Curriculum Vita of Dr. Michael J. Plewa

College of Agricultural, Consumer and Environmental Sciences
University of Illinois at Urbana-Champaign
Department of Crop Sciences
August 16, 2012

TITLE: Professor of Genetics and University Scholar

WaterCAMP*W*S Investigator. Center of Advanced Materials for the Purification of Water with Systems

ADDRESS: Room 364 NSRC, MC-635
University of Illinois at Urbana-Champaign
1101 West Peabody Drive
Urbana, IL 61801-4723

Office telephone: 217-333-3614

EDUCATION:

B.S. degree in Biology, Minors in Philosophy and Chemistry, Loyola University of Chicago, 1969.

M.S. degree in Biology (Genetics Group), Illinois State University, 1971.

Ph.D. degree in Biology (Genetics Group), Illinois State University, 1974.

Postdoctoral Research Associate, Department of Agronomy, University of Illinois, 1974-1976.

PROFESSIONAL EXPERIENCE:

Graduate Teaching Assistantship, Illinois State University, 1969-1970.

Graduate Research Assistantship, Illinois State University, 1970-1974.

Assistant Research Geneticist, Institute for Environmental Studies, University of Illinois, 1976-1978.

Assistant Professor of Genetics, Institute for Environmental Studies, University of Illinois, 1978-1982.

Associate Professor of Genetics, Institute for Environmental Studies, University of Illinois, 1982-1986.

Departmental Affiliate, School of Clinical Medicine, University of Illinois, 1981-1982.

Associate Professor of Genetics, Department of Agronomy, University of Illinois, 1983-1986.

Departmental Affiliate, Department of Genetics and Development, 1983-1987.

Visiting Scientist, Biology Division, Molecular Biology Program, Oak Ridge National Laboratory, Oak Ridge, TN. Sabbatic from the University of Illinois, December 1984- June 1985.

Professor of Genetics, Institute for Environmental Studies, University of Illinois, 1986-1996.

Professor of Genetics, Department of Microbiology, University of Illinois, 1987-2002.

Research Geneticist, Experimental Carcinogenesis and Mutagenesis Branch, National Institute for Environmental Health Sciences, Research Triangle Park, NC. Sabbatic from the University of Illinois, August 1992 - June 1993.

Associate Director, Institute for Environmental Studies, University of Illinois, July 1994-July 1995.

Interim Director, Institute for Environmental Studies, University of Illinois, July 1995-November 1996. Service on the Council of Deans, UIUC, 1994-1996.

Member Campus Honors Faculty, 1990-present.

Honorary Professor, Department of Biomedical Sciences, University of Bradford, UK. Sabbatic from the University of Illinois, January - May 2003.

Professor of Genetics, Department of Agronomy, University of Illinois, 1986-1995; Department of Crop Sciences, 1995-present.

Director, Howard Hughes Medical Institute Programs, University of Illinois, College of Liberal Arts and Sciences, 2003-2007.

Interim Associate Head, Department of Crop Sciences, University of Illinois, 2004-2005. Associate Head, Department of Crop Sciences, March 2005-present.

WaterCAMP*W*S Investigator 2007-present. Center of Advanced Materials for the Purification of Water with Systems, a National Science Foundation Science and Technology Center, under Award CTS-0120978.

HONORS AND PROFESSIONAL SERVICE:

Phi Sigma Society Award for outstanding graduate research, 1974.

Donald F. Jones Scholar in Cytogenetics, Research Corporation, New York, 1973-1974.

Donald F. Jones Fellow in Cytogenetics, Research Corporation, New York, 1974-1976.

North Atlantic Treaty Organization Travel Fellowship, 1979.

Member, Editorial Board, *Environmental Mutagenesis*, 1979-1982; *Environmental and Molecular Mutagenesis*, 1993-1998.

Member, Gene-Tox Commission (Committee on Plant Systems), U.S. Environmental Protection Agency, 1980-1982.

Invited Speaker and Travel Fellowship, Third International Conference on Environmental Mutagens, Tokyo/Mishima, Japan, 1981. Travel Fellowship, Fourth International Conference on Environmental Mutagens, Stockholm, Sweden, 1985. Invited Speaker, Fifth International Conference on Environmental Mutagens, Cleveland, USA, 1989. Invited Speaker, Eighth International Conference on Environmental Mutagens, Shizuoka, Japan, 2001.

Invited Lecturer, Workshop and International Symposium on Agricultural Genotoxicity in Developing Countries. Government of Pakistan and U.S. National Science Foundation, Islamabad, Pakistan, 1982.

Invited Speaker, National Institute of Environmental Health Sciences Lecture Series, "New Frontiers in Genetics," 1983.

Member, NIH Environmental Health Sciences Review Committee, National Institute of Environmental Health Sciences, July 1, 1985-June 30, 1988.

Named **University Scholar** for distinction as a member of the faculty of the University of Illinois, 1986.

Member, Editorial Board, *Mutation Research*, 1987-1993; 2000-present.

Editor, Special Issue of *Mutation Research* devoted to the topic, "The Activation of Promutagens by Plant Systems." 1988.

Appointed to the National Institutes of Health Reviewers Reserve, July 1, 1988 - June 30, 1992.

Invited Speaker, International Association of Environmental Mutagen Societies - Latin American Symposium on "Genetic Monitoring for Protection of Human Health and the Environment" San Jose, Costa Rica, March 6-11, 1988. Editor of Symposium Proceedings.

Elected as Councillor, Environmental Mutagen Society 1988-1991.

Appointed to serve on the International Program Advisory Committee for the Fifth International Conference on Environmental Mutagens, 1989.

Federal Job Training Partnership Act, Summer Youth Program, Champaign Consortium, 1988 JTPA Summer Youth Employment and Training Program Worksite of the Year.

Elected to the Executive Board of the Environmental Mutagen Society, 1990-1991; 2000-2002.

Invited Speaker, Third International Conference on Mechanisms of Antimutagenesis and Anticarcinogenesis, Lucca, Italy, 1991. Fourth International Conference on Mechanisms of Antimutagenesis and Anticarcinogenesis, Banff, Canada, 1994. Fifth International Conference on Mechanisms of Antimutagenesis and Anticarcinogenesis, Okayama, Japan, 1996. Seventh International Conference on Mechanisms of Antimutagenesis and Anticarcinogenesis, Grand Rapids, USA, 2000.

Invited Speaker, European Environmental Mutagen Society, August 1991, Prague, Czechoslovakia.

Member, Environmental Biology Science Review Panel, U.S. Environmental Protection Agency, 1991-1994.

Invited Visiting Scientist, Czechoslovakian Academy of Sciences, Prague, August 25 - September 8, 1991.

University of Manitoba Visiting Distinguished Professor Lectureship, Awarded by the Board of Regents, University of Manitoba, November 1991.

J. William Fulbright Senior Scholar, The Board of Foreign Scholarships and the U.S. Information Agency, 1992-1993, Prague, Czech Republic, June - November 1993.

Corresponding Scientist: U.S. C Czech Science and Technology Program. Office of International Cooperation and Development, U.S. Department of Agriculture 1993-1996; Academy of the Czech Republic, Visiting Scientist 1993, 1994, 1995, 1996, 1998, 2000.

Visiting Scientist at BIBRA International (Great Britain) January 1995; February 1996; 1997, 1998, 1999, presenter of invited lectures.

Kyoto University Scholar, Faculty of Engineering, Ministry of Education, Kyoto University, Japan, August - December, 1997; December 1999, October 2001.

William and Flora Hewlett Summer International Research Fellow, 1998.

Elected as Treasurer, Environmental Mutagen Society, 1999 - 2004.

Invited Keynote Speaker for the Third IWA Specialized Conference on Hazard Assessment and Control of Environmental Contaminants B ECOHAZARD=99, December, 1999, Otsu, Japan.

Broadrick-Allen Award for Excellence in Honors Teaching, University of Illinois, 1999.

Campus Wide Award for Excellence in Guiding Undergraduate Research, University of Illinois, 2000.

Editorial Board: Environmental Mutagens and Carcinogens, 2001- present.

Distinguished Member, The National Society of Collegiate Scholars, 2002.

Illinois State University Alumnus Achievement Award, 2003.

Keynote speaker at the European Union Conference on Plant Bioassays, Poland, May 2003.

Plenary lecturer at the EcoHazard 2009 MicroPol meeting, June 2009

Phi Kappa Phi Honor Society, UIUC Chapter 46. President 2008-present.

Environmental Mutagen Society, President-Elect, 2008-2009; President 2009-2010.

Plenary Speaker at the Gordon Research Conference on DBPs 2006, 2009, Elected as the Vice-Chair for the GRC 2012 meeting and Chair for the 2015 meeting.

Teacher-Fellow (national teaching award).

Dr. Plewa has received research grants from federal (NIH, NSF, USEPA, DOD, USDA) state (OSWR, IL EPA, HWRIC, WRC, WMRC, C-FAR) and private sources (HyClone, Research Corporation, Joyce Foundation, Research Board)..

Dr. Plewa has been named 21 times on the University of Illinois Incomplete List of Teachers Rated as Excellent by their Students.

Undergraduate and Graduate Research Students in the Plewa Laboratory				
Undergraduate Research Students			**M.S. Degree Graduate Students**	**Ph.D. Degree Graduate Students**
Maria Ho	Kathy Hajek	Kristin McCalla	Sara Engl	L. Curt Blair
Tim Wilkins	Christine Chorney	Janet Pavese	William Schy	Van Anderson
Pat Dowd	Jamison Allen	Nancy Hsu	Patricia Stapleton	William Schy
Kathy Grant	Michele Sharon	Rebecca Milsk	Monica Lhotka	Doug Kalinowski
William Schy	Lucie Dobrovolny	Jon Zolt	Dan Krompitz	Kathleen Mottus
Rachel Shefner	Frances Hoff	Angelica Laguna	Janet Minton	Kwang-Young Seo
Barb Egan	Joan Riley	Justin Ang	Pam Landos	Young Hwa Ju
Monica Lhotka	Amit Shah	Vince Siebert	Paul Ariagno	Yahya Kargalioglu

Undergraduate and Graduate Research Students in the Plewa Laboratory				
Undergraduate Research Students			**M.S. Degree Graduate Students**	**Ph.D. Degree Graduate Students**
Carol Hansen	David Cortez	Kevin Homman	Shannon Smith	Kara Sorensen*
Richard Carr	Erica Blaford		Tammy Stinson	Mark Rundell
Mary Verdier	James Lodolce		Michelle Silkowski	Mark Muellner
Rebecca Liggin	Anupam Basu		Scott Taylor	Matias Attene Ramos*
Jennifer Pillote	Sarah Connolly		John Opilka	Clara Jeong
Paul Cihak	Jane Tan		Margaret Timme	Justin Pals
Shannon Smith	Bob Stringham		Paul Connelly	Azra Dad
Calvin Ke	RyAnn Nelson		Karen Repetny	Yukako Kamura*
Paul Theodorakis	Adam Conway		Lynn Kirchoff	
Anita Kumar	Bryant Kiliman		Tae-Hee Kim	
Dana Kaiser	Kristen Naschansky		Danielle Vankerk	
Brian McMillan	Susan Bartolini		Emilie Woods	
Megan Sullivan	Megan Anderson		Mark Rundell	
Matt Marengo	Mark Rundell		Mark Muellner	
Mark Muellner	Irene Masiulis		Nancy Hsu	
Paras Mehta	Amar Chadaga		Justin Pals	

Undergraduate and Graduate Research Students in the Plewa Laboratory				
Undergraduate Research Students			**M.S. Degree Graduate Students**	**Ph.D. Degree Graduate Students**
Alex Kim	Eping Li		Jessica Wallace	
Paulina Jazwierska	Kearney Gunsalus		Jessica Osiol	
Shannon McMillan	Margo Mejia			

*Co-advisor

Academic Professional Staff, Visiting Scholars, Post-Doctoral Associates and Sabbatical Associates in the Plewa Laboratory	
Elizabeth Wagner	Patrick Dowd
Danny Weaver	R. Garton
Susan Wood	L. C. Blair
Hwa Xin	Diane Ades-McInerney
Shannon Smith	Jane Fang
Tomas Gichner	Young Ju
Kristen Naschansky	May Al-Doori
Jin Kim	Steve Daniel

PROFESSIONAL ASSOCIATIONS

Environmental Mutagen Society (USA)

Midwest Society of Toxicology
Phi Sigma Honor Society
Sigma Xi Society
Phi Kappa Phi Honor Society
American Chemical Society

PUBLISHED ABSTRACTS:

1 Plewa, M.J. and D.F. Weber. 1972. The effect of monosomy on lipid content of *Zea mays* embryos. Genetics 71:s47-s48.

2 Plewa, M.J. and D.F. Weber. 1973. The effect of monosomy on linoleic acid concentrations in *Zea mays* embryos. Genetics 74:s214.

3 Plewa, M.J., J.M. Gentile, D. Pittman and D.F. Weber. 1973. The effect of temperature on fatty acid profiles of *Saccharomyces cerevisiae*. IL State Acad. Sci. News Letter 2:11.

4 Gentile, J.M. and M.J. Plewa. 1973. Altered relative fatty acid concentrations in a temperature-sensitive mutant of *Saccharomyces cerevisiae*. Am. Soc. Microbiol. Abstracts 73:145.

5 Plewa, M.J., D.F. Weber and E.J. Weber. 1974. Alteration of oleic and linoleic acid concentrations in leaf lipids of monosomic 2 maize plants. Genetics 77:s51.

6 Gentile, J.M. and M.J. Plewa. 1975. A bioassay for screening host-mediated proximal mutagens in agriculture. Environ. Mutagen Soc. Abstracts 6:35-36.

7 Plewa, M.J. and J.M. Gentile. 1975. Possible mutagenic activity of atrazine degradation products. Internat. Maize Symposium Abstracts p. 32, University of Illinois.

8 Plewa, M.J. and J.M. Gentile. 1976. Plant activation of herbicides into mutagens: the mutagenicity of field-applied atrazine on maize germ cells. Mutation Res. 38:390.

9 Gentile, J.M. and M.J. Plewa. 1976. Plant activation of herbicides into mutagens: the mutagenicity of atrazine metabolites in maize kernels. Mutation Res. 38:390-391.

10 Gentile, J.M. and M.J. Plewa. 1978. A comprehensive analysis of the mutagenic properties of pesticides used in commercial maize production. Mutation Res. 53:112.

11 Plewa, M.J., E.D. Wagner and J.M. Gentile. 1979. Analysis of the mutagenic properties of pesticides incorporating animal and plant activation. Environ. Mutagenesis 1:142.

12 Heartlein, M.W., D.M. DeMarini, H.E. Brockman, A.J. Katz, M.J. Plewa and J.C. Means. 1980. Tests for mutagenicity of Lake Bloomington water in *Salmonella* and maize. Environ. Mutagenesis 2:285.

13 Gentile, J.M. and M.J. Plewa. 1980. The activation of promutagens by green plants. Environ. Mutagenesis 2:312.

14 Plewa, M.J., M.L. Ho., P.A. Dowd and E.D. Wagner. 1980. Forward mutation in inbred Early-Early Synthetic, *Zea mays* by chronic exposure to EMS. Environ. Mutagenesis 2:286.

15 Weaver, D.L., P.K. Hopke, J.B. Johnston and M.J. Plewa. 1981. Mutagenicity of Chicago municipal sewage sludge in the *Salmonella*/microsome reverse mutation test. Environ. Mutagenesis 3:399.

16 Blair, L.C. and M.J. Plewa. 1981. Hydroponic plant culture for pollen mutation assay. Environ. Mutagenesis 3:398.

17 Dowd, P.A., E.D. Wagner and M.J. Plewa. 1981. Comparison of germinal and somatic cell mutagenesis after exposure to ethyl methanesulfonate (EMS) and maleic hydrazide (MH) in *Zea mays*. Environ. Mutagenesis 3:399.

18 Plewa, M.J., E.D. Wagner, S. Wood and P.K. Hopke. 1981. Mutagenicity of Chicago sewage sludge in *Zea mays* and *Tradescantia paludosa*. Environ. Mutagenesis 3:400.

19 Gentile, J.M. and M.J. Plewa. 1982. Activation of promutagens in plants: an in vitro approach. Environ. Mutagenesis 4:308.

20 Blair, L.C., M.J. Plewa and J.M. Gentile. 1982. The use of a model sulfide compound to study monooxygenase activity in cultured plant cells. Environ. Mutagenesis 4:308.

21 Dowd, P.A. and M.J. Plewa. 1982. Comparison of mutagenicity of ethylmethanesulfonate (EMS) in acute versus chronic exposure in *Zea mays*. Environ. Mutagenesis 4:349.

22 Johnson, G.V. and M.J. Plewa. 1982. Conservation tillage: a case study of the problems of using the current genotoxicology literature in policy analysis. Environ. Mutagenesis 4:312-313.

23 Means, J.M., G.D. Marbury, J.M. Gentile and M.J. Plewa. 1982. Absence of genotoxicity induced by ^{3}H and ^{14}C labeled compounds in *Salmonella typhimurium* and *Bacillus subtilus*. Environ. Mutagenesis 4:323.

24 Waters, M.D., J.M. Gentile and M.J. Plewa. 1982. An evaluation of the genotoxic properties of pesticides involved in commercial corn production. Environ. Mutagenesis 4:341.

25 Weaver, D.L., P.K. Hopke and M.J. Plewa. 1982. Mutagenicity of municipal sewage sludge in the *Salmonella*/microsome reverse mutation test. Environ. Mutagenesis 4:365-366.

26 Engl, S.A., P.K. Hopke and M.J. Plewa. 1982. Analysis of the genotoxicity of municipal sewage sludge with SCEs in human lymphocytes. Environ. Mutagenesis 4:366.

27 Schy, W., R. Garton, P.K. Hopke and M.J. Plewa. 1982. Analysis of municipal sewage sludge for the induction of micronuclei in *Tradescantia paludosa*. Environ. Mutagenesis 4:366-367.

28 Dowd, P.A. and M.J. Plewa. 1983. Comparison of radiation versus chemically induced mutagenicity in *Zea mays*. Environ. Mutagenesis 5:372.

29 Schy, W. and M.J. Plewa. 1983. Induction of somatic mutation by N-ethyl-N-nitrosourea in *Zea mays*. Environ. Mutagenesis 5:372-373.

30 Wagner, E.D., P.A. Dowd and M.J. Plewa. 1983. Evaluation of micronucleus induction in root tip cells of *Zea mays* with ethylmethanesulfonate (EMS). Environ. Mutagenesis 5:371.

31 Gentile, J.M. and M.J Plewa. 1983. Metabolism of chemicals by cell free plant tissue extracts. Environ. Mutagenesis 5:373.

32 Blair, L.C., M.J. Plewa and J.M. Gentile. 1983. Xenobiotic sulfide monooxygenation in tobacco, cotton and carrot cell cultures. Environ. Mutagenesis 5:373-374.

33 Plewa, M.J., D.L. Weaver, L.C. Blair, B. Egan, M. Lhotka and J.M. Gentile. 1983. The plant cell/ microbe coincubation assay. Environ. Mutagenesis 5:374.

34 Weaver, D.L., M.J. Plewa, L.C. Blair and J.M. Gentile. 1983. A comparison of the activation of 2-aminofluorene among four species of cultured plant cells. Environ. Mutagenesis 5:374-375.

35 Francis, B.M., M.J. Plewa and S.A. Engl. 1983. Development of an in vitro assay for teratogenicity using human lymphocytes. Environ. Mutagenesis 5:435.

36 Plewa, M.J. and G.V. Johnson. 1983. The effects of estimated dose and toxicity on statistical analysis of dose-response curves for the *Salmonella* assay. Environ. Mutagenesis 5:394.

37 Means, J.C., G.D. Marbury, M.J. Plewa and J.M. Gentile. 1983. Mutagenicity of HPLC fractions from s-triazine treated *Zea mays*. Environ. Mutagenesis 5:371-372.

38 Plewa, M.J., P.A. Dowd and E.D. Wagner. 1984. Effect of altered temperature and time parameters on EMS-induced forward mutation in *Zea mays*. Environ. Mutagenesis 6:439.

39 Stapleton, P.L., M.J. Plewa, P.K. Hopke and P.A. Dowd. 1984. The effect of soil application on the mutagenic activity of waste water. Environ. Mutagenesis 6:433-434.

40 Anderson, V.A., L.C. Blair and M.J. Plewa. 1984. Initiation and maintenance of suspension cultures derived from two clones of *Tradescantia*. Environ. Mutagenesis 6:472.

41 Lhotka, M.A., M.J. Plewa, L.C. Blair and J.M. Gentile. 1984. Determination of protein content of tobacco cell cultures for use in plant activation studies. Environ. Mutagenesis 6:473.

42 Gentile, J.M., S. Townsend, G.J. Gentile and M.J. Plewa. 1984. The enhancement of 4-nitro-o-phenylenediamine mutagenic activity by plant S-9. Environ. Mutagenesis 6:473.

43 Gentile, J.M., G.J. Gentile, S. Townsend and M.J. Plewa. 1985. Mutagenicity of phenylenediamines to *Salmonella* following plant and mammalian hepatic activation. Environ. Mutagenesis 7:23, Suppl. 3.

44 Gentile, J.M., G.J. Gentile and M.J. Plewa. 1985. In vitro activation of promutagens by plants: a comparison of cell free and intact plant cell protocols. Environ. Mutagenesis 7:43, Suppl. 3.

45 Pluymers D., D. Heydenberg, J.M. Gentile and M.J. Plewa. 1985. Characterization of promutagen activation by plant cells in culture. Environ. Mutagenesis 7:43, Suppl. 3.

46 Plewa, M.J., L.C. Blair and J.M. Gentile. 1985. A preincubation procedure for the plant cell/microbe coincubation assay for the detection of plant activated promutagens. Environ. Mutagenesis 7:40, Suppl. 3.

47 Blair, L.C., M.J. Plewa and J.M. Gentile. 1985. Impurities of commercial 4-nitro-o-phenylenediamine and a novel plant activated promutagen. Environ. Mutagenesis 7:40, Suppl. 3.

48 Wagner, E.D., P.A. Dowd, W.E. Schy and M.J. Plewa. 1985. Relationship between the induction of micronuclei and forward mutation in maize embryonic target cells. Environ. Mutagenesis 7:40, Suppl. 3.

49 Schy, W.E., P.A. Dowd and M.J. Plewa. 1985. Initiation of molecular dosimetry studies of ethyl methanesulfonate and ethylnitrosourea using the *yg2* assay in maize. Environ. Mutagenesis 7:41, Suppl. 3.

50 Lhotka, M.A., M.J. Plewa and J.M. Gentile. 1985. Plant activation of m-phenylenediamine by tobacco cells in the plant cell/microbe coincubation assay. Environ. Mutagenesis 7:41, Suppl. 3.

51 Hansen, C.L., M.J. Plewa, L.C. Blair and J.M. Gentile. 1985. Activation of 2-aminofluorene by cultured plant cells using the forward mutation assay *Salmonella typhimurium* SV50. Environ. Mutagenesis 7:42, Suppl. 3.

52 Stapleton, P.L., C.L. Hansen, K.A. Marley, R.A. Larson and M.J. Plewa. 1985. Mutagenicity and toxicity of aged corn oil. Environ. Mutagenesis 7:42, Suppl. 3.

53 Gentile, J.M. and M.J. Plewa. 1985. In vitro activation of promutagens by plants: A comparison of techniques. IV International Conference on Environmental Mutagens, Stockholm. Abstracts page 292.

54 Gentile, G.J., J.M. Gentile and M.J. Plewa. 1985. Phenylenediamine activation by plant and mammalian hepatic systems. IV International Conference on Environmental Mutagens, Stockholm. Abstracts page 225.

55 Wagner, E.D., P.A. Dowd, W.E. Schy and M.J. Plewa. 1985. Induction of micronuclei in maize root-tip cells and a correlation with forward mutation at the *yg2* locus. IV International Conference on Environmental Mutagens, Stockholm. Abstracts page 244.

56 Plewa, M.J., L.C. Blair, M. Lhotka, V.A. Anderson and J.M. Gentile. 1985. The activation of promutagens by cultured plant cells in suspension. IV International Conference on Environmental Mutagens, Stockholm. Abstracts page 206.

57 Johnson, G.V. and M.J. Plewa. 1985. A test of the uniformity of radiation induced mutation rate between *Salmonella typhimurium* and *Zea mays*. IV International Conference on Environmental Mutagens, Stockholm. Abstracts page 216.

58 Plewa, M.J. 1985. Invited Paper. Metabolic activation of promutagens by plant systems: The plant cell/microbe coincubation assay. Society of Environmental Toxicology and Chemistry. Abstracts 6th Annual Meeting, p. 15.

59 Hacker, L.S., J. Day, G.J. Gentile, J.M. Gentile and M.J. Plewa. 1986. Promutagen activation by combined plant and mammalian in vitro activation systems. Environ. Mutagenesis 8:33, Suppl. 6.

60 Heydenburg, D., J.M. Gentile and M.J. Plewa. 1986. The influence of plant cell culture age on promutagen metabolism in the plant cell/microbe coincubation assay. Environ. Mutagenesis 8:37, Suppl. 6.

61 Shafer, T., J.M. Gentile and M.J. Plewa. 1986. Promutagen activation by the green algae *Selenastrum capricornutum* in the plant cell/microbe coincubation assay. Environ. Mutagenesis 8:76-77, Suppl. 6.

62 Anderson, V.A, M.J. Plewa and J.M. Gentile. 1986. Plant activation of dibromoethane, m-phenylenediamine, and NOPx by *Tradescantia* clone 03 cells in culture. Environ. Mutagenesis 8:5, Suppl. 6.

63 Lhotka, M.A., M.J. Plewa and J.M. Gentile. 1986. Plant activation of m-phenylenediamine by tobacco, cotton, and carrot cells in the plant cell/microbe coincubation assay. Environ. Mutagenesis 8:44, Suppl. 6.

64 Plewa, M.J., E.D. Wagner, P.A. Dowd and J.M. Gentile. 1986. Plant activation of m-phenylenediamine: Biological affinity of an enzyme system in cultured tobacco cells. Environ. Mutagenesis 8:65, Suppl. 6.

65 Day, J., G.J. Gentile, J.M. Gentile and M.J. Plewa. 1987. Promutagen activation by photosynthetic and nonphotosynthetic plant cell cultures. Environ. Mutagenesis 9:28, Suppl. 8.

66 Johnson, G.V. and M.J. Plewa. 1987. A test of the uniformity of radiation-induced mutation rates. Environ. Mutagenesis 9:50, Suppl. 8.

67 Lippert, M., J.M. Gentile and M.J. Plewa. 1987. Activation of promutagens by algae. Environ. Mutagenesis 9:60, Suppl. 8.

68 Plewa, M.J., D. Kalinowski and F.L. Larimer. 1987. Development of pMP4, a shuttle vector for use in defining frameshift mutations at the his4-38 region of yeast. Environ. Mutagenesis 9:85, Suppl. 8.

69 Schy, W.E. and M.J. Plewa. 1987. Molecular dosimetry studies of forward mutation induced at the *yg2* locus in maize by ethyl methanesulfonate. Environ. Mutagenesis 9:96, Suppl. 8.

70 Wagner, E.D., M.J. Plewa and J.M. Gentile. 1987. Diethyldithiocarbamate inhibits the activation of 2-aminofluorene by cultured tobacco cells. Environ. Mutagenesis 9:110, Suppl. 8.

71 Hertel, L.S., G.J. Gentile, J.M. Gentile and M.J. Plewa. 1988. Activation of promutagens by plant protoplasts. Environ. Molecular Mutagenesis 11:46, Suppl. 11.

72 Lippert, M., J.M. Gentile and M.J. Plewa. 1988. The activation of model promutagens by Selenastrum capricornutum in a modified plant cell/microbe coincubation assay. Environ. Molecular Mutagenesis 11:60, Suppl. 11.

73 Ariagno, P.W., E.D. Wagner, M.M. Verdier, J.M. Gentile and M.J. Plewa. 1988. Inhibition of plant activation of m-phenylenediamine, a promutagenic monocyclic aromatic amine. Environ. Molecular Mutagenesis 11:6, Suppl. 11.

74 Wagner, E.D., M.J. Plewa and J.M. Gentile. 1988. Repression of the plant cell activation of 2-aminofluorene by specific enzyme inhibitors. Environ. Molecular Mutagenesis 11:110, Suppl. 11.

75 Plewa, M.J., D. Kalinowski, K. Mottus, P. Cihak, J. Pillote and F.W. Larimer. 1988. Molecular spectrum analysis of frameshift mutations in yeast. Environ. Molecular Mutagenesis 11:83, Suppl. 11.

76 Kalinowski, D., K.M. Mottus, M.J. Plewa and F.W. Larimer. 1989. Molecular spectrum analysis of frameshift mutations in yeast. Environ. Molecular Mutagenesis 14:98, Suppl. 15.

77 Wagner, E.D., M.M. Verdier and M.J. Plewa. 1989. Comparison of the plant cell activation of two promutagens using enzyme inhibitors. Environ. Molecular Mutagenesis 14:211, Suppl. 15.

78 Smith, S.R., M.M. Verdier, E.D. Wagner and M.J. Plewa. 1989. Protein content of tobacco cells in relation to the plant activation of *m*-phenylenediamine and 2-aminofluorene. Environ. Molecular Mutagenesis 14:188-189, Suppl. 15

79 Plewa, M.J., S. Taylor, A. Kumar and R. Carr. 1989. Double-strand gap plasmids do not alter the rate of mutation or gene conversion in *Saccharomyces cerevisiae*. Environ. Molecular Mutagenesis 14:154, Suppl. 15.

80 Plewa, M.J. 1989. The activation of promutagens by plant cell systems. (Invited symposium lecture to the Fifth International Conference on Environmental Mutagens). Environ. Molecular Mutagenesis 14:154, Suppl. 15

81 Taylor, S.T., P. Theodorakis, A. Kumar and M.J. Plewa. 1990. A genetic approach for the study of spontaneous deletion mutations in a eukaryote model system. Environ. Molecular Mutagenesis 15:59, Suppl. 17.

82 Stinson, T.J., S. Jaw, E. Jeffery and M.J. Plewa. 1990. The relationship of lipid peroxidation and DNA strand breakage in mammalian hepatic tissue. Environ. Molecular Mutagenesis 15:58, Suppl. 17.

83 Mottus, K.M., M.J. Plewa and F.W. Larimer. 1990. The use of PCR in the molecular spectra analysis of 4-nitroquinoline-N-oxide-induced reversion in *Saccharomyces cerevisiae*. Environ. Molecular Mutagenesis 15:43, Suppl. 17.

84 Kalinowski, D., K.M. Mottus, M.J. Plewa and F.W. Larimer. 1990. Molecular spectrum analysis of frameshift mutation in yeast. Environ. Molecular Mutagenesis 15:29, Suppl. 17.

85 Silkowski, M.A. and M.J. Plewa. 1990. Analysis of the genotoxicity of municipal incinerator ash. Environ. Molecular Mutagenesis 15:55, Suppl. 17.

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Biosketch of Dr. Michael J. Plewa.

Dr. Michael J. Plewa is University Scholar and Professor of Genetics (College of Agricultural, Consumer and Environmental Sciences), member of the Campus Honors Faculty, and the WaterCAMP*W*S Program, College of Engineering, at the University of Illinois. He has an international reputation for research and teaching in environmental and molecular mutagenesis. His research program has been continuously funded by competitive national and regional research grants for over 36 years and he has published >200 scientific papers and reports and books. Dr. Plewa has been with the University of Illinois at Urbana-Champaign where he was promoted from Assistant Professor to Full Professor in eight years. His current research interests include the isolation and chemical characterization of antimutagens and anticarcinogens from commercial agricultural by-products, the analysis of mutagenic synergy of aromatic amines and OP insecticides, and the calibration of cytotoxic, genotoxic and toxicogenomic responses induced by drinking-water disinfection by-products. His first sabbatic was at the Biology Division at Oak Ridge National Laboratory during 1985. In 1986 he was awarded the title of University Scholar as a distinguished faculty member of the University of Illinois. In 1991 Dr. Plewa was awarded a Distinguished Professor Lectureship from the University of Manitoba Board Of Regents. That same year Dr. Plewa was named a Visiting Scientist at the Academy of Sciences of Czech Republic and he has continued to work in Prague. In 1992-93 he was a Visiting Scientist at the National Institutes of Health for 10 months during his sabbatical year. During this time Dr. Plewa was named a J. William Fulbright Senior Scholar, by the Board of Foreign Scholarships and the U.S. Information Agency. Dr. Plewa took his Fulbright Scholarship to Prague. Dr. Plewa was named as a Kyoto University Scholar in the Faculty of Engineering. This award was provided by the Japan Ministry of Education and he spent from August to December 1997 conducting research and delivering lectures throughout Japan. He has continued his scholarly activity at Kyoto University to the present. In 1998 Dr. Plewa, was awarded a William and Flora Hewlett International Research Grant to develop a new environmental program with the Academy of Sciences of the Czech Republic. Dr. Plewa served as a Counselor, member of the Executive Board and was elected as the Treasurer of the Environmental Mutagen Society in 2000 and 2002. Dr. Plewa teaches, CPSC 336 Tomorrow's Environment, CPSC 432 Genetic Toxicology and Molecular Mutagenesis, CPSC 449 Basic Toxicology, CHP 395 Controversial Environmental Issues, and is a participant in the ACES 100 Discovery Course for freshmen students. Dr. Plewa was appointed to the College of ACES Teaching Academy of Excellence in 1999 and he currently is a member of the Honors Council. He received the 1999 Broadrick-Allen Award for Excellence in Honors Teaching from the Campus Honors Program. In 2000 he was the recipient the University of Illinois Campus Award for Excellence in Guiding Undergraduate Research and in 2009 he was named a NACTA Teacher Fellow. In 2002 he was named a distinguished member of the National Society of Collegiate Scholars. Dr. Plewa received the 2003 Illinois State University Alumnus Achievement Award. In 2008 Dr. Plewa was elected as President of the UIUC Chapter of Phi Kappa Phi Honor Society, and in he was the President of the Environmental Mutagen Society (2010) and was the Program Chair for the 2009 40th EMS annual meeting. Dr. Plewa is the Vice Chair of the 2012 Gordon Research Conference on Drinking Water DBPs; he was elected as chair for the 2015 Gordon Research Conference. For 2010 he was awarded the College of ACES Senior Faculty Award for Excellence in Research. Dr Plewa’s name has appeared 23 times on the University of Illinois List of Teachers Rated as Excellent by their Students.