

CURRICULUM VITAE
Perry James Gehring

Birthplace: Yankton, South Dakota
Birthdate: March 15, 1936
Married: 1959, Barbara Tennis
Children: Daniel, 1961; Matthew, 1964; Elizabeth, 1966;
Heidi, 1971.

Education: Elementary and Secondary Schools
Yankton, S. Dakota

Graduated University of Minnesota in 1960 with
B.S. and D.V.M. degrees.

Attended Iowa State University 1960-1961;
Graduate work in physiology at Baylor Univ.
Summer, 1961, no degree.

Graduated University of Minnesota, Ph.D. in
1965. Major in Pharmacology and Minor in
Physical Chemistry. Thesis: The Interrelationship
Between Thallium and Potassium in Animals.

Employment: 1960-1961, Iowa State University; Research
Associate in Dept. of Veterinary Physiology
and Pharmacology. Financed by Atomic
Energy Commission.

1961-1965, University of Minnesota, Research
Fellow in Dept. of Veterinary Physiology
and Pharmacology. Financed by National
Institute of Health.

September 1, 1965, The Dow Chemical Company,
Research Pharmacologist.
June, 1968, Group Leader - Biochemical Research
Laboratory, Toxicology Research.

November 15, 1968, Associate Professor,
Pharmacology Dept. Michigan State Univ.

September 1, 1970, Assistant Director, Toxicology
Research Laboratory, The Dow Chemical Company,
Midland, Michigan

December 11, 1973, Director, Toxicology Research
Laboratory, The Dow Chemical Company
Midland, Michigan

Professional Organization Memberships: Society of Toxicology
American Society of Pharmacology and Experimental Thereapeutics.
New York Academy of Sciences
Minnesota Veterinary Medical Association

Other Professional Activities: Board of Editors of the Journal Toxicology and Applied Pharmacology.
Visiting Professor, Dept. of Pharmacology, Michigan State Univ. E. Lansing, Michigan

Honors- Recognitions: Undergraduate
Graduated with honors
Scholastic All-Big Ten Conference Football Team
Scholastic All American Football Team, Honorable mention on others.
Big Ten Conference Medal, 1958 for most outstanding combination of athletic and scholastic performance.
Associated Press and United Press Lineman of the Week, twice 1956 & 1957
North-South All Star Football Game, 1958

Graduate
U. S. Public Health Service - Postdoctoral Research Grant.

Professional
The Deans Advisory Council, Michigan State Univ. 1968-1970, Elected Chairman 1969.
Curriculum Committee, College of Veterinary Medicine, Michigan State Univ. 1969.
Program Committee for Annual Meeting, Society of Toxicology, 1973.
Recipient of U. S. Public Health Service Research Grant, 1968.
Member of Scientific Committee of the Animal Drug Section, Animal Health Institute.

Listed in:
American Men of Science
Who's Who in the Midwest
Who's Who in America
Who's who in the World

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PUBLICATIONS

P. J. Gehring, D.V.M., Ph.D.

- 1) Gehring, P. J. and Hammond, P. B.: The uptake of thallium by rabbit erythrocytes. *J. Pharmacol. Exp. Therap.* 145:215-221, 1964.
- 2) Gehring, P. J. and Hammond, P. B.: The interrelationship between thallium and potassium in animals. *J. Pharmacol. Exp. Therap.* 155:187-201, 1967.
- 3) Gehring, P. J., Torkelson, T. R. and Oyen, F.: A comparison of the lethality of chlorinated pyridines and a study of the acute toxicity of chloropyridine. *Toxicol. Appl. Pharmacol.* 11:361-371, 1967.
- 4) Gehring, P. J.: Hepatotoxic potency of various chlorinated hydrocarbon vapors relative to their narcotic and lethal potencies in mice. *Toxicol. Appl. Pharmacol.* 13:287, 1968.
- 5) Gehring, P. J.: Thallium Toxicity, *Current Veterinary Therapy 111*, 3rd. Ed. Edited by R. W. Kirk, W. B. Saunders Co., Philadelphia, 1968.
- 6) Gehring, P. J. and Buerge, J.: The cataractogenic activity of 2,4-dinitrophenol in ducks and rabbits. *Toxicol. and Appl. Pharmacol.* 14:475, 1969.
- 7) Gehring, P. J. and Buerge, J.: The distribution of 2,4-dinitrophenol relative to its cataractogenic activity in ducks and rabbits. *Toxicol. and Appl. Pharmacol.* 15:574-592, 1969.
- 8) Rao, K. S. and Gehring, P. J.: Acute toxicity of Aflatoxin B₁ in monkeys. *Toxicol. and Appl. Pharmacol.* 19:169-175, 1971.
- 9) Eiseman, J. L., Gehring, P. J., and Gibson, J. E.: The *In Vitro* metabolism of 2,4,-dinitrophenol by rat liver homogenates. *Toxicol. and Appl. Pharmacol.* 21:275-285, 1972.
- 10) Schwetz, B. A. Sparschu, G. L., and Gehring, P. J.: The effect of 2,4-dichlorophenoxyacetic acid (2,4-D) and esters of 2,4-D on rat fetal and neonatal growth and development. *Food and Cosmetic Tox.* 9:801-817, 1971.
- 11) Gehring, P.J.: Toxicity of pyridine, piperidine, quinoline and their derivatives. Encyclopaedia of Occupational Health and Safety. Edited by L. Parmeggiani and Published by the International Labour Office. Geneva. I/K-Z. 1971
- 12) Gehring, P. J. and Rowe, V. K.: Carbon Tetrachloride. Encyclopaedia of Occupational Health and Safety. Edited by L. Parmeggiani and Published by the International Labour Office. Geneva, I/A-K:256-257, 1971.

- 13) Le Beau, J. E. and Gehring, P. J.: Studies on the mechanism of the cataractogenic activity of 2,4-Dinitrophenol. Toxicol. and Appl. Pharmacol. 19:403, 1971
- 14) Gehring, P. J. and MacDougall, D.: Review of the toxicity of hexachlorobenzene and hexachlorobutadiene. A Special release of The Dow Chemical Company, August 1971.
- 15) Gehring, P. J.: Cataractogenic activity of chemicals. Critical Reviews in Toxicology, 1:93-118, 1971.
- 16) Kociba, R. J., Gehring, P. J., Humiston, C. G., and Sparschu, G. L.: Toxicological study of female rats administered hexachlorobutadiene or hexachlorobenzene for thirty days. A special release of The Dow Chemical Company, August 1971.
- 17) Rowe, V. K., Norris, J. M., Schwetz, B. A., Sparschu, G. L., Gehring, P. J., Emerson, J. L. and Gerbig, C. G.: Toxicology of chlorinated dibenzo-*p*-dioxins. Adv. in Chemistry Series 120, "Chlorodioxins- Origin and Fate", ed by E. H. Blair, Am. Chem. Soc., Washington, D. C., p 30-69, 1973.
- 18) Piper, W. N., Rose, J. Q., and Gehring, P. J.: Excretion and tissue distribution of 2,3,7,8-tetrachlorodibenzo-*p*-dioxin in the rat. Adv. in Chem. Series 120, "Chlorodioxins--Origin and Fate", ed by E. H. Blair, Am. Chem. Soc. Washington, D.C., 1973, p 85-91.
- 19) Gehring, P. J., Kramer, C. G., Schwetz, B. A., Rose, J. Q. and Rowe, V.K. The fate of 2,4,5-trichlorophenoxyacetic acid (2,4,5-T) following oral administration to man. Toxicol. and Appl. Pharmacol. 26, 352-361, 1973.
- 20) Piper, W. N., Rose, J. Q., Leng, M. L. and Gehring, P. J.: The fate of 2,4,5-trichlorophenoxyacetic acid (2,4,5-T) following oral administration to rats and dogs. Toxicol. Appl. Pharmacol. 26, 339-351, 1973.
- 21) Kociba, R. J., Sparschu, G. L., Leong, B.K.J. and Gehring, P. J.: Tissue response to ceramic foam dust following intratracheal and intraperitoneal administration. Toxicol. Appl. Pharmacol. 25, 145-151, 1973
- 22) Schwetz, B. A., Norris, J. M., Sparschu, G. L., Rowe, V. K., Gehring, P. J., Emerson, J. L. and Gerbig, C. G. Toxicology of chlorinated dibenzo-*p*-dioxins. Environ. Hlth. Perspectives. Exp. Issue 5:87-89, 1973
- 23) Johnson, R. L., Gehring, P. J., Kociba, R. J. and Schwetz, B. A. Chlorinated dibenzo-*p*-dioxins and pentachlorophenol. Environ. Hlth. Perspectives. Exp. Issue 5:171-175, 1973.

- 24) Piper, W. N., Rose, J. Q. and Gehring, P. J. Excretion and tissue distribution of 2,3,7,8-tetrachlorodibenzo-*p*-dioxin in the rat. *Environ. Hlt. Perspectives. Exp. Issue* 5:241-244, 1973
- 25) Schwetz, B. A., Keeler, P. A. and Gehring, P. J. Effect of purified and commercial grade tetrachlorophenol on rat embryonal and fetal development. *Toxicol. Appl. Pharmacol.* In Press.
- 26) Schwetz, B. A., Spencer, H. C. and Gehring, P. J. A study of the prenatal and postnatal toxicity of a sulfhydryl resin in rats. *Toxicol. Appl. Pharmacol.* In Press.
- 27) Eiseman, J. L., Gehring, P. J. and Gibson, J. E. Kinetics of *in vitro* reduction of 2,4-dinitrophenol by rat liver homogenates. *Toxicol. Appl. Pharmacol.* In Press.
- 28) Schwetz, B. A., Leong, B.K.J. and Gehring, P. J. Embryo and fetotoxicity of inhaled chloroform in rats. *Toxicol. Appl. Pharmacol.* In Press.
- 29) Schwetz, B. A., Leong, B.K.J. and Gehring, P. J. Embryo- and fetotoxicity of inhaled carbon tetrachloride, 1,1-dichloroethane and methylethyl ketone in rats. *Toxicol. Appl. Pharmacol.* In Press.
- 30) J. B. Hook, Bailie, M. D., Johnson, J. T. and Gehring, P. J. *In Vitro* analysis of transport of 2,4,5-trichlorophenoxyacetic acid (2,4,5-T) by rat and dog kidney. *Food and Cosmetics Toxicol.* In Press.
- 31) Gehring, P. J.: Toxic minerals in Veterinary Pharmacology and Therapeutics 4th Ed. Edited by P. B. Hammond and C. M. Stowe, Iowa State Univ. Press. In Press.
- 32) Gehring, P. J.: Miscellaneous toxic agents. Veterinary Pharmacology and Therapeutics 4th Ed. Edited by P. B. Hammond and C. V. Stowe, Iowa State Univ. Press. In Press.
- 33) Gehring, P. J., Rowe, V. K., and McCollister, S. B.: Toxicology: Cost/Time. *Food and Cosmetics Toxicol.* In Press.
- 34) Braun, W. H., Ramsey, J. C. and Gehring, P. J. The lack significant absorption of methylcellulose, viscosity 3300 cps from the gastrointestinal tract following single and multiple oral doses to the rat. *Food and Cosmetics Toxicol.* In Press.
- 35) Ramsey, J. C., Rose, J. Q., Braun, W. H., and Gehring, P. J. Fate of 6-chloro-picolinic acid following oral administration in rats. *J. Agri. Food Chem.* In Press.
- 36) Kociba, R. J., McCollister, S. B., Park, C., Torkelson, T. R. and Gehring, P. J. 1,4-dioxane: I Results of two-year ingestion studies in rats. *Toxicol. Appl. Pharmacol.* In Press.

- 37) Schwetz, B. A. and Gehring, P. J. Placental transfer of 2,4-D and 2,4,5-T in pregnant rats. Toxicol. Appl. Pharmacol. In Press.
- 38) McCollister, S. B., Kociba, R. J. and Gehring, P. J. Studies on the acute and chronic oral toxicity of O,O-diethyl-O-(3,5,6-trichloro-2-pyridyl) phosphorothioate. Food and Cosmetics Toxicol. In Press.
- 39) Norris, J. M., Ehrmantraut, J. W., Gibbons, C. L., Kociba, R. J., Schwetz, B. A., Rose, J. Q., Humiston, C. G., Jewett, G. L., Crummett, W. B., Gehring, P. J., Tirsell, J. B. and Brosier, J. S. Toxicological and environmental factors involved in the selection of decabromodiphenyl oxide as a fire retardant chemical. Applied Polymer Symposium, J. Wiley & Sons, Inc. No. 22:195-219, 1973
- 40) Norris, J. M., Ehrmantraut, J. W., Gibbons, C. L., Kociba, R. J., Schwetz, B. A., Rose, J. Q., Humiston, C. G., Jewett, G. L., Crummett, W. B., Gehring, P. J., Tirsell, J. B., and Brosier, J. S. Toxicological and environmental factors involved in the selection of decabromodiphenyl oxide as a fire retardant chemical. J. Fire and Flammability. In Press.
- 41) McCollister, S. B., Kociba, R. J. and Gehring, P. J. Ninety-day repeated oral toxicity of 2,4,5-trichlorophenoxyacetic acid in rats. Food and Cosmetics Toxicol. In Press.

ABSTRACTS AND/OR PAPERS PRESENTED

P. J. Gehring, D.V.M., Ph.D.

- 1) Gehring, P. J. and Hammond, P. B. The uptake of thallium by rabbit erythrocytes. Fall Meeting. Am. Soc. Pharmacol. Exp. Therap., 1964.
- 2) Gehring, P. J. and Hammond, P. B. Mechanism for the increase in thallium excretion during the administration of potassium. Fall Meeting. Am. Soc. Pharmacol. Exp. Therap., 1966.
- 3) Gehring, P. J. and Hammond, P. B. Effect of dietary potassium on the rate of thallium excretion from rats and dogs. Spring Meeting. Society of Toxicology, 1966.
- 4) Gehring, P. J. Acute toxicity of chlorinated pyridines. Spring Meeting Society of Toxicology, 1967.
- 5) Gehring, P. J. The distribution of 2,4-dinitrophenol (DNP) relative to its cataractogenic activity in ducklings and rabbits. Fall Meeting. Am. Soc. Pharmacol. Exp. Therap., 1969.
- 7) LeBeau, J. E. and Gehring, P. J. Studies on the mechanism of the cataractogenic activity of 2,4-dinitrophenol. Society of Toxicology 1971.
- 8) Eiseman, J. L., Gehring, P. J., and Gibson, J. E. The *in vitro* metabolism of 2,4-dinitrophenol by rat liver. Fed. Am. Soc. Exp. Biology 1971. (Federation Proc. 30:186, 1971)
- 9) Rowe, V. K., Norris, J. M. Schwetz, B. A. Sparschu, G. L., Gehring, P. J., Emerson, J. L., and Gerbig, C. G. Am. Chem. Soc. Symposium on Pesticides, Washington, DC Sept. 1971.
- 10) Piper, W. N., Rose, J. Q., Gehring, P. J. Excretion and tissue distribution of 2,3-7,8-tetrachlorodibenzo-p-dioxin in the rat. Am. Chem. Soc. Symposium on Pesticides, Washington, DC Sept. 1971.
- 11) Hayes, F. D., Gehring, P. J., and Gibson, J. E. Studies on the acute toxicity of monochloroacetic acid in rats. 11th Annual Meeting Society of Toxicology, Williamsburg, VA March 5-9, 1972
- 12) Piper, W. N., Rose, J. Q., and Gehring, P. J. Metabolism of 2,4,5-T in rats. 11th Annual Meeting, Society of Toxicology, Williamsburg, VA. March 5-9, 1972
- 13) Gehring, P. J., Rowe, V. K., and McCollister, S. B. Toxicology: Cost/Time. Presented at American Chemical Society Symposium "Economics of Pesticides - Current and Future". 163rd ACS National Meeting, Boston, Mass., April 9-14, 1972.
- 14) Gehring, P. J. and Rowe, V. K. Urethane glycols toxicology. Gordon Research Conference - "Chemistry and Physics of Cellular Materials", N. Hampton School, New Hampton, NJ, August, 1972.

- 15) Gehring, P. J., Kramer, C. G., Schwetz, B. A., Rose, J. Q., Rowe, V. K. and Zimmer, J. A. The fate of 2,4,5-trichlorophenoxyacetic acid (2,4,5-T) following oral administration to man. 12th Ann. Meeting, Society of Toxicology, March, 1973 Toxicol. Appl. Pharmacol. 25:455, 1973
- 16) Schwetz, B. A. and Gehring, P. J. The effect of tetrachlorophenol and pentachlorophenol on rat embryonal and fetal development. 12th Ann. Meeting Society of Toxicology, March, 1973. Toxicol. Appl. Pharmacol. 25:455, 1973.
- 17) Norris, J. M., Kociba, R. J., Schwetz, B. A., Rose, J. Q., Humiston, C. G., and Gehring, P. J. Toxicological evaluation of fire retardant chemicals: decabromodiphenyl oxide and octabromobiphenyl. Fall Meeting Am. Soc. Pharmacol. Exp. Therap. The Pharmacologist 15:394, 1973.
- 18) McCollister, Susan B., Kociba, Richard J. and Gehring, Perry J. Studies on the acute and chronic oral toxicity of O,O-diethyl-O- (3,5,6-trichloro-2-pyridyl)phosphorothioate. Fall Meeting Am. Soc. Pharmacol. Exp. Therap. The Pharmacologist 15:396, 1973
- 19) LeBeau, J. E., Humiston, C. G., Rose, J. Q, and Gehring, P. J. Toxicological properties and metabolic fate of 2,2-dibromo-3-nitrilopropionamide (DBNPA). Fall Meeting Am. Soc. Pharmacol. Exp. Therap. The Pharmacologist 15:395, 1973.
- 20) Schwetz, Gehring, P. J. and Kociba, R. J. Toxicological properties of pentachlorophenol relative to its content of chlorinated dibenzo-p-dioxins. Fall Meeting Am. Soc. Pharmacol. Exp. Therap. The Pharmacologist 15:397,1973.
- 21) Ramsey, John C., Rose, James Q., Braun, Werner, and Gehring, Perry. Fate of 6-chloropicolinic acid following oral administration in rats. Fall Meeting Am. Soc. Pharmacol. Exp. Therap. The Pharmacologist 15:406, 1973.
- 22) Schwetz, B. A., Norris, J. M., Sparschu, G. L, Rowe, V. K., Gehring, P. J., Emerson, J. L. and Gerbig, C. G. Toxicology of chlorinated dibenzo-p- dioxins. Conference on "Dibenzodioxins and Dibenzofurans" sponsored by Nat. Inst. Environ. Hlt. Sci. Res. Triangle Park. N. Car. April, 1973.
- 23) Johnson, R. L. Gehring, P. J., Kociba, R. J. and Schwetz, B. A. Chlorinated dibenzo-p- dioxins and pentachlorophenol. Conference on "Dibenzodioxins and Dibenzofurans" sponsored by Nat. Inst. Environ. Hlt. Sci. Res. Triangle Park, N. Car. April, 1973.

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