

CURRICULUM VITAE

James P. Kehrer, Ph.D. Faculty of Pharmacy and Pharmaceutical Sciences
Katz Centre for Pharmacy & Health Research 3142C
University of Alberta
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CANADA

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Jim@kehrerfamily.com

Date & Place of Birth: August 25, 1951, Watertown, WI

Citizenship USA
Permanent Resident, Canada

Married to: Debra A. Bodensteiner, August 6, 1977

Children: Paul L. Kehrer, July 21, 1982
Marc D. Kehrer, February 27, 1986

Education

Purdue University, West Lafayette, IN 47907 May, 1974 B.S. (Pharmacy)
Univ. of Iowa College of Medicine, Iowa City, IA 52242 May, 1978 Ph.D. (Pharmacology)
Postdoctoral - Biology Division, Oak Ridge National Laboratory, Oak Ridge, TN 37831 1978-1980 (Toxicology)

Membership - Societies

Alberta College of Pharmacists (regulatory body) (non-voting board member) (2009-present)
American Association for Cancer Research (1999-2006)
American Association for the Advancement of Science (1975-present)
American Association of Colleges of Pharmacy (2005-present)
American Pharmacists Association (2005-2009)
American Society for Pharmacology and Experimental Therapeutics (1984-present). *Chairman, Toxicology Division 2006-2007*
American Society of Health System Pharmacists (2005-present)
Association of Faculties of Pharmacy of Canada (2009-present); *Director, 2012-2014; Chair, Council of Deans, 2014-2015*
Canadian Pharmacists Association (2009-present)
Gulf Coast Chapter Society of Toxicology (1989-2005) *Vice-President 1989; President 1990*
International Society for Free Radical Research (1986-2008)
International Society for the Study of Xenobiotics (ISSX) (1993-1997)
National Community Pharmacists Association (2005-2009)
Society for Free Radical Biology and Medicine (1988-2008)
Society of Toxicology (1982-present); *President of Mechanisms Specialty Section, 1998-1999*
Washington State Pharmacy Association (2005-2009)
Western Pharmacology Society (1984-1998)

Awards and Honors

1. Merck Award in Pharmacology (1974 - Purdue)
2. Rho Chi National Pharmacy Honorary
3. Phi Kappa Phi Honorary Society
4. University of Iowa Graduate College Fellowship in Pharmacology 1974-1975

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5. Postdoctoral Investigatorship - University of Tennessee-Oak Ridge Graduate School of Biomedical Sciences, Oak Ridge National Laboratory, Biology Division. 1978-1980.
6. University of Texas Summer Research Award - 1981
7. Research Career Development Award - National Institutes of Health (NHLBI) 1984-1989
8. Gustavus Pfeiffer Centennial Endowed Fellowship in Pharmacology - 1985-1991
9. Achievement Award - Society of Toxicology 1989.
10. Gustavus and Louise Pfeiffer Professorship in Toxicology - 1991-2005.
11. Zeneca Traveling Lectureship Award, Society of Toxicology 1996.
12. Univ. of Texas College of Pharmacy Alumni Association "Best Friend" Award, Nov. 1, 2001
13. Distinguished Alumnus Award, Purdue Univ. School of Pharmacy, 2004.
14. Elected, Fellow of the American Association for the Advancement of Science, 2008.
15. Nominated, Outstanding Mentor by the Washington State Univ. Women & Leadership Forum, 2009.

Experience

Professor and Dean, Faculty of Pharmacy and Pharmaceutical Sciences, The University of Alberta, Edmonton, Canada	2009 - present
Professor and Dean, College of Pharmacy, Washington State University	2005 - 2009
Adjunct Professor, University of Texas College of Pharmacy	2005 - 2006
Director, Center for Molecular and Cellular Toxicology, Univ. Texas	2003 - 2005
Member, FDA Nonprescription Drugs Advisory Committee	2009 - 2010
Member, US-EPA Science Advisory Board Environmental Health Committee	2003 - 2006
Member, US-EPA Science Advisory Board Exposure & Human Health Committee	2006-2009
Adjunct Professor, Dept. Carcinogenesis, M.D. Anderson Cancer Center, Science Park Research Division	1997 - 2006
Head, Division of Pharmacology and Toxicology, College of Pharmacy	1991 - 2004
Professor of Pharmacology - University of Texas at Austin	1990 - 2005
Guest Scientist - Universität Düsseldorf	May-June 1990 and 1997
Visiting Professor - Institut Für Physiologische Chemie I, Universität Düsseldorf, Düsseldorf, West Germany (with Dr. Helmut Sies)	Jan. - Dec. 1986
Associate Professor of Pharmacology - University of Texas at Austin	1985 - 1990
Assistant Professor of Pharmacology - University of Texas at Austin	1980 - 1985
Postdoctoral Investigator-Biology Div., Oak Ridge National Laboratory (with Dr. Hanspeter Witschi)	1978 - 1980
NIH Predoctoral Fellow, Univ. of Iowa (with Dr. Anne P. Autor)	1974 - 1978

RESEARCH

Research Interests

- Molecular mechanisms by which acrolein, a cyclophosphamide metabolite, affects apoptosis and cell proliferation; effects on signal transduction including NF κ B
- Thioredoxin and apoptosis; role of thioredoxin in signaling
- Mechanisms of apoptosis induced by lipoxygenase and cyclooxygenase-2 inhibitors; role of lipocalin expression (24p3 and NGAL) and Akt signaling pathways
- Free radical toxicology; glutathione and apoptosis signaling

Research Support (direct costs)

1. Univ. of Texas Research Institute. "Effect of Butylated Hydroxytoluene on Pulmonary Glutathione Levels". \$4,800: October 1980-March 31, 1981, Principal Investigator.
2. Univ. of Texas Research Institute. "The Effect of Corticosteroids on Acutely Damaged Pulmonary Tissue," \$4,000, Summer Research Award, June 1, 1981-August 31, 1981.
3. College of Pharmacy BRSR Seed Grant. "Hydroxyproline as an Index of Collagen Content After Acute Lung Damage", \$5,000: June 15, 1981-March 31, 1982, Principal Investigator

4. Univ. of Texas Research Institute. "The Effect of Acute Lung Damage on the Breakdown of Collagen" \$5,000: Sept. 30, 1981-July 31, 1982, Principal Investigator
5. Gustavus and Louise Pfeiffer Research Foundation. "The Effect of Drug Treatment on Damaged Lung Tissue" \$50,023: October 1982-September 1985, Principal Investigator.
6. College of Pharmacy BRSB Seed Grant. "The Effects of BCNU (carmustine) on Pulmonary Glutathione Reductase". \$2,000: June 15, 1982-March 31, 1983, Principal Investigator.
7. Univ. of Texas Research Institute. "The Effect of Drug Treatment on Damaged Lung Tissue". \$5,000: October 1982-March 1983, Principal Investigator.
8. National Institutes of Health (NHLBI). "Effect of Toxic Lung Damage and Steroids on Collagen" \$167,612: April 1, 1983-March 31, 1986, Principal Investigator.
9. American Heart Assoc.-Texas Affiliate. "Enhanced Doxorubicin Cardiotoxicity by BCNU". \$28,771: July 1, 1983-June 30, 1984, Principal Investigator.
10. American Cancer Society. "Toxic Effects of BCNU: Role of Glutathione Reductase Inhibition." \$72,355: July 1, 1983 - June 30, 1985, Principal Investigator.
11. College of Pharmacy BRSB Seed Grant. "Role of Lipid Peroxide Damage in Chicken Muscular Dystrophy". \$2,000: June 1, 1985 - March 31, 1986.
12. American Cancer Society. "Toxic Interactions of Anticancer Drugs on the Lung" \$37,575: July 1, 1985 - June 30, 1986, Principal Investigator.
13. General Motors Research Institute. "Analysis of Lung Collagen in Ozone-Exposed Rats. \$14,805: Dec. 1985 - Aug. 1986, Principal Investigator
14. University of Texas Research Institute. "Reoxygenation Injury in Isolated Perfused Heart". \$4,500: Oct. 1, 1986 - March 31, 1987, Principal Investigator
15. General Motors Research Institute. "Oxidant Exposure and Pulmonary Fibrosis". \$10,274: Oct. 1987 - Aug. 1988, Principal Investigator
16. National Institutes of Health (NHLBI). "Toxic Lung Damage and the Effect of Steroid Treatment" Research Career Development Award \$237,500: Sept. 1, 1984 - Aug. 31, 1989.
17. Burroughs Wellcome Fund. Wellcome Visiting Professorship for Dr. Helmut Sies, \$2500 January, 1990, initiator for this award.
18. General Motors Research Institute. "Oxidant Exposure and Pulmonary Fibrosis". \$13,699: Jan. 1989 - Dec. 1989, Principal Investigator
19. University of Düsseldorf. "Mitochondrial function under defined conditions of hypoxia". 6000DM: May 9, 1990 - June 30, 1990, Principal Investigator
20. Marnac Corporation. "Antifibrotic activity of pirfenidone" \$2,000, May 1, 1990 - Aug. 31, 1990, Principal Investigator
21. College of Pharmacy BRSB Grant. "Chloroethyl ³H labeled cyclophosphamide" \$2000, Jan. 1991, Principal Investigator.
22. Marnac Corporation. "Antifibrotic activity of pirfenidone" \$2,100, Dec. 1, 1990 - April 30, 1991, Principal Investigator
23. Clinitec Nutrition. "Effect of glutathione esters on hypoxic heart injury" \$5,000: Aug. 1, 1991-Jan. 1, 1992, Co-Principal Investigator
24. National Institutes of Health (NHLBI). "Toxicity of cardiac hypoxia and reoxygenation". \$131,882: Dec. 1, 1988 - Nov. 30, 1991, Principal Investigator
25. American Cancer Society. "Activation of cyclophosphamide via cooxidation" \$124,220: July 1, 1992-June 30, 1994, Principal Investigator (duplicate award to NIH so funds not provided)
26. Dermigen Corp. "Effect of antioxidants on hepatotoxicity of endrin and dieldrin" \$6,249: February 1, 1992 - August 31, 1992, Principal Investigator
27. Dermigen Corp. "Effect of antioxidants on hepatotoxicity of endrin and dieldrin" \$11,019: September 1, 1992 - December 31, 1992, Principal Investigator
28. Gustavus and Louise Pfeiffer Research Foundation. "Prevention of lung injury induced by the anticancer drug cyclophosphamide" \$30,000: Feb. 1991-Feb. 1993, Principal Investigator.
29. National Institutes of Health (NHLBI). "Lung Toxic Interactions Involving Therapeutic Drugs". \$351,425: April 1, 1987 - March 31, 1993, Principal Investigator
30. Pharmaceutical Manufacturers Association. Postdoctoral award to Sarath Kanekal "Peroxidase-mediated metabolism of cyclophosphamide". \$31,175: July 1, 1992 - June 30, 1993.

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31. HealthQuest "General support" \$6,000: January - December, 1993; Principal Investigator
32. RJR. "Oxidative stress, thiol redox status and cellular senescence". \$22,500: Jan. 1, 1997- Dec. 31, 1997. Principal Investigator
33. NIEHS Center Grant Pilot Project. "Mechanisms of apoptosis: lipoxygenase enzymes and bcl protooncogenes". \$13,500: July 1, 1997 – June 30, 1998, Principal Investigator
34. NIEHS Center Grant Pilot Project. "Effect of acrolein on gene expression". \$15,000: July 1, 1999 – June 30, 2000, Principal Investigator
35. National Institutes of Health (NHLBI). "Cellular reducing equivalents and oxidative stress". \$653,993: August 1, 1994 - July 31, 2000, Principal Investigator
36. National Institutes of Health (NHLBI). "Mechanisms of cyclophosphamide toxicity". \$399,234: Dec. 1, 1995 - Nov. 30, 2000, Principal Investigator
37. National Institutes of Health (NIEHS). "Mechanisms of acrolein on proliferation and apoptosis". \$558,017: Aug. 1, 1999 - July 31, 2003, Principal Investigator
38. NIEHS. "Mechanisms of organ-specific toxicology of xenobiotics. Training Grant \$320,000; annual costs 7/1/2000-6/30/2005, Training faculty
39. NIEHS. "Mechanisms and prevention of environmental disease". Center Grant \$3,000,000: April 1, 1996 - March 31, 2001, Director Research Core 1 1996; Associate Director, Austin, 1997-2005
40. National Institutes of Health (NCI). "Apoptosis, 5-lipoxygenase activating protein, and bcl-x_L". \$900,000: June 1, 2000 - May 31, 2006, Principal Investigator

Journal Editorial Appointments

Editor-in-Chief - *Toxicology Letters* (April 1993- June 2014)

Associate Editor for Reviews - *Toxicology Letters* (1988-93)

Associate Editor - *Journal of Toxicology and Environmental Health* (1992-93)

Deputy Chairman of the Editorial Board - *Biochemical Journal* (2000-2008)

Editorial Boards

Toxicology (1982-1993)

Toxicology and Applied Pharmacology (1989-2005)

Biochemical Journal [editorial advisory panel] (1991-1993)

Biochemical Journal (1993-2000)

Archives of Biochemistry and Biophysics (2003-2008)

Invited Presentations

1. "Butylated Hydroxytoluene Induced Pulmonary Toxicity" Dept. of Pharmacology and Toxicology, Purdue University, West Lafayette, IN, Nov. 1979
2. "Butylated Hydroxytoluene Lung Toxicity and the Development of Pulmonary Fibrosis" Dept. of Pharmacology, Southern Illinois Univ. School of Medicine, Springfield, IL, Jan. 1980
3. "Collagen Metabolism During the Development of Pulmonary Fibrosis" Los Alamos Scientific Laboratory, Los Alamos, NM, Nov. 1980
4. "Research Frontiers in Pharmacology" Texas Junior Science, Engineering, and Humanities Symposium, Joe C. Thompson Conference Center, Austin, TX, Feb. 1981
5. "Mediators of Lung Toxicity: Activated Metabolites and Oxygen Radicals" Symposium on Cellular Mechanisms of Toxicity, Fifth Annual Meeting of Texas Pharmacologists, Lubbock, TX, May, 1981
6. "The Effect of Butylated Hydroxytoluene on Pulmonary Collagen" Department of Pharmacology, The University of Iowa, Iowa City, IA, October, 1981
7. "Collagen Synthesis After Acute Lung Damage" College of Pharmacy, University of Wisconsin, Madison, WI, May, 1982
8. "Paraquat Induced Lung Damage" Abbott Laboratories, North Chicago, IL, August, 1982
9. "Effects of Corticosteroids on Collagen in Damaged Lung" The Univ. of Texas System Cancer Center, Smithville, TX, February, 1983

10. "A Comparison of Ranitidine and Cimetidine" Capital Area Pharmacists Association, Austin, TX, May, 1983
11. "Effects of Corticosteroids on Acutely Damaged Lung" Dept. of Radiation Biology and Biophysics, University of Rochester Medical Center, Rochester, NY, January, 1984
12. "What's New In Therapeutic Drugs" UT Ex-Students Association - Update 84, Austin, TX, June, 1984
13. "Measuring Collagen Metabolism in Normal and Damaged Lung Tissue" Biomedical Sciences Dept., General Motors Research Labs, Warren, MI, October, 1984
14. "New Developments in Therapeutic Drugs" Texas Society of Professional Engineers, Austin, TX, April, 1985
15. "Drug-Induced Lung Damage: Models and Mechanisms" Institut für Physiologische Chemie I, Universität Düsseldorf, Düsseldorf, West Germany, February, 1986.
16. "Reactive Oxygen Species in Biological Systems" Institut Für Anorganische Chemie, Universität Basel, Basel, Switzerland, June, 1986.
17. "Reactive Oxygen in Biological Systems" Martin Luther Universität, Sektion Pharmazie, Halle, East Germany, June, 1986.
18. "Models and Mechanisms of Drug-Induced Lung Damage" Universität Göttingen, Institut für Pharmakologie und Toxikologie, Göttingen, West Germany, July, 1986.
19. "Absence of Changes in Xanthine Oxidase During Hypoxia and Reoxygenation of Isolated Rat Heart". Discussion meeting on "The Role of Oxygen Radicals in Cardiovascular Diseases", Asolo, Italy, December, 1986.
20. "The Oxygen Paradox: A German Experience". Institut Für Physiologische Chemie I, Universität Düsseldorf, Düsseldorf, West Germany, December, 1986.
21. Invited discussant to the workshop on "Antioxidant Interactions", part of the workshop on "Oxygen Radicals and Antioxidants in Cancer and Aging". Univ. California, Berkeley, February, 1987.
22. "Antioxidants in Muscular Dystrophy" Invited speaker, Gordon Research Conference on "Oxy Radicals in Biology and Medicine", Santa Barbara, CA, February, 1987.
23. "Reoxygenation Injury: Energy or Radicals?" Department of Kinesiology, The University of Texas at Austin, December 1987.
24. "Overview of The Role of Free Radicals in Pathogenesis" Chairman of the symposium by the same name at the 1988 annual Meeting of the Society of Toxicology, Dallas, TX, Feb. 1988.
25. "Is Oxidative Stress a Factor in Muscular Dystrophy or Cardiac Reperfusion Injury?" Dept. of Pharmacology, College of Pharmacy, The Univ. of Arizona, Tucson, AZ, March 1988.
26. "Energy-Dependence of Enzyme Release From Hypoxic Isolated-Perfused Rat Heart Tissue." Department of Biochemistry, University of Osaka Medical School, Osaka, Japan. April 1988.
27. "Cardiac Reperfusion Injury: Oxidative Changes and Protection by Ruthenium Red." Johnson & Johnson, New Brunswick, NJ, May 1989.
28. "Oxidative Stress in Hypoxic Heart Tissue" Dept. of Physiology & Pharmacology, Texas A & M University Veterinary School, College Station, TX, October 1989.
29. "Hypoxic Heart Injury: Oxidative Stress and Protection by Ruthenium Red" Section of Cardiovascular Sciences, Baylor College of Medicine, Houston, TX December 1989.
30. "Chemical-Induced Lung Injury and Fibrosis" Univ. of British Columbia, School of Medicine, Vancouver, BC, Canada, February 1990.
31. "Mechanisms of Hypoxic Cell Injury: Introduction and Overview" Chairman of the symposium by the same name at the 1990 annual Meeting of the Society of Toxicology, Miami, FL, February 1990.
32. "Free Radicals In Muscular Dystrophy" invited speaker for a symposium on "Chemical Stimulation of Free Radical Mechanisms of Tissue Injury, American Chemical Society meeting, Boston, MA April 1990.
33. "Oxidative Stress During Cardiac Hypoxia" Institut of Physiological Chemistry I, University of Düsseldorf, Federal Republic of Germany, May 1990.
34. "Cooxidation as the Mechanism of Cyclophosphamide-Induced Lung Injury" Institute of Toxicology, University of Würzburg, Federal Republic of Germany, May 1990.

35. "Cooxidation as a Mechanism of Cyclophosphamide Bioactivation" Department of Pharmacology, College of Medicine, Texas A & M University, February 1991.
36. "The Mechanism of Cyclophosphamide-Induced Lung Injury: Cooxidation versus P450" Dept. Pharmacology & Toxicology, College of Medicine, West Virginia University, March 1991.
37. "Cooxidation and Hypoxia: Pathways Leading to Reactive Species and Tissue Injury" Dept. of Pharmacology /Toxicology, College of Pharmacy, Northeast Louisiana Univ., April 1991.
38. "Oxidative Stress During Hypoxia: Excess Radicals or Compromised Defenses", Symposium on Free Radicals and Oxidative Stress, Gulf Coast Society of Toxicology meeting, Science Park, TX October 1991.
39. "Cooxidation of Cyclophosphamide: Does it Lead to Lung and Bladder Toxicity?" University of California, Davis, February 1992.
40. "Redox balance of the hypoxic heart" Univ. Oklahoma, College of Pharmacy, May, 1992.
41. "Effects of oxygen deprivation on cardiac redox systems" Symposium on Molecular Mechanisms of Ischemia/Reperfusion Injury, Western Pharmacology Society, Incline Village, NV, Feb. 1993
42. "Oxidant toxicity in hypoxic heart tissue", Dept. of Biological Sciences, Southern Methodist University, March 1993.
43. "The science of toxicology", LBJ High School Science, Mathematics and Technology Symposium, Austin, TX, May 1993.
44. "Oxidative stress and the supply of cellular reducing equivalents", Penn State's Thirteenth Summer Symposium in Molecular Biology" Molecular and Cellular Mechanisms of Toxicity. University Park, PA, August 1994.
45. "Reducing mitochondrial oxidative stress", Dept. of Pharmacology and Toxicology, Indiana University School of Medicine, Indianapolis, IN, January 1995.
46. "Reducing mitochondrial oxidative stress", Dept. of Pharmacology and Toxicology, School of Pharmacy, Purdue University, W. Lafayette, IN, January 1995.
47. "Bcl-2 and free radicals, and reducing mitochondrial oxidative stress" Dept. of Pathology, University of Texas Medical Branch, Galveston, TX, August, 1995.
48. "Oxidative stress: Mitochondrial responses and the role of bcl-2" Dept. of Pharmaceutical Chemistry, Wayne State University, Detroit, MI, August, 1995.
49. "NIH Grant Writing", Northeast Louisiana University, October 1995.
50. "Oxidative stress, reducing equivalents and bcl-2" Zeneca Pharmaceuticals, Macclesfield, England, May 1996.
51. "Oxidative stress, reducing equivalents and bcl-2" MRC Toxicology Unit, Leicester, England, May 1996.
52. "Oxidative stress, reducing equivalents and bcl-2" Univ. Düsseldorf, Germany, June 1996
53. "Oxidative stress, reducing equivalents and bcl-2" Leiden University, Center for Drug Research, Division of Molecular Pharmacology, Amsterdam, The Netherlands, June 1996
54. "Acrolein mercapturates: A factor in cyclophosphamide toxicity?" University of Würzburg, Germany, June 1996
55. "Oxidants, antioxidants and the Bcl protooncogenes" University of Düsseldorf, Germany, May 1997.
56. "Oxidants, antioxidants and the Bcl protooncogenes" University of Konstanz, Germany, June 1997.
57. "Oxidants, antioxidants and the Bcl protooncogenes" University of Zurich, Switzerland, June 1997.
58. "Lipoxygenase and bcl-x_L in apoptotic cell death" University of Houston, December 1997.
59. "5-Lipoxygenase activator protein and bcl-x_L in apoptotic cell death" Essen University, Germany, March 1998.
60. "5-Lipoxygenase activating protein (FLAP), bcl-x_L and apoptosis" Washington State University, July 1998.
61. "5-Lipoxygenase activating protein (FLAP), bcl-x_L and apoptosis" Penn State University, September 1998.
62. "Overview of current research: FLAP and Apoptosis; Acrolein and NF- κ B, Proteasome and hsp70" Oklahoma State University, December 1998.

63. "Detoxification" Plenary lecture at the NIH workshop on Cellular Responses to Low Doses of Ionizing radiation, Bethesda, MD April 1999.
64. "The cause-effect of oxidative stress and apoptosis". Symposium presentation at the annual meeting of the Teratology Society. Keystone, CO, July 1999.
65. "Basic concepts of toxicology" American Chemical Society Short Course; Washington DC, Sept. 1999; New Orleans, November 1999; San Francisco, April 2000; Boston, August 2000, Washington DC, August 2000
66. "The Haber-Weiss reaction and mechanisms of toxicity" Workshop presentation at the annual meeting of the Society of Toxicology. Philadelphia, PA, March 2000
67. "Energy metabolism, oxidative stress and toxicological consequences in the heart" Continuing education presentation at the annual meeting of the Society of Toxicology. Philadelphia, PA, March 2000
68. "Unexpected pathways for xenobiotic-induced apoptosis; focus on lipoxygenase inhibitors" Texas A&M University, September 2000.
69. "Death becomes her: Pathways to apoptosis", Women in Science, Austin, TX April 2001.
70. "Acrolein and apoptosis; NF-kB, AP-1 and caspases", Distinguished Speaker in Environmental Cardiology, University of Louisville, KY, August 2001.
71. "Introduction to thioredoxins and thioredoxin reductases: central roles in toxicity and cancer", symposium chaired at 2002 annual meeting of the Society of Toxicology
72. Chairman, Session 1, Symposium on "Oxidative stress: health benefits of micronutrients", L'Abbaye de Royaumont, Paris, France, July 2002.
73. "Lipocalins, PPARs and apoptosis", Marshall University, Huntington, WV, April 2003.
74. "Acrolein, transcription factors and thioredoxin", Wake Forest University, November 2003.
75. "Lipocalins and apoptosis", Symposium presentation at the annual Society of Toxicology meeting, Baltimore, MD March 2004.
76. "NSAIDs, Peroxisome Proliferators and apoptosis: any role for oxidants?" North Carolina Society of Toxicology, October 2004
77. "The Balance Between Life and Death Signaling", Purdue University, November 2004.
78. "Survival and apoptosis pathways affected by COX-2 inhibitors" Symposium on "Therapeutics and toxicology of COX-2 inhibitors" at the Experimental Biology Meeting, San Diego, CA April 2006.
79. "The Ins and Outs of Publishing and Reviewing Manuscripts", University of Iowa, February 2007.
80. "The Ins and Outs of Publishing and Reviewing Manuscripts", Symposia talk in session on "Communicating Science: Writing for Technical and Lay Audiences". Society of Toxicology annual meeting, March 2007, Charlotte, North Carolina.
81. "The Ins and Outs of Publishing and Reviewing Manuscripts", Univ. of Cardiff, Cardiff, Wales, March 2008.
82. "Canada, Alberta and the PharmD". Canadian Society of Hospital Pharmacy, Edmonton, October 2009.
83. "Canada, Alberta and the Entry Level PharmD: What has been done, what remains". Canadian Society of Hospital Pharmacy, Banff, BC, March 2010.
84. "Faculty Recruitment: Preparing for the Blueprint and Ensuring the Right Knowledge, Skills, and Values Mix" Breakout session with Mary Ensom and Simon Albon at the 2010 Canadian Pharmacy Education and Research Conference, Vancouver, BC, June 2010
85. "PharmD as the First Professional Degree in Canada: Where we are, or Where are we?". Canadian Society of Hospital Pharmacy, Halifax, NS, August 2010.
86. "Canada – Japan – USA: Differences and similarities in the delivery of pharmaceutical care". Toho University, Tokyo, Japan, September 2010 with Dr. Christine Hughes.
87. "Pharmacy practice in North America. Ahram Canadian University, Egypt, December 2010.
88. "The Future of Pharmacy in Canada and North America". Lethbridge Alumni Event. May, 2011
89. "Pharmacy Practice and Education in Alberta: Now and the future". Canadian Society of Hospital Pharmacy, Edmonton, October 2011.

90. "The Future of Pharmacy in Canada and North America". Keynote speaker at the 14th Scientific Congress of the Association of the Pharmacy Colleges in the Arab World, Ajman, UAE, Feb. 2012. Cancelled due to funding and regional unrest
91. Invited panelist: Early Brain & Biological Development Symposium. June 1, 2012, Banff, AB
92. "Pharmacy Practice, Education and Scholarship: Canada and the USA" Manchester University College of Pharmacy, Fort Wayne, IN, August 2012.
93. "Education and Scholarship in Academic Pharmacy" Zhejiang University, Hangzhou, China, May, 2013.
94. "Editors' and Reviewers' Roles in Promoting Quality Publications", EUROTOX2013, invited presentation, Sept. 2013, Interlaken, Switzerland.
95. "Overview of the Faculty of Pharmacy & Pharmaceutical Sciences", Hokkaido Health Sciences University, Japan, April 2014.
96. "Overview of the Faculty of Pharmacy & Pharmaceutical Sciences", Meiji University, Japan, April 2014.

TEACHING

Postdoctoral Fellows:

Tom Dydek, Ph.D., 1983-1984	Noel Horton, Ph.D., 1996-1998
Yu-Chen C. Lee, Ph.D., 1984-1986	Kaushik Datta, Ph.D., 1996-2000
Sarathchandra Kanekal, Ph.D., 1990-1993	Shyam S. Biswal, Ph.D., 1998-2001
Loren Lund, Ph.D., 1992-1994	Grace La, Ph.D., 2000-2002
Kumar Ramu, Ph.D., 1994-1995	Zhimin Tong, Ph.D., 2001-2003; Research Associate 2003-2005
Suresh Krishnan, Ph.D., 1995-1996	Xianmei Yang, Ph.D., 2002-2004
Heidi Bojes, Ph.D., 1996-1998	

National Science Foundation and Howard Hughes Summer Students

Mitchell Rosner, 1981	Arjun Srinivasan, 1991
Lily Wei, 1989	Jennifer Bolin, 1992
Timothy Lee, 1992	Leland Hu, 1993
Meredith Watson, 1998	Eric Liao, 1999

NIH Minority High School Student Research Apprentice Program: Erika Kappe, 1992; Felecia Shaw, 1993; Reagan Billingsley, 1995; Keith Rodriguez 2004-2005.

Special Topics Graduate Students:

Mary Ann Smith, Summer 1981	Doug Bowles, Summer 1989
Glen Kisby, Fall 1981	Steven Siler, Fall 1990
Graciela Cantu, Summer 1988	Brennan Harris, Summer 1996
Ryan Taylor, Fall 2002	

Special Topics Undergraduate Students:

Tamer Ahmed, 1994-1996	Lucindra Corrigan, 1997
Anita Chin, 1996	Sanket Shah, 1999-2000
Ky Lee, 1996	Eric Liao, 1999-2000

Other Students

Fariba Moraghebi, 2001; M.S. graduate student from Sweden

Graduate Students Supervised:

Thomas Paraidathathu, 1982-84 (M.S. June 1984); 1989-93 (Ph.D. August 1993)
Michael E. Murphy, 1985-88 (Ph.D. May, 1988)
Younja Park, 1985-1989 (M.S., May 1987; Ph.D. December 1989)
Robin Smith, 1984-90 (Ph.D., August 1990)

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Jairam Palamanda, 1988-92 (Ph.D., August 1992)
Lucy Fraiser, 1989-92 (Ph.D., December 1992)
Whayoung Lee, 1990-1993 (co-supervisor) Ph.D., December 1993
Camarie S. Perry, 1992-1995 (M.S. May 1995)
Hanlin Liu, 1992-1995 (M.S. May 1995)
Xiang Feng, 1996-1998 (M.S., August 1998)
John Robertson, 1995-1999 (Ph.D., May 1999)
Julie Kern, 1998-2002 (Ph.D., December 2002)
Jonathan Pabalan, 1999-2000 (M.S. December 2000)
George Acquaaah-Mensah, 1998-2001 (Ph.D., August 2001)
Vaidehee Deshpande, 2000-2005; Ph.D. December 2005
Elisa Atarod, 2001-2003 (M.S., December 2003)
Young Eun Choi, 2001-2005 (Ph.D. December 2008)
Shreya Mitra, 2002-2005
Dmitriy Ovcharenko, 2004-2005

Masters Thesis Committees - Texas

Sedelia Lopez; Physical & Health Education, M.S. May 1983 (no thesis)
Jon Swift; Kinesiology, M.S. May, 1996
Hae-Seong Yoon, M.S., August 1999

Ph.D. Dissertation Committees

Texas

Kenneth S. Santone; Pharmacology - Ph.D. 1984
Lee James Carmack; Biomedical Engineering - Ph.D. 1987
Glen Kisby; Pharmacology - Ph.D. 1986
Donald R. Needham-VanDevanter; Medicinal Chemistry - Ph.D. 1986
John Swann; Pharmacology - Ph.D. 1989
Tina Machu; Pharmacology - Ph.D. 1990
Robert W. Reed; Biochemistry - Ph.D. 1990
Barbara Hill; Pharmacology - Ph.D. 1991
Riq Chacon; Pharmacology - Ph.D. 1991
Douglas W. Bowles; Kinesiology - Ph.D. 1992
Roberta Grant; Pharmacology - Ph.D. 1994
Steven Seiler; Kinesiology - Ph.D. 1995
Shujia Pan; Pharmacology - Ph.D., 1994
Richard Timothy Miller; Pharmacology - Ph.D., 1996
Heather Kliner; Pharmacology - Ph.D., 1996
Brennan Harris; Kinesiology - Ph.D. 1999
Kelly Towndrow; Pharmacology – Ph.D., 2000
Qihong Huang; Pharmacology - Ph.D., 2000
Xiang Jing; Nutrition - Ph.D., 2001
John Giammona; Pharmacology – Ph.D. 2002
John Kern; Medicinal Chemistry – Ph.D. 2002
Lora Watts; Pharmacology San Antonio – Ph.D. 2004
Ryan Taylor, Kinesiology, Ph.D. 2004
Bobby Bhatia; MD Anderson, Science Park – Ph.D. 2005
Yamini Chandrasekaran; Pharmacology – Ph.D. 2005

Other

A.D. Gurusinghe - Ph.D. Monash Univ., Clayton, Melbourne, Australia, 1989
Chia Wan Jie, National University of Singapore, PhD thesis evaluation, 2011
Olivier Désy, Laval University, Quebec City, PhD thesis defense, 2012

Courses Taught

Iowa

1977 - Pharmacology 71:120 (Drugs; Their Nature Action and Use) course coordinator.

Texas

Undergraduate

1980-1984 and Summer 1985: PHR 373N (Pharmacology III) course coordinator alternate semesters; responsible for 50% of the course each semester including summers.
1980-1984: PHR 173L (Pharmacology Laboratory) 13% of the course 3 times yearly.
1980-1984;
1987-2005: PHR 362L (Toxicology of Modern Drugs): 20% of the course each semester.
1993-1995 PHR 362M (experimental toxicology): 20% of the course each Fall.
1983-1984: PHR 348 (New drugs & New drug developments) 100% of the course
1989-1996 PHR 473M (Pharmacology II) 25% of course each semester.
1998-2005: Pharmacotherapeutics IIb; 15% of course each year.

Graduate

Seminar in Pharmacology: each long semester
Toxicological Methods: 15% of the course in Fall or Spring
Advanced Toxicology): 20% of course each year through 1990.
Biochemical & Molecular Toxicology: 20% of the course each Spring.
Biomedical Pharmacology: 25% of course each Fall, 1998-present

Washington State University

4 - 8 lectures in toxicology and drug metabolism to pharmacy students annually

Univ. of Alberta

In different years 2 to 6 lectures were given in one or more of the following areas:

- free radicals and toxicology
- pulmonary pharmacology and toxicology
- Cancer and cancer chemotherapy

Teaching Honors

Nominated for Pharmacy teaching excellence award, Texas, 1981.

SERVICE

State of Texas

1. Consultant to the Legislative Task Force on Cancer in Texas, 1984.
2. Director, Travis County Water District #18, 2002-2005

State of Washington

1. Prescription Drug Consortium Advisory Committee, 2005-2009

University of Texas

1. Student Health Committee: 1981-1983
2. Research Evaluation Committee for the Texas Junior Science, Engineering, and Humanities Symposium: 1982-1983
3. University Research Institute grant review committee: 1987-1990.
4. Research Safety Advisory Committee: 1991 - 1997.

College of Pharmacy Texas

1. Admissions: 1980-1982; 1988-1990
2. Continuing Education: 1980-1984

3. Graduate Studies Committee: 1980-2005
4. Recruitment Subcommittee; Graduate Studies Committee: 1980-83 (Chairman 1980-82)
5. Advisory Subcommittee on Equipment Purchases: 1981
6. Advisory Subcommittee on Teaching Assistantships: 1982
7. Baccalaureate Curriculum Committee for the Accreditation Review: 1982
8. Curriculum Committee: 1982 - 1984
9. Administrative subcommittee of the Graduate Studies Committee: 1984-1989
10. Financial aid committee: 1985-2005; chairman 1988-2005
11. Departmental Review Committee on Human Research: 1986-1988
12. Equipment Committee: 1986-1988 (chairman)
13. Financial Resources Subcommittee of the Accreditation Review Committee: chairman, 1989
14. Faculty Development Committee: 1990-1993
15. PharmD Degree Structure Steering Committee: 1990-1991.
16. Space Committee: 1990-1994 , 1999-2000 (chairman)
17. All College Seminar Committee: 1994-1996
18. Graduate Financial Aid Committee: 2000-2002
19. Library Services Committee, 2000-2002.
20. Executive Committee (promotion and tenure); 1990-present; chair 2002-2003
21. PharmD/PhD task force (chairman) 2001.
22. Accreditation Self-Study: financial resources (chairman), Steering Committee (member), College Missions and Goals (member) 2002-2003.
23. Task Force on Pharmacy Enrollment (chairman) 2004

National Societies

1. Public Relations Committee - Mechanisms Section Society of Toxicology: 1983 - 1984
2. Chairman, General Toxicology session, Society of Toxicology, 24th Annual Meeting, 1985.
3. Member, Committee on Public Communications, Society of Toxicology, 1985 - 1988
4. Chairman, Symposium on "Free Radical Mechanisms in Pathogenesis" Society of Toxicology, 27th Annual Meeting, 1988.
5. Chairman, Pulmonary Toxicology session, Society of Toxicology 28th Annual Meeting, 1989.
6. Chairman, Society of Toxicology Continuing Education Course on "Free Radical Toxicology", 29th annual meeting, 1990.
7. Chairman and organizer, Symposium on "Mechanisms of Hypoxic Cell Injury" Society of Toxicology, 29th Annual Meeting, 1990.
8. Awards Committee, Society of Toxicology, 1990-1992.
9. Councilor, Mechanisms Specialty Section, Society of Toxicology, 1992-1994.
10. Society of Toxicology Ad hoc Chlorine Working Group. 1994. Work resulted in the publication of: "Toxicologic principles do not support the banning of chlorine: A Society of Toxicology Position Paper" *Fundam. Appl. Toxicol.* **24**: 1-2 (1995).
11. Member, Board of Publications, Society of Toxicology, 1995-1999.
12. Member, Nominating Committee, Oxygen Society, 1995-1996.
13. President, Mechanisms Specialty Section, Society of Toxicology, 1998-1999.
14. Society of Toxicology Media Resource Specialist, 1997-1999.
15. Society of Toxicology World-Wide-Web task force, 1997-2000
16. Society of Toxicology – elected to Nominating Committee, 2000
17. Society of Toxicology World-Wide-Web Special Advisory Committee, 2001-2005 (chairman, 2001-2004)
18. American Society for Pharmacology and Experimental Therapeutics, elected Chairman of the Division of Toxicology, 2006-2007.
19. Chairman and organizer, Symposium on "Therapeutics and Toxicology of COX-2 inhibitors" Experimental Biology (ASPET), 2006.
20. American Association of Colleges of Pharmacy (AACP) Volweiler Research Achievement Award Committee 2006-07

21. American Association of Colleges of Pharmacy (AACP) Task Force on Pharmacy Faculty Workforce, 2006-2008.
22. American Association of Colleges of Pharmacy (AACP) Standing Committee on Policy and Advocacy, 2007-2009. Chair, 2008-2009.
23. American Association of Colleges of Pharmacy (AACP) Task Force on Pharmacy Academy's Role in Educating Support Personnel for Emerging Practice, 2011-2012
24. Association of Faculties of Pharmacy of Canada (AFPC) task force on a new governance model, 2012.
25. Reviewer, Carl Smith Graduate Student Award, Mechanisms Specialty Section, Society of Toxicology, 2013.

Washington State University

1. Student Fee Committee, 2005-2009
2. Implementation Team for the Health Sciences, 2005-2006
3. Riverpoint Administrative Advisory Group, 2006-2009
4. Health Sciences Research Committee, Spokane, 2005-2006
5. Life Sciences Graduate Recruitment Committee, Chair; 2006-2007
6. WSU-Spokane Next Building Task Force, Chair; 2006-2007
7. WSU-Spokane Health Sciences Native American Recruitment and Retention committee
8. WWAMI Medical Education Spokane Advisory Committee; 2007-2009
9. Health Sciences Leadership Coordination Group; 2006-2009, Chair 2007-09
10. Task force on Interdisciplinary Graduate Education; 2007
11. Master Plan Advisory Committee – Riverpoint Campus; 2008-2009

University of Alberta

1. Institute for Health Economics, Board Member, 2009-present
2. Health Sciences Council, 2009-present; Vice Chair 2013-present
3. Provost Deans Advisory Council, 2009-2010; 2013-present
4. Review Committee for the Vice-President (University Relations), 2010
5. Review Committee for the Provost and Executive Vice-President, 2012
6. Strategic University Measures and Metrics Committee, 2012-2013
7. The Umbrella Committee for Change, 2012
8. HSERC Business Development Committee, 2012-2014
9. Renewal Review Committee for the Vice-President (University Relations), 2014

Miscellaneous Activities

1. Rho Chi Pharmacy Honor Society Faculty Advisor, 1981-1983.
2. Item writer for the National Association of Boards of Pharmacy Licensure Examinations, 1981, 1983.
3. Co-author (with Daniel M. Kehrer) of "Consumer Drug File"--A syndicated drug information column. March 1982-February 1985.
4. Invited participant, Pharmaceutical Manufacturers Association Coordinated Industry Program for Pharmacy Faculty, Abbott Laboratories, August 16-27, 1982.
5. Ahrum Canadian University (Cairo, Egypt) Council Member, 2009 – 2013.
6. Free lance editor, Cactus Communications, 2014 – present.

Grant and other Review Activities

1. Veterans Administration, Merit Review Board for the Basic Sciences, 1983.
2. Research Corporation Cottrell College Science Grants, 1988, 1989.
3. University of Texas Research Institute, 1987-1990
4. Special Reviewer, NIH Toxicology Study Section, Oct. 1989.
5. Member NIH Toxicology Study Section, July 1991 - June 1995.
6. American Institute of Biological Sciences (for U.S. Army), 1995.
7. Oral Cancer Center Review Panel, NIH, 1996
8. ALTOX NIH Study Section, Ad hoc; 1996, 1997, 1999, 2002

9. External reviewer, Graduate Center for Toxicology, University of Kentucky, April 1996
10. National Science Foundation, 1996
11. John Sealy Memorial Endowment Fund, Univ. Texas Med. Branch Galveston, 1996.
12. Veterans Administration, Pulmonary Merit Review Board, member 1997-1998.
13. Pacific Northwest National Laboratory, Environmental Health Initiative Aug. 1999.
14. Medical Center Research Fund grants, Univ. Kentucky, 2001
15. Israel Biomedical Research Grant Program reviewer, 2001, 2002
16. Philip Morris External Research Program reviewer, 2001, 2002, 2003.
17. EPA FIFRA Scientific Advisory Panel. 2003-2006
18. Member, External Advisory Board for the University of Colorado NIEHS Toxicology Training Grant (grant submitted 5/04).
19. Member, External Advisory Committee for the Department of Pharmacology and Toxicology, University of Utah, Feb. 2005.
20. Member, NIH Center Grant Review Panel, Medical Countermeasures against Radiation, June 2005
21. Member, Life Sciences Research Office (LSRO) expert Harm Committee to review toxicology data that can be used to evaluate reduced risk tobacco products. 2005-2007.
22. Member, SBIR Special Emphasis Panel, NIH, January 2006
23. Ad hoc member, XNDA NIH Study Section, February 2006
24. Member, NIH Special Emphasis Panel – Mechanisms, Diagnosis and Treatment of Radiation Injury from a Nuclear Accident or Terrorist Attack, May 2008.
25. Ad hoc member, FDA Non-Prescription Drug review panel – 2008.
26. Member, NIH Center Grant Review Panel, Medical Countermeasures against Radiation, April 2010.
27. Member, NIH Review Panel, Countermeasures Against Chemical Threats (CounterACT) Research Centers of Excellence, 2011, 2012, 2013, 2014 (February and July).

PUBLICATIONS – June 2014: h index = 42 (from Google Scholar).

1. Hornemann, U., Kehrer, J.P. and Eggert, J.H.: Pyruvic acid and D-glucose as precursors in mitomycin biosynthesis by *Streptomyces verticillatus*. *J. Chem. Soc. Chem. Commun.* 1045-1046 (1974).
2. Hornemann, U., Kehrer, J.P., Nunez, C.S. and Ranieri, R.L.: D-Glucosamine and L-citrulline, precursors in mitomycin biosynthesis by *Streptomyces verticillatus*. *J. Amer. Chem. Soc.* **96**: 320-322 (1974).
3. Hornemann, U., Kehrer, J.P., Nunez, C.S., Ranieri, R.L. and Ho, Y.K.: Precursors in mitomycin biosynthesis by *Streptomyces verticillatus*, in "Developments in Industrial Microbiology", Vol. 15, pp. 82-92 (1974).
4. Kehrer, J.P. and Autor, A.P.: Age-dependent lipid peroxidation in neonatal rat lung tissue. *Arch. Biochem. Biophys.* **181**: 73-81 (1977).
5. Kehrer, J.P. and Autor, A.P.: Changes in the fatty acid composition of rat lung lipids during development and following age-dependent lipid peroxidation. *Lipids* **12**: 596-603 (1977).
6. Kehrer, J.P. and Autor, A.P.: The relationship between fatty acids and lipid peroxidation in lungs of neonates. *Biol. Neonate* **34**: 61-67 (1978).
7. Kehrer, J.P. and Autor, A.P.: The effect of dietary fatty acids on the composition of adult rat lung lipids: relationship to oxygen toxicity. *Toxicol. Appl. Pharmacol.* **44**: 423-430 (1978).
8. Kehrer, J.P., Haschek, W.M. and Witschi, H.P.: The influence of hyperoxia on the acute toxicity of paraquat and diquat. *Drug Chem. Toxicol.* **2**: 397-408 (1979).
9. Kehrer, J.P. and Witschi, H.P.: Effects of drug metabolism inhibitors on butylated hydroxytoluene-induced pulmonary toxicity in mice. *Toxicol. Appl. Pharmacol.* **53**: 333-342 (1980).
10. Kehrer, J.P. and Witschi, H.P.: *In vivo* collagen accumulation in an experimental model of pulmonary fibrosis. *Exp. Lung Res.* **1**: 259-270 (1980).
11. Kehrer, J.P.: Oxygen-Induced Lung Damage I. Chemistry of oxygen reduction, in "Lectures in Toxicology", ed. G. Zbinden, Pergamon Press (1981).
12. Kehrer, J.P.: Oxygen-Induced Lung Damage II. Pulmonary oxygen toxicity, in "Lectures in Toxicology", ed. G. Zbinden, Pergamon Press (1981).
13. Kehrer, J.P. and Witschi, H.P.: The effect of indomethacin, prednisolone, and cis-4-hydroxyproline on pulmonary fibrosis produced by treatment with butylated hydroxytoluene and oxygen. *Toxicology* **20**: 281-288 (1981).
14. Witschi, H.P., Hakkinen, P.J. and Kehrer, J.P.: Modification of lung tumor development in A/J mice. *Toxicology* **21**: 37-45 (1981).
15. Witschi, H.P. and Kehrer, J.P.: Adenoma development in mouse lung following treatment with possible promoting agents. *J. Amer. Coll. Toxicol.* **1**: 171-184 (1982).
16. Kehrer, J.P.: Collagen production rates following acute lung damage induced by butylated hydroxytoluene. *Biochem. Pharmacol.* **31**: 2053-2058 (1982).
17. Kehrer, J.P. and Autor, A.P.: Unsaturated fatty acids in the postnatally developing rat lung. *Lipids* **18**: 50-54 (1983).
18. Haschek, W.M., Reiser, K.M., Klein-Szanto, A.J.P., Kehrer, J.P., Smith, L.H., Last, J.A. and Witschi, H.P.: Potentiation of butylated hydroxytoluene-induced acute lung damage by oxygen. Cell kinetics and collagen metabolism. *Am. Rev. Respir. Dis.* **127**: 28-34 (1983).
19. Kehrer, J.P.: The effect of BCNU (carmustine) on tissue glutathione reductase activity. *Toxicol. Lett.* **17**: 63-68 (1983).
20. Kehrer, J.P., Pearlman, R. and Smith, M.A.: Direct effects of corticosteroids on *in vitro* collagen production by normal and damaged lung tissue. *Toxicology* **28**: 235-246 (1983).
21. Kehrer, J.P. and Paraidathathu, T.: Enhanced oxygen toxicity following pretreatment with BCNU. *Fundam. Appl. Toxicol.* **4**: 760-767 (1984).
22. Kehrer, J.P., Klein-Szanto, A.J.P., Sorensen, E.M.B., Pearlman, R. and Rosner, M.H.: Enhanced acute lung damage following corticosteroid treatment. *Am. Rev. Respir. Dis.* **130**: 256-261 (1984).

23. Kehrer, J.P. and Dydek, S.T.: Analysis of pulmonary collagen production by HPLC separation of radiolabeled hydroxyproline and proline. *Proc. West. Pharmacol. Soc.* **27**: 319-322 (1984).
24. Dydek, S.T. and Kehrer, J.P.: Effects of sodium chloride on the HPLC separation of hydroxyproline and proline. *LC* **2**: 536-538 (1984).
25. Kehrer, J.P.: Collagen synthesis and degradation in acutely damaged mouse lung tissue following treatment with prednisolone. *Biochem. Pharmacol.* **34**: 2519-2524 (1985).
26. Paraidathathu, T., Combs, A.B. and Kehrer, J.P.: *In vivo* effects of 1,3-bis(2-chloroethyl)-1-nitrosourea and doxorubicin on the cardiac and hepatic glutathione systems. *Toxicology* **35**: 113-124 (1985).
27. Kehrer, J.P. and Kacew, S.: Systemically applied chemicals that damage lung tissue. *Toxicology* **35**: 251-293 (1985).
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29. Lee, Y-C. C. and Kehrer, J.P.: Increased pulmonary collagen synthesis in mice treated with cyclophosphamide. *Drug Chem. Toxicol.* **8**: 503-512 (1985).
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31. Murphy, M.E. and Kehrer, J.P.: Activities of antioxidant enzymes in the muscle, liver and lung of chickens with inherited muscular dystrophy. *Biochem. Biophys. Res. Commun.* **134**: 550-556 (1986).
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33. Murphy, M.E. and Kehrer, J.P.: Free radicals: A potential pathogenic mechanism in inherited muscular dystrophy. *Life Sci.* **39**: 2271-2278 (1986).
34. Kehrer, J.P., Klein-Szanto, A.J.P., Thurston, D., Lindenschmidt, R.C. and Witschi, H.R.: O,S,S-Trimethyl phosphorodithioate-induced lung damage in rats and mice. *Toxicol. Appl. Pharmacol.* **84**: 480-492 (1986).
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36. Kehrer, J.P., Piper, H.M. and Sies, H.: Xanthine oxidase and reoxygenation injury in isolated perfused rat heart. *Free Rad. Res. Commun.* **3**: 69-78 (1987).
37. Murphy, M.E. and Kehrer, J.P.: Simultaneous measurement of tocopherols and tocopheryl quinones in tissue fractions using HPLC with redox-cycling electrochemical detection. *J. Chromatog.* **421**, 71-82 (1987).
38. Kehrer, J.P. and Lee, Y-C.C.: Pulmonary hydroxyproline content and production following treatment of mice with O,S,S- trimethyl phosphorodithioate. *Toxicol. Lett.* **38**: 321-327 (1987).
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40. Kehrer, J.P., Sevanian, A., Trush, M.A., Mossman, B.T. and Smith, M.T.: Free radical mechanisms in chemical pathogenesis. *Toxicol. Appl. Pharmacol.* **95**: 349-362 (1988).
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42. Murphy, M.E. and Kehrer, J.P.: Increased oxidation of tocopherols in chickens with inherited muscular dystrophy, in "Oxygen Radicals in Biology and Medicine", Vol. 49, The Proceedings of the Fourth International Congress on Oxygen Radicals, (M. G. Simic, K.A. Taylor, J.F. Ward, and C. von Sonntag, eds.), Plenum, New York, pp. 611-614 (1988).
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44. Kehrer, J.P.: Cardiac cell breakdown at reoxygenation: Absence of changes in xanthine oxidase and effects of calcium concentration, in "The Role of Oxygen Radicals in Cardiovascular Diseases", (A. L'Abbate and F. Ursini, eds.), Kluwer Academic Publishers, Dordrecht, pp. 71-89 (1988).
45. Murphy, M.E. and Kehrer, J.P.: Lipid peroxidation inhibitory factors in liver and muscle of rat, mouse and chicken. *Arch. Biochem. Biophys.* **268**: 585-593 (1989).

46. Murphy, M.E. and Kehrer, J.P.: Oxidative stress and muscular dystrophy. *Chemico-biol. Interact.* **69**: 101-173 (1989).
47. Kehrer, J.P.: Concepts related to the study of reactive oxygen and cardiac reperfusion injury. *Free Radical Res. Commun.* **5**: 305-314 (1989).
48. Murphy, M.E. and Kehrer, J.P.: Oxidation state of tissue thiol groups and content of protein carbonyl groups in chickens with inherited muscular dystrophy. *Biochem. J.* **260**: 359-364 (1989).
49. Murphy, M.E. and Kehrer, J.P.: Altered contents of tocopherols in chickens with inherited muscular dystrophy. *Biochem. Med. Metab. Biol.* **41**: 234-245 (1989).
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51. Kehrer, J.P. and Starnes, J.W.: Models and markers used to study cardiac reperfusion injury. *Pharmacol. Therap.* **44**: 123-145 (1989).
52. Kehrer, J.P.: Bleomycin and cyclophosphamide toxicity in mice with damaged lung tissue. *Toxicology* **57**: 69-82 (1989).
53. Ziegler, D.M. and Kehrer, J.P.: Oxygen radicals and drugs: in vitro measurements. *Methods in Enzymology* **186**: 621-626 (1990).
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55. Kehrer, J.P. and DiGiovanni, J.: Comparison of lung injury induced in four strains of mice by butylated hydroxytoluene. *Toxicol. Lett.* **52**: 55-61 (1990).
56. Kehrer, J.P.: Commentary on the pulmonary toxicity of inhaled and intravenous talc. *Toxicol. Lett.* **52**: 117-119 (1990).
57. Kehrer, J.P.: Commentary on the production of alveolar macrophage-derived growth regulating proteins in response to lung injury. *Toxicol. Lett.* **54**: 1-2 (1990).
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61. Kehrer, J.P. and Park, Y.: Oxidative stress during hypoxia in isolated-perfused rat heart. *Adv. Exp. Med. Biol.* **283**: 299-304 (1991).
62. Smith, R.D. and Kehrer, J.P.: Cooxidation of cyclophosphamide as an alternative pathway for its bioactivation and lung toxicity. *Cancer Res.* **51**: 542-548 (1991).
63. Park, Y. and Kehrer, J.P.: Oxidative changes in hypoxic-reoxygenated rabbit heart: A consequence of hypoxia rather than reoxygenation. *Free Rad. Res. Commun.* **14**: 179-185 (1991).
64. Park, Y., Kanekal, S. and Kehrer, J.P.: Oxidative changes in hypoxic rat heart tissue. *Am. J. Physiol.* **260**: H1395-H1405 (1991).
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66. Seiler, K.S., Kehrer, J.P. and Starnes, J.W.: Effect of perfusion pressure at reoxygenation on reflow and function in isolated rat hearts. *Am. J. Physiol.* **262**: H1029-H1035 (1992).
67. Kehrer, J.P. and Murphy, M.E.: Free radicals and muscular dystrophy. in *Free Radical Mechanisms of Tissue Injury* (C.V. Smith and M. Moslen, eds) CRC Press, Boca Raton, pp. 189-202 (1992).
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69. Kehrer, J.P. and Paraidathathu, T.: The use of fluorescent probes to assess oxidative processes in isolated-perfused rat heart tissue. *Free Rad. Res. Commun.* **16**: 217-225 (1992).

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71. Spitz, D.R., Kinter, M.T., Kehrer, J.P. and Roberts, R.J.: The effect of monosaturated and polyunsaturated fatty acids on O₂-toxicity in cultured cells. *Pediatr. Res.* **32**: 366-372 (1992).
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74. Kanekal, S. and Kehrer, J.P.: Evidence for peroxidase-mediated metabolism of cyclophosphamide. *Drug Metab. Dispos.* **21**: 37-42 (1993).
75. Palamanda, J.R. and Kehrer, J.P.: Involvement of vitamin E and protein thiols in the inhibition of microsomal lipid peroxidation by glutathione. *Lipids* **28**: 427-431 (1993).
76. Kehrer, J.P.: Free radicals as mediators of tissue injury and disease. *Crit. Rev. Toxicol.* **23**: 21-48 (1993).
77. Fraiser, L. and Kehrer, J.P.: Effect of indomethacin, aspirin, nordihydroguaiaretic acid, and piperonyl butoxide on cyclophosphamide-induced bladder damage. *Drug Chem. Toxicol.* **16**: 117-133 (1993).
78. Kehrer, J.P., Paraidathathu, T. and Lund, L.G.: Effects of oxygen deprivation on cardiac redox systems. *Proc. West. Pharmacol. Soc.* **36**: 45-52 (1993).
79. Kehrer, J.P.: Systemic pulmonary toxicity, in "General and Applied Toxicology. Volume 1: Basic, Route and Organ Toxicity", (B. Ballantyne, T. Marrs, and P. Turner, eds.), Stockton Press, New York, pp. 537-554 (1993).
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81. Kehrer, J.P. and Smith, C.V.: Free radicals in biology: sources, reactivities and roles in the etiology of human diseases. in *Natural Antioxidants in Human Health and Disease*, (B. Frei, ed.) Academic Press, pp.25-62 (1994).
82. Kehrer, J.P. and Lund, L.G.: Cellular reducing equivalents and oxidative stress. *Free Rad. Biol. Med.* **17**: 65-75 (1994).
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84. Lund, L.G., Paraidathathu, T. and Kehrer, J.P.: Reduction of glutathione disulfide and the maintenance of reducing equivalents in hypoxic hearts after the infusion of diamide. *Toxicology* **93**: 249-262 (1994).
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ABSTRACTS

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