CURRICULUM VITAE

NAME:	Eleanor Groeniger Rogan
HOME ADDRESS:	725 N 92 nd Court, #307, Omaha, NE 68114
CAMPUS ADDRESS:	Department of Environmental, Agricultural and Occupational Health College of Public Health 984388 Nebraska Medical Center Omaha, NE 68198-4388

EDUCATION:

Mount Holyoke College, South Hadley, Massachusetts, 1959-1963. A.B. with major in biochemistry.

The Johns Hopkins University, 1963-1968. Ph.D. in the Department of Biology.

POST-DEGREE TRAINING:

Post-doctoral Fellow with K.J. Monty, Department of Biochemistry, The University of Tennessee, Knoxville, 1969-1971.

ACADEMIC APPOINTMENTS:

Adjunct Professor, Department of Biomechanics, University of Nebraska at Omaha, 2016present.

Interim Associate Dean for Research, College of Public Health, UNMC, 2014-2015.

Faculty Fellow, University of Nebraska, Robert B. Daugherty Water for Food Institute, 2014-present.

Professor, Department of Environmental, Agricultural and Occupational Health, UNMC, 2011-present.

Chair, Department of Environmental, Agricultural and Occupational Health, College of Public Health, UNMC, 2007-present.

Professor, Eppley Institute for Research in Cancer, 1990-2011 and Departments of Pharmaceutical Sciences, 1990-present and Biochemistry and Molecular Biology, UNMC, 1993-2005.

Academic Tenure Awarded, 1989.

Associate Professor, Eppley Institute for Research in Cancer and Department of Pharmaceutical Sciences, UNMC, 1980-1990.

Assistant Professor, Eppley Institute for Research in Cancer, UNMC, 1976-1980. Department of Biomedicinal Chemistry, UNMC, 1977-1980.

Research Associate with E. Cavalieri, Eppley Institute for Research in Cancer, University of Nebraska Medical Center (UNMC), Omaha, NE 1973-1976.

Research Associate with J.H. Coggin, Jr., Department of Microbiology. The University of Tennessee, Knoxville, 1971-1973.

Lecturer in the Department of Biological Sciences, Goucher College, Towson, Maryland, 1968-1969.

GRANT/CONTRACT SUPPORT:

"Quantifying Water Quality in Rural Nebraska Counties with Elevated Incidence of Pediatric Cancers" Sammy's Superheroes Foundation January, 2020 to December, 20201 \$110,000.00 Principal Investigator

"Linking Pediatric Health Outcomes with Water Qualty Across Nebraska Watersheds" Edna Ittner Pediatric Research Grant University of Nebraska Foundation January, 2018 – June, 2019 \$50,000.00 Principal Investigator

"Health Systems Transformation" UNMC College of Public Health, Innovation Fund Research Grant March, 2016 to February, 2017 \$25,000.00 Senior Advisor

"The Role of Oxidative Stress in the Pathogenesis of Fuchs Endothelial Corneal Dystrophy" National Eye Institute to Harvard Medical School August, 2015 to July, 2025 \$653,225.00 (for 5 years) Principal Investigator (of subcontract) "National Taiwan University Hospital Agreement" National Taiwan University Hospital November, 2014 to October, 2015 \$50,000.00 Principal Investigator

"Estrogen-DNA Adducts as Novel Biomarkers for Ovarian Cancer Risk and for Use in Prevention" Department of Defense, Ovarian Cancer Research Program March, 2010 to March, 2013 \$167,000.00 Principal Investigator

"Estrogen-DNA Adducts in Breast, Urine & Serum as Biomarkers of Breast Cancer Risk" National Cancer Institute 2006-2009 Co-Investigator

"Estrogen-Induced Depurination of DNA: A Novel Target for Breast Cancer Prevention" Department of Defense Breast Cancer Research Program, Breast Cancer Center of Excellence 2003-2007 Program Leader, Analytical Core Component

"Agrochemicals and Cancer: A Framework and P450 Expression" Collaborative Seed Grant from University of Nebraska Medical Center/University of Nebraska-Lincoln March, 2001 to March, 2002 Principal Investigator

"Initiation of Human Breast Cancer: Enzymes Involved and Early Detection" Cancer Research Foundation of America July, 2000 to July, 2002 Principal Investigator

"Initiation of Breast Cancer: Activated Catechol Estrogens" U.S. Army 1996-1999 Principal Investigator

"Initiation of Breast Cancer: Activated Catechol Estrogens" National Cancer Institute 1995-1998 Principal Investigator "Mechanisms of 7,12-Dimethylbenzanthracene Carcinogenesis" National Cancer Institute
1988-1992
renamed "Mechanisms of Carcinogenesis of Aromatic Hydrocarbons"
1993-1996
"Molecular Origin of Cancer: From PAH to Estrogen Quinones"
1996-2001
renamed "Molecular Origin of Cancer: Catechol Estrogen-3,4-Quinones"
2001-2005
Program Leader of Project #2 in the program project grant

"Molecular Origin of Cancer: From PAH to Estrogen Quinones" National Cancer Institute 1996-2001 renamed "Molecular Origin of Cancer: Catechol Estrogen-3,4-Quinones" 2001-2005 Program Leader Core Component on the program project grant

"Development of Monoclonal Antibodies to the Predominant Aromatic Hydrocarbon Depurinating Adducts of Adenine" ASC SIG grant 1995-1996 Principal Investigator on the ASC SIG grant

"Development of Monoclonal Antibodies to the Predominant Aromatic Hydrocarbon Depurination Adducts of Adenine" ASC SIG grant 1994-1995 Principal Investigator

"Use of DNA Adducts in the Study of PAH Carcinogenesis" National Cancer Institute 1979-1983; 1984-1995 Principal Investigator "Metabolic Formation of 3-Methylcholanthrene-DNA Adducts" Nebraska Department of Health 1988-1989 Principal Investigator

"Persistence of Carcinogen Binding to DNA" Nebraska Department of Health 1983-1984 Principal Investigator "Activation and Binding of Benzo[*a*]pyrene to DNA in Mouse Mammary Gland Explants" UNMC Seed Research Grant 1985-1986 Principal Investigator

"Binding of Hydroxymethyl Aromatic Hydrocarbons in <u>S</u>. <u>typhimuriumz</u>" UNMC Seed Research Grant 1981-1982 Principal Investigator

"Role of Estrogen Metabolism in the Initiation of Prostate Cancer: Biomarkers of Susceptibility and Early Detection" Department of Defense Prostate Cancer Research Program 2002-2005 Co-Investigator

"Mechanisms of Carcinogenesis of Dibenzo[*a*,*l*]pyrene"
National Cancer Institute
1991-1995
renamed "Dibenzo[*a*,*l*]pyrene: Model of Tumor Initiation & Promotion"
1996-1998
renamed "Molecular Origin of Cancer: Catechols → Semiquinones → Quinones"
1999-2003
Co-Investigator

"Radical Cations of PAH in Carcinogenesis and Metabolism" National Cancer Institute 1988-1995 Co-Investigator

"Catechol Estrogens-Carcinogenic Forms of Estrogens" National Cancer Institute 1992-1993 Co-Investigator

"Dibenzo[*a*,*l*]pyrene: Smoking and Environmental Cancer Risk" Nebraska Department of Health 1991-1992 Co-Investigator

"Dibenzo[*a*,*l*]pyrene: Smoking and Environmental Cancer Risk" Nebraska Department of Health 1990-1991 Co-Investigator "Dibenzo[*a*,*l*]pyrene: Smoking and Environmental Cancer Risk" UNMC Seed Research Grant 1990-1991 Co-Investigator

"Renal and Mammary Carcinogenicity of Catechol Estrogens" Wendy Will Case Cancer Fund 1987-1988 Co-Investigator

"Mechanisms of Mammary Carcinogenesis by Hydrocarbons" National Cancer Institute 1983-1987 Co-Investigator

"Metabolism and Genotoxicity of Nitrosamines" National Cancer Institute 1985-1990 Co-Investigator

"Capsaicin: Chemistry, Carcinogenesis and Mode of Action" National Cancer Institute 1985-1988 Co-Investigator

"Cyclopenta[cd]pyrene Series: Mutagenesis and Carcinogenesis" National Institute for Environmental Health Sciences 1979-1985 Co-Investigator

"Environmental Carcinogenesis" Public Health Service Contract 1976-1979 Co-Investigator

"Studies on Environmental Carcinogenesis and Bioassay (Skin Studies)" Public Health Service Contract 1979-1981 Co-Investigator

"Quantitative Study of Carcinogenesis by Hydrocarbons" National Cancer Institute 1973-1976 Co-Investigator

PATENTS:

Cavalieri, E., and Rogan, E. (#5, 849, 906, December 15, 1998) Antigenic conjugates of polycyclic aromatic hydrocarbons to nucleosides.

Cavalieri, E., Casale, G., Rogan, E., Stack, D. (#5, 840, 889, November 24, 1998) Synthesis of estrogen- purine base and estrogen-mercapturate adducts and development of fluorescent probes and monoclonal antibodies to assay those adducts.

Cavalieri, E., Casale, G., Rogan, E., Stack, D. (#5, 952,183, September 14, 1999) Synthesis of estrogen-mercapturate adducts and development of fluorescent probes and monoclonal antibodies to assay those adducts.

Cavalieri, E., Rogan, E. (#8,629,174, January 15, 2015) A unifying mechanism and methods to prevent cancer and neurodegenerative diseases.

HONORS AND AWARDS:

Student trainee under F.J. Bollum, Biology Division, Oak Ridge National Laboratory and Oak Ridge Associated Universities, summers of 1962, 1963, and 1964.

A.B. cum laude et distinctione, Mount Holyoke College, 1963. United States Public Health Service Predoctoral Fellow 1965-1968.

Graduate Faculty Fellow, University of Nebraska, 1977-present.

Mid-America State Universities Association Honor Lecturer, 1988-1989.

The Twelfth Linus Pauling Functional Medicine Award, The Institute for Functional Medicine, 2006.

UNMC Distinguished Scientist for 2007.

Excellence in Teaching Award, College of Public Health, UNMC, 2009-2010.

Chancellor Robert D. Sparks Award in Public Health and Preventive Medicine, College of Public Health, UNMC, 2017.

MEMBERSHIPS IN PROFESSIONAL SOCIETIES:

Co-Chairman and Organizer of the Fourteenth International Symposium on Polycyclic Aromatic Compounds, Osage Beach, MO, September 8 - 11, 1993.

Editor of the Proceedings of the Fourteenth International Symposium on Polycyclic Aromatic Compounds

Editorial Committee, International Symposium on Polynuclear Aromatic Hydrocarbons, 1989-1995

Society of Toxicology

American Public Health Association

Member, Environmental and Occupational Health Council, Association of Schools of Public Health, 2011-present

NATIONAL ACTIVITIES AND COMMITTEE ASSIGNMENTS:

Reviewer, DoD Prostate Cancer Research Program, Baltimore, MD, December 2-4, 2018.

Reviewer, California Breast Cancer Research Program, San Francisco, CA, March 28-29, 2008

Special Study Section, Research Centers in Minority Institutions Review Committee, NIH, September 25-26, 2002, Clark Atlanta University

Special Study Section, National Cancer Institute, April 14, 1998

Special Study Section, National Institutes of Health, March 9-10, 1998

Reviewer, U.S. Army Breast Cancer Research Program grants, 1997, 1998, 1999, 2000, 2002, 2003

Session chair, The Department of Defense Breast Cancer Research Program "Era of Hope" meeting, October 31-November 4, 1997

Participant in the NCI workshop "Do Estrogenic Compounds induce Genotoxic Events leading to Cancer?" Bethesda, MD, December 8-9, 1996.

Special Review Committee, National Institute of Environmental Health Sciences, Research Triangle Park, NC, February 23, 1996

Contract Study Section, National Cancer Institute, Bethesda, MD, January 6, 1995

Special Review Committee, National Institute of Environmental Health Sciences, Research Triangle Park, NC, March 31, 1995

Special Review Committee, National Institute of Environmental Health Sciences, Kansas City, KS, February 16-18, 1994

Special Review Committee for RFA "Molecular interventions for environmentally induced disease prevention: Biomarkers to assess the effectiveness of intervention studies," NIEHS, February 17-18, 1993.

Nebraska Department of Health LB595 grant review committee, May 1995

Executive Graduate Council, University of Nebraska, 1985-1988; 1990-1993.

President's Intercampus Faculty Advisory Committee, UNMC Representative, 1978-1981; 1986-1987; and 1988-1989.

Ad Hoc Committee to Develop By-Laws for UNMC Faculty Senate, Eppley Representative, 1978.

Search Committee for Vice-Chancellor for Research at UNL, 1992-1993.

UNMC Faculty Senate, Eppley Representative, 1979-1982 Vice-president, 1979 President, 1979-1981 Eppley Representative, 1986-1989

Chancellor's Minority Student Affairs Advisory Committee, 1982-1987

Cancer Research Grant Review Committee, Nebraska Department of Health, 1983

Campus Activities Committee, 1983-1984

UNMC Seed Research Review Committee, 1984, 1985, 1986, 1987, 1994 (Chair), 1996, 1998

United Way, UNMC Steering Committee, 1984-1991

Graduate Fellowship Committee, 1985-1986

UNMC Graduate Council, 1987-1988, 2006-2008

UNMC Safety Committee, 1986-present; Chairman, 1987-2009

UNMC Chemical and Radiation Safety Committee, 1995-2009

UNMC Radiation Safety Committee, 2009-present

UNMC Chemical Safety Committee, 2009-present

UNMC Task Force for Smoke Free Campus, 1987-1991; Chairman, Policy Subcommittee

UNMC Classroom Space Utilization Committee, 1987-1989

UNMC Academic Freedom and Tenure Committee, 1990-1996; Chairman, 1991-1996 and 2008-present

Ad Hoc Committee to Review UNMC Faculty Senate By-Laws, 1992

UNMC Awareness Campaign Internal Audience Committee, member, 1997

UNMC Honorary Degrees and Awards Committee, 2002-present

UNMC Research Resources Board, 2014-present

Eppley Institute Animal Care Committee, 1979-1980

Eppley Institute Director's Advisory Committee, 1980-1983; 1991-1994; 1997-2008

Eppley Institute Space Committee, 1983-1985

ACS Institutional Grant Review Committee, 1987, 1988, 1989, 1990

Eppley Institute Safety Committee, 1985-2007; Chairman, 1986-2007

Planning Committee for a Breast Cancer Symposium, Chairman, 1988-1989

Eppley Institute Cancer Communications Committee, Chairman, 1990-1998

Eppley Institute Computers and Communications Committee, 1999-2007

Eppley Institute Carcinogenesis Search Committee, 1990-1991, 1996-1997

Eppley Institute Cancer Research Training Program Committee, 1995-1998

Eppley Institute Faculty Search Committee, 1998-2001

Eppley Institute Faculty Search Committee in Chemoprevention/Molecular Epidemiology, 2000-2001

College of Public Health, Evaluation Committee, 2017-present

College of Public Health, Design and Implementation Task Force, member, 2007-2009

College of Public Health, Environmental Health Sciences Search Committee, Chair, 2006-2009

College of Public Health, Environmental Health Sciences Graduate Program Committee, Chair, 2006-2008 College of Public Health, Academic Affairs Subcommittee (Curriculum Committee), member, 2007-2011

College of Public Health, MPH Graduate Program Committee, member, 2007-2009

College of Public Health Building Committee, 2008

College of Public Health Dean Search Committee, 2008-2009

College of Public Health Dean's Leadership Council, 2009-present

College of Public Health, Environmental, Agricultural and Occupational Health Promotion and Tenure Committee, Chair, 2010-2011

College of Public Health, Strategic Planning Executive Committee, 2015-2017

College of Public Health, Promotion and Tenure Committee, Chair, 2013-2014

College of Public Health, Strategic Planning Subcommittee for Cancer Prevention and Control Program, Co-Chair, 2015-2017

College of Public Health, Accreditation Self-Study Committee, 2015-2016

College of Public Health, Self-Study Subcommittee on Research and Service, Chair, 2015present

Search Committee for a Director of the Center for Cancer Prevention and Population Studies, member, 2015-present

Pharmaceutical Sciences Graduate Committee, 1984-1989

Search Committee for Department Chairman, Department of Pharmaceutical Sciences, 1987-1988

Search Committee for a New Faculty Member, Department of Pharmaceutical Sciences, Chairman, 1989-1990

College of Pharmacy Promotion and Tenure Committee, 1990-1991

*Executive Committee, Environmental Carcinogenesis and Toxicology Graduate Program, 1991-2007

Ph.D. Supervisory Committee for Mr. Walid Al-Turk, Department of Biomedicinal Chemistry, College of Pharmacy, 1977-1979 (degree granted)

Ph.D. Supervisory Committee for Mr. Scott Helgeson, Department of Biomedicinal Chemistry, College of Pharmacy, 1979-1983

M.S. Advisory Committee (Chairman) for Ms. Fatma El-Rashidy, Department of Biomedicinal Chemistry, College of Pharmacy, 1980-1981

Ph.D. Supervisory Committee for Ms. Jean Hassing, Department of Biomedicinal Chemistry, College of Pharmacy, 1981-1982 (degree granted)

M.S. Advisory Committee for Mr. Ronald Heinecke, Department of Biomedicinal Chemistry, College of Pharmacy, 1981-1982 (degree granted)

Ph.D. Supervisory Committee for Mr. Kevin Stansbury, Department of Biomedicinal Chemistry, College of Pharmacy, 1983-1984

Ph.D. Supervisory Committee for Mr. Lance Hines, Department of Pharmaceutical Sciences, College of Pharmacy, 1982-1987 (degree granted)

M.S. Advisory Committee for Mr. Kevin Church, Department of Biomedicinal Chemistry, College of Pharmacy, 1983-1985 (degree granted)

Ph.D. Supervisory Committee for Ms. Zainab Al-Bayati, Department of Biomedicinal Chemistry, College of Pharmacy, 1983-1985 (degree granted)

M.S. Advisory Committee for Ms. Manju Goel, Department of Pharmaceutical Sciences, College of Pharmacy, 1984-1987 (degree granted)

Ph.D. Supervisory Committee for Mr. Paolo Cremonesi, Department of Pharmaceutical Sciences, College of Pharmacy, 1984-1987 (degree granted)

M.S. Advisory Committee (Chairman) for Mr. Stephen Tibbles, Department of Pharmaceutical Sciences, College of Pharmacy, 1986-1987 (degree granted) Ph.D. Supervisory Committee for Mr. Mohd Shara, Department of Pharmaceutical Sciences, College of Pharmacy, 1986-1990 (degree granted)

Ph.D. Supervisory Committee for Mr. Boonprom Enkvetchakul, Department of Pharmaceutical Sciences, College of Pharmacy, 1988-1990

Ph.D. Supervisory Committee for Mr. Qin Huang, Department of Pharmaceutical Sciences, College of Pharmacy, 1989-1992 (degree granted)

M.S. Advisory Committee for Mr. Todd Wilson, Department of Pharmaceutical Sciences, College of Pharmacy, 1990-1991 (degree granted)

Ph.D. Supervisory Committee for Ms. Nicole Johnson, Department of Biochemistry and Molecular Biology, 1993-1996 (degree granted)

Ph.D. Supervisory Committee for Mr. Shawn Vogen, Department of Biochemistry and Molecular Biology, 1993-1998 (degree granted)

Ph.D. Supervisory Committee for Mr. Dojin Ryu, Department of Food Sciences & Technology, University of Nebraska-Lincoln, 1994-1997 (degree granted)

Ph.D. Supervisory Committee for Mr. Jason Hlywka, Dept. of Food Sciences & Technology, UNL, 1994-1997 (degree granted)

Ph.D. Supervisory Committee for Mr. Aaron Hanson, Dept. of Pharmaceutical Sciences, 1994-1998 (degree granted)

Ph.D. Supervisory Committee (Chair) for Ms. Kimberly Chapman (UNMC M.D./Ph.D. Scholar), Dept. of Biochemistry and Molecular Biology, 1995-2000 (degree granted)

M.S. Advisory Committee for Ms. Lisa Zaddock Crandall, Dept. of Pharmaceutical Sciences, 1998-2001 (degree granted)

Ph.D. Supervisory Committee for Ms. Yuksel Cetin, Dept. of Food Sciences & Technology, UNL, 2001-2003 (degree granted)

Ph.D. Supervisory Committee (Chair) for Mr. Mohamed Ali, Graduate Program in Environmental Toxicology, 2002-2008 (degree granted)

Ph.D. Supervisory Committee for Ms. Diana Londono, Department of Entomology, UN-L, 2002-2005 (degree granted)

Ph.D. Supervisory Committee (Chair) for Mr. Fang Lu, Graduate Program in Environmental Toxicology, 2004-2007 (degree granted)

Ph.D. Supervisory Committee (Chair) for Ms. Li Yang, Graduate Program in Environmental Toxicology, 2005-2010 (degree granted)

Ph.D. Supervisory Committee for Mr. Benjamin Thornton, Graduate Program in Environmental Toxicology, 2005-2009 (degree granted)

Ph.D. Supervisory Committee for Ms Marlo Sellin, Graduate Program in Environmental Health, Occupational Health and Toxicology, 2007-2010 (degree granted)

Ph.D. Supervisory Committee (Chair) for Mr. Gulzar Ahmad, Graduate Program in Environmental Health, Occupational Health and Toxicology, 2008-2009

M.S. and Ph.D. Advisory Committees for Ms. Mariya Liyasova, Department of Environmental, Agricultural and Occupational Health, 2008–2012 (degrees granted)

Ph.D. Supervisory Committee for Ms. Maha Farid, Department of Environmental, Agricultural and Occupational Health, 2008–2012 (degree granted)

Ph.D. Supervisory Committee for Mr. Scott Reiling, Department of Environmental, Agricultural and Occupational Health, 2009-2014 (degree granted)

Ph.D. Supervisory Committee for Ms. Ashley Jessick, Department of Environmental, Agricultural and Occupational Health, 2010-2012

M.S. Advisory Committee for Ms. Ashley Jessick, Medical Sciences Interdepartmental Area, 2012-2013 (degree granted)

Ph.D. Supervisory Committee for Ms. Jannah Obaid, Department of Environmental, Agricultural and Occupational Health, 2013-2015

Ph.D. Supervisory Committee for Mr. Jonathan Ali, Department of Environmental, Agricultural and Occupational Health, 2013-2017 (degree granted)

Ph.D. Supervisory Committee for Ms. Elizabeth Beam, Medical Sciences Interdepartmental Area, 2014 (degree granted)

Ph.D. Supervisory Committee for Mr. Tyler Davis, Medical Sciences Interdepartmental Area, 2014-present

Ph.D. Supervisory Committee for Mr. Niming Wu, Medical Sciences Interdepartmental Area, 2014-2018 (degree granted)

Ph.D. Supervisory Committee (Chair) for Mr. Bodhisattwa Mondal, Department of Environmental, Agricultural and Occupational Health, 2015-2019 (degree granted)

Ph.D. Supervisory Committee for Mr. Nikolaos Chantziantoniou, Medical Sciences Interdepartmental Area, 2015-2019 (degree granted)

Ph.D. Supervisory Committee for Ms. Carol Gilbert, Medical Sciences Interdepartmental Area, 2015-present

Ph.D. Supervisory Committee (Chair) for Ms. Balkissa Ouattara, Department of Environmental, Agricultural and Occupational Health, 2019-present

Ph.D. Supervisory Committee for Mr. Moses New-Aaron, Department of Environmental, Agricultural and Occupational Health, 2019-present.

COMMUNITY SERVICE:

Extensive community service unrelated to university appointment.

Panel member, Expanding Your Horizons in Mathematics and Science, Conference for Young Women in Grades 7 through 9, College of Saint Mary, Omaha, NE, 1996, 1999, 2001

Judge, Junior Academy of Sciences, Metro Regional Science Fair, University of Nebraska-Omaha, Omaha, NE, March 30, 1996

Core Advisory Group for the Nebraska Environmental Science Distance Learning Project, Nebraska Department of Education, 1993

Committee to revise eighth grade science curriculum, Westside Community Schools, 1979-1980

PUBLICATIONS:

Articles published in scholarly journals

- 1. Bollum, F.J., Groeniger, E., and Yoneda, M. Polydeoxyadenylic Acid. <u>Proc. Natl. Acad. Sci.</u> <u>USA</u>, 51:853-859, 1964.
- 2. Rogan, E.G., and Bessman, M.J. Studies on the pathway of incorporation of 2-aminopurine into the deoxyribonucleic acid of <u>Escherichia coli J. Bact.</u>, 103:622-633, 1970.
- 3. Rogan, E.G., Schafer, M.P., Anderson, N.G., and Coggin, Jr., J.H. Cyclic AMP levels in the developing hamster: A correlation with the phasing of fetal antigen in membrane maturation. <u>Differentiation</u>, 1:199-204, 1973.
- 4. Rogan, E.G., and Cavalieri, E. 3-Methylcholanthrene-inducible binding of aromatic hydrocarbons to DNA in purified rat liver nuclei. <u>Biochem. Biophys. Res. Commun.</u>, 58:1119-1126, 1974.
- 5. Rogan, E.G., Mailander, P., and Cavalieri, E. Metabolic activation of aromatic hydrocarbons in purified rat liver nuclei: Induction of enzyme activities and binding to DNA with and without monooxygenase-catalyzed formation of active oxygen. <u>Proc. Natl. Acad. Sci. USA</u>, 73:457-461, 1976.
- 6. Cavalieri, E., Roth, R., Rogan, E.G. Metabolic activation of aromatic hydrocarbons by one-electron oxidation in relation to the mechanism of tumor initiation. pp. 181-190. In: Freudenthal, R., and Jones, P., eds. Polynuclear Aromatic Hydrocarbons: Chemistry, Metabolism and Carcinogenesis. New York, Raven Press, 1976.
- 7. Rogan, E., and Cavalieri, E. Differences between nuclear and microsomal cytochrome P-450 in uninduced and induced rat liver. <u>Mol. Pharmacol.</u>, 14:215-219, 1978.
- 8. Rogan, E., Roth, R., Katomski, P., Benderson, J., and Cavalieri, E. Binding of benzo[*a*]pyrene at the 1,3,6 positions to nucleic acids <u>in vivo</u> on mouse skin and <u>in vitro</u> with rat liver microsomes and nuclei. <u>Chem.-Biol. Interact.</u>, 22:35-51, 1978.
- 9. Rogan, E., Roth, R., and Cavalieri, E. Enzymology of polycyclic hydrocarbon binding to nucleic acids. pp. 265-271. In: Jones, P.W., and Freudenthal, R.I., eds. Carcinogenesis, Vol. 3: Polynuclear Aromatic Hydrocarbons. New York, Raven Press, 1978.

- Cavalieri, E., Roth, R., Rogan, E., Grandjean, C., and Althoff, J. Mechanisms of tumor initiation by polycyclic aromatic hydrocarbons. pp. 273-284. In: Jones, P.W. and Freudenthal, R.I., eds. Carcinogenesis, Vol. 3: Polynuclear Aromatic Hydrocarbons. New York, Raven Press, 1978.
- 11. Rogan, E.G., Katomski, P.A., Roth, R.W., and Cavalieri, E.L. Horseradish peroxidase/hydrogen peroxide-catalyzed binding of aromatic hydrocarbons to DNA. J. Biol. <u>Chem.</u>, 254:7055-7059, 1979.
- 12. Rogan, E., Roth, R., and Cavalieri, E. Binding of aromatic hydrocarbons to DNA catalyzed by peroxidase and by ATP. pp. 685-694. In: Jones, P.W. and Leber, P., eds. Third International Symposium on Polynuclear Aromatic Hydrocarbons. Ann Arbor, MI, Ann Arbor Science Publishers, 1979.
- 13. Cavalieri, E., Roth, R., and Rogan, E. Hydroxylation and conjugation at the benzylic carbon atom: A possible mechanism of carcinogenic activation for some methyl-substituted aromatic hydrocarbons. pp. 517-529. In: Jones, P.W., and Leber, P., eds. Third International Symposium on Polynuclear Aromatic Hydrocarbons. Ann Arbor, MI, Ann Arbor Science Publishers, 1979.
- 14. Rogan, E.G., Roth, R.W., Katomski-Beck, P.A., Laubscher, J.R., and Cavalieri, E.L. Non-enzymatic ATP-mediated binding of hydroxymethyl derivatives of aromatic hydrocarbons to DNA. <u>Chem.-Biol. Interactions</u>, 31:51-63, 1980.
- Rogan, E., Roth, R., and Cavalieri, E. Manganic acetate and horseradish peroxidase/hydrogen peroxide: <u>In vitro</u> models of activation of aromatic hydrocarbons by one-electron oxidation. pp. 259-266. In: Bjorseth, A., and Dennis, A.J., eds. Polynuclear Aromatic Hydrocarbons: Chemistry and Biological Effects. Columbus, OH, Battelle Press, 1980.
- Cavalieri, E., Sinha, D., and Rogan, E. Rat mammary gland vs mouse skin: Different mechanisms of activation of aromatic hydrocarbons. pp. 215-231. In: Bjorseth, A., and Dennis, A.J., eds. Polynuclear Aromatic Hydrocarbons: Chemistry and Biological Effects. Columbus, OH, Battelle Press, 1980.
- 17. Cavalieri, E., Rogan, E., Toth, B., and Munhall, A. Carcinogenicity of the environmental pollutants cyclopenteno[cd]pyrene and cyclopentano[cd]pyrene in mouse skin. Carcinogenesis, 2:277-281, 1981.
- Cavalieri, E.L., Rogan, E., and Thilly, W.G. Carcinogenicity, mutagenicity and binding studies of the environmental contaminant cyclopenteno[*cd*]pyrene and some of its derivatives. pp. 487-498. In: Cooke, M., and Dennis, A.J., eds. Chemical Analysis and Biological Fate: Polynuclear Aromatic Hydrocarbons. Columbus, OH, Battelle Press, 1981.
- 19. Rogan, E.G., Walker, B.A., Gingell, R., Nagel, D.L., and Toth, B. Microbial mutagenicity of selected hydrazines. <u>Mutat. Res.</u>, 102:413-424, 1982.
- 20. Cavalieri, E., and Rogan, E. Carcinogenicity of 3-methylcholanthrene derivatives and cyclopenteno[*cd*]pyrene in the rat mammary gland. pp. 145-156. In: Cooke, W.M., Dennis,

A.J., and Fisher, G.L., eds. Polynuclear Aromatic Hydrocarbons: Physical and Biological Chemistry. Columbus, OH, Battelle Press, 1982.

- 21. Rogan, E.G., Hakam, A., and Cavalieri, E.L. Structure elucidation of a 6-methylbenzo[*a*]pyrene-DNA adduct formed by horseradish peroxidase <u>in vitro</u> and mouse skin <u>in vivo</u>. <u>Chem.-Biol. Interactions</u>, 47:111-122, 1983.
- 22. Cavalieri, E.L., Rogan, E.G., Roth, R.W., Saugier, R.K., and Hakam, A. The relationship between ionization potential and horseradish peroxidase/hydrogen peroxide-catalyzed binding of aromatic hydrocarbons to DNA. <u>Chem.-Biol. Interactions</u>, 47:87-109, 1983.
- 23. Cavalieri, E., Munhall, A., Rogan, E., Salmasi, S., and Patil, K. Syncarcinogenic effect of the environmental pollutants cyclopenteno[*cd*]pyrene and benzo[*a*]pyrene in mouse skin. <u>Carcinogenesis</u>, 4:393-398, 1983.
- Cavalieri, E., and Rogan, E. One-electron oxidation of aromatic hydrocarbons in chemical and biological systems. pp. 1-26. In: Cooke, M., and Dennis, A.J., eds. Polynuclear Aromatic Hydrocarbons: Formation, Metabolism and Measurement. Columbus, OH, Battelle Press, 1983.
- Rogan, E., Cavalieri, E., Munhall, A., and Salmasi, S. Synergistic effect of the environmental contaminants cyclopenta[*cd*]pyrene and benzo[*a*]pyrene in mouse skin carcinogenicity. pp. 1035-1046. In: Cooke, W.M., and Dennis, A.J., eds. Polynuclear Aromatic Hydrocarbons: Formation, Metabolism and Measurement. Columbus, OH, Battelle Press, 1983.
- 26. Toth, B., Rogan, E., and Walker, B. Tumorigenicity and mutagenicity studies with capsaicin of hot peppers. <u>Anticancer Res.</u>, 4:117-120, 1984.
- 27. Rogan, E., and Cavalieri, E. Adduct analysis in the ATP-mediated binding of 6-hydroxymethylbenzo[*a*]pyrene to DNA. pp. 1123-1132. In: Cooke, W.M., and Dennis, A.J., eds. Polynuclear Aromatic Hydrocarbons: Mechanisms, Methods and Metabolism. Columbus, OH, Battelle Press, 1985.
- 28. Walker, B., Rogan, E.G., and Cromwell, N.H. Mutagenicity of selected functionalized benz(c)acridines and a benz(c)phenazine in the <u>Salmonella typhimurium</u> microsome assay. <u>Anticancer Res.</u>, 4:399-402, 1984.
- Cavalieri, E., and Rogan, E. Metabolic activation by one-electron and two- electron oxidation in aromatic hydrocarbon carcinogenesis. pp. 533-569. In: Woo, Y.-T., Lai, D.Y., Arcos, J.C., and Argus, M.F. <u>Chemical Induction of Cancer</u>, vol. IIIB. New York, Academic Press, 1985.
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(DB[*a*, *1*]P) compared to benzo[*a*]pyrene (BP) and 7,12-dimethylbenz[*a*]anthracene (DMBA) in mouse skin and rat mammary gland.

- Devanesan, P., RamaKrishna, N., Cavalieri, E., Rogan, E., Jeong, H., Jankowiak, R. and Small, G. (1991) Proc. Amer. Assoc. Cancer Res., Houston, <u>31</u>:87. Predominant formation of depurinated benzo[*a*]pyrene (BP)-DNA adducts by horseradish peroxidase (HRP)- and cytochrome P-450-catalyzed one-electron oxidation.
- 74. RamaKrishna, N.V.S., Cavalieri, E., and Rogan, E. (1991) Proc. Amer. Assoc. Cancer Res., Houston, <u>31</u>:95. DNA adducts of 7,12-dimethylbenz[*a*]anthracene (DMBA) formed by electrochemical oxidation and horseradish peroxidase (HRP).
- 75. Cavalieri, E.L., Rogan, E.G., RamaKrishna, N.V.S., and Devanesan, P.D. (1991) Thirteenth International Symposium on Polynuclear Aromatic Hydrocarbons, Bordeaux, France. Mechanisms of BP and DMBA activation: Qualitative aspects of the stable and labile DNA adducts obtained from radical cations and diol epoxides.
- 76. Rogan, E.G., Cavalieri, E.L., RamaKrishna, N.V.S., and Devanesan, P.D. (1991) Thirteenth International Symposium on Polynuclear Aromatic Hydrocarbons, Bordeaux, France. Mechanisms of BP and DMBA activation: Quantitative aspects of the stable and labile DNA adducts obtained from radical cations and diol epoxides.
- 77. Cavalieri, E.L., Rogan, E.G., Murray, W.J., and RamaKrishna, N.V.S. (1991) Thirteenth International Symposium on Polynuclear Aromatic Hydrocarbons, Bordeaux, France. Mechanistic aspects of benzo[*a*]pyrene metabolism.
- 78. Rogan, E. (4/8/92) ACS Short Course on Toxicology for Chemists, Newport Beach, CA. Chemical Carcinogenesis.
- 79. Rogan, E. (4/8/92) Invited lecture at Allergan Therapeutics Group, Irvine, CA. Chemical Carcinogenesis.
- 80. Rogan, E. (4/13/92) How chemicals alter DNA to cause cancer. Department of Chemistry, Fort Hays State University, Hays, KS.
- Rogan, E.G., RamaKrishna, N.V.S., Devanesan, P.D., Padmavathi, N.S., and Cavalieri, E.L. (1992) Proc. Amer. Assoc. Cancer Res., San Diego, <u>32</u>:135. Formation of 7,12-dimethylbenz[*a*]anthracene (DMBA)-DNA adducts in mouse skin by one-electron oxidation.
- 82. Devanesan, P., RamaKrishna, N.V.S., Padmavathi, N.S., Rogan, E., and Cavalieri, E. (1992) Proc. Amer. Assoc. Cancer Res., San Diego, <u>32</u>:135. Formation of benzo[*a*]pyrene (BP)-DNA adducts in mouse skin by one-electron oxidation.
- RamaKrishna, N.V.S., Higginbotham, S., Padmavathi, N.S., Johansson, S., Rogan, E., and Cavalieri, E. (1992) Proc. Amer. Assoc. Cancer Res., San Diego, <u>32</u>:113. The extremely potent carcinogen dibenzo[*a*,*l*]pyrene (DBP): Tumorigenicity in mouse skin and synthesis of nucleoside adducts.

- 84. Dwivedy, I., Devanesan, P., Rogan, E., and Cavalieri, E. (1992) Proc. Amer. Assoc. Cancer Res., San Diego, <u>32</u>:135. Synthesis of 2,3- and 3,4-estrogen quinones and comparison of DNA adducts formed by the quinones and horseradish peroxidase (HRP)-activated catechol estrogens (CE).
- 85. Cavalieri, E. and Rogan, E. (1992) International Society for Free Radical Research, VI Biennial Meeting, Turino, Italy. Metabolic activation of the potent carcinogens benzo[*a*]pyrene and dimethylbenz[*a*]anthracene by one-electron oxidation.
- Rogan, E. (8/3/92) ACS Short Course on Chemical Mechanisms in Toxicology, Washington, D.C. Chemical carcinogenesis.
- 87. Rogan, E. (9/17/92) How cancer-causing chemicals interact with DNA to initiate cancer. Department of Chemistry, St. Olaf College, Northfield, MN.
- 88. Rogan, E. (9/18/92) Carcinogen-DNA interactions the beginning of cancer. Department of Chemistry, Carleton College, Northfield, MN.
- 89. Rogan, E. (11/16/92) ACS Short Course on Chemical Mechanisms in Toxicology, Clearwater, FL. Chemical carcinogenesis.
- 90. Rogan, E. (11/18/92) ACS Short Course on Toxicology for Chemists, Clearwater, FL. Chemical carcinogenesis.
- 91. Cavalieri, E., and Rogan, E. (1993) Environmental Mutagen Society Annual Meeting, Norfolk, VA. Invited talk: Identification and quantitation of aromatic hydrocarbon-DNA depurination adducts formed in vitro and in vivo.
- 92. Devanesan, P., Todorovic, R., Rogan, E., and Cavalieri, E. (1993) Proc. Amer. Assoc. Cancer Res., Orlando, <u>33</u>:138. ³²P-Postlabeling analysis of 6-fluorobenzo[*a*]pyrene (6-FBP) and 6methylbenzo[*a*]pyrene (6-CH₃BP)-DNA adducts.
- 93. Cavalieri, E., RamaKrishna, N.V.S., Li, K.-M., and Rogan, E. (1993) Proc. Amer. Assoc. Cancer Res., Orlando, <u>33</u>:138. Adducts of 6-methylbenzo[*a*]pyrene (6-CH₃BP) and 6fluorobenzo[*a*]pyrene (6-FBP) to deoxyribonucleosides formed by electrochemical oxidation.
- 94. Rogan, E., Higginbotham, S., RamaKrishna, N.V.S., Devanesan, P., and Cavalieri, E. (1993) Proc. Amer. Assoc. Cancer Res., Orlando, <u>33</u>:139. Binding of benzo[*a*]pyrene (BP) to free and membrane-bound DNA in rat liver nuclei.
- 95. Rogan, E. (9/14/93) An approach to understanding aromatic hydrocar/bon carcinogenesis. Invited lecture, Tumor Conference, Cancer Center, Creighton University, Omaha.
- 96. Cavalieri, E., Higginbotham, S., and Rogan, E. (1993) Fourteenth International Polycyclic Aromatic Compounds Symposium, Osage Beach, Missouri. Dibenzo[*a*,*l*]pyrene: The most potent carcinogenic aromatic hydrocarbon.

- 97. Casale, G.P., Todorovic, R. RamaKrishna, N.V.S., Rogan, E., and Cavalieri, E. (1993) Fourteenth International Polycyclic Aromatic Compounds Symposium, Osage Beach, Missouri. Detection of 7-(benzo[*a*]pyren-6-yl)guanine by monoclonal antibodies.
- 98. Li, K.-M., RamaKrishna, N.V.S., Padmavathi, N.S., Rogan, E.G., Cavalieri, E.L. (1993) Fourteenth International Polycyclic Aromatic Compounds Symposium, Osage Beach, Missouri. Synthesis and structure determination of the adducts of dibenzo[*a*,*l*]pyrene(DBP) diol epoxides and deoxyadenosine or deoxyguanosine.
- 99. Devanesan, P., Todorovic, R., Rogan, E., Cavalieri, E. (1993) Fourteenth International Polycyclic Aromatic Compounds Symposium, Osage Beach, Missouri. Effect of 7-hydroxybenzo[*a*]pyrene (7-OHBP) on BP metabolism and formation of BP-DNA adducts.
- 100. Rogan, E., Higginbotham, S., Devanesan, P., Cavalieri, E. (1993) Fourteenth International Polycyclic Aromatic Compounds Symposium, Osage Beach, Missouri. Covalent binding of BP to free and membrane-bound DNA in isolated liver nuclei from 3-methylcholanthrene-induced rats.
- 101. Cavalieri, E., Devanesan, P., Mulder, P., RamaKrishna, N.V.S., Rogan, E. (1993) Fourteenth International Polycyclic Aromatic Compounds Symposium, Osage Beach, Missouri. Metabolism of 1-fluorobenzo[a]pyrene (1-FBP) and 3-FBP by cytochrome P-450 and horseradish peroxidase (HRP).
- Rogan, E. (11/8/93) ACS Short Course on Chemical Mechanisms in Toxicology, Clearwater, FL. Chemical carcinogenesis.
- 103. Rogan, E. (11/11/93) ACS Short Course on Toxicology for Chemists, Clearwater, FL. Chemical carcinogenesis.
- 104. Li, K.-M., Todorovic, R., Rogan, E.G., and Cavalieri, E.L. (1994) Proc. Amer. Assoc. Cancer Res., <u>35</u>:113. Determination of dibenzo[*a*,*l*]pyrene-DNA depurination adducts formed in horseradish peroxidase-and microsome-catalyzed reactions.
- 105. Chakravarti, D., Higginbotham, S., Rogan, E.G., and Cavalieri, E.L. (1994) Proc. Amer. Assoc. Cancer Res., <u>35</u>:153. Dibenzo[*a*,*l*]pyrene-initiated mouse skin tumors contain a codon 61 mutation in c-H-ras gene.
- Devanesan, P., Li, K.-M., Rogan, E.G., and Cavalieri, E.L. (1994) Proc. Amer. Assoc. Cancer Res., <u>35</u>:113. DNA adducts of the potent carcinogen 3-methylcholanthrene.
- 107. Stack, D.E., Cremonesi, P., Rogan, E.G., and Cavalieri, E.L. (1994) Proc. Amer. Assoc. Cancer Res., <u>35</u>:113. Radical cations of benzo[*a*]pyrene: synthesis and reaction with nucleosides.
- 108. Todorovic, R., Casale, G.P., RamaKrishna, N.V.S., Rogan, E., and Cavalieri, E. (1994) Proc. Amer. Assoc. Cancer Res., <u>35</u>:101. Production of monoclonal antibodies specific for 7-(benzo[*a*]pyren-6-yl)guanine and their use in developing a competitive enzyme-linked immunosorbent assay.

- 109. Li, K.-M., Todorovic, R., Rogan, E.G., and Cavalieri, E.L. (1994) Environmental Mutagen Society Annual Meeting, Portland, OR. Environ. Molec. Mutagenesis, <u>23</u>:38. Dibenzo[*a*,*l*]pyrene (DB[*a*,*l*]P)- and DB[*a*,*l*]P-11,12-dihydrodiol-DNA adducts formed in reactions catalyzed by rat liver microsomes.
- 110. Chakravarti, D., Higginbotham, S., Rogan, E.G., Cavalieri, E.L. (1994) Environmental Mutagen Society Annual Meeting, Portland, OR. Environ. Molec. Mutagenesis, <u>23</u>:8. A codon 61 mutation (CAA to CTA) in C-H-*ras* gene in mouse skin tumors initiated by dibenzo[*a*,*l*]pyrene (DB[*a*,*l*]P) or its 11,12-dihydrodiol.
- 111. Rogan, E. (9/21/94) New approaches to analyzing carcinogenic risks posed by environmental pollutants. Invited lecture, Hazardous Waste Toxicology Series, Institute for Comparative and Environmental Toxicology, Cornell University, Ithaca, NY.
- 112. Cavalieri, E.L., Rogan, E.G. (1994) Sixth North American International Society for the Study of Xenobiotics Meeting, Raleigh, NC. The central role of radical cations in metabolic activation of polycyclic aromatic hydrocarbons.
- 113. Cremonesi, P., Stack, D.E., Rogan, E.G., Cavalieri, E.L. (1994) Sixth North American International Society for the Study of Xenobiotics Meeting, Raleigh, NC. Radical cation of benzo[*a*]pyrene and 6-substituted derivatives: Synthesis and reaction with nucleophiles and DNA.
- 114. Cavalieri, E.L., Devanesan, P.D., Mulder, P.P.J., Rogan, E.G. (1994) Sixth North American International Society for the Study of Xenobiotics Meeting, Raleigh, NC. Metabolism of benzo[*a*]pyrene by cytochrome P-450: Mechanism of oxygen transfer to benzo[*a*]pyrene radical cation.
- Rogan, E. (10/31/94) ACS Short Course on Chemical Mechanisms in Toxicology, Clearwater, FL. Chemical Carcinogenesis.
- 116. Rogan, E. (11/3/94) ACS Short Course on Toxicology for Chemists, Clearwater, FL. Chemical carcinogenesis.
- 117. Li, K.-M., Rogan, E.G., Cavalieri, E.L. (1995) Proc. Amer. Assoc. Cancer Res., <u>36</u>:137. Dibenzo[*a*,*l*]pyrene-N3 adenine adduct formed by one-electron oxidation: synthesis and detection *in vitro*.
- 118. Li, K.-M., Rogan, E.G., Cavalieri, E.L. (1995) Proc. Amer. Assoc. Cancer Res., <u>36</u>:137. Adducts formed by reaction of (±)-syn- and (±)-anti-dibenzo[a,l]pyrene diol epoxides with DNA.
- Devanesan, P.D., Rogan, E.G., Cavalieri, E.L. (1995) Proc. Amer. Assoc. Cancer Res., <u>36</u>:137. Identification of stable DNA adducts of dibenzo[*a*,*l*]pyrene.

- Chakravarti, D., Rogan, E. and Cavalieri, E. (3/12-16/95) Mapping DNA sequence-specific aromatic hydro-carbon reaction sites in a 231 bp EcoRI-NheI fragment of plasmid pBR322. Environmental Mutagen Society Annual Meeting, St. Louis, MO.
- 121. Rogan, E. (4/4/95) ACS Short Course on Chemical Mechanisms in Toxicology, Atlanta, GA, Chemical carcinogenesis.
- 122. Rogan, E. (5/2/95) ACS Short Course on Toxicology for Chemists, San Francisco, CA, Chemical carcinogenesis.
- 123. Gross, M., Cavalieri, E., Rogan, E. (9/12-13/95) Tandem mass spectrometry of modified DNA bases and nucleotides. FDA Mass Spectrometry Symposium, Washington, D.C.
- 124. Cavalieri, E., Rogan, E. (9/95) The primary role of apurinic sites in tumor initiation. 15th International Symposium on Polycyclic Aromatic Compounds, Belgirate, Italy.
- 125. Casale, G., Rogan, E., Stack, D., Devanesan, P., Cavalieri, E. (9/95) Characteristics of a monoclonal antibody (MAb) with high specific affinity for the depurinating adduct 7- (benzo[a]pyren-6-yl)guanine (BP-6-N7Gua): A new dosimeter of DNA damage by benzo[a]pyrene (BP). 15th International Symposium on Polycyclic Aromatic Compounds, Belgirate, Italy.
- Chen, L., Devanesan, P.D., Rogan, E.G., Cavalieri, E.L. (4/96) Characterization of the 7-Hdibenzo[*c*,*g*]-carbazole (DBC)-DNA adducts formed *in vitro*. Proc. Amer. Assoc. Cancer Res., <u>37</u>, 119, Washington, D.C.
- 127. Li, K.-M., Todorovic, R., Devanesan, P., Rogan, E. G., Cavalieri, E. L. (4/96) Detection of 3methyl-cholanthrene-DNA adducts formed *in vitro*. Proc. Amer. Assoc. Cancer Res., <u>37</u>, 119, Washington, D.C.
- 128. Todorovic, R., Li, K.-M., Rogan, E.G., Cavalieri, E.L. (4/96) Identification and quantitation of DNA adducts of benzo[a]pyrene (BP), 7,12-dimethylbenz[a]anthracene (DMBA) and dibenzo[a,l]-pyrene (DB[a,l]P) formed in rat mammary glands. Proc. Amer. Assoc. Cancer Res., <u>37</u>, 119, Washington, D.C.
- Devanesan, P.D., Ariese, F., Small, G.J., Rogan, E.G., and Cavalieri, E.L. (4/96) Isolation and identification of stable DNA adducts of dibenzo[*a*,*l*]pyrene. Proc. Amer. Assoc. Cancer Res., <u>37</u>, 119, Washington, D.C.
- Jan, S.-T., Devanesan, P.D., Rogan, E.G., Cavalieri, E. L. (4/96) DNA damage caused by hexestrol, a carcinogenic nonsteroidal estrogen. Proc. Amer. Assoc. Cancer Res., <u>37</u>, 120, Washington, D.C.
- Stack, D.E., Devanesan, P.D., Todorovic, R., Rogan, E.G., Cavalieri, E.L. (4/96) Genotoxic mechanisms of catechol estrogens: Depurinating adducts and tumor initiation. Proc. Amer. Assoc. Cancer Res., <u>37</u>, 129, Washington, D.C.

- Chakravarti, D., Higginbotham, S., Rogan, E.G., Cavalieri, E.L. (4/96) Detection of preneoplastic oncogenic mutations in PAH-treated mouse skin. Proc. Amer. Assoc. Cancer Res., <u>37</u>, 135, Washington, D.C.
- 133. Rogan, E. (5/29/96) NCI Focus Group on Estrogen Carcinogenesis, Bethesda, MD. Invited talk: Diagnostic Biomarkers in Human Breast Tissue.
- 134. Rogan, E. (5/29-31/96) ACS Short Course on Toxicology for Chemists, Charleston, SC, Chemical carcinogenesis, Mutagenesis.
- 135. Cai, Z., Cerny, R.L., Rogan, E.G., Cavalieri, E.L. (5/96) The determination of catechol estrogen levels in breast tissue. 44th Annual Conference American Society for Mass Spectrometry, Portland, OR.
- Gross, M., Cavalieri, E., Rogan, E. (7/8-13/96) Mass spectrometry for modified DNA. NATO Conference, Sicily, Italy.
- Gross, M., Cavalieri, E., Rogan, E. (8/25-30/96) Tandem mass spectrometry of modified DNA bases and nucleotides. American Chemical Society Conference, Division of Chemical Toxicology, Orlando, FL.
- 138. Stack, D.E., Cavalieri, E.L., Rogan, E.G. (10/96) Catechol estrogens as procarcinogens: depurinating adducts and tumor initiation. Eighth International Catecholamine Symposium, Asilomar, CA.
- 139. Cavalieri, E.L., Rogan, E.G. (10/96) Role of aromatic hydrocarbons in disclosing how catechol estrogens initiate cancer. Eighth International Catecholamine Symposium, Asilomar, CA.
- 140. Rogan, E.G. (10/17/96) Clark-Atlanta College, Atlanta, GA. Invited talk: How Chemicals Cause Cancer.
- 141. Rogan, E.G. (11/15/96) Molecular Studies in Breast Cancer Focus Group, University of Nebraska Medical Center, Omaha, NE. Invited talk: Looking at Catechol Estrogens as Initiators of Breast Cancer.
- Rogan, E.G. (1/21/97) Department of Cell Biology and Anatomy, University of Nebraska Medical Center, Omaha, NE. Invited talk: The Role of Specific Carcinogen-DNA Adducts in Oncogene Mutations.
- 143. Rogan, E.G. (2/12/97) UNMC Cancer Center Grand Rounds, University of Nebraska Medical Center, Omaha, NE. Invited talk: Initiation of Breast Cancer by Catechol Estrogens.
- 144. Rogan, E.G. (2/18/97) Buena Vista University, Storm Lake, IA. Invited talk: How Chemicals Cause Cancer.
- 145. Rogan, E.G. (3/12-13/97) Macalaster College & St Olaf, Minneapolis, MN. Invited talk: How Chemicals Cause Cancer.

- 146. Rogan, E.G. (3/18/97) ACS Short Course on Toxicology for Chemists, San Francisco, CA, Chemical Carcinogenesis, Mutagenesis.
- 147. Cao, K., Cavalieri, E.L., and Rogan, E.G. (4/97) Horseradish peroxidase-, lactoperoxidase-, and rat liver microsome- catalyzed binding of catechol estrogens to glutathione. Proc. Amer. Assoc. Cancer Res., <u>38</u>, 42, San Diego, CA.
- 148. Li, K.-M., Todorovic, R., Cavalieri, E.L., Rogan, E.G., Jankowiak, R., and Small, G. (4/97) Depurinating DNA adducts detected in mouse skin treated with dibenzo[*a*,*l*]pyrene (DB[*a*,*l*]P), DB[*a*,*l*]P-11,12-dihydrodiol, (±)-*anti*-DB[*a*,*l*]P diol epoxide (DE) or (±)-*syn*-DB[*a*,*l*]PDE. Proc. Amer. Assoc. Cancer Res., <u>38</u>, 127, San Diego, CA.
- 149. Li, K.-M., Cavalieri, E.L., Rogan, E.G., George, M., Gross, M., and Seidel, A. (4/97) Structure elucidation of the eight diastereomers formed by reaction of dibenzo[*a*,*l*]pyrene diol epoxide DB[*a*,*l*]PDE with deoxyadenosine (dA). Proc. Amer. Assoc. Cancer Res., <u>38</u>, 335, San Diego, CA.
- Todorovic, R., Devanesan, P., Li, K.-M., Rogan, E.G., and Cavalieri, E.L. (4/97) Stable dibenzo[*a*,*l*]pyrene-DNA adducts formed in mouse skin. Proc. Amer. Assoc. Cancer Res., <u>38</u>, 336, San Diego, CA.
- 151. Devanesan, P., Chen, L., Gooden, J., Gross, M., Rogan, E.G., and Cavalieri, E.L. (4/97) Identification of 7-methyldibenzo[*c*,*g*]carbazole-DNA adducts formed *in vitro*. Proc. Amer. Assoc. Cancer Res., <u>38</u>, 336, San Diego, CA.
- Hanson, A., Cavalieri, E.L., and Rogan, E.G. (4/97) Synthesis of aromatic hydrocarbonnucleoside adducts by iodine oxidation. Proc. Amer. Assoc. Cancer Res., <u>38</u>, 463, San Diego, CA.
- 153. Rogan, E., Stack, D., Cerny, R., Edney, J., Johannson, S., Higginbotham S. and Cavalieri, E. (10/31-11/4/97) GC/MS analysis of catechol estrogen metabolites in breast tissue samples. Proc. The Dept. of Defense Breast Cancer Res. Prog. Era of Hope Meeting, 743-744, Washington, D.C.
- 154. Rogan, E. (12/2-3/97) ACS Short Course on Toxicology for Chemists, New Orleans, LA, Chemical Carcinogenesis, Mutagenesis.
- 155. Rogan, E. (3/16-17/98) Oncogenic mutations by depurinating carcinogen-DNA adducts. Estrogens as Endogenous Carcinogens in the Breast and Prostate. Westfields International Conference Center, Chantilly, VA.
- 156. Hanson, A.A., Rogan, E.G., Cavalieri, E.L. (4/98) Identification and quantitation of 6-methylbenzo[*a*]pyrene (6-CH₃BP)-DNA stable and depurinating adducts formed *in vitro* and *in vivo*. Proc. Amer. Assoc. Cancer Res., <u>39</u>, 185, New Orleans, LA.

- 157. Li, K.-M., Devanesan, P.D., Rogan, E.G., and Cavalieri, E.L. (4/98) Formation of the depurinating 4-hydroxyestradiol (4-OHE₂)-1-N7Gua and 4-OHE₂-1-N3Ade adducts by reaction of E₂-3,4-quinone with DNA. Proc. Amer. Assoc. Cancer Res., <u>39</u>, 636, New Orleans, LA.
- Devanesan, P.D., Li, K.-M., Higginbotham, S., Harvey, R.G., Rogan, E.G., and Cavalieri, E.L. (4/98) Identification of DNA depurinating adducts of the potent carcinogen, 5-methylchrysene (5-MeC). Proc. Amer. Assoc. Cancer Res., <u>39</u>, 637, New Orleans, LA.
- 159. Rogan, E. (4/2/98) ACS Short Course on Toxicology: Principles and Applications, San Francisco, CA, Chemical Carcinogenesis.
- 160. Rogan, E. (6/6/98) Invited speaker, Maurice J. Bessman Symposium, The John Hopkins University, Baltimore, MD. Molecular origin of cancer: From polycyclic aromatic hydrocarbons to catechol estrogen quinones.
- 161. Rogan, E. (8/9-14/98) Invited speaker, Gordon Research Conference: DNA Alterations in Transformed Cells, Colby-Sawyer College, New London, NH. Molecular origin of cancer: Catechol estrogen-3,4-quinones as endogenous tumor initiators.
- 162. Rogan, E. (12/8/98) ACS Short Course in Toxicology: Principles and Applications, Charleston, SC Chemical Carcinogenesis.
- 163. Rogan, E. (4/28/99) Invited speaker, Molecular Epidemiology Program, University of California-San Francisco. The Possible Role of Endogenous Catechol Estrogen-3,4-Quinones in the Initiation of Breast and Other Cancers.
- 164. Todorovic, R., Devanesan, P., Zhao, J. (WU), Gross, M. (WU), Higginbotham, S., Rogan, E., and Cavalieri, E. (4/99) Determination of catechol estrogen-DNA and thioether adducts in the urine of Syrian golden hamsters treated with 4-hydroxyestradiol. Proc. Amer. Assoc. Cancer Res., <u>40</u>, 45, Philadelphia, PA.
- 165. Devanesan, P., Todorovic, R., Zhao, J. (WU), Higginbotham, S., Gross, M. (WU), Rogan, E., and Cavalieri, E. (4/99) Formation of catechol estrogen adducts in kidneys of male hamsters treated with 4-hydroxyestradiol. Proc. Amer. Assoc. Cancer Res., <u>40</u>, 46, Philadelphia, PA.
- 166. Balu, N., Li, K.-M., Rogan, E., and Cavalieri, E. (4/99) A unifying mechanism in the reaction of catechol-catecholamine- and catechol estrogen-quinones with nucleophilic sites in DNA. Proc. Amer. Assoc. Cancer Res., <u>40</u>, 46, Philadelphia, PA.
- 167. Li, K.-M., Liang, W., Devanesan, P., Rogan, E., and Cavalieri, E. (4/99) Relative stability of 4hydroxyestradiol-1-N7dG compared to other depurinating nucleoside adducts. Proc. Amer. Assoc. Cancer Res., 40, 46, Philadelphia, PA.
- 168. Chakravarti, D., Mailander, P., Higginbotham, S., Cavalieri, E., and Rogan, E. (4/99) Relationship of depurinating adducts with H-ras oncogenic mutations in mouse skin papillomas

induced by benzo[a]pyrene, benzo[a]pyrene-7,8-dihydrodiol and 6-methylbenzo[a]pyrene. Proc. Amer. Assoc. Cancer Res., 40, 507, Philadelphia, PA.

- 169. Chakravarti, D., Mailander, P., Higginbotham, S., Cavalieri, E., and Rogan, E. (4/99) Dibenzo[*a*,*l*]pyrene induction of single-strand mutations in early preneoplastic mouse skin, followed by multiple transient clonal expansions and regressions of H-*ras* oncogenic mutationbearing cells. Proc. Amer. Assoc. Cancer Res., <u>40</u>, 623, Philadelphia, PA.
- Badawi, A.F., Cavalieri, E.L., and Rogan, E.G. (4/00) Effect of chlorinated hydrocarbons on cytochrome P450 (CYP) 1A2 and 1B1 mRNA transcripts and the 2- and 4- hydroxylation of estradiol in female Sprague-Dawley rats. Proc. Amer. Assoc. Cancer Res., <u>41</u>:109, San Francisco, CA.
- Chakravarti, D., Mailander, P., Cavalieri, E.L. and Rogan, E.G. (4/00) Estrogen-DNA damage in mouse skin H-*ras* gene is mutated by error-prone repair. Proc. Amer. Assoc. Cancer Res., <u>41</u>: 107, San Francisco, CA.
- 172. Chakravarti, D., Mailander, P., Cavalieri, E.L., and Rogan, E.G. (4/00) Transforming and nontransforming mutations in dibenzo[*a l*]pyrene-initiated and TPA-promoted papillomas. Proc. Amer. Assoc. Cancer Res., <u>41</u>:570, San Francisco, CA.
- 173. Chapman, K, Zhang, L., Gross, M., Cavalieri, E.L., and Rogan, E.G. (4/00) Identification of depurinating and stable DNA adducts in human breast cancer cell lines following treatment with 0.2nM estradiol (E₂) or 4-OHE₂. Proc. Amer. Assoc. Cancer Res., <u>41</u>:109, San Francisco, CA.
- 174. Crandall, L., Rogan, E.G. and Cavalieri, E.L. (4/00) Oxidation of catechol estrogens mediated by metal ions. Proc. Amer. Assoc. Cancer Res., <u>41</u>:107, San Francisco, CA.
- 175. Devanesan, P., Rogan, E.G., Cavalieri, E.L., Bocchinfuso, W., Korach, K., and Santen, R.J. (4/00) Catechol estrogen metabolites and conjugates in hyperplastic mammary tissue from estrogen receptor α knock-out (ERKO)/Wnt-1 mice. Proc. Amer. Assoc. Cancer Res., <u>41</u>: 08, San Francisco, CA.
- Li, K.-M., Casale, G., Rogan, E.G., and Cavalieri, E.L. (4/00) Synthesis of *N*-acetyl-lysine adducts with the of 2-hydroxyestradiol and 4-hydroxyestradiol. Proc. Amer. Assoc. Cancer Res., <u>41</u>:109, San Francisco, CA.
- 177. Li, K.-M., Zhao, J., Gross, M., Rogan, E.G., and Cavalieri, E.L. (4/00) A unifying mechanism in the reaction of metabolically-activated catechol and dopamine with DNA. Proc. Amer. Assoc. Cancer Res., <u>41</u>:96, San Francisco, CA.
- 178. Todorovic, R., Devanesan, P., Higginbotham, S., Zhao, J., Gross, M., Rogan, E.G., and Cavalieri, E.L. (4/00) Metabolic response to treatment of Syrian Golden hamsters with 4hydroxyestradiol: Analysis of estrogenic compounds in urine. Proc. Amer. Assoc. Cancer Res., <u>41</u>:107, San Francisco, CA.

- 179. Todorovic, R., Li, K.-M., Higginbotham, S., Zhao, J., Gross, M., Rogan, E.G., and Cavalieri, E.L. (4/00) Metabolic response to treatment of ACI rat mammary gland with 4hydroxyestradiol or estradiol-3,4-quinone. Proc. Amer. Assoc. Cancer Res., <u>41</u>: 107, San Francisco, CA.
- 180. Rogan, E.G. and Cavalieri, E.L. (6/00) Biomarkers for risk of breast cancer. Proc. Dept. of Defense Breast Cancer Res. Prog. Meeting, 116, Atlanta, GA.
- 179. Badawi, A.F., Devanesan, P.D., Edney, J.A., West, W.W., Higginbotham, S.M., Rogan, E.G., and Cavalieri, E.L. (3/01) Estrogen metabolites and conjugates: Biomarkers of susceptibility to human breast cancer. Proc. Amer. Assoc. Cancer Res., <u>42</u>: 664, New Orleans, LA.
- Cavalieri, E.L., Devanesan, P.D., Bosland, M.C., and Rogan, E.G. (3/01) Estrogen metabolites and conjugates: Potential biomarkers of prostate cancer susceptibility. Proc. Amer. Assoc. Cancer Res., <u>42</u>: 150, New Orleans, LA.
- 181. Rogan, E.G., Higginbotham, S.M., and Cavalieri, E.L. (3/01) Greater oxidation of catechol estrogens to quinones in the hamster kidney target tissue for carcinogenesis than in the refractory liver. Proc. Amer. Assoc. Cancer Res., <u>42</u>: 883, New Orleans, LA.
- 182. Chakravarti, D., Mailander, P.C., Cavalieri, E.L., and Rogan, E.G. (3/01) A mixture of dibenzo[*a*,*l*]pyrene diol epoxide induces fewer H-*ras* codon 61 mutations than dibenzo[*a*,*l*]pyrene alone in SENCAR mouse skin. Proc. Amer. Assoc. Cancer Res., <u>42</u>: 470, New Orleans, LA.
- 183. Chakravarti, D., Badawi, A.F., Li, K-M., Mailander, P., Cavalieri, E.L. and Rogan, E.G. (3/01) How well to measurements of depurinating adducts and abasic sites report the level of depurination induced by chemical carcinigens? Proc. Amer. Assoc. Cancer Res. Supplement, <u>42</u>: 80, New Orleans, LA.
- 186. Zhang, L.-K., Chapman, K.A., Zhao, J., Gross, M.L., Cavalieri, E.L. and Rogan, E.G. (5/01) Develop and Validate MALDI MS and ESI LC/MS/MS Methods for Determination of Estrogen Quinone-induced Apurinic Sites and Adducts. 49th ASMS Conference, Chicago, IL.
- 187. Rogan, E.G. (10/01) DNA Damage and Repair in the Initiation of Cancer. Special Seminar at the Tulane Cancer Center, 2001 Research Seminar Series with the Department of Chemistry, New Orleans, LA.
- 188. Chakravarti, D., Mailander, P.C., Cavalieri, E.L. and Rogan, E.G. (4/02) The double role of DNA adducts in tumor initiation in mouse skin: Formation of initiated cells by inducing oncogenic mutations and regulation of early preneoplastic clonal proliferation. Proc. Amer. Assoc. Cancer Res., <u>43</u>: 1009, San Francisco, CA.
- 189. Chakravarti, D., Bhattacharya, G., Mailander, P.C., Cavalieri, E.L. and Rogan, E.G. (4/02) The biology of clonal proliferation of unpromoted initiated cells carrying dibenzo[*a*,*l*]pyrene-induced H-*ras* condon 61 mutations in early preneoplastic SENCAR mouse skin. Proc. Amer. Assoc. Cancer Res., <u>43</u>: 698, San Francisco, CA.

- 190. Rogan, E.G., Edney, J.A. and Cavalieri, E.L. (12/11-14/02) Imbalance of estrogen homeostasis in human breast carcinomas: Possible biomarkers for susceptibility to breast cancer. 25th Annual San Antonio Breast Cancer Symposium, San Antonio, TX.
- 191. Cavalieri, E. and Rogan, E. A unified mechanism in the initiation of cancer and other diseases. In: <u>Journal of the American Aging Association</u>, Vol. 25, (A.K. Balin, Ed.), JAAA, Media, PA, p. 50, 2002.
- 192. Cavalieri, E. and Rogan, E. A unified mechanism in the initiation of cancer. In: <u>Healthy Aging, The Keys to Healthy Living</u>, (K.S. Rugh, Ed.), NOW Foods, Bloomingdale, IL, p. 57, 2002.
- 193. Rogan, E.G., Singh, S., Chakravarti, D., Higginbotham, S. and Cavalieri, E.L. (7/03) Differential expression of estrogen-metabolizing enzymes in four quadrants of human breast. Proc. Amer. Assoc. Cancer Res., 44: (2nd ed.), 307, Washington, D.C.
- 194. Chakravarti, D., Mailander, P.C., Cavalieri, E.L. and Rogan, E.G. (7/03) Benzo[*a*]pyrene- and benzo[*a*]pyrene-7,8-dihydrodiol-induced H-*ras* mutations in early preneoplastic mouse skin, as well as in papillomas, are correlated with depurinating DNA adducts. Proc. Amer. Assoc. Cancer Res., 44: (2nd ed.), 873, Washington, D.C.
- 195. Cavalieri, E., Kohli, E., Zahid, M. and Rogan, E. (7/03) Greater reactivity of Estradiol-3,4-Quinone vs Estradiol-2,3-Quinone with DNA in the formation of depurinating DNA adducts. Proc. Amer. Assoc. Cancer Res., 44: (2nd ed.), 180, Washington, D.C.
- 196. Chakravarti, D., Mailander, P.C., Higginbotham, S., Cavalieri, E.L. and Rogan, E.G. (7/03) The catechol estrogen-3,4-quinone metabolite induces mutations in the mammary gland of ACI rats. Proc. Amer. Assoc. Cancer Res., 44: (2nd ed.), 180, Washington, D.C.
- 197. Cavalieri, E., Saeed, M., Gunselman, S. and Rogan, E. (7/03) Depurination of adenine and guanine adducts occurs in DNA, but only very slowly in RNA. Proc. Amer. Assoc. Cancer Res., <u>44</u>: (2nd ed.), 1324, Washington, D.C.
- 198. Gunselman, S.J., Saeed, M., Higginbotham, S., Rogan, E.G. and Cavalieri, E.L. (3/27-31/04) Formation of the depurinating N3adenine and N7guanine adducts by reaction of DNA with hexestrol-3',4'-quinone or enzyme-activated 3'-hydroxyhexestrol. Implications for a unifying mechanism of tumor initiation by natural and synthetic estrogens. Proc. Amer. Assoc. Cancer Res., <u>45</u>, 1564, Orlando, FL.
- Saeed, M., Zahid, M., Gunselman, S.J., Rogan, E. and Cavalieri, E. (3/27-31/04) Slow loss of deoxyribose from the N7deoxyguanosine adducts of estradiol-3,4-quinone and hexestrol-3'-4'quinone. Implications for mutagenic activity. Proc. Amer. Assoc. Cancer Res., <u>45</u>, 1555, Orlando, FL.
- 200. Singh, S., Bosland, M.C., Cavalieri, E.L. and Rogan, E.L. (3/27-31/04) Effect of treatment with estradiol or testosterone on the expression of CYP19, CYP1B1, COMT and NQO1 in the prostate of male Noble rats. Proc. Amer. Assoc. Cancer Res., <u>45</u>, 14, Orlando, FL.

- 201. Zahid, M., Olson, K., Gunselman, S., Chakravarti, D., Rogan, E. and Cavalieri, E. (3/27-31/04) Mass spectrometric determination of the rate of depurination of 7-methylguanine, 3methyladenine and 7-methyladenine after reaction of methyl methanesulfonate with DNA. Proc. Amer. Assoc. Cancer Res., <u>45</u>, 1554, Orlando, FL.
- 202. Zhang, Y., Schoomaker, S., Cavalieri, E. and Rogan, E. (3/27-31/04) Metabolism of estradiol by cytochrome P450 in rat liver microsomes to form quinones that bind to DNA. Proc. Amer. Assoc. Cancer Res., <u>45</u>, 1886, Orlando, FL.
- Krishnamachari, V., Olson, K., Rogan, E. and Cavalieri, E.L. (3/27-31/04) Reaction of dopamine *ortho*-quinone in the formation of depurinating adducts. Implications for neurodegenerative disorders. Proc. Amer. Assoc. Cancer Res., <u>45</u>, 1556, Orlando, FL.
- Raghavanpillai, A., Zahid, M., Olson, K., Rogan, E. and Cavalieri, E. (3/27-31/04) Slow loss of deoxyribose from N7deoxyguanosine adducts of catechol quinone: Possible relevance for mutagenic activity. Proc. Amer. Assoc. Cancer Res., <u>45</u>, 1553, Orlando, FL.
- Saeed, M., Rogan, E. and Cavalieri, E. (4/16-20/05) Mechanism of tumor initiation by the human carcinogen diethylstilbestrol: The defining link to natural estrogens. Proc. Amer. Assoc. Cancer Res., <u>46</u>, 2129, Anaheim, CA.
- 206. Rogan, E.G. and Cavalieri, E.L. (6/8-11/05) The role of estrogen metabolism in the initiation of human breast cancer. Era of Hope, Department of Defense Breast Cancer Research Program meeting, Philadelphia, PA.
- 207. Cavalieri, E.L., Saeed, M. and Rogan, E.G. (6/8-11/05) The mechanism of tumor initiation by the human carcinogen diethylstilbestrol is similar to that of natural estrogens. Era of Hope, Department of Defense Breast Cancer Research Program meeting, Philadelphia, PA.
- 208. Cavalieri, E.L. and Rogan, E.G. The etiology of breast cancer. (6/8-11/05) Prevention is now the solution. Era of Hope, Department of Defense Breast Cancer Research Program meeting, Philadelphia, PA.
- 209. Markushin, Y., Kapke, P., Gaikwad, N., Zhang, H., Rogan, E.G., Cavalieri, E.L., Trock, B. and Jankowiak, R. (3/12-17/06) Novel biomarker for early risk assessment of prostate cancer. 57th Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy, Orlando, FL.
- Venugopal, D., Mailander, P.C., Higginbotham, S., Rogan, E.G., Cavalieri, E.L. and Chakravarti, D. (4/1-5/06) Correlations between DNA adducts and mutations in preneoplastic mouse skin and papillomas induced by polycyclic aromatic hydrocarbons. Proc. Amer. Assoc. Cancer Res., <u>47</u>, 77, Washington, D.C.
- 211. Gaikwad, N.W., Markushin, Y., Saeed, M., Jankowiak, R., Trock, B.J., Rogan, E.G. and Cavalieri, E.L. (4/1-5/06) The depurinating 4-hydroxyestrone(estradiol)-1-N3Ade DNA adducts as biomarkers of prostate cancer risk. Proc. Amer. Assoc. Cancer Res., <u>47</u>, 78, Washington, D.C.

- Gaikwad, N.W., Cavalieri, E.L. and Rogan, E.G. (4/1-5/06) NQO1-catalyzed reduction of estradiol-3,4-quinone. Implications for tumor initiation by estrogens. Proc. Amer. Assoc. Cancer Res., <u>47</u>, 445, Washington, D.C.
- Lu, F., Cavalieri, E.L. and Rogan, E.G. (4/1-5/06) TCDD-induced expression of cytochrome P450 enzymes and formation of estrogen metabolites in human breast epithelial MCF-10F cells. Proc. Amer. Assoc. Cancer Res., <u>47</u>, 445, Washington, D.C.
- 214. Rogan, E.G., Zhang, Y., Gaikwad, N.W., Olson, K., Zahid, M. and Cavalieri, E.L. (4/1-5/06) Cytochrome P450 isoforms catalyze oxidation of catechol estrogens to their quinones, which react with DNA. Proc. Amer. Assoc. Cancer Res., <u>47</u>, 446 Washington, D.C.
- 215. Zahid, M., Saeed, M., Olson, K., Gaikwad, N., Rogan, E., Cavalieri, E. (4/1-5/06) Inhibition of the formation of the N3Ade and N7Gua depurinating adducts after reaction of estradiol-3,4quinone or lactoperoxidase-oxidized 4-hydroxyestradiol with DNA. Proc. Amer. Assoc. Cancer Res., <u>47</u>, 446, Washington, D.C.
- 216. Saeed, M., Rogan, Ed., Cavalieri, E., Sheriff, F., Fernandez, S. and Russo, J. (4/1-5/06) Formation of the DNA depurinating N3Ade and N7Gua adducts of 4-hydroxyestradiol by MCF-10F cells cultured with the carcinogenic estrogen metabolite 4-hydroxyestradiol. Proc. Amer. Assoc. Cancer Res., <u>47</u>, 447, Washington, D.C.
- 217. Singh, S., Zahid, M., Gaikwad, N., Chakravarti, D., Cavalieri, E.L. and Rogan, E.G. (4/1-5/06) The effect of NAD(P)H:quinone oxidoreductase 1 polymorphisms on estrogen metabolism in relation to initiation of breast cancer. Proc. Amer. Assoc. Cancer Res., <u>47</u>, 835, Washington, D.C.
- 218. Saeed., M., Rogan, E. and Cavalieri, E. (4/1-5/06) Formation of depurinating N3Adenine and N7Guanine adducts after reaction of 1,2-naphthoquinone or enzyme-activated 1,2dihydroxynaphthalene with DNA. Implications on the metabolic activation of naphthalene. Proc. Amer. Assoc. Cancer Res., <u>47</u>, late breaking, Washington, D.C.
- 219. Rogan, E. (4/5-8/06) Estrogen Metabolism in Human Breast Cancer, AAAS-SWARM Division Annual Meeting, Science and the Next Generation, Tulsa, OK.
- 220. Rogan, E. (4/19-22/06) Invited talk: Xenoestrogens, Biotransformation, and Differential Risks for Breast Cancer, The 13th International Symposium on Functional Medicine, Managing Biotransformation: The Metabolic, Genomic, and Detoxification Balance Points, Tampa, FL.
- 221. Rhoades, M.G., Meza, J.L., Rogan, E.G., Exner, M.E. and Spalding, R.F. (5/22-24/06) A spatial model exploring the association of groundwater atrazine concentration and the incidence of non-Hodgkin lymphoma in Nebraska, Society of Environmental Toxicology and Chemistry Regional Meeting, Columbia, MO.
- 222. Rogan, E. (11/03/06) The role of estrogen metabolism in the initiation of breast, prostate and other human cancers, The Michigan Society of Toxicology Fall Meeting, East Lansing, MI.

- 223. Rogan, E. (11/10-12/06) The Role of Estrogen Metabolism in the Initiation of Breast, Prostate and Other Human Cancers, CAMExpo West, Los Angeles, CA.
- 224. Rogan, E. (2/07/07) Estrogen-DNA Adducts in the Etiology and Prevention of Breast and Prostate Cancer, Functional Medicine of Colorado, Boulder, CO.
- 225. Khmelnitsky, M., Kosinska, W., Cavalieri, E.L., Rogan, E.G., Chakravarti, D. and Guttenplan, J.B. (4/14-18/07) Mutagenic activity and specificity of estradiol and metabolites in *lac1* rat mammary gland and liver. Amer. Assoc. Cancer Res., Los Angeles, CA.
- 226. Vega, K., Rogan, E.G., Cavalieri, E.L. and Bosland, M.C. (4/14-18/07) Steroid hormoneinduced prostate carcinogenesis in the Noble (NBL) rat: The effects of an aromatase inhibitor and catechol estrogens. Amer. Assoc. Cancer Res., Los Angeles, CA.
- 227. Cavalieri, E., Rogan, E., Pruthi, S. and Ingle, J. (7/7-10/07) Molecular Etiology of Breast Cancer: Biomarkers of Risk and Prevention, 15th Annual SPORE Investigators' Workshop, Baltimore, MD.
- 228. Pruthi, S., Sandhu, N.P., Ingle, J.N., Suman, V.J., Rogan E.G. and Cavalieri, E. (9/7-8/07) Estrogen-DNA adducts identified in urine as potential biomarkers of breast cancer risk. 2007 ASCO Breast Cancer Symposium, San Francisco, CA.
- 229. Cavalieri, E., Gaikwad, N., Rogan, E., Pruthi, S., Ingle, J. (12/12-16/07) Molecular etiology of breast cancer: potential biomarkers of risk and for use in prevention. San Antonio Breast Cancer Symposium, San Antonio, TX.
- 230. Yang, L., Cavalieri, E.L., Rogan, E.G. (2/29-3/1/08) The role of estrogen metabolism in risk of developing breast cancer: Detection of novel biomarkers from a case-control study. 39th Annual Midwest Student Biomedical Research Forum, Omaha, NE.
- 231. Yang, L., Cavalieri, E.L., Rogan, E.G., Pruthi, S., Ingle, J.N., Muti, P. (3/16-20/08) The role of estrogen metabolism in risk of developing breast cancer: Detection of novel biomarkers from a case-control study. Society of Toxicology Annual Meeting and ToxExpo, Seattle, WA.
- 232. Rogan, E. (5/30/08) Origins and Prevention of Breast and Prostate Cancer. Mount Holyoke College, South Hadley, MA.
- 233. Rogan, E. (6/3/08) How estrogens begin the process leading to breast & prostate cancer. Summer Undergraduate Research Program Seminar, UNMC, Omaha, NE.
- 234. Rogan, E. (04/09/09) Can We Stop Cancer from Starting? Functional Medicine of Colorado, Boulder, CO.
- 235. Rogan, E. (04/14/09) Can We Stop Cancer from Starting? Breast Cancer Survivor Support Group, Omaha, NE.

- 236. Rogan, E. (3/11/10) The origins of research: The critical thinking process. Faculty Development Session, UNMC, Omaha, NE.
- 237. Rogan, E., (3/20/10) The nuts and bolts of defining your research question. College of Public Health, UNMC, Omaha, NE.
- 238. Rogan, E. (6/22/10) Effects of modulating estrogen metabolism on transformation of cultured human breast epithelial cells. Molecular and Biochemical Etiology Program, UNMC, Omaha, NE.
- 239. Rogan, E.G., Cavalieri, E.L., Yang, L., Gaikwad, N. (8/2-5/2011) Estrogen-DNA adducts as biomarkers for risk of developing breast cancer, Era of Hope, Department of Defense Breast Cancer Research Program meeting, Orlando, FL.
- 240. Rogan, E. (8/4/11) Ovarian cancer: Proposed mechanism of initiation by estrogens. Invited speaker. Carolinas Medical Center, Charlotte, NC.
- 241. Rogan, E. (1/23/12) Environmental health: Issues following the Missouri River flood of 2011. Doctoral Seminar, College of Public Health, UNMC, Omaha, NE.
- 242. Rogan, E. (5/14/12) Department of Environmental, Agricultural and Occupational Health, UNMC, Overview. Rural Health Education Network, UNMC, Omaha, NE.
- 243. Rogan, E. (5/17/13) Progress toward preventing breast cancer. Mt. Holyoke College, South Hadley, MA.
- 244. Rogan, E. (12/10/13) Estrogen-DNA adducts as biomarkers for risk of developing breast and ovarian cancer. Biomarkers Focus Group, UNMC, Omaha, NE.
- 245. Rogan, E. (1/10/14) The role of estrogens in the initiation of ovarian cancer. Gynecologic Oncology Focus Group, UNMC, Omaha, NE.
- 246. Rogan, E., (1/24/14) Potential role of estrogen metabolism in the initiation of thyroid cancer. Section of Diabetes, Endocrinology and Metabolism, Internal Medicine, UNMC, Omaha, NE.
- 247. Rogan, E., (6/7/14) Role of endogenous and environmental oestrogens in initiation of human cancers. The 2014 International Congress on Natural Medicine, Sydney, Australia.
- 248. Rogan, E., (6/9/14) Functional medicine approach to managing oestrogen metabolism and reducing breast cancer risk. The 2014 International Congress on Natural Medicine, Sydney, Australia.
- 249. Yang, L., Liao, Y., Zahid, M., Rogan, E.G., Cavalieri, E.L., Kensler, T.W. (3/22-26/15) Modulation of depurinating estrogen-DNA adducts by sulforaphane in ACI rats: implication for breast cancer prevention. Society of Toxicology 2015 Annual Meeting, San Diego, CA.

- 250. Rogan, E. (07/24/15) Estrogen metabolite-DNA adducts. The Institute for Functional Medicine, webinar.
- 251. Rogan, E. (09/28/15) Prevention of estrogen-initiated cancer. Rotary Club of Ljubljana, Slovenia.
- 252. Rogan, E. (09/29/15) Prevention of estrogen-initiated cancer, Medivitale Meeting, Ljubljana, Slovenia.
- 253. Rogan, E. (09/30/15) Etiology and prevention of estrogen-initiated cancer, Health Festival F3ZO, Ljubljana, Slovenia.
- 254. Rogan, E. (06/01/16) Public health heats up: Global and local impacts of climate disruption, Session on Climate Change for Nebraska State Senators, Nebraska Innovation Campus.
- 255. Corley, B., Rogan, E., Coulter, D.W., Baccaglini, L., Howell, M., Bartelt-Hunt, S.L., and Kolok, A.S. (05/10/17) Using watershed boundaries in a geospatial analysis of pediatric cancers in Nebraska. 2017 Pediatric Research Forum, University of Nebraska Medical Center, Omaha, NE.
- 256. Puvvula, J., Corley, B., Coulter, D.W., Sparks, J., Baccaglini, L., Rogan, E.G., Bartelt-Hunt, S.L., and Kolok, A.S. (04/22-25/2018) Using watershed boundaries to map adverse human health outcomes: Examples from Nebraska, USA. American Water Resources Association, Spring Specialty Conference on GIS & Water Resources X, Orlando, FL.
- 257. Bartelt-Hunt, S., Rogan, E., Fruhling, A., Christenson, G., and Hindmarsh, J. (10/11/2018) Well water, farm families and better health. Great Plains IDeA-CTR Annual Scientific Meeting, University of Nebraska Medical Center, Omaha, NE.
- 258. Puvvula, J., Bartelt-Hunt, S., Kolok, A., and Rogan, E.G. (10/03/2018) Congenital anomalies due to maternal Atrazine exposure from drinking water. Nebraska Environmental Health Association Conference, Ashland, NE.
- 259. Rogan, E. (10/27/2018) Invited talk. Sigma Theta Tau, Clarkson College of Nursing, Omaha, NE.
- 260. Ouattara, B., Rogan, E., Bartelt-Hunt, S., Kolok, A., Bell, J., and Puvvula, J. (11/27/2018) Pediatric Cancer Incidences in Nebraska vs Concentrations of Nitrate in Water, 2018 Midwest Regional Agricultural Safety and Health Meeting, Council Bluffs, I.
- 261. Ouattara, B., Rogan, E., Bartelt-Hunt, S., Kolok, A., Bell, J., and Puvvula, J. (02/15-16/2019) Pediatric Cancer Incidences in Nebraska vs Concentrations of Nitrate in Water. Global health Midwest Conference, Creighton University, Omaha, NE.
- 262. Bartelt-Hunt, S., Ali, J., Kolok, A., Rogan, E., Christensen, G., and Hindmarsh, J. (03/26/2019) Using citizen science to monitor water quality in urban and rural areas. AWRA 2019 Spring Specialty Conference.

- 263. Rogan, E.G., Bartelt-Hunt, S., Kolok, A.S., Puvvula, J., Ouattara, B., and Coulter, D. (03/27/2019) Using watersheds as a tool to correlate water contaminants and adverse health effects. AWRA 2019 Spring Specialty Conference.
- 264. Ouattara B., Bartelt-Hunt, S., Kolok, A., Bell, J., Puvvula, J., and Rogan, E., (04/2019) Pediatric Cancer Incidence in Nebraska vs Concentrations of Nitrate in Water. CoPH Student Research Day, University of Nebraska Medical Center, Omaha, NE.
- 265. Rogan, E.G., Bartelt-Hunt, S., Kolok, A.S., Bell, J., Puvvula, J., Ouattara, B., and Coulter, D. (04/23/2019) Health Kids Alliance Summit, Lincoln, NE
- 266. Ouattara, B., Bartelt-Hunt, S., Kolok, A., Bell, J., Puvvula, J., Rogan, E. (05/9-10/2019) Pediatric Cancer Incidence in Nebraska vs Concentrations of Nitrate in Water, 17th Annual Pediatric Research Forum, Children's Hospital, Omaha, NE
- 267. Rogan, E.G. (08/26/2019) Possible Association of Higher Incidence of Pediatric Cancers in Nebraska with Areas of More Intensive Agricultural Activities, PCRG Symposium, University of Nebraska Medical Center, Omaha, NE

TEACHING ACTIVITIES:

2019

Course #	Course Title Spring	Role	Hour(s)
CPH 597/ENV 888	Principles of Toxicology	Lecturer	3
CPH 503/ENV 892	Public Health, Environment & Society	Lecturer	2
		Spring 2019 Total	5

Course Title	Role	Hour(s)
Spring		
Principles of Toxicology	Lecturer	3
Public Health, Environment & Society	Lecturer	2
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	Course Title <i>Spring</i> Principles of Toxicology Public Health, Environment & Society	Course Title SpringRolePrinciples of ToxicologyLecturerPublic Health, Environment & SocietyLecturer

Spring 2018 Total 5

2017			
Course #	Course Title	Role	Hour(s)
	Spring		
CPH 620/EPI 812	Chronic Disease Epidemiology	Lecturer	1

CPH 597/ENV 888 CPH 503/ENV 892	Principles of Toxicology Public Health, Environment & Society	Lecturer Lecturer	3 1
High School	<i>Fall</i> Community Medicine	Coordinator	8
Amance		2017 Total	13

Course #	Course Title	Role	Hour(s)
	Spring		
CPH 643/EPI 803	Topics in Cancer Prevention	Lecturer	1
CPH 597/ENV 888	Principles of Toxicology	Lecturer	2
	Fall		
High School	Community Medicine	Co-	4
Alliance		coordinator	
		2016 Total	7

2015			
Course #	Course Title Spring	Role	Hour(s)
ENV 875	Chemical Carcinogenesis	Course Coordinator	30
CPH 643/EPI 803	Topics in Cancer Prevention <i>Fall</i>	Lecturer	1
	None	2015 Total	0 31

Course #	Course Title	Role	Hour(s)
	Spring		
CPH 649/EPI 998	Cancer Prevention and Control	Lecturer	1
CPH 503/ENV 892	Public Health, Environment & Society	Lecturer	1.25
	Fall		
CPH 620/EPI 812	Chronic Disease Epidemiology	Lecturer	2.5
	COPH Doctoral Program Seminar	Lecturer	
	C C	2014 Total	4.75

2013			
Course #	Course Title	Role	Hour(s)
	Spring		
CPH 649/EPI 998	Cancer Prevention and Control	Lecturer	1
	Fall		

CPH 620/EPI 812	Chronic Disease Epidemiology	Lecturer 2013 Total	2.5 3.5	
2012				
Course #	Course Title	Role	Hour(s)	
	Spring			
	None		0	
		Ŧ,	1.05	
CPH 503/ENV 892	Public Health, Environment & Society	Lecturer	1.25	
BIOC 880	Research	Lecturer	2.0	
CPH 620/EPI 812	Chronic Disease Epidemiology	Lecturer	2.5	
		2012 Total	5.75	
0011				
2011 Course #	Course Title	Dala	Hann(a)	
Course #	Course Thie Spring	Kole	Hour(s)	
CPH 503/ENV 892	Public Health, Environment & Society (online) Fall	Lecturer	2.0	
CPH 503/ENV 892	Public Health, Environment & Society	Lecturer	1.25	
BIOC 880	Principles and Methodologies in Cancer Research	Lecturer	2.0	
CPH 620/EPI 812	Cancer	Lecturer	2.5	
Course in Public Health for High	Principles of Carcinogenesis	Lecturer	1.0	
School Academy		2011 Total	8.75	
2010				
Course #	Course Title Spring	Role	Hour(s)	
ENV 875	Chemical Carcinogenesis	Coordinator and lecturer	12	
	Fall			
ENV 892	Public Health, Environment & Society	Coordinator and lecturer	1.5	
BIOC 880	Principles and Methodologies in Cancer Research	Lecturer	2.0	

> 2010 Total 15.5

(Revised 03/2020)