cell Biol. Toxicol.* 3:63-73.
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- Committee on Multimedia Approaches to Pollution Control, 1987, *Multimedia Approaches to Pollution Control*, Symposium Proceedings, Board on Environmental Studies and Toxicology, National Research Council, National Academy Press, Washington, DC (committee member).
- Babich, H., Martin-Alguacil, N. and E. Borenfreund, 1987/1988, Mediating role of metabolic activation in in vitro cytotoxicity assays, *Molec. Toxicol.*, 1:363-372.
- 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.
- Borenfreund, E. and H. Babich, 1988, Applications of the neutral red in vitro cytotoxicity assay using various cell types and toxicants, In *Alternatives to Animal Experiments in Risk Assessment*, Symposium Proceedings, Schering AG, Berlin, Federal Republic of Germany, pp. 101-110.
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Weisburg, J.H., Wesisman, D.B., Sedaghat, T. and H. Babich, 2004, In vitro cytotoxicity of epigallocatechin gallate (EGCG) and tea extracts to cancerous and normal cells from the human oral cavity, *Basic Clin. Pharmacol. Toxicol.*, 95:192-200.

Babich, H., Krupka, M.E., Nissim, H.A., and H.L. Zuckerbraun, 2005, Differential in vitro cytotoxicity of (-)-epicatechin gallate (ECG) to cancer and normal cells from the human oral cavity, *Toxicol. In Vitro* 19:231-242.

Babich, H., Gold, T., and R. Gold, 2005, Mediation of the in vitro cytotoxicity of green and black tea polyphenols by cobalt chloride, *Toxicol. Lett*, 155:195-205.

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- Babich, H., 2018, Environmental pollution in the Ta'nach and in the Talmud, Derech HaTeva, a Journal of Torah and Science, 20: 53-58.
- Babich, H., 2019, Scientific thoughts on specific Talmudic passages, Derech HaTeva a Journal of Torah and Science, 23:80-87.
- Babich, H., 2020, Talmud Chullin: some science behind the text, Derech HaTeva a Journal of Torah and Science, 24:61-67.
- Babich, H., 2021, Is there a place for prehistoric man within the Torah? The view of one European gadol, Rabb Israel Lipschitz, Derech HaTeva a Journal of Torah and Science, 25:2-34.
- Babich, H., 2022, Adom HaRishon and his contemporaries- soulless humanoids, Derech HaTeva, a Journal of Torah and Science, 26:47-32.
- Babich, H., 2023, The science behind some Mishnaic and Talmudic passages, Derech HaTeva, A Journal of Torah and Science, 27:55-65.
- Babich, H., 2024, Zav/Zavah and Tumtum/Androgynous Derech HaTeva A Journal of Torah and Science, 28:submitted.