

**CURRICULUM VITAE**  
**Hasan Mukhtar, Ph.D.**

**Personal Data**

Updated: June 27th, 2011

Office Address: Hasan Mukhtar, Ph.D.  
 Helfaer Professor of Cancer Research  
 Director and Vice Chair for Research  
 Department of Dermatology  
 University of Wisconsin  
 Medical Science Center, Rm B-25  
 1300 University Avenue  
 Madison, Wisconsin 53706

Office Phone numbers: (608) 263-3927  
 (608) 263-5223 (FAX)

E-mail: hmukhtar@wisc.edu

Marital status: Married

**Education**

1965 B.S. Physics, Chemistry, Math - Lucknow University, India.  
 1967 M.Sc. Biochemistry, Lucknow University, India.  
 1971 Ph.D. Biochemistry, Kanpur University, India (Thesis: Chemical Studies on Drug Metabolism in Relation to Enzyme Induction).

**Appointments**

1967 - 1971 Junior Research Fellow, Central Drug Research Institute, Lucknow, India.  
 1971 - 1974 Senior Scientific Assistant, Central Drug Research Institute, Lucknow, India.  
 1974 - 1976 Postdoctoral Fellow, Medical College of Georgia, Augusta, Georgia.  
 1976 - 1979 Visiting Associate, Laboratory of Pharmacology National Institute of Environmental Health Sciences, Research Triangle Park, North Carolina.  
 Jan. 1979 - June 1980 Pool Officer, Industrial Toxicology Research Centre, Lucknow, India.  
 July 1980 - Nov. 1980 Visiting Scientist, Laboratory of Pharmacology, University of Leiden, The Netherlands.  
 Dec. 1980 - 1981 Assistant Professor, Department of Dermatology, Case Western Reserve University, Cleveland, Ohio.  
 1981 - 1985 Deputy Director, Dermatology Research, Veterans Administration Medical Center, Cleveland, Ohio.

1985 – April 2002	Research Director, Department of Dermatology, Case Western Reserve University, Cleveland, Ohio.
1985 - 1996	Director, Dermatology Research, Veterans Administration Medical Center, Cleveland, Ohio.
1985 - 1990	Associate Professor, Department of Dermatology, Case Western Reserve University, Cleveland, Ohio.
1985 - 1990	Associate Professor, Department of Environmental Health Sciences, Case Western Reserve University, Cleveland, Ohio.
1987-1990 1987-1991	Associate Professor of Oncology in the Division of General Medical Sciences – Cancer Research Center, Case Western Reserve University, Cleveland, Ohio.
1988-2002	Co-Director, Skin Disease Research Center, Case Western Reserve University, Cleveland, Ohio.
1990-2002	Professor, Department of Dermatology with secondary appointments in Department of Environmental Health Sciences and General Medical Sciences (Oncology).
1994-present	Adjunct Professor, Department of Dermatology, Columbia University College of Physicians and Surgeons, New York, New York
1995-2002	Professor, Department of Physiology and Biophysics, Case Western Reserve University, Cleveland, Ohio.
1995-2002	Member, Executive Council, Case Western Reserve University/Ireland Cancer Center.
1994-1998	Director, Athymic Animal Facility, Case Western Reserve University /Ireland Cancer Center
1995-2001	Co-Leader, Cancer Genetics Program, Case Western Reserve University/Ireland Cancer Center
1998-2002	Professor, Department of Radiation Oncology, Case Western Reserve University, Cleveland, Ohio
April 2002-June 2002	Professor and Director of Research, Division of Dermatology, Department of Medicine, University of Wisconsin
July 2002-June 2003	Helpaer Professor and Director of Research, Department of Dermatology, University of Wisconsin
September 2002-present	Vice Chair for Research, Department of Dermatology, University of Wisconsin
October 2002-present	Member, University of Wisconsin Comprehensive Cancer Center
July 2003-present	Helpaer Professor of Cancer Research, School of Medicine, University of Wisconsin

October 2006-present                      Co-Leader, Chemoprevention Program, University of Wisconsin. Carbone  
Comprehensive Cancer Center

### **Other Appointments:**

1997-2002                                      Member, Board of Trustees, The Ohio Cancer Research Associates  
2006-Present                                  Councilor, American Society for Photobiology

### **Research Experience:**

Multidisciplinary areas of dermatopharmacology, dermatotoxicology, skin carcinogenesis, chemical carcinogenesis, photocarcinogenesis, prostate cancer, drug metabolism, toxicology, cancer chemoprevention, diet nutrition and cancer, oncogenes and cancer, photobiology, photodynamic therapy, environmental health, occupational health, risk assessment, inflammatory responses and clinical research.

### **Teaching Experience:**

1. Supervised several M.S., M.D. and Ph.D. students.
2. Theses advisor for eleven Ph.D. Students.
3. Graduate and undergraduate biochemistry courses, 1974-1976.
4. Graduate Course Genetic Toxicology at CWRU, 1985-2002.
5. Graduate Course Nutrition and Toxicology at CWRU, 1989-2002.
6. Served on Thesis Committee of sixteen Ph.D. candidates at Universities in India, the Netherlands and Case Western Reserve University, Cleveland, Ohio, and University of Wisconsin-Madison
7. Served as Ph.D. advisor of Sabah Farouk from the University of Monufia, Egypt
8. Served as Ph.D. advisor of Kedar Hastak from the Department of Environmental Health Sciences, Case Western Reserve University. Degree awarded August 2003.
9. Advisor Ph.D. Committees of C. K. Choo and Tatiana Efimova, Department of Physiology and Biophysics, Case Western Reserve University.
10. Advisor, Ph.D. Committee of Shervin R. Desti, Department of Physiology and Biophysics.
11. Advisor, Ph.D. Committee, Richard Barnes, Department of Physiology and Biophysics, Case Western Reserve University.
12. Advisor, Ph.D. Committee Kaluhath Nadira De Abrew, Department of Pathology School of Medicine, University of Wisconsin.
13. Have supervised at least 50 post doctoral fellows.
14. Teaching to residents in Dermatology at Case Western Reserve University (1982-2002), and now (2002-present) at University of Wisconsin.
15. Advisor, Ph.D. thesis of Imtiaz A. Siddiqui, worked in my laboratory under my supervision and degree awarded in 2005 from Jamia Hamdard, New Delhi, India.
16. Advisor, Ph.D. thesis of Jung Mi Yun, worked in my laboratory under my supervision and degree awarded in 2006 from University of Seoul, Korea.
17. Advisor, Ph.D. thesis of Rohinton Tarapore.
18. Advisor, Ph.D. thesis of Deeba N. Syed.
19. Advisor, Ph.D. Committee of Travis Schmit
20. Advisor, Ph.D. Committee of Shannon Reagan-Shaw
21. Advisor, Ph. D. Committee of Jeremy J. Johnson

### **Honors and Awards:**

1. Listed in Frontier of Science and Technology, U.S. Marquis Who's Who
2. Listed in Cancer Professional and Facilitus, Marquis Who's Who
3. Featured on the cover of February 1996 issue of International Journal of Oncology

4. Featured on the cover of September 2007 issue of Cancer Biology and Therapy with a write up under the Profiles and Legacies section of the journal with an article entitled “Natural Products: Nature’s gift molecules for cancer prevention and treatment
5. Featured on the cover of November 15<sup>th</sup> issue of Toxicology and Applied Pharmacology. This issue was dedicated to my 60<sup>th</sup> birthday.
6. March/April 2008 issue of Photochemistry and Photobiology was dedicated to my 60<sup>th</sup> birthday.
7. 1<sup>st</sup> International Conference on Dermatology dedicated to Hasan Mukhtar, PhD. Oct. 22-25, 2008, Vaalsbroek, The Netherlands.
8. Receptient Skin Aging Research Award, La Roche – Posay, France, . March 2011

#### **Societies:**

1. American Society of Pharmacology and Experimental Therapeutics
2. American Association for Cancer Research
3. Society for Investigative Dermatology
4. Society of Toxicology
5. American Association for the Advancement of Science
6. American Society for Photobiology
7. International Society for the Study of Xenobiotics
8. Skin Pharmacology Society
9. New York Academy of Sciences
10. International Photodynamic Association
11. International Society for Nutrition and Cancer

#### **Grant Review Committees: (Only Partial list of activity since 1996 is listed below)**

1. Member: Medical and Scientific Review Committee Dermatology Foundation, 1987-1989.
2. Member: Several ad hoc NIH and ACS study sections and site visiting team, 1987-present.
3. Member: Research Advisory Committee of Medical Research Council of Canada, 1990-present.
4. Member: Study Section-Skin Diseases Research Centers, 1990.
5. Chairman: NIAMS ad hoc Study Section, March 1996.
6. Consultant - Estee Lauder Companies, 1994-2000.
7. Member: Adhoc NCI Study Section on Nutrition and Cancer, November 1996.
8. Member: Study Section - Skin Diseases Research Center, NIAMS, November 1996.
9. Member: Study Section - Special Emphasis Panel, NIAMS, December 1996.
10. Member: Study Section - Special Emphasis Panel, NIDR, February 1997.
11. Member: Scientific Review Committee Ohio Cancer Research Associates, 1997.
12. Member: Biological and Physiological Sciences Special Emphasis Panel, NIH, November 1997.
13. Member, Biological and Physiological Sciences Special Emphasis Panel, NIH, March 1998.
14. Member, Special Emphasis Panel, NIAMS, NIH, May 1998.
15. Member, Chemical Pathology Study Section, NIH, October 1998.
16. Member, Special Emphasis Panel, ZRGI Rad, February 1999.
17. Member, Metabolic Pathology Study Section, NIH, March 1999.
18. Member, NIOSH Study Section of Skin Intramural Projects, December 1999.
19. Member, NCI RAPID Program Review Committee, March 2000.
20. Member, Merit Review Subcommittee for Oncology, October 2000.
21. Member, NIAMS Study Section, October 2000.
22. Member, American Cancer Society Study Section on Carcinogenesis, Nutrition and the Environment, 2001-2005.
23. Member, NCI Study Section “Innovative Cancer Complementary and Alternative Medicine Initiative in Cancer Centers February 19-21, 2001.
24. Member, ALTX-1 Study Section February 21-22, 2001.
25. Member, Study Section Philip Morris, October 2001.

26. Member, Study Section on T32 Applications, December 2001.
27. Member, Study Section, NCI Special Emphasis Panel ZCAI SRRB-E (J3), Preclinical Chemoprevention of Tobacco Related Cancers in Former Smokers, December 7, 2001.
28. Member Study Section, NCI Special Emphasis Panel ZCAI SRRB-E (J2R), Clinical Chemoprevention of Tobacco-Related Cancer, December 6, 2001.
29. Member Study Section, Breast Cancer-Radiation Oncology Panel, Department of Defense, August 9-10, 2002.
30. Member Study Section, Ovarian Cancer Research Program, Panel #4, Department of Defense, August 14-16, 2002.
31. Member, Photodynamic Therapy Program Project Site Visit, Toronto, Canada, September 18-20, 2002.
32. Member, VACO Merit Review Board on Oncology, October 12-22, 2002.
33. Member, NCI Study Section ZCA1 SRRB-Y (J2), Chemoprevention of Tobacco Related Cancers in Former Smokers: Preclinical Studies, November 4, 2002.
34. Member, NCI Study Section ZCA1 SRRB-Y (J1), Chemoprevention of Tobacco Related Cancers in Former Smokers: Clinical Studies, November 5, 2002.
35. Chairman, NCI Study Section ZCA1 SRRB-Q (J1), Cooperative Grants for Nutritional Modulation, November 6-8, 2002.
36. Member AMS-1 Study Section, December 2-3, 2002.
37. Member, VACO Merit Review Board on Oncology, March 24-25, 2003.
38. Member, NCCAM Study Section ZAT1 CP (05), March 10-11, 2003.
39. Member, 2002 BCRB, Scientist Reviewer, Concept #7, DOD Panel, March 2003.
40. Member, 2003 PCR, Scientist Reviewer, Cell Biol #2, DOD Panel, June 2003.
41. Member, 2003 BCRP, Scientist Reviewer, Cell Biol #4, DOD Panel, July 2003.
42. Chairman, NIAMS Special Emphasis Panel for Skin Diseases Research Core Centers, ZAR1 AAA-G J1, September 30-October 1, 2003.
43. Member, NIAMS K-08 Application Review, November 2003.
44. Member, NCI, Special Emphasis Panel ZRGI TCB (03) M, November 2003.
45. Member, NCI, Special Emphasis Panel ZCA1 SRRB D (J2), November 2003.
46. Member, NCAM Panel ZAT1-CP (11) November 2003.
47. Member, NCAM Panel ZCA1 SRRB-YMIR, March 2004.
48. Member, UO1 Panel, NCI, April 2004.
49. Chairperson, Department of Defense, CBY-2 Panel, Prostate Cancer, April 18-20, 2004.
50. Member, NIH, 2 RGI F09 Study Section, July 2004.
51. Member, NIH, Physical Biochemistry Study Section, July 2004.
52. Member, Department of Defense, CBY-4 Panel, Breast Panel, July 2004.
53. Member, NIH, ZAR1 TLB-DOIS, August 2004.
54. Member, ZAT1 DB (17), NCCAM Special Emphasis Panel, November 2004
55. Member, Toxicology Study Section and Review Committee, National Center for Toxicological Research, November 2004
56. Member, Department of Defense, BCRP Concept Award Cell Biology 2, March 2005.
57. Member, Department of Defense, BCRP Concept Award Pathobiology, March 2005.
58. Member, NCCAM Special Emphasis Panel, 1AT1JH(09), March 28, 2005.
59. Member Special Emphasis Panel – Centers of Biomedical Excellence (COBRES), May 24-25, 2005.
60. Member, Site Visiting Team University of Colorado Cancer Center, June 15-17, 2005.
61. Member, Department of Defense, BCRP. CET-1 Panel, July 31-August 2, 2005.
62. Member, Department of Veterans Affairs Review Committee on CAMM, December 2, 2005.
63. Member, Department of Defense, BCRP CBY-2 Panel, March 2006.
64. Member, Department of Defense, BCRP PBY-2 Panel, March 2006.
65. Member, Department of Veterans Affairs Review Committee on CAMM, May 2006.
66. Member, Tobacco-Related Disease Program, Study Section, University of California, April 2006.
67. Scientist Reviewer 2006 PCR Exploration: Hypothesis development #2, June 2006.
68. Scientist Reviewer 2006 PCR Prostate Cancer Training Award #3, June 2006.
69. Scientist Reviewer 2006 BCRP Training Award #5, June 2006.
70. Member, NIH Study Section ZRG1 MOSS-K 12 B, July 21, 2006.

71. Member, National Cancer Institute, PO1 Study Section ZCA1 RPRB-7 (M1), February 2007.
72. Member, National Cancer Institute, PO1 Study Section ZCA1 RPRB-7 (M2), February 2007.
73. Member, BCRP Concept-Cell Biology #4 Study Section, March 2007.
74. Member, Site Visiting Team, New York University Cancer Institute, June 20-22, 2007.
75. Chairperson, Department of Defense, 2007 BCRP, Training #5 Panel, July 15-17, 2007.
76. Scientist Reviewer, Department of Defense, 2007 PCR, Synergistic Idea Development Award #1, August 12-14, 2007.
77. Scientist Reviewer, Department of Defense, 2007 BCRP, Concept Molecular Biology Genetics #3 Review Committee.
78. Member, NCI ZCA1 SRRB-Y (M1) Study Section, March 13-14, 2008.
79. Scientist Reviewer, Department of Defense, 2008 BCRP, CET #1, July 13-15, 2008.
80. Member, NIH Special Emphasis Group ZRG1 MOSS-A C12J, July 18-22, 2008.
81. Chair, NCI Special Emphasis Panel ZCAI SRLB-R(J1), September, 2008.
82. Member, NIAMS Special Emphasis Panel for Skin Diseases Research Core Centers, ZAR1 KM-D M1, November 20-21, 2008.
83. Scientist Reviewer, Department of Defense, 2008 BCRP Concept – Molecular Biology and Genetics Panel.
84. Member, National Cancer Institute Special Emphasis Panel ZCA1 SRLB-F (MI), March 16-17, 2009.
85. Member, National Center on Minorities Health and Health Disparities Panel ZMD1 PA (L1) 1 April 7, 2009.
86. Scientist Reviewer, 2009 PCR PRE CHS/EPI Panel, March, 2009.
87. Member, National Cancer Institute PO1 Cell-mediated clinical oncology studies Special Emphasis Panel, June 15-17, 2009.
88. Member, Loan Repayment Panel 1, 2, 3 and 4 ZMD1 AAL1, April – May, 2009.
89. Member, Department of Defense, BCRP CBY-3 Panel, June 7-9, 2009.
90. Member, Department of Defense, PCR PB-IDA Panel, July, 2009.
91. Member, PCR Concept-Genetic Cancer #2 Panel, August 2009.
92. Member, PCR PRE-CHS/EPI Panel, September 2009.
93. Member, National Cancer Institute, ARRA, RC1 Panel, September 2009.
94. Member, National Cancer Institute, GO Grant Panel, September 2009.
95. Member, National Cancer Institute Special Emphasis Panel, ZCA/SRLB-FC (JI), October 26-27 2009.
96. Member, National Cancer Institute, Special Emphasis Panel, ZRG1CVRS-F52, December 4, 2009
97. Member, VA Merit Review, GASTI Panel, December 11, 2009.
98. Member, National Cancer Institute, Special Emphasis Panel, ZCA1 SRLB-F (M1) Cancer Prevention Research, March 18-19, 2010.
99. Member, National Cancer Institute, Special Emphasis Panel, ZCA1 – SRLB R(MI) – EUREKA, March 29-30, 2010.
100. Member, Loan Repayment Panel 2, April 2010
101. Member, PCR – Online Reviewer, May 2010
102. Member, PCR PRE – CBY-B-Panel, June 2010
103. Member, PCR Prevention, Treatment and Epidemiology Panel, August 2010
104. Member, National Cancer Institute, Special Emphasis Panel, ZCAI SRLB-G (MI) R, Nov 7 – 8, 2010.
105. Member, Cancer Prevention Research Small Grant Program (RO3), ZCA1 SRLB-H (M1) R. Mar 10 - 11, 2011.
106. Member, National Institutes of Health, LRP Panel1, ZMD1 MLS (L1) 1, Mar 18, 2011.
107. Member, NCI Exceptional, Unconventional, Research Enabling Knowledge Acceleration (EUREKA) Panel, ZCA1 SRLB-2 (M1) R. March 28-29, 2011.
108. Member, National Institutes of Health, LRP Panel3, ZMD1 MLS (L3) 1, April 13, 2011.
109. Member Distinguished Editorial Board, Musculoskeletal, Oral and Skin Sciences, ZRG1 MOSS-C (05) M, May 13, 2011.
110. Member, Innovative emerging Molecular Analysis Technologies, ZCA1 SRLB-5(O1) R, June 2-3, 2011.
111. Member, Cancer Prevention, Control and Population Sciences, ZCA1 RPRB-7(O1) R, May 23-25, 2011.
112. Member, Cancer Prevention Research Small Grants Program (RO3), ZCA1 SR2B-Y (O2) R, November 6-8, 2011.

**Special Assignment:**

Member Working Group - IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, Vol. 92: Air Pollution, Part 1: Some non-heterocyclic polycyclic aromatic hydrocarbons and some related exposures. Lyon, France, October 11-18, 2005.

**Symposiums Organized:**

1. Co-Chairman - 4th Annual Meeting of Skin Pharmacology Society, Boston, 1984.
2. Co-Chairman - 8th Annual Meeting of Skin Pharmacology Society, Cleveland, 1992.
3. Co-Chairman - Environmental Skin Cancer: Mechanisms, Models and Human Health Implications, 1992 Supported by NIH Grant.
4. Director - Photocarcinogenesis: Mechanisms, Models and Human Health Implications, Washington, DC, October 1995. Supported by EPA, FDA and NIH Grants.
5. Program Committee - 2nd International Symposium on Cosmetic Efficacy, New York, April 1997.
6. Program Committee - 3rd International Symposium on Cosmetic Efficacy, Cologne, Germany, May 1998.
7. Co-Chair - Symposium on Photocarcinogenesis: Models and Mechanisms, The American Society of Photobiology, July 1998.
8. Co-Chair - Symposium on Novel Photoprotectors, The American Society of Photobiology, July 1998.
9. Chairman - Symposium on Cancer Chemoprevention: Progress and Promise, Cleveland, OH, October 1998.
10. Program Committee - 4th International Symposium on Cosmetic Efficacy, New York, NY, May 1999.
11. Program Committee - Symposium on Advances in Biology and Treatment of the Skin, Piscataway, NJ, June 1999.
12. Organizer - Session on Tea and Human Health, IIMTC, New Delhi, India, March 2000.
13. Program Committee - Photobiology 2000, San Francisco, CA, July 2000.
14. Co-Chair-Symposium on Chemoprevention of Photocarcinogenesis, 13th International Congress on Photobiology, July 2000.
15. Program Committee-International Symposium on Tea and Health, Paris, France, November 2000.
16. Symposium Chair "Photocarcinogenesis: Mechanisms and Prevention." ASP Annual Meeting, July 2001.
17. Member, International Advisory Committee, 4<sup>th</sup> International Conference on Lasers & Application Advances in Science, Medicine and Technology, April 2-4, 2001, Cairo, Egypt.
18. Convener, Symposium on Tea as an Antidote for Environmentally-Induced Diseases, 89<sup>th</sup> Session of Indian Science Congress, Lucknow, India, January 3-7, 2002.
19. Chair - Session on Carcinogenesis, SOT meeting, Nashville, TN., March 8-10, 2002.
20. Co-Chair – Green Tea and Cancer; A Critical Review, The Banbury Center, Cold Spring Harbor Laboratory May 12-15, 2002.
21. Symposium Chair "Photocarcinogenesis." ASP Annual Meeting, July 2002.
22. Symposium Chair "Photocarcinogenesis." ASP Annual Symposium, July 2003.
23. Symposium Chair "Photocarcinogenesis." 14<sup>th</sup> International Congress on Photobiology, June 10-15, 2004, Jeju, Korea.
24. Symposium Chair "Photodynamic Therapy" ASP Annual Symposium, Seattle July 2004.
25. Member Planning Committee, Cancer Chemoprevention Symposium, October 11-13, Crete, Greece.
26. Member International Advisory Committee, 1<sup>st</sup> International Conference on Biological and Environmental Sciences, March 13-16, 2008, Hurgada, Egypt.
27. Symposium Chair, First International Conference on Nutrition and Cancer, May 19-23, 2008. Antalya, Turkey.
28. Symposium Chair, Second International Conference on Nutrition and Cancer, May 18-22, 2009 Antalya, Turkey.
29. Symposium Chair, Third International Conference on Nutrition and Cancer, Oct 20-24, 2010. Bodrum, Turkey.
30. Symposium Chair, Fourth International Conference on Nutrition and Cancer, Oct 19-23, 2011, Antalya, Turkey.

**Editorial Boards:**

**Completed Term Appointments:**

1. Member Editorial Board: Drug Metabolism and Disposition, 1986-1994.
2. Member Editorial Board: Journal of Toxicology and Environmental Health, 1988-1994.
3. Section Editor for Drug Metabolism: Year Book of Pharmacology, 1990-1993.
4. Member Editorial Board: The Journal of Investigative Dermatology, 1992-1997.
5. Chief Associate Editor: Skin Pharmacology, 1993-1997.
6. Member Editorial Academy: International Journal of Oncology, 1994-2006.
7. International Editorial Board: Journal of Cutaneous Medicine and Surgery, 1996-2002.
8. Associate Editor: The Journal of Investigative Dermatology, 1997-2002.
9. Associate Editor: Cancer Research, 2007 - 2009

**Current Appointments:**

1. Member Editorial Board: The Journal of Pharmacology and Experimental Therapeutics, 1987-Present.
2. Member Editorial Board: Photodermatology, Photoimmunology, and Photomedicine, 1990-Present.
3. Member Editorial Board: Toxicology and Applied Pharmacology, 1996-1999.
4. Member Editorial Board: Experimental Dermatology, 1991-Present.
5. Member Editorial Board: Archives of Biochemistry and Biophysics, 1997-present.
6. Associate Editor: Skin Pharmacology and Applied Skin Physiology, 1998-present.
7. Member Editorial Board: Antioxidants & Redox Signaling, 1999-present.
8. Associate Editor: Toxicology and Applied Pharmacology, 1999-present.
9. Associate Editor: Photochemistry and Photobiology, 2000-present.
10. Member Editorial Board: International Journal of Hygiene and Environmental Health, 2000-present.
11. Member Editorial Board: International Journal of Tea Science, 2001-present.
12. Associate Editor: Clinical Cancer Research, 2002-present.
13. Member Editorial Board: Cancer Epidemiology Biomarkers and Prevention, 2003-present.
14. Associate Editor: Cancer Therapy, 2003-present.
15. Member Editorial Board: Current Cancer Therapy Reviews, 2004 – present.
16. Associate Editor: Nutrition and Cancer, 2006 – present.
17. Associate Editor: Life Sciences, 2006-present.
18. Associate Editor: Molecular Carcinogenesis, 2007 – present.
19. Member Editorial Board: The Open Cancer Journal, 2007 – present.
20. Member Editorial Board: The Open Dermatology Journal, 2007 – present.
21. Member Editorial Board: International Journal of Biological Chemistry, 2007 – present.
22. Member Editorial Board: International Journal of Cancer Research, 2007 – present.
23. Member Editorial Board: Journal of Biological Sciences, 2007 – present.
24. Member Editorial Board: Journal of Pharmacology and Toxicology, 2007 – present.
25. Member Editorial Board: Pakistan Journal of Biological Sciences, 2007 – present.
26. Member Editorial Board: Research Journal of Environmental Toxicology, 2007 – present.
27. Member Editorial Board: International Journal of Cancer, 2007 – present.
28. Member Editorial Board: Journal of Toxicology, 2007 – present.
29. Member Editorial Board: Clinical, Cosmetic and Investigational Dermatology, 2008 – present.
30. Member Editorial Board: Carcinogenesis, 2009 – present.
31. Member Editorial Board: Medicine and Health, 2009 – present.
32. Member Editorial Board: Apoptosis, 2010 – present.
33. Member Editorial Board: Cancer Research, 2010 – present.
34. Member Editorial Board: Molecular Nutrition and Food Research, 2010 - present.
35. Member Editorial Board: Nanomedicine, 2010 - present.
36. Associate Editor: Cancer Letters, 2011 –
37. Member Editorial Board: PLoS ONE, 2011-
38. Member Editorial Board: British Journal of Nutrition: 2011 -

**Adhoc Reviewer for: Only a partial list is included here.**



1. Analytical Biochemistry
2. Archives of Biochemistry and Biophysics
3. Archives of Dermatology
4. Biochemical Journal
5. Biochemical Pharmacology
6. British Journal of Cancer
7. British Journal of Dermatology
8. British Journal of Pharmacology
9. Cancer
10. Cancer Letters
11. Cancer Epidemiology, Biomarkers and Prevention
12. Cancer Research
13. Carcinogenesis
14. Chemical Research in Toxicology
15. Chemico Biological Interactions
16. Clinical Cancer Research
17. Drug Metabolism and Disposition
18. Experimental Cell Research
19. FASEB Journal
20. Investigative Ophthalmology and Visual Science
21. International Journal of Cancer
22. International Journal of Biochemistry
23. Journal of Cellular Biochemistry
24. Journal of Clinical Investigation
25. Journal of Immunology
26. Journal of Laboratory and Clinical Medicine
27. Journal of Lipid Research
28. Journal of Leukocyte Biology
29. Journal of Nutrition
30. Journal of Nutritional Biochemistry
31. Journal of Photochemistry and Photobiology
32. Lancet
33. Life Sciences
34. Metabolism
35. Molecular Carcinogenesis
36. Molecular and Cellular Biochemistry
37. Molecular Pharmacology
38. Mutagenesis
39. Mutation Research
40. Nature Medicine
41. Nature
42. Nutrition and Cancer
43. Oncogene
44. Photochemistry and Photobiology
45. Preventive Medicine
46. Proceedings of National Academy of Sciences
47. Science
48. The Journal of American Academy of Dermatology
49. The Journal of Clinical Investigation
50. The Journal of Biological Chemistry
51. The Journal of Investigative Dermatology
52. The Journal of National Cancer Institute
53. Toxicology and Applied Pharmacology

54. Toxicology Letters
55. Xenobiotica

## BIBLIOGRAPHY

### JOURNAL PUBLICATIONS

1. **Mukhtar H**, Dutta GP and Mohan Rao VK: Entamoeba histolytica: aldolase and amylase in rats treated with emetine and enterovioform. *Exptl Parasitol* 26:135-139, 1969.
2. **Mukhtar H** and Krishna Murti CR: Induction of rat liver tyrosine amino transferase by pharmacologically unrelated drugs. *Ind J Biochem Biophys* 8:116-117, 1971.
3. **Mukhtar H** and Mohan Rao VK: alpha-Amylase activity of Entamoeba histolytica. *Ind J Microbiol* 12:1-6, 1972.
4. Sharma SC, **Mukhtar H**, Sahib MK and Krishna Murti CR: Lipid peroxide formation in experimental inflammation. *Biochem Pharmacol* 21:1210-1214, 1972.
5. **Mukhtar H**, Sahib MK and Krishna Murti CR: Stabilization of rat liver tyrosine aminotransferase by drugs. *Ind J Biochem Biophys* 10:8-12, 1973.
6. **Mukhtar H**, Sahib MK and Krishna Murti CR: Effect of high and low protein diets on the regulation of rat liver tyrosine aminotransferase and tryptophan oxygenase activities by L-tyrosine and L-tryptophan. *Biochem J* 134:225-229, 1973.
7. **Mukhtar H**, Sahib MK and Kidwai JR: Precocious induction of hepatic aniline hydroxylase and aminopyrine N-demethylase in neonatal rats. *Biochem Pharmacol* 23:345-349, 1974.
8. Azhar S, **Mukhtar H**, Dutta GP and Mohan Rao VK: Changes in the level of hydrolytic enzymes in the caecum and intestine of rats infected with a virulent, strain of Entamoeba histolytica intracaecally. *Indian J Med Res* 62:573-580, 1974.
9. Prasad R, **Mukhtar H** and Sharma SK: Biochemical changes in experimentally induced hypercholesterolemia: Activity of rabbit hepatic microsomal and mitochondrial enzymes and changes in the lipid composition and enzyme activity of RBC membrane. *Indian J Biochem Biophys* 10:243-246, 1974.
10. **Mukhtar H** and Bresnick E: Effect of phenobarbital and 3-methylcholanthrene administration on glutathione-S-epoxide transferase activity in rat liver. *Biochem Pharmacol* 24:1081-1084, 1976.
11. **Mukhtar H** and Bresnick E: Glutathione-S-epoxide transferase in mouse skin and human foreskin. *J Invest Dermatol* 66:161-164, 1976.
12. **Mukhtar H** and Bresnick E: Glutathione-S-epoxide transferase activity during development and the effect of partial hepatectomy. *Cancer Res* 36:937-940, 1976.
13. **Mukhtar H** and Bresnick E: Mouse liver and lung glutathione-S-epoxide transferase: Effect of Phenobarbital and 3-methylcholanthrene administration. *Chem Biol Interact* 15:59-67, 1976.
14. Bresnick E, **Mukhtar H**, Stoming TA, Dansette PM and Jerina DM: Effect of phenobarbital and 3-methylcholanthrene administration on epoxide hydrolase levels in liver microsomes. *Biochem Pharmacol* 26:891-892, 1977.
15. Bresnick E, Chuang AHL, Stoming TA, Boekham D, Vaught JB and **Mukhtar H**: Nuclear aryl hydrocarbon hydroxylase and interaction of polycyclic hydrocarbons with nuclear components. *Arch Biochem Biophys* 181:257-269, 1977.
16. **Mukhtar H** and Bend JR: Serum glutathione-S-transferases: Perinatal development, sex difference, and effect of carbon tetrachloride administration on enzyme activity in the rat. *Life Sciences* 21:1277-1286, 1977.
17. Chuang AHL, **Mukhtar H** and Bresnick E: Inhibition of aryl hydrocarbon hydroxylase and 3-methylcholanthrene induced skin tumorigenesis by diethyl maleate. *J Natl Cancer Inst* 60:321-325, 1977.
18. Bornstein WA, Chuang AHL, Bresnick E, **Mukhtar H** and Bend JR: Epoxide hydrolase activity in liver nuclei: Hydration of benzo (a) pyrene-4, 5-oxide and styrene oxide. *Chem Biol Interact* 21:343-346, 1978.
19. **Mukhtar H**, Lee IP, Foureman GL and Bend JR: Epoxide-metabolizing enzyme activities in rat testes: postnatal development and relative activity in interstitial and spermatogenic cell compartments. *Chem Biol Interact* 22:153-165, 1978.
20. **Mukhtar H**, Philpot RM and Bend JR: Epoxide-metabolizing enzyme activities and cytochrome P-450 content of rat ovaries during pregnancy. *Biochem Biophys Res Commun* 81:89-98, 1978.

21. **Mukhtar H**, Elmamlouk TH and Bend JR: Trans-Stilbene oxide: an inducer of rat hepatic microsomal and nuclear epoxide hydrase and mixed function oxidase activities. *Chem Biol Interact* 22:125-137, 1978.
22. **Mukhtar H**, Lee IP and Bend JR: Glutathione-S-transferase activities in rat and mouse sperm and human semen. *Biochem Biophys Res Commun* 83:1093-1098, 1978.
23. **Mukhtar H**, Philpot RM and Bend JR: The postnatal development of microsomal epoxide hydrase, cytosolic glutathione-S-transferase and mitochondrial and microsomal cytochrome P-450 in adrenals and ovaries of female rats. *Drug Metab Dispos* 6:577-583, 1978.
24. **Mukhtar H**, Elmamlouk TH, Philpot RM and Bend JR: Rat hepatic nuclear cytochrome P-450 and epoxide hydrase in membrane prepared by two methods: similarities with microsomal enzymes. *Mol Pharmacol* 15:192-196, 1979.
25. **Mukhtar H**, Elmamlouk TH and Bend JR: Epoxide hydrase and mixed function oxidase activities of rat liver nuclear membranes. *Arch Biochem Biophys* 192:10 21, 1979.
26. Kohli KK, Gupta BN, Albro PW, **Mukhtar H** and McKinney JD: Biochemical effects of pure isomers of hexachlorobiphenyl (HCB): Fatty liver and cell structure. *Chem Biol Interact* 25:139-156, 1979.
27. Kohli KK, **Mukhtar H**, Bend JR, Albro PW and McKinney JD: Biochemical effects of pure isomers on hexachlorobiphenyl (HCB): hepatic microsomal epoxide hydrase and cytosolic glutathione-S-transferase activities in the rat. *Biochem Pharmacol* 28:1444-1446, 1979.
28. **Mukhtar H**, Leakey JEA, Elmamlouk TH, Fouts JR and Bend JR: Precocious development of hepatic glutathione-S-transferase activity with glucocorticoid in neonatal rat. *Biochem Pharmacol* 28:1801-1803, 1979.
29. Elmamlouk TH and **Mukhtar H**: Trans-Stilbene oxide: A new inducer of rat liver microsomal UDP-glucuronyltransferase. *Biochem Pharmacol* 28:539-542, 1979.
30. Miranda CL, **Mukhtar H**, Bend JR and Chhabra RS: Effects of Vitamin A deficiency on hepatic and extrahepatic mixed-function oxidase and epoxide metabolizing enzymes in guinea pig and rabbit. *Biochem Pharmacol* 28:2713-2716, 1979.
31. Sivarajah K, **Mukhtar H** and Eling T: Arachidonic acid-dependent metabolism of (+) trans-7, 8-dihydroxy-7, 8-dihydrobenzo (a) pyrene (BP-7, 8 diol) to 7, 10/8, 9 tetrols. *FEBS Lett* 106:17-20, 1979.
32. Lee IP, Suzuki K, **Mukhtar H** and Bend JR: Hormonal regulation of cytochrome P-450 dependent monooxygenase activity and epoxide metabolizing enzyme activities in testis of hypophysectomized rats. *Cancer Res* 40:2486-2492, 1980.
33. Dixit R, **Mukhtar H**, Seth PK and Krishna Murti C.R.: Binding of acrylamide with glutathione-S-transferases. *Chem Biol Interact* 32:353-359, 1980.
34. Dixit R, Husain, R., Seth PK and **Mukhtar H**: Effect of diethyl maleate on acrylamide induced neuropathy in rats. *Toxicol Lett* 6:417-421, 1980.
35. Khan SU, **Mukhtar H** and Pandya KP: N-octane and n-nonane induced alterations in xenobiotic metabolizing enzyme activities and lipid peroxidation of rat liver. *Toxicology* 16:239-245, 1980.
36. Ong, Tongman, **Mukhtar H**, Wolf CR and Zeiger E: Differential effects of cytochrome P-450-inducers on promutagen activation capabilities and enzymatic activities of S-9 from rat liver. *J Environ Path Toxicol* 4:55-65, 1980.
37. Kumar A, Husain MM, **Mukhtar H** and Krishna Murti CR: Hepatic and extrahepatic glutathione-S-transferase activity in wild pigeons. (*Columbia livia*) *J Biosci* 2:181-189, 1980.
38. Dixit R, Seth PK and **Mukhtar H**: Brain glutathione-S-transferase catalyzed conjugation of acrylamide: a novel mechanism for detoxification of neurotoxin. *Biochem Internatl* 1:547-552, 1980.
39. Dixit R, Husain R, **Mukhtar H** and Seth PK: Acrylamide induced inhibition of hepatic glutathione-S-transferase activity in rats. *Toxicol Lett* 7:207-210, 1981.
40. Dixit R, **Mukhtar H**, Seth PK and Krishna Murti CR: Preliminary evidence for the presence of glutathione-S-transferase activity in mammalian and avian brain. *Neurotoxicology* 2:193-196, 1981.
41. Das M, Seth PK and **Mukhtar H**: NADH dependent inducible aryl hydrocarbon hydroxylase activity in rat brain mitochondria. *Drug Metab Dispos* 9:69-70, 1981.
42. Das M, Seth PK and **Mukhtar H**: Characterization of microsomal aryl hydrocarbon hydroxylase of rat brain. *J Pharm Exptl Ther* 216:156-161, 1981.
43. Das M, Dixit R, Seth PK and **Mukhtar H**: Glutathione-S-transferase activity in brain: Species, sex, regional and age differences. *J Neurochem* 36:1439-1442, 1981.

44. Dixit R, **Mukhtar H** and Seth PK: In vitro inhibition of alcohol dehydrogenase by acrylamide: Interaction with enzyme - SH groups. *Toxicol Lett* 7:487-492, 1981.
45. **Mukhtar H** and Bickers, D.R.: Drug metabolism in skin: comparative activity of the mixed-function oxidases, epoxide hydrolase and glutathione-S-transferase in liver and skin of the neonatal rat. *Drug Metab Dispos* 9:311-314, 1981.
46. **Mukhtar H**, Dixit R and Seth PK: Reduction in cutaneous and hepatic glutathione contents, glutathione-S-transferase and aryl hydrocarbon hydroxylase activities following topical application of acrylamide to mouse. *Toxicol Lett* 9:153-156, 1981.
47. **Mukhtar H**, Kumar A, Husain MM and Krishna Murti, C.R.: Aryl hydrocarbon hydroxylase in pigeon skin and its possible relevance to monitoring air pollution. *Ecotoxicol and Environ Safety* 5:97-105, 1981.
48. **Mukhtar H**, Zoetmelk CEM, Baars AJ, Wijnen JTh, Wijnen LMB, Khan PM and Breimer DD: Glutathione-S-transferase activity in human fetal and adult tissues. *Pharmacology* 22:322-329, 1981.
49. Dixit R, **Mukhtar H**, Seth PK and Krishna Murti CR: Conjugation of acrylamide with glutathione catalyzed by glutathione-S-transferase of rat liver and brain. *Biochem Pharmacol* 30:1739-1744, 1981.
50. Mushtaq M, **Mukhtar H**, Dutta KK, Tandon SG and Seth PK: Toxicological studies of leachable stabilizer di-n-butyltin dilaurate (DBTL): Effect on hepatic drug metabolizing enzyme activities. *Drug and Chemical Toxicology* 4:75-88, 1981.
51. Asokan P, Dixit R, **Mukhtar H** and Krishna Murti, CR: Effect of cadmium on hepatic mixed-function oxidases during early development of rats: possible protective role of metallothionein. *Biochem Pharmacol* 30:3095-3097, 1981.
52. Dixit R, Husain, R., **Mukhtar H** and Seth PK: Effect of acrylamide on biogenic amine levels, monoamine oxidase and cathepsin-D-activity of rat brain. *Environ Res* 26:168-173, 1981.
53. Baars AJ, **Mukhtar H**, Zoetemelk CEM, Jansen M and Breimer DD: Glutathione-S-transferase activity in rat and human tissues and organs. *Comp Biochem Physiol* 70:285-288, 1981.
54. Elmamlouk TH, **Mukhtar H** and Bend JR: The nuclear envelope as a site of glucuronyltransferase in rat liver: Properties of and effect of inducers on, enzyme activity. *J Pharm Exptl Ther* 219:27-34, 1981.
55. Das M, Seth PK and **Mukhtar H**: Effect of certain neurotoxins and mixed function oxidase modifiers on glutathione-S-transferase activity of rat brain. *Res Commun Chem Pathol Pharmacol* 33:377-380, 1981.
56. **Mukhtar H**, Baars AJ and Breimer DD: Differences in inducibility of particulate and cytosolic glutathione S-transferase activities. *Xenobiotica* 11:367-371, 1981.
57. **Mukhtar H** and Bickers DR: Aminopyrine N-demethylase activity in neonatal rat skin. *Biochem Pharmacol* 30:3257-3260, 1981.
58. Husain MM, Kumar A, **Mukhtar H** and Krishna Murti, CR: Xenobiotic biotransformation in wild birds: activity, induction, characterization and comparison with rat and mouse microsomal enzyme. *Xenobiotica* 11:785-794, 1981.
59. Bickers DR, Wroblewski D, Choudhury TD and **Mukhtar H**: Induction of neonatal rat skin and liver aryl hydrocarbon hydroxylase by coal tar and its constituents, *J Invest Dermatol* 78:227-229, 1982.
60. Bickers DR, Choudhury TD and **Mukhtar H**: Epidermis: A site of drug metabolism in neonatal rat skin. Studies on cytochrome P-450 content, the mixed function oxidase and epoxide hydrolase activity. *Mol Pharmacol* 21:239-247, 1982.
61. Dixit R, Bickers DR and **Mukhtar H**: Binding of benzo (a) pyrene to hepatic cytosolic protein enhances its microsomal oxidation. *Biochem Biophys Res Commun*, 104:1093-1101, 1982.
62. **Mukhtar H** and Bickers DR: Evidence that coal tar is a mixed-inducer of microsomal drug metabolizing enzymes. *Toxicol Lett* 11:221-227, 1982.
63. Dixit R, Seth PK and **Mukhtar H**: Disposition of acrylamide into urinary mercapturic acid and cysteine conjugates in rats. *Drug Metab Dispos* 10:196-197, 1982.
64. Leakey JEA, **Mukhtar H**, Fouts JR and Bend JR: Thyroid hormone-induced changes in hepatic monooxygenase system, heme oxygenase activity and epoxide hydrolase activity in adult male, female and immature rats. *Chem Biol Interact* 40:257-264, 1982.
65. Bickers DR, **Mukhtar H**, Molica SJ and Pathak MB: The effect of psoralens on hepatic and cutaneous drug metabolizing enzymes. *J Invest Dermatol* 79:201-205, 1982.

66. Dixit R, **Mukhtar H** and Bickers DR: Evidence that lipid peroxidation in microsomal membranes of epidermis is associated with generation of hydrogen peroxide and singlet oxygen. *Biochem Biophys Res Commun* 105:546-552, 1982.
67. **Mukhtar H**, Link CM, Cherniack E, Kushner DM and Bickers DR: Effect of topical application of defined constituents of coal tar on skin and liver aryl hydrocarbon hydroxylase and 7-ethoxycoumarin deethylase activities. *Toxicol Appl Pharmacol* 64:541-549, 1982.
68. Das M, Seth PK, Dixit R and **Mukhtar H**: Aryl hydrocarbon hydroxylase of rat brain mitochondria: properties of, and effect of inducers and inhibitors on enzyme activity. *Archs Biochem Biophys* 217:205-215, 1982.
69. Das M, **Mukhtar H** and Seth PK: Aryl hydrocarbon hydroxylase and glutathione S-transferase activities in discrete regions of rat brain. *Toxicol.Lett* 13:125-128, 1982.
70. Husain MM, Kumar A and **Mukhtar H**: Inhibition of tissue aryl hydrocarbon (benzo(a)pyrene) hydroxylase by 7,8-benzoflavone in birds. *Xenobiotica* 12:375-380, 1982.
71. Bickers DR, Marcelo CL, Choudhury TD and **Mukhtar H**: Studies on microsomal cytochrome P-450, monooxygenases and epoxide hydrolase in cultured keratinocytes and intact epidermis from Balb-c mice. *J Pharm Exptl Ther* 223:163 168, 1982.
72. Das M, **Mukhtar H** and Seth PK: Effect of acrylamide on brain and hepatic mixed function oxidases and glutathione-S-transferase(s) in rats. *Toxicol Appl Pharmacol* 66:420-426, 1982.
73. Bickers DR, Dixit R and **Mukhtar H**: Hematoporphyrin photosensitization of epidermal microsomes results in destruction of cytochrome P-450 and in decreased monooxygenase activities and heme content. *Biochem Biophys Res Commun* 108:1032-1039, 1982
74. Bickers DR, **Mukhtar H** and Yang SK: Cutaneous metabolism of benzo(a)pyrene: Comparative studies in C57BL/6N and DBA/2N mice and neonatal Sprague-Dawley rats. *Chem Biol Interact* 43:263-270, 1983.
75. Dixit R, **Mukhtar H** and Bickers DR: Destruction of microsomal cytochrome P 450 by reactive oxygen species generated during photosensitization of hemato porphyrin derivative. *Photochem Photobiol* 37:173-176, 1983.
76. Lee IP, **Mukhtar H**, Suzuki K and Bend JR: Metabolism of benzo (a) pyrene 4, 5 oxides by isolated perfused rat testis. *Biochem Pharmacol* 32:159-161, 1983.
77. Del Tito BJ, Jr., **Mukhtar H** and Bickers DR: Inhibition of epidermal metabolism and DNA-binding of benzo (a) pyrene by ellagic acid. *Biochem Biophys Res Commun* 114:388-394, 1983.
78. Dixit R, **Mukhtar H** and Bickers DR: Studies on the role of reactive oxygen species in mediating lipid peroxide formation in epidermal microsomes of rat skin. *J Invest Dermatol* 81:369-375, 1983.
79. **Mukhtar H**: Toxicology and human health risk assessment: A commentary. *Biol Memoir* 8:1-5, 1983.
80. Srivastava SP, Seth PK and **Mukhtar H**: 7-Ethoxycoumarin O-de-ethylase activity in rat brain microsomes. *Biochem Pharmacol* 32:3657-3660, 1983.
81. **Mukhtar H** and Bickers DR: Age related changes in benzo (a) pyrene metabolism and epoxide metabolizing enzyme activities in rat skin. *Drug Metab Dispos* 11:562-567, 1983.
82. **Mukhtar H**, Das M, Del Tito BJ and Bickers DR: Protection against 3-methylcholanthrene-induced skin tumorigenesis in Balb/c mice by ellagic acid. *Biochem Biophys Res Commun* 119:751-757, 1984.
83. Srivastava SP, Das M, **Mukhtar H**, Malhotra OP and Seth PK: Effect of acrylamide on glutathione-S-transferase activity in different regions of rat brain. *Bull Environ Contam Toxicol* 32:166-170, 1984.
84. DelTito BJ, **Mukhtar H** and Bickers DR: In vivo metabolism of topically applied benzo(a)pyrene 4,5-oxide in neonatal rat skin. *J Invest Dermatol* 82:378-380, 1984.
85. Bickers DR, Dixit R and **Mukhtar H**: Enhancement of bleomycin-mediated DNA damage by epidermal microsomal enzymes. *Biochem Biophys Acta* 781:265-272, 1984.
86. Das M, Bickers DR and **Mukhtar H**: Plant phenols as in vitro inhibitors of glutathione-S-transferase(s). *Biochem Biophys Res Commun* 120:427-433, 1984.
87. Bickers DR, **Mukhtar H**, Dutta-Choudhury T, Marcelo CL and Voorhees JJ: Aryl hydrocarbon hydroxylase, epoxide hydrolase and benzo (a) pyrene metabolism in human epidermis. Comparative studies in normal subjects and patients with psoriasis. *J Invest Dermatol* 83:51-56, 1984.
88. **Mukhtar H**, Das M, DelTito BJ and Bickers DR: Epidermal benzo(a)pyrene metabolism and DNA-binding in Balb/C mice: Inhibition by ellagic acid. *Xenobiotica* 14:527-531, 1984.

89. **Mukhtar H**, DelTito BJ, Das M, Cherniack EP, Cherniack AD and Bickers DR: Clotrimazole, an inhibitor of epidermal benzo(a)pyrene metabolism and DNA binding and carcinogenicity of the hydrocarbon. *Cancer Res* 44:4233-4240, 1984.
90. Husain MM, Kumar A and **Mukhtar H**: Hepatic mixed-function oxidase activities of wild pigeons. *Xenobiotica* 14:761-766, 1984.
91. **Mukhtar H**, DelTito BJ, Marcelo CL, Das M and Bickers DR: Ellagic acid: a potent naturally occurring inhibitor of benzo(a)pyrene metabolism and its subsequent glucuronidation, sulfation and covalent binding to DNA in cultured Balb/C mouse keratinocytes. *Carcinogenesis* 5:1565-1571, 1984.
92. Dixit R, Das M, Seth PK and **Mukhtar H**: Interaction of acrylamide with glutathione in rat erythrocytes. *Toxicol Lett* 23:291-298, 1984.
93. Bickers DR, **Mukhtar H**, Meyer LW and Speck WT: Epidermal enzyme mediated mutagenesis of a skin carcinogen, 2-aminoanthracene. *Mutation Res* 147:37-43, 1985.
94. Das M, Dixit R, **Mukhtar H** and Bickers DR: Role of reactive oxygen species in the photodestruction of microsomal cytochrome P-450 and associated monooxygenases by hematoporphyrin derivative in rats. *Cancer Res* 45:608-615, 1985.
95. Srivastava SP, Seth PK, Das M and **Mukhtar H**: Effects of mixed-function oxidase modifiers on neurotoxicity of acrylamide in rats. *Biochem Pharmacol* 34:1099-1102, 1985.
96. Das M, Bickers DR, Santella RM and **Mukhtar H**: Altered patterns of cutaneous xenobiotic metabolism in UVB induced squamous cell carcinoma in SKH-1 hairless mice. *J Invest Dermatol* 84:532-536, 1985.
97. Das M, Srivastava SP, Seth PK and **Mukhtar H**: Brain microsomal enzyme mediated covalent binding of benzo (a) pyrene to DNA. *Cancer Lett* 25:343-350, 1985.
98. Asokan P, Das M, Rosenkranz HS, Bickers DR and **Mukhtar H**: Topically applied nitropyrenes are potent inducers of cutaneous and hepatic monooxygenases. *Biochem Biophys Res Commun* 129:134-140, 1985.
99. Asokan P, Das M, Dixit R and **Mukhtar H**: Interaction of certain metal ions with aryl hydrocarbon hydroxylase of rat lung microsomes. *Acta Pharmacol ET Toxicol* 57:72-77, 1985.
100. Das M, **Mukhtar H**, Greenspan ER and Bickers DR: Photoenhancement of lipid peroxidation associated with the generation of reactive oxygen species in hepatic microsomes of hematoporphyrin derivative treated rats. *Cancer Res* 45:6328-6330, 1985.
101. Das M, Seth PK and **Mukhtar H**: Distribution of benzo(a)pyrene in discrete regions of rat brain. *Bull Environ Contam Toxicol* 35:500-504, 1985.
102. Das M, Bickers DR and **Mukhtar H**: Effect of ellagic acid on hepatic and pulmonary xenobiotic metabolism in mice. *Studies on the mechanism of anticarcinogenic action. Carcinogenesis* 6:1409-1413, 1985.
103. Awasthi YC, Singh SV, Das M and **Mukhtar H**: Differential activities of rat and human lung glutathione S-transferase isoenzymes towards benzo (a) pyrene epoxides. *Biochem Biophys Res Commun* 133:863-867, 1985.
104. **Mukhtar H**, Das M and Bickers DR: Inhibition of 3-methylcholanthrene -induced skin tumorigenicity in Balb/C mice by chronic oral feeding of trace amounts of ellagic acid in drinking water. *Cancer Res* 46:2262-2265, 1986.
105. Dixit R, Das M, Seth PK and **Mukhtar H**: Interaction of acrylamide with bovine serum albumin. *Environ Res* 40:365-371, 1986.
106. Hawkins CW, Bickers DR, **Mukhtar H** and Elmetts CA: Cutaneous porphyrin photosensitization: Murine ear swelling as a marker of the acute response. *J Invest Dermatol* 86:638-642, 1986.
107. Das M, **Mukhtar H**, DelTito BJ, Marcelo, C.L and Bickers DR: Clotrimazole, an inhibitor of benzo(a)pyrene metabolism and its subsequent glucuronidation, sulfation, and macromolecular binding in Balb/C mouse cultured keratinocytes. *J Invest Dermatol* 87:4-10, 1986.
108. Modly CE, Das M, Don PSC, Marcelo CL, **Mukhtar H** and Bickers DR: Capsaicin as an in vitro inhibitor of benzo(a)pyrene metabolism and its DNA binding in human and murine keratinocytes. *Drug Metab Dispos* 14:413-416, 1986.
109. **Mukhtar H**, Das M and Bickers DR: Skin tumor initiating activity of therapeutic crude coal tar as compared to other polycyclic aromatic hydrocarbons in senear mice. *Cancer Letters* 31:147-151, 1986.
110. Bickers DR, Das M and **Mukhtar H**: Pharmacological modification of epidermal detoxification systems. *Brit J Dermatol* 115s:9-16, 1986.

111. Gordeuk VR, Brittenham GM, Hawkins CW, **Mukhtar H** and Bickers DR: Iron therapy for hepatic dysfunction in erythropoietic protoporphyria. *Ann Int Med* 105:27-31, 1986.
112. **Mukhtar H**, DelTito BJ, Matgouranis PM, Das M, Asokan P and Bickers DR: Additive effects of ultraviolet B and crude coal tar on cutaneous carcinogen metabolism: Possible relevance to the tumorigenicity of the Goeckerman regimen. *J Invest Dermatol* 87:348-353, 1986.
113. Das M, Asokan P, Don PSC, Krueger GG, Bickers DR and **Mukhtar H**: Carcinogen metabolism in human skin grafted onto athymic nude mice: a model system for the study of human skin carcinogenesis. *Biochem Biophys Res Commun* 138:33-39, 1986.
114. Asokan P, Das M, Bik DP, Howard PC, McCoy GD, Rosenkranz HS, Bickers DR and **Mukhtar H**: Comparative effects of topically applied nitrated arenes and their nonnitrated parent arenes on cutaneous and hepatic drug and carcinogen metabolism in neonatal rats. *Toxicol Appl Pharmacol* 86:33-43, 1986.
115. Das M, Bickers DR and **Mukhtar H**: Epidermis: the major site of cutaneous benzo (a) pyrene and benzo (a) pyrene 7, 8-diol metabolism in neonatal Balb/C mice. *Drug Metab Dispos* 14:637-642, 1986.
116. **Mukhtar H**, Asokan P, Das M, Santella RM and Bickers DR: Benzo (a) pyrene diol epoxide-I-DNA adduct formation in the epidermis of SENCAR mice following topical application of crude coal tar. *Cancer Letters* 33:287-294, 1986.
117. Das M, Singh SV, **Mukhtar H** and Awasthi YC: Differential inhibition of rat and human glutathione S-transferase isoenzymes by plant phenols. *Biochem Biophys Res Commun* 141:1170-1176, 1986.
118. Merk HF, **Mukhtar H**, Kaufmann I, Das M and Bickers DR: Human hair follicle benzo(a)pyrene and benzo(a)pyrene 7,8-diol metabolism: Effect of exposure to a coal tar-containing shampoo. *J Invest Dermatol* 88:71-76, 1987.
119. Das M, **Mukhtar H**, Bik, DP and Bickers DR: Inhibition of epidermal xenobiotic metabolism in SENCAR mice by naturally occurring plant phenols. *Cancer Res* 47:760-766, 1987.
120. Das M, Khan WA, Asokan P, Bickers DR and **Mukhtar H**: Inhibition of polycyclic aromatic hydrocarbon-DNA adducts formation in epidermis and lungs of SENCAR mice by naturally occurring plant phenols. *Cancer Res* 47:767-773, 1987.
121. Singh SV, Creadon G, Das M, **Mukhtar H** and Awasthi YC: Glutathione S transferases of mouse lung: Selective binding of benzo (a) pyrene metabolites by the subunits which are preferentially induced by t-butylated hydroxyanisole. *Biochem J* 243:351-358, 1987.
122. **Mukhtar H**, Athar M and Bickers DR: Cytochrome P-450-dependent metabolism of testosterone in rat skin. *Biochem Biophys Res Commun* 145:749-753, 1987.
123. Khan WA, Das M, Stick S, Javed S, Bickers DR and **Mukhtar H**: Induction of epidermal NAD(P)H:quinone reductase by chemical carcinogens: a possible mechanism for the detoxification. *Biochem Biophys Res Commun* 146:126-133, 1987.
124. Khan WA, Asokan P, Park SS, Gelboin HV, Bickers DR and **Mukhtar H**: Use of monoclonal antibodies to characterize the induction response of the cytochrome P-450- dependent mixed function oxidase system to nitrofluoranthenes. *Carcinogenesis* 8:1679-1684, 1987.
125. Merk HF, **Mukhtar H**, Schutte B, Kaufmann I, Das M and Bickers DR: 7-ethoxyresorufin O-deethylase activity in human hair roots: A potential marker for toxifying species of cytochrome P-450 isozymes. *Biochem Biophys Res Commun* 148:755-761, 1987.
126. Klemme JC, **Mukhtar H** and Elmets CA: Induction of contact hypersensitivity to dimethylbenz (a) anthracene and benzo(a)pyrene in C3H/HeN mice. *Cancer Res* 47: 6074- 6078, 1987.
127. Wang ZY, Das M, Bickers DR and **Mukhtar H**: Interaction of epicatechins derived from green tea with rat hepatic cytochrome P-450. *Drug Metab Dispos* 16:98-103, 1988.
128. McCullough AJ, Barron D, Mullen KD, Petrelli M, Park MC, **Mukhtar H** and Bickers DR: Fecal protoporphyrin excretion in erythropoietic protoporphyria: effect of cholestyramine and bile acid feeding. *Gastroenterology* 94:177-181, 1988.
129. Elmets CA, Khan WA, Klemme JC and **Mukhtar H**: Impaired immunological surveillance by 7, 12-dimethylbenz (a) anthracene augments its skin tumorigenicity in C3H mice. *Biochem Biophys Res Commun* 151:148-152, 1988.
130. Athar M, **Mukhtar H**, Elmets CA, Zaim MT, Lloyd JR and Bickers DR In situ evidence for the involvement of superoxide anions in cutaneous porphyrin photosensitization. *Biochem Biophys Res Commun* 151:1054-1059, 1988.

131. **Mukhtar H**, Das M, Khan WA, Wang ZY, Bik DP and Bickers DR: Exceptional activity of tannic acid among naturally occurring plant phenols in protecting against 7,12-dimethylbenz(a)anthracene-, benzo(a)pyrene-, 3-methylcholanthrene- and N-methyl-N-nitrosourea-induced skin tumorigenesis in mice. *Cancer Res* 48:2361-2365, 1988.
132. Athar M, **Mukhtar H** and Bickers DR: Differential role of reactive oxygen intermediates in Photofrin-I- and Photofrin-II-mediated photoenhancement of lipid peroxidation in epidermal microsomal membranes. *J Invest Dermatol* 90:652-657, 1988.
133. Khan WA, Wang ZY, Athar M, Bickers DR and **Mukhtar H**: Inhibition of the skin tumorigenicity of ( $\pm$ )-7 $\beta$ ,8 $\alpha$ -dihydroxy-9 $\alpha$ ,10 $\alpha$ -epoxy-7,8,9,10-tetrahydro benzo(a)pyrene by tannic acid, green tea polyphenols and quercetin in Sencar mice. *Cancer Lett* 42:7-12, 1988.
134. **Mukhtar H** and Athar M: Dietary anticarcinogens and cancer prevention. *Clev Clin J Med* 55:507-508, 1988.
135. **Mukhtar H**, Khan WA, Bik DP, Das M and Bickers DR: Hepatic microsomal metabolism of leukotriene B<sub>4</sub> in rats: biochemical characterization, effect of inducers, and age- and sex-dependent differences. *Xenobiotica* 19:151-159, 1989.
136. Don PSC, **Mukhtar H**, Das M, Berger NA and Bickers DR: Benzo(a)pyrene metabolism, DNA-binding and UV-induced repair of DNA damage in cultured skin fibroblasts from a patient with unilateral multiple basal cell carcinoma. *Brit J Dermatol* 120:161-171, 1989.
137. Wang ZY, Khan WA, Bickers DR and **Mukhtar H**: Protection against polycyclic aromatic hydrocarbon-induced skin tumor initiation in mice by green tea polyphenols. *Carcinogenesis* 10:411-415, 1989.
138. Athar M, Elmets CA, Bickers DR and **Mukhtar H**: A novel mechanism for the generation of superoxide anions in hematoporphyrin derivative-mediated cutaneous photosensitization: Activation of xanthine oxidase pathway. *J Clin Invest* 83:1137-1143, 1989.
139. Das M, Bickers DR and **Mukhtar H**: Protection against chemically induced skin tumorigenesis in Sencar mice by tannic acid. *Int J Cancer* 43:468-470, 1989.
140. Khan WA, Park SS, Gelboin HV, Bickers DR and **Mukhtar H**: Epidermal cytochrome P-450: Immunochemical characterization of isoform induced by topical application of 3-methylcholanthrene to neonatal rat. *J Pharmacol Exptl Ther* 249:921-927, 1989.
141. Wang ZY, Cheng SJ, Zhou ZC, Athar M, Khan WA, Bickers DR and **Mukhtar H**: Antimutagenic activity of green tea polyphenols. *Mutation Res* 223:273-289, 1989.
142. Krutmann J., Athar M, Mendel B, Khan IU, Guyre PM, **Mukhtar H** and Elmets CA: Inhibition of the high affinity Fc receptor (Fc $\gamma$ RI) on human monocytes by porphyrin photosensitization is highly specific and mediated by the generation of superoxide radicals. *J Biol Chem* 264:11407-11413, 1989.
143. **Mukhtar H**, Bik DP, Ruzicka T, Merk HF and Bickers DR: Cytochrome P 450-dependent omega-oxidation of leukotriene B<sub>4</sub> in rodent and human epidermis. *J Invest Dermatol* 93:231-235, 1989.
144. Merk HF, Khan WA, Kuhn C., Bickers DR and **Mukhtar H**: Effect of topical application of clotrimazole to rats on epidermal and hepatic monooxygenase activities and cytochrome P-450. *Arch Dermatol Res* 281:198-202, 1989.
145. Khan WA, Park SS, Gelboin HV, Bickers DR and **Mukhtar H**: Monoclonal antibodies directed characterization of epidermal and hepatic cytochrome P-450 isozymes induced by skin application of therapeutic crude coal tar. *J Invest Dermatol* 93:40-45, 1989.
146. Khan WA, Kuhn C, Merk HF, Park SS, Gelboin HV, Bickers DR and **Mukhtar H**: Isozyme-specific monoclonal antibody-directed assessment of induction of hepatic cytochrome P-450 by clotrimazole. *Drug Metab Dispos* 17:360-364, 1989.
147. **Mukhtar H** and Khan WA: Cutaneous cytochrome P-450. *Drug Metab Rev* 20:657-673, 1989.
148. Athar M, **Mukhtar H**, Bickers DR, Khan IU and Kalyanaraman B: Evidence for the metabolism of tumor promoter organic hydroperoxides into free radicals by human carcinoma skin keratinocytes: an ESR-spin trapping study. *Carcinogenesis* 10:1499-1503, 1989.
149. Athar M, Lloyd JR, Bickers DR and **Mukhtar H**: Malignant conversion of UV radiation and chemically induced mouse skin benign tumors by free radical-generating compounds. *Carcinogenesis* 10:1841-1845, 1989.
150. Athar M, Khan WA and **Mukhtar H**: Effect of dietary tannic acid on epidermal, lung, and forestomach polycyclic aromatic hydrocarbon metabolism and tumorigenicity in Sencar mice. *Cancer Res* 49:5784-5788, 1989.



151. Athar M, Raza, H., Bickers DR and **Mukhtar H**: Inhibition of benzoyl peroxide mediated tumor promotion in 7, 12-dimethylbenz (a) anthracene initiated skin of Sencar mice by antioxidants nordihydroguaiaretic acid and diallyl sulfide. *J Invest Dermatol* 94:162-165, 1990.
152. Raza H, Awasthi YC, Zaim MT, Eckert RL and **Mukhtar H**: Glutathione S-transferases in human and rodent skin: Multiple forms and species-specific expression. *J Invest Dermatol* 96:463-467, 1991.
153. Agarwal R, Athar M, Bickers DR and **Mukhtar H**: Evidence for the involvement of singlet oxygen in the photodestruction by chloroaluminum phthalocyanine tetrasulfonate. *Biochem Biophys Res Commun* 173:34-41, 1990.
154. Wang ZY, Agarwal R, Zhou ZC, Bickers DR and **Mukhtar H**: Inhibition of mutagenicity in *Salmonella typhimurium* and skin tumor initiating and tumor promoting activities in Sencar mice by glycyrrhetic acid: comparison of 18 $\alpha$ - and 18 $\beta$ -glycyrrhetic acid stereoisomers. *Carcinogenesis* 12:187-192, 1991.
155. Agarwal R, Athar M, Urban SA, Bickers DR and **Mukhtar H**: Involvement of singlet oxygen in chloroaluminum phthalocyanine tetrasulfonate-mediated photoenhancement of lipid peroxidation in rat epidermal microsomes. *Cancer Lett* 56:125-129, 1991.
156. Agarwal R, Wang ZY and **Mukhtar H**: Inhibition of skin tumor-initiating activity of 7, 12-dimethylbenz (a) anthracene by chronic oral feeding of glycyrrhizin in drinking water. *Nutrition and Cancer* 15:187-193, 1991.
157. Agarwal R, Wang ZY, Bik DP and **Mukhtar H**: Nordihydroguaiaretic acid, an inhibitor of lipoxygenase, also inhibits cytochrome P-450-mediated monooxygenase activity in rat epidermal and hepatic microsomes. *Drug Metab Dispos* 19:620-624, 1991.
158. Raza H, Chung WL and **Mukhtar H**: Specific high-affinity binding of fatty acids to epidermal cytosolic proteins. *J Invest Dermatol* 97:323-326, 1991.
159. Wang ZY, Agarwal R, Bickers DR and **Mukhtar H**: Protection against ultraviolet B radiation-induced photocarcinogenesis in hairless mice by green tea polyphenols. *Carcinogenesis* 12:1527-1530, 1991.
160. Wang ZY, Agarwal R, Zhou ZC, Bickers DR and **Mukhtar H**: Antimutagenic and antitumorigenic activities of nordihydroguaiaretic acid. *Mutation Res* 261:153-162, 1991.
161. Agarwal R, Medrano EE, Khan IU, Nordlund JJ and **Mukhtar H**: Metabolism of benzo(a)pyrene by human melanocytes in culture. *Carcinogenesis* 12:1963-1966, 1991.
162. Athar M, Agarwal R, Wang ZY, Lloyd JR, Bickers DR and **Mukhtar H**: All *trans* retinoic acid protects against conversion of chemically-induced and ultraviolet B radiation-induced skin papillomas to carcinomas. *Carcinogenesis* 12:2325-2329, 1991.
163. **Mukhtar H**, Agarwal R, Athar M, Lewen RL, Elmets CA and Bickers DR: Photodynamic therapy of murine skin tumors using Photofrin<sup>®</sup>-II. *Photodermatol Photoimmunol & Photomed* 8:169-175, 1991.
164. **Mukhtar H**, Wang ZY, Katiyar SK and Agarwal R: Tea components: antimutagenic and anticarcinogenic effects. *Preventive Medicine* 21:351-360, 1992.
165. Raza H, Agarwal R, Bickers DR and **Mukhtar H**: Purification and molecular characterization of  $\beta$ -naphthoflavone-inducible cytochrome P-450 from rat epidermis. *J Invest Dermatol* 98:233-240, 1992.
166. Agarwal R, Zaidi SIA, Athar M, Bickers DR and **Mukhtar H**: Photodynamic effects of chloroaluminum phthalocyanine tetrasulfonate are mediated by singlet oxygen: *In vivo* and *in vitro* studies utilizing hepatic microsomes as a model membrane source. *Arch Biochem Biophys* 294:30-37, 1992.
167. Katiyar SK, Agarwal R, Wang ZY, Bhatia, AK and **Mukhtar H**: (-)-Epigallocatechin-3-gallate in *Camellia sinensis* leaves from Himalayan region of Sikkim: Inhibitory effects against biochemical events and tumor initiation in SENCAR mouse skin. *Nutrition and Cancer* 18:73-83, 1992.
168. Agarwal R, Athar M, Elmets CA, Bickers DR and **Mukhtar H**: Photodynamic therapy of chemically- and ultraviolet radiation-induced murine skin papillomas by chloroaluminum phthalocyanine tetrasulfonate. *Photochem Photobiol* 56:43-50, 1992.
169. Agarwal R, Katiyar SK, Zaidi SIA and **Mukhtar H**: Inhibition of tumor promoter-caused induction of ornithine decarboxylase in SENCAR mice by polyphenolic fraction isolated from green tea and its individual epicatechin derivatives. *Cancer Res* 52:3582-3588, 1992.
170. Khan SG, Katiyar SK, Agarwal R and **Mukhtar H**: Enhancement of antioxidant and phase II enzymes by oral feeding of green tea polyphenols in drinking water to SKH-1 hairless mice: possible role in cancer chemoprevention. *Cancer Res* 52:4050-4052, 1992.

171. Wang ZY, Agarwal R, Khan WA and **Mukhtar H**: Protection against benzo(a)pyrene- and N-nitrosodiethylamine-induced lung and forestomach tumorigenesis in A/J mice by water extracts of green tea and licorice. *Carcinogenesis* 13:1491-1494, 1992.
172. Khan IU, Bickers DR, Haqqi TM and **Mukhtar H**: Induction of CYP1A1 mRNA in rat epidermis and cultured human epidermal keratinocytes by Benz (a) anthracene and  $\beta$ -naphthoflavone. *Drug Metab Dispos* 20:620-624, 1992.
173. Elmets CA, Zaidi SIA, Bickers DR and **Mukhtar H**: Immunogenetic influences on the initiation stage of the cutaneous chemical carcinogenesis pathway. *Cancer Res* 52: 6106-6109, 1992.
174. Agarwal R, Raza H, Allyn DL, Bickers DR and **Mukhtar H**: Glutathione S-transferase-dependent conjugation of leukotriene A<sub>4</sub>-methyl ester to leukotriene C<sub>4</sub>-methyl ester in mammalian skin. *Biochem Pharmacol* 44:2047-2053, 1992.
175. Katiyar SK, Agarwal R, Wood GS and **Mukhtar H**: Inhibition of 12-O-tetradecanoylphorbol-13-acetate-caused tumor promotion in 7,12-dimethylbenz[a] anthracene-initiated SENCAR mouse skin by a polyphenolic fraction isolated from green tea. *Cancer Res* 52:6890-6897, 1992.
176. Kress S, Sutter C, Strickland PT, **Mukhtar H**, Schweizer J and Schwarz M: Carcinogen-specific mutational pattern in the p53 gene in ultraviolet B-radiation-induced squamous cell carcinomas of mouse skin. *Cancer Res* 52:6400-6403, 1992.
177. Katiyar SK, Agarwal R and **Mukhtar H**: Green tea in chemoprevention of cancer. *Comprehensive Therapy* 18:3-8, 1992.
178. Katiyar SK, Agarwal R, Ekker S, Wood GS and **Mukhtar H**: Protection against 12-O-tetradecanoylphorbol-13-acetate-caused inflammation in SENCAR mouse ear skin by polyphenolic fraction isolated from green tea. *Carcinogenesis* 14:361-365, 1993.
179. Katiyar SK, Agarwal R, Zaim MT and **Mukhtar H**: Protection against N-nitrosodiethylamine and benzo(a)pyrene-induced forestomach and lung tumorigenesis in A/J mice by green tea. *Carcinogenesis* 14:849-855, 1993.
180. Megerian CA, Zaidi SIA, Sprecher RC, Setrakian S, Stepnick DW, Oleinick NL and **Mukhtar H**: Photodynamic therapy of human squamous cell carcinoma *in vitro* and in xenografts in nude mice. *Laryngoscope* 103:967-975, 1993.
181. Singhal SS, Saxena M, Awasthi S, **Mukhtar H**, Zaidi SIA, Ahmad H and Awasthi YC: Glutathione S-transferases of human skin: qualitative and quantitative differences in men and women. *Biochem Biophys Acta* 1163:266-272, 1993.
182. Zaidi SIA, Agarwal R, Eichler G, Rihter BD, Kenney ME, and **Mukhtar H**: Photodynamic effects of new silicon phthalocyanines: *in vitro* studies utilizing rat hepatic microsomes and human erythrocyte ghosts as model membrane sources. *Photochem Photobiol* 58:204-210, 1993.
183. Sutter C, Strickland PT, **Mukhtar H**, Agarwal R, Winter H and Schweizer J: Ras gene activation and aberrant expression of keratin K13 in ultraviolet B radiation-induced epidermal neoplasias of mouse skin. *Mol Carcinogenesis* 8:13-19, 1993.
184. Khan IU, **Mukhtar H** and Haqqi TM: Chemical carcinogens increase IL-1 and IL-6 gene transcripts in human keratinocytes. *Experimental Dermatol* 2: 84-88, 1993.
185. Raza H and **Mukhtar H**: Differences in inducibility of cytochrome P-450 1A1, monooxygenases and glutathione S-transferase in cutaneous and extracutaneous tissue after topical and parental administration of  $\beta$ -naphthoflavone to rats. *Int J Biochem* 25:1151-1516, 1993.
186. Agarwal R, Katiyar SK, Khan SG and **Mukhtar H**: Protection against ultraviolet B radiation-induced effects in the skin of SKH-1 hairless mice by a polyphenolic fraction isolated from green tea. *Photochem Photobiol* 58:695-700, 1993.
187. Katiyar SK, Agarwal R, and **Mukhtar H**: Protective effects of green tea polyphenols administered by oral intubation against chemical carcinogen-induced forestomach and pulmonary neoplasia in A/J mice. *Cancer Lett* 73:167-172, 1993.
188. Katiyar SK, Agarwal R and **Mukhtar H**: Protection against malignant conversion of chemically-induced benign skin papillomas to squamous cell carcinoma in SENCAR mice by a polyphenolic fraction isolated from green tea. *Cancer Res* 53:5409-5412, 1993.

189. Katiyar SK, Agarwal R and **Mukhtar, H**: Inhibition of both stages I and II skin tumor promotion in SENCAR mice by a polyphenolic fraction isolated from green tea: Inhibition depends on the duration of polyphenol treatment. *Carcinogenesis* 14:2641-2643, 1993.
190. Agarwal ML, Larkin H, Zaidi SIA, **Mukhtar H** and Oleinick NL: Phospholipase activation triggers apoptosis in photosensitized mouse lymphoma cells. *Cancer Res* 53:5897-5902, 1993.
191. Agarwal R, Khan SG, Athar M, Zaidi SIA, Bickers DR and **Mukhtar H**: Ras protein p21 processing enzyme farnesyltransferase in chemical carcinogen-induced murine skin tumors. *Mol Carcinogenesis* 8:290-298, 1993.
192. **Mukhtar H** and Bickers DR: Environmental skin cancer: mechanisms models and human relevance. *Cancer Res* 53:3439-3442, 1993.
193. Zaidi SIA, Oleinick NL, Zaim MT and **Mukhtar H**: Apoptosis during photodynamic therapy-induced ablation of RIF-1 tumors in C3H mice: electron microscopic, histopathologic and biochemical evidence. *Photochem Photobiol* 58:771-776, 1993.
194. Takahara H, Zaidi SIA, **Mukhtar H**, Masafumi H, Epstein WL and Fukuyama K.: Purification and characterization of NADPH-cytochrome P-450 reductase from rat epidermis. *J Cellular Biochem* 53:206-212, 1993.
195. **Mukhtar H**, Katiyar SK and Agarwal R: Green tea and skin - anticarcinogenic effects. *J Invest Dermatol* 102:3-7, 1994.
196. Khan SG, Bickers DR, **Mukhtar H** and Agarwal R: Ras p21 farnesylation in ultraviolet B radiation-induced tumors in the skin of SKH-1 hairless mice. *J Invest Dermatol* 102:754-758, 1994.
197. Agarwal R, Jugert FK, Khan SG, Bickers DR, Merk HF and **Mukhtar H**: Evidence for multiple inducible cytochrome P450 isozymes in SENCAR mouse skin by pyridine. *Biochem Biophys Res Commun* 199:1400-1406, 1994.
198. Jugert FK, Agarwal R, Kuhn A, Bickers DR, Merk HF and **Mukhtar H**: Multiple cytochrome P450 isozymes in murine skin: induction of P450 1A, 2B, 2E and 3A by dexamethasone. *J Invest Dermatol* 102:970-975, 1994.
199. Katiyar SK, Agarwal R and **Mukhtar H**: Inhibition of spontaneous and photoenhanced lipid peroxidation in mouse epidermal microsomes by epicatechin derivatives from green tea. *Cancer Lett* 79:61-66, 1994.
200. Agarwal R, Katiyar SK, Lundgren DW and **Mukhtar H**: Inhibitory effect of silymarin, an anti-hepatotoxic flavonoid, on 12-*O*-tetradecanoylphorbol-13-acetate-induced epidermal ornithine decarboxylase activity and mRNA in SENCAR mice. *Carcinogenesis* 15:1099-1103, 1994.
201. **Mukhtar H**, Zaidi SIA, Raza H and Agarwal R.: Differential expression of glutathione S-transferase isozymes in murine and human skin tumors. *Int J Oncol* 6:37-43, 1995.
202. Khan SG, Saxena R, Bickers DR, **Mukhtar H** and Agarwal R: Inhibition of ras p21 membrane localization of protein kinase C isozyme expression during regression of chemicals carcinogen-induced murine skin tumors by lovastatin. *Mol Carcinogenesis* 12:205-212, 1995.
203. Khan SG, **Mukhtar H** and Agarwal R: A rapid and convenient filter-binding assay for ras p21 processing enzyme farnesyltransferase. *J Biochem Biophys Methods* 30:133-144, 1995.
204. Stoner GD and **Mukhtar H**: Polyphenols as cancer chemopreventive agents. *J Cellular Biochem* 22:169-180, 1995.
205. Katiyar SK, Rupp CO, Korman NJ, Agarwal R and **Mukhtar H**: Inhibition of 12-*O*-tetradecanoylphorbol-13-acetate and other skin tumor promoter-caused induction of epidermal -1 $\alpha$  mRNA and protein expression in SENCAR mice by green tea polyphenols. *J Invest Dermatol* 105:394-398, 1995.
206. Agarwal R and **Mukhtar H**: Cancer chemoprevention by polyphenolic compounds from green tea. *Drug News and Perspectives* 8:216-225, 1995.
207. Sizemore N, **Mukhtar H**, Couch LH, Howard PC and Rorke EA: Differential response of normal and HPV immortalized ectocervical epithelial cells to benzo (a) pyrene. *Carcinogenesis* 16:2413-2418, 1995.
208. Katiyar SK, Elmets CA, Agarwal R and **Mukhtar H**: Protection against ultraviolet B radiation-induced local and systemic suppression of contact hypersensitivity responses in C3H/HeN mice by green tea polyphenols. *Photochem Photobiol* 62:855-861, 1995.
209. Anderson C, Herr A, Robbins R, Hasan R, Athar M, **Mukhtar H** and Elmets CA: Metabolic requirements for induction of contact hypersensitivity to immunotoxic polycyclic hydrocarbons. *J Immunol* 155:3530-3537, 1995.
210. Bergstresser PR, Elmets CA, Takashima A and **Mukhtar H**: Photocarcinogenesis. *Photodermatol Photoimmunol Photomed* 11:181-184, 1995.

211. Katiyar SK and **Mukhtar H**: Tea in chemoprevention of cancer: epidemiologic and experimental studies (Review). *Int J Oncol* 8:221-238, 1996.
212. Elmets CA and **Mukhtar H**: Ultraviolet radiation and skin cancer: Progress in pathophysiologic mechanisms. *Progress in Dermatology* 30:1-16, 1996.
213. Khan SG, Mohan RR, Katiyar SK, Wood GS, Bickers DR, **Mukhtar H** and Agarwal R: Mutations in ras oncogenes: rare events in ultraviolet B radiation-induced mouse skin tumorigenesis. *Mol Carcinogenesis* 15:96-103, 1996.
214. Katiyar SK, Agarwal R and **Mukhtar H**: Inhibition of tumor promotion in SENCAR mouse skin by ethanol extract of *zingiber officinale* rhizome. *Cancer Res* 56:1023-1030, 1996.
215. Agarwal R, Korman NJ, Mohan RR, Feyes DK, Jawed S, Zaim MT and **Mukhtar H**: Apoptosis is an early event during phthalocyanine-photodynamic therapy-induced ablation of chemically-induced squamous papillomas in mouse skin. *Photochem Photobiol* 63:547-552, 1996.
216. **Mukhtar H** and Elmets CA: Photocarcinogenesis: Mechanisms, models and human health implications (Invited Review). *Photochem Photobiol* 63:355-447, 1996.
217. Agarwal R and **Mukhtar H**: Chemoprevention of photocarcinogenesis. *Photochem Photobiol* 63:440-444, 1996.
218. Khan SG, Dummer R, Siddiqui J, Bickers DR, Agarwal R and **Mukhtar H**: Farnesyltransferase activity and mRNA expression in human skin basal cell carcinomas. *Biochem Biophys Res Commun* 220:795-801, 1996.
219. Mohan RR, Katiyar SK, Khan SG, Zaim MT, **Mukhtar H** and Agarwal R: Protective effective of all trans-retinoic acid against tumor promotion and progression in low- and high risk protocols of mouse skin chemical carcinogenesis. *Int J Oncol* 8:1079-1088, 1996.
220. Siddiqui J, Haqqi TM, Bickers DR and **Mukhtar H**: Identification and partial characterization of novel genes by differential display of mRNAs in squamous papillomas induced in skin of SENCAR mice. *Int J Oncol* 9:211-216, 1996.
221. **Mukhtar H** and Agarwal R: Skin cancer chemoprevention. *J Invest Dermatol Symp Proceedings* 1:209-214, 1996.
222. Ahmad N, Agarwal R and **Mukhtar H**: Cytochrome P-450-dependent drug metabolism in skin. *Clinics in Dermatology* 14:407-415, 1996.
223. **Mukhtar H**: Consumption of black tea and cancer risk: a prospective cohort study. *J Natl Cancer Inst* 88:768, 1996.
224. Singh SV, Mohan RR, Agarwal R, Benson PJ, Hu X, Rudy MA, Xia H, Katoh H, Srivastava SK, **Mukhtar H**, Gupta V and Zaren HA. A novel anti-carcinogenic activity of an organosulfide from garlic: Inhibition of H-ras oncogene transformed tumor growth *in vivo* by diallyl disulfide is associated with inhibition of p21 H-ras processing. *Biochem Biophys Res Commun* 225:660-665, 1996.
225. Ahmad N, Agarwal R and **Mukhtar H**: Cytochrome P-450 and drug development for skin diseases. *Skin Pharmacology* 9:231-241, 1996.
226. Agarwal R, Mohan RR, Ahmad N and **Mukhtar H**: Protection against malignant conversion in SENCAR mouse skin by all *trans* retinoic acid: Inhibition of the ras p21-processing enzyme farnesyltransferase and H-ras p21 membrane localization. *Mol Carcinogenesis* 17:13-22, 1996.
227. Chatterjee ML, Agarwal R and **Mukhtar H**: Ultraviolet B radiation-induced DNA lesions in mouse epidermis: an assessment using a novel <sup>32</sup>P-postlabelling technique. *Biochem Biophys Res Commun* 229:590-595, 1996.
228. He J, Larkin HE, Li YS, Rihter BD, Zaidi SIA, Rodgers MA, **Mukhtar H**, Kenney ME and Oleinick NL: The synthesis, photophysical and photobiological properties and *in vitro* structure-activity-relationships of a set of silicon phthalocyanine PDT photosensitizers. *Photochem Photobiol* 65:581-586, 1997.
229. Katiyar SK, Mohan RR, Agarwal R and **Mukhtar H**: Protection against induction of mouse skin papillomas with low and high risk of conversion to malignancy by green tea polyphenols. *Carcinogenesis* 18:497-502, 1997.
230. Ahmad N, Srivastava RS, Agarwal R and **Mukhtar H**: Nitric oxide synthase and skin tumor promotion. *Biochem Biophys Res Commun* 232:328-331, 1997.
231. Anderson C, Hrabovsky S, McKinley Y, Tubesing K, Tang HP, Dunbar R, **Mukhtar H** and Elmets CA: Phthalocyanine photodynamic therapy: disparate effects of pharmacologic inhibitors on cutaneous photosensitivity and on tumor regression. *Photochem Photobiol* 65:895-901, 1997.

232. Katiyar SK, Korman NJ, **Mukhtar H** and Agarwal R: Protective effects of silymarin against photocarcinogenesis in a mouse skin model. *J Natl Cancer Inst* 89:556-566, 1997.
233. Katiyar SK and **Mukhtar H**: Inhibition of phorbol ester tumor promoter 12-O-tetradecanoylphorbol-13-acetate-caused inflammatory responses in SENCAR mouse skin by black tea polyphenols. *Carcinogenesis* 18:1911-1916, 1997.
234. Zi X, **Mukhtar H** and Agarwal R: Novel cancer chemopreventive effects of a flavonoid antioxidant silymarin: inhibition of mRNA expression of an endogenous tumor promoter TNF $\alpha$ . *Biochem Biophys Res Commun* 239:334-339, 1997.
235. Challa A, Ahmad N and **Mukhtar H**: Cancer prevention through sensible nutrition. *Int J Oncol* 11:1387-1392, 1997.
236. Yamawaki M, Katiyar SK, Anderson CY, Tubesing KA, **Mukhtar H** and Elmets CA: Genetic variation in low-dose UV-induced suppression of contact hypersensitivity and in the skin photocarcinogenesis response. *J Invest Dermatol* 109:716-721, 1997.
237. Ahmad N, Feyes DK, Nieminen Anna-Liisa, Agarwal R and **Mukhtar H**: Green tea constituent epigallocatechin 3-gallate and induction of apoptosis and cell cycle arrest in human carcinoma cells. *J Natl Cancer Inst* 89:1881-1886, 1997. **Featured commentary on the paper in journal.**
238. Elmets CA, Anderson CY and **Mukhtar H**: Genotypic differences in host immunoreactivity and their effect on the development of polycyclic hydrocarbon-induced tumors. *Environmental Toxicol Pharmacol* 4:289-293, 1997.
239. Katiyar SK and **Mukhtar H**: Tea antioxidants in cancer chemoprevention. *J Cellular Biochem Supplement* 27:59-67, 1997.
240. Anderson CY, Freye K, Tubesing KA, Li YS, Kenney ME, **Mukhtar H** and Elmets CA: A comparative analysis of phthalocyanine photosensitizers for in vivo photodynamic therapy of RIF1 tumors in C3H mice. *Photochem Photobiol* 67:332-336, 1998.
241. Balasubramanian S, Ahmad N, Jeedigunta S and **Mukhtar H**: Alterations in cell cycle regulation in mouse skin tumors. *Biochem Biophys Res Commun* 243:744-748, 1998.
242. Gupta S, Ahmad N and **Mukhtar H**: Involvement of nitric oxide during phthalocyanine (Pc 4)-photodynamic therapy-mediated apoptosis. *Cancer Res* 58:1785-1788, 1998.
243. Ahmad N, Feyes DK, Agarwal R and **Mukhtar H**: Photodynamic therapy results in induction of WAF1/C1P1/P21 leading to cell cycle arrest and apoptosis. *Proc Natl Acad Sci USA* 95:6977-6982, 1998.
244. Rorke EA, Sizemore N, **Mukhtar H**, Couch LH and Howard PC: Polycyclic aromatic hydrocarbons enhance terminal cell death of human ectocervical cells. *Int J Oncol*. 13:557-563, 1998.
245. Yamawaki M, Katiyar S, Anderson CY, Tubesing KA, **Mukhtar H** and Elmets CA: UV immunosuppression and skin cancer. *J Invest Dermatol*. 111:706-708, 1998.
246. Baron JM, Zwadlo-Klarwasser G, Jugert F, Hamann W, Rübber A, **Mukhtar H** and Merk HF: Cytochrome P450 1B1: A major P450 isoenzyme in human blood monocytes and macrophage subsets. *Biochem Pharmacol* 56:1105-1110, 1998.
247. Elmets CA, Athar M, Tubesing KA, Rothaupt D, Xu Hui and **Mukhtar H**: Susceptibility to the biological effects of polyaromatic hydrocarbons is influenced by genes of the major histocompatibility complex. *Proc Natl Acad Sci, USA* 95:14915-14919, 1998.
248. Colussi VC, Feyes DK and **Mukhtar H**: Perspective of photodynamic therapy in dermatology. *Skin Pharmacol and Appl Skin Physiol* 11:336-346, 1998.
249. Mohan RR, Challa A, Gupta S, Bostwick DG, Ahmad N, Agarwal R, Marengo SR, Amini SB, Paras F, MacLennan GT, Resnick MI and **Mukhtar H**: Overexpression of ornithine decarboxylase in prostate cancer and prostatic fluid in humans. *Clin Cancer Res* 5:143-147, 1999.
250. Balasubramanian S, Kim K-H, Ahmad N and **Mukhtar, H**: Activation of telomerase and its association with G1-phase of the cell cycle during UVB-induced skin tumorigenesis in SKH-1 hairless mouse. *Oncogene* 18:1297-1302, 1999.
251. Colussi VC, Feyes DK, Mulvihill JW, Li Y-S, Kenney ME, Elmets CA, Oleinick NL and **Mukhtar H**: Phthalocyanine 4 (Pc 4) photodynamic therapy of human ovc3 tumor xenografts. *Photochem Photobiol* 69:236-241, 1999.

252. Katiyar SK, Matsui MS, Elmets CA and **Mukhtar H**: Polyphenolic antioxidant (-)-epigallocatechin-3-gallate from green tea reduces UVB-induced inflammatory responses and infiltration of leukocytes in human skin. *Photochem Photobiol* 69:148-153, 1999.
253. Ahmad N, Gupta S and **Mukhtar H**: Involvement of retinoblastoma (Rb) and E2F transcription factors during photodynamic therapy of human epidermoid carcinoma cells, A431. *Oncogene* 18:1891-1896, 1999.
254. Ahmad N and **Mukhtar H**: Green tea polyphenols and cancer: biologic mechanisms and practical implications. *Nutrition Reviews* 57:78-83, 1999.
255. **Mukhtar H** and Ahmad N: Mechanism of cancer chemopreventive activity of green tea. *Proc Soc Exp Biol Med* 220:234-238, 1999.
256. Haqqi TM, Anthony DD, Gupta S, Ahmad N, Lee-M-S, Kumar G and **Mukhtar H**: Prevention of collagen-induced arthritis in mice by polyphenolic antioxidants from green tea. *Proc Natl Acad Sci, USA* 96:4524-4529, 1999.
257. Gupta S, Ahmad N, Mohan RR and **Mukhtar H**: Prostate cancer chemoprevention by green tea: *in vitro* and *in vivo* inhibition of testosterone-mediated induction of ornithine decarboxylase. *Cancer Res* 59:2115-2120, 1999.
258. Gupta S, Ahmad N and **Mukhtar H**: Prostate cancer chemoprevention by green tea. *Seminars in Urologic Oncology* 17:70-76, 1999.
259. Balasubramanian S, Ahmad N and **Mukhtar H**: Upregulation of E2F transcription factors in chemically-induced mouse skin tumors. *Int J Oncol* 15:387-390, 1999.
260. **Mukhtar H**, Forbes PD and Ananthaswamy HN: Pathocarcinogenesis - Models and Mechanisms (Review). *Photodermatology, Photoimmunology and Photomedicine* 15:91-95, 1999.
261. **Mukhtar H** and Ahmad N: Cancer chemoprevention: Future holds in multiple agents: Contemporary issues in Toxicology. *Toxicol Appl Pharmacol* 158:207-210, 1999.
262. Zhao J, Jin X, Yaping E, Zheng ZS, Athar M, DeLeo VA, **Mukhtar H**, Bickers DR and Wang ZY: Photoprotective effect of black tea extracts against UVB-induced phototoxicity in skin. *Photochem Photobiol* 70:637-644, 1999.
263. Katiyar SK, Challa A, McCormick S, Cooper KD and **Mukhtar H**: **Prevention** of UVB-induced immunosuppression in mice by green tea polyphenol (-)-epigallocatechin-3-gallate may be associated with alterations in IL-10 and IL-12 production. *Carcinogenesis* 20:2117-2124, 1999.
264. Safe S, Wargovich MJ, Lamartiniere CA and **Mukhtar H**: Forum: Symposium on mechanisms of action of naturally occurring anticarcinogens. *Tox Sci* 52:1-8, 1999.
265. **Mukhtar H** and Ahmad N: Green tea in chemoprevention of cancer. *Toxicological Sciences* 52S:111-117, 1999.
266. Gupta S, Srivastava M, Ahmad N, Bostwick DG and **Mukhtar H**: Over-expression of cyclooxygenase-2 in human prostate adenocarcinoma. *The Prostate* 42:73-78, 2000.
267. Chiu SM, Davis T, Myers M, Ahmad N, **Mukhtar H** and Separovic D: Phthalocyanine 4-photodynamic therapy induces ceramide generation and apoptosis in acid sphingomyelinase-deficient mouse embryonic fibroblasts. *International J Oncol* 16:423-427, 2000.
268. Gupta S, Ahmad N, Nieminen A-L and **Mukhtar H**: Induction of apoptosis and cell cycle arrest by green tea constituent (-)-epigallocatechin-3-gallate in both androgen-sensitive and androgen-insensitive human prostate carcinoma cells. *Toxicol Appl Pharmacol*. 164:82-90, 2000.
269. Kalka K, Merk HF and **Mukhtar H**: Photodynamic therapy in dermatology. CME article *J Amer Acad Dermatol* 42:389-413, 2000.
270. Katiyar SK, Matsui MS and **Mukhtar H**: Ultraviolet-B exposure to human skin induces cytochromes P450 CYP 1A1 and CYP 1B1. *J Invest Dermatol* 114:328-333, 2000.
271. Ahmad N, Gupta S, Husain MM, Heiskanen KM and **Mukhtar H**: Differential anti-proliferative and apoptotic response of sanguinarine for cancer cells vs normal cells. *Clin Cancer Res* 6:1524-1528, 2000.
272. Ahmad N, Gupta S and **Mukhtar H**: Green tea polyphenol epigallocatechin-3-gallate (EGCG) differentially modulates nuclear factor kappa B (NF-kB) in cancer cells vs normal cells. *Arch Biochem Biophys* 376:338-346, 2000.
273. Whitacre CM, Feyes DK, Satoh T, Grossmann J, Mulvihill JW, **Mukhtar H** and Oleinick NL: Photodynamic therapy with the phthalocyanine photosensitizer Pc 4 of SW 480 human colon cancer xenografts in athymic mice. *Clin Cancer Res* 6:2021-2027, 2000.

274. Islam S, Islam N, Kermode T, Johnstone B, **Mukhtar H**, Moskowitz RW, Goldberg VM, Malemud CJ and Haqqi TM: Involvement of caspase-3 in epigallocatechin-3-gallate-mediated apoptosis of human chondrosarcoma cells. *Biochem Biophys Res Commun* 270:793-797, 2000.
275. **Mukhtar H** and Ahmad N: Tea polyphenols: Prevention of cancer and optimizing health. *Amer J Clin Nutr* 71:1698S-1702S, 2000.
276. Kalka K, **Mukhtar H**, Turowski-Wanke A and Merk HF: Biomelanin antioxidants in cosmetics: Assessment based on inhibition of lipid peroxidation. *Skin Pharmacology and Applied Skin Physiology* 13:143-149, 2000.
277. Katiyar SK, Ahmad N and **Mukhtar H**: Green tea and skin. *Arch Dermatol* 136:989-994, 2000.
278. Ahmad N, Cheng P and **Mukhtar H**: Cell cycle dysregulation by green tea polyphenol epigallocatechin-3-gallate. *Biochem Biophys Res Commun*. 275:328-334, 2000.
279. Gupta S, Ahmad N, Marengo SR, MacLennan GT, Greenberg NM and **Mukhtar H**: Chemoprevention of prostate carcinogenesis by  $\alpha$ -difluoromethylornithine in TRAMP mice. *Cancer Res* 60:5125-5133, 2000.
280. Katiyar SK, Perez A and **Mukhtar H**: Green tea polyphenol treatment to human skin prevents formation of ultraviolet light B-induced pyrimidine dimers in DNA. *Clin Cancer Res* 6:3864-3869, 2000.
281. Athar M, Kim AL, Ahmad N, **Mukhtar H**, Gautier J and Bickers DR: Mechanism of Ultraviolet B-induced cell cycle arrest in G2/M phase in immortalized skin keratinocytes with defective P53. *Biochem Biophys Res Commun* 277:107-111, 2000.
282. Kalka K, Ahmad N, Criswell T, Boothman D and **Mukhtar H**: Upregulation of Clustrin during Pc4 photodynamic therapy-mediated apoptosis of tumor cells and ablation of mouse skin tumors. *Cancer Res* 60:5984-5987, 2000.
283. Ahmad N, Gupta S, Feyes DK and **Mukhtar H**: Involvement of Fas (APO-1/CD-95) during photodynamic therapy-mediated apoptosis in human epidermoid carcinoma A431 cells. *J. Invest Dermatol* 115:1041-1046, 2000.
284. Katiyar SK, Matsui M and **Mukhtar H**: Kinetics of ultraviolet light induced cyclobutane pyrimidine dimers in human skin *in vivo*: An immunohistochemical analysis of both epidermis and dermis. *Photochem Photobiol* 72:788-793, 2000.
285. Azizuddin K, Kalka K, Chiu S-M, Ahmad N, **Mukhtar H** and Separovic D: Recombinant human tumor necrosis factor alpha does not potentiate cell killing after photodynamic therapy with a silicon phthalocyanine in A431 human epidermoid carcinoma cells. *Int J Oncol* 18:411-415, 2001.
286. Subbarayan M, Shetty S J, Srivastava T S, Noronha O P D, Samuel A M and **Mukhtar H**: Water soluble  $^{99m}$ Tc-labeled dendritic novel porphyrins for tumor imaging and diagnosis. *Biochem Biophys Res Commun* 281:32-36, 2001.
287. Katiyar SK, Afaq F, Perez A and **Mukhtar H**: Green tea polyphenol (-)-epigallocatechin-3-gallate treatment to human skin inhibits ultraviolet radiation-induced oxidative stress. *Carcinogenesis* 22:287-294, 2001.
288. Elmets CA, Singh D, Tubesing K, Matsui MS, Katiyar SK and **Mukhtar H**: Cutaneous photoprotection from ultraviolet injury by green tea polyphenols. *J Am Acad Dermatol* 44:425-432, 2001.
289. Gupta S, Srivastava M, Ahmad N, Sakamoto K, Bostwick DG and **Mukhtar H**: Lipoxygenase-5 is overexpressed in human prostate adenocarcinoma. *Cancer* 91:737-743, 2001.
290. Katiyar SK and **Mukhtar H**: Green tea polyphenol (-)-epigallocatechin-3-gallate treatment to mouse skin prevents UVB-induced infiltration of leukocytes, depletion of antigen presenting cells and oxidative stress. *J Leukocyte Biology* 69:719-726, 2001.
291. Ahmad N and **Mukhtar H**: Cutaneous photochemoprotection by green tea: A brief review. *Skin Pharmacol and Appl Skin Physiol* 14:69-76, 2001.
292. Ahmad N, Kalka K and **Mukhtar H**: In vitro and in vivo inhibition of epidermal growth factor receptor-tyrosine kinase pathway by photodynamic therapy. *Oncogene* 20:2314-2317, 2001.
293. Ahmad N, Adhami VM, Afaq F, Feyes DK and **Mukhtar H**: Reseveratrol causes WAF-1/P21-mediated G1-phase arrest of cell cycle and induction of apoptosis in human epidermoid carcinoma A431 cells. *Clinical Cancer Res* 7:1466-1473, 2001.
294. Srivastava M, Gupta S, Ahmad N and **Mukhtar H**: Involvement of bcl 2 and bax in photodynamic therapy mediated apoptosis: Antisense bcl2 oligonucleotide sensitizes RIF1 cells to PDT-apoptosis. *J. Biol Chem* 276:15481-15488, 2001.
295. Ahmad N, Gilliam AC, Katiyar SK, O'Brien TG and **Mukhtar H**: A definitive role of ornithine decarboxylase in photocarcinogenesis. *Amer J Pathol* 159:885-892, 2001.

296. Gupta S, Hastak K, Ahmad N, Lewin JS and **Mukhtar H**: Inhibition of prostate carcinogenesis in TRAMP mice by oral infusion of green tea polyphenols. *Proc Natl Acad Sci* 98:10350-10355, 2001.
297. Afaq F and **Mukhtar H**: Effects of solar radiation on cutaneous detoxification pathways. *J Photochem Photobiol B*. 63:61-69, 2001.
298. Katiyar SK, Afaq F, Azizuddin K, Perez A and **Mukhtar H**: Inhibition of UVB-induced oxidative stress-mediated phosphorylation of mitogen-activated protein kinase signaling pathways in cultured human epidermal keratinocytes by green tea polyphenol (-)-epigallocatechin-3-gallate. *Tox Appl Pharmacol* 176:110-117, 2001. Featured on the cover of the journal.
299. Elmets CA, Katiyar S, Xu H and **Mukhtar H**: Host defense mechanisms in polyaromatic hydrocarbon carcinogenesis. *Skin Pharmacol and Appl Skin Physiol* 14:386-392, 2001.
300. Gupta S and **Mukhtar H**: Chemoprevention of skin cancer through natural agents. *Skin Pharmacol and Appl Skin Physiol* 14:373-385, 2001.
301. Gupta S, Afaq F and **Mukhtar H**: Selective Growth-inhibitory, cell cycle deregulatory and apoptotic response of apigenin in normal versus human prostate carcinoma cells. *Biochem. Biophys. Res. Commun* 287:914-920, 2001.
302. Berger SJ, Gupta S, Belfi CA, Gosky DM and **Mukhtar H**: Green tea constituent (-)-epigallocatechin-3-gallate inhibits topoisomerase 1 activity in human colon carcinoma cells. *Biochem Biophys Res Commun* 288:101-105, 2001.
303. Islam S, Kermod T, Sultana D, Moskowitz RW, **Mukhtar H**, Malemud CJ, Goldberg VM and Haqqi TM: Expression profile of protein tyrosine kinase genes in human osteoarthritis chondrocytes. *Osteoarthritis and Cartilage* 9:684-693, 2001.
304. Ahmad N, Adhami VM, Gupta S, Cheng P and **Mukhtar H**: Role of retinoblastoma (pRb-E2F/DP pathway in cancer chemopreventive effects of green tea polyphenol epigallocatechin-3-gallate. *Arch Biochem Biophys* 398:125-131, 2002.
305. Afaq F, Adhami VM, Ahmad N and **Mukhtar H**: Botanical antioxidants for chemoprevention of photocarcinogenesis. *Frontiers in Biosciences* 7:784-792, 2002.
306. Singh AK, Seth P, Anthony P, Husain MM, Madhavan S, **Mukhtar H** and Maheshwari RK: Green tea constituent epigallocatechin-3-gallate inhibits angiogenic differentiation of human endothelial cells. *Arch Biochem Biophys* 401:29-37, 2002.
307. Wang SI and **Mukhtar H**: Gene expression profile in human prostate LNCaP cells by (-)-epigallocatechin-3-gallate. *Cancer Lett* 182:43-51, 2002.
308. Wang SI and **Mukhtar H**: A high-efficiency translational control element with potential for cancer gene therapy. *Int J Oncol* 20:1269-1274, 2002.
309. Gupta S, Afaq F and **Mukhtar H**: Involvement of nuclear factor-kappa B, Bax and Bcl2 in induction of cell cycle arrest and apoptosis by apigenin in human prostate carcinoma cells. *Oncogene* 21:3727-3738, 2002.
310. Gupta S and **Mukhtar H**: Green tea and prostate cancer. *Urol Clin North Am* 29:49-57, 2002.
311. Afaq F and **Mukhtar H**: Photochemoprevention by botanical antioxidants. *Skin Pharmacol Appl Skin Physiol* 15:297-306, 2002.
312. An KP, Athar M, Tang X, Katiyar S, Russo J, Beech J, Aszterbaum M, Kopelovich L, Epstein EH, **Mukhtar H** and Bickers DR: Cyclooxygenase-2 expression in murine and human nonmelanoma skin cancers: Implications for therapeutic approaches. *Photochem Photobiol* 76:73-80, 2002.
313. Gupta S and **Mukhtar H**: Chemoprevention of skin cancer: Current status and future prospects. *Cancer and Metastasis Reviews* 20:363-380, 2002.
314. Subbarayan M, Hafeli UO, Feyes DK, Unnithan J, Emancipator SN and **Mukhtar H**: A simplified method for the preparation of <sup>99m</sup>Tc-annexin V and its biological evaluation for in vivo imaging of apoptosis after photodynamic therapy. *J Nuclear Med* 44:650-656, 2003
315. Hussain T, Gupta S and **Mukhtar H**: Cyclooxygenase-2 and prostate carcinogenesis, *Cancer Lett* 191:125-135, 2003.
316. Gupta S, Hussain T, MacLennan GT, Fu P, Patel J and **Mukhtar H**: Differential expression of S100A2 and S100A4 during progression of human prostate adenocarcinoma. *J Clin Oncol* 21:106-112, 2003.
317. Afaq F, Adhami VM, Ahmad N and **Mukhtar, H**: Inhibition of Ultraviolet-B-Mediated Activation of Nuclear Factor kB in human epidermal keratinocytes by green tea constituent (-) epigallocatechin-3-gallate. *Oncogene* 22:1035-1044, 2003.



318. Gupta S, Hussain T and **Mukhtar H**: Molecular pathway for (-) epigallocatechin-3-gallate-induced cell cycle arrest and apoptosis of human prostate carcinoma cells. *Arch Biochem Biophys* 410:177-185, 2003.
319. F'guyer S, Afaq F and **Mukhtar H**: Photochemoprevention of skin cancer by botanical agents. *Photodermatol, Photoimmunol and Photomed* 19: 56-72, 2003
320. Siddiqui I, Afaq F and **Mukhtar H**: Tea in promotion of human health. *International J Tea Sciences* 2: 6-19, 2003.
321. Adhami VM, Ahmad N and **Mukhtar H**: Molecular targets for green tea in prostate cancer prevention. *J. Nutr* 133: 2417S-2424S, 2003. **Featured on the cover of the journal.**
322. Hastak K, Gupta S, Ahmad N, Agarwal MK, Agarwal ML and **Mukhtar H**: Role of p53 and NF-kB in epigallocatechin-3-gallate induced apoptosis of LNCaP cells. *Oncogene* 22:4851-4859, 2003.
323. Afaq F, Ahmad N and **Mukhtar H**: Suppression of UVB-induced phosphorylation of mitogen activated protein kinase and nuclear factor kappa B by green tea polyphenol in SKH-1 hairless mice. *Oncogene* 22:9254-9264, 2003.
324. Adhami VM, Aziz MH, **Mukhtar H** and Ahmad N: Activation of pro-death Bcl-2 family proteins and mitochondrial apoptosis pathway by sanguinarine in immortalized human HaCaT keratinocytes. *Clin Cancer Res* 9: 3176-3182, 2003.
325. Lee J, **Mukhtar H**, Bickers D, Kopelovich L and Athar M: Cyclooxygenases in the skin: Pharmacological and Toxicological Implications. *Toxicol Appl Pharmacol* 92:294-306, 2003.
326. Saleem M, Adhami VM, Siddiqui IS and **Mukhtar H**: Tea beverage in chemoprevention of prostate cancer: A mini review. *Nutrition and Cancer* 47:13-23, 2003.
327. Siddiqui, IS, Adhami VM, Afaq F, Ahmad N and **Mukhtar H**: Modulation of phosphatidylinositol-3 kinase B- and mitogen activated protein kinase-pathways by tea polyphenols in human prostate cancer cells. *J Cellular Biochem* 91:232-242, 2004.
328. Gupta S, Hastak K, Ahmad N and **Mukhtar H**: Essential role of caspases in epigallocatechin-3-gallate-mediated inhibition of nuclear factor kB and induction of apoptosis. *Oncogene* 23:2507-2522, 2004.
329. Afaq F, Saleem M, Aziz MH and **Mukhtar H**: Inhibition of 12-O-tetradecanoyl-13-acetate-induced tumor promotion markers in CD-1 mouse skin by oleandrin. *Toxicol Appl Pharmacol* 195:361-369, 2004.
330. Ahmad N and **Mukhtar H**: Toxicology of the skin: new and emerging concepts. *Toxicol Appl Pharmacol* 195:265-266, 2004. **Featured on the cover of the journal.**
331. Gupta M, Adhami VM, Substrayan M, MacLennan GT, Lewin JS, Hafeli UO and **Mukhtar H**: Suppression of prostate carcinogenesis by dietary supplementation of celecoxib in FuP mice. *Transgenic adenocarcinoma of the mouse prostate model. Cancer Res* 64, 3334-3343, 2004.
332. Siddiqui IA, Afaq F, Adhami VM, Ahmad N and **Mukhtar H**: Antioxidants of the beverage tea in promotion of human health. *Antioxid Redox Signal* 6: 571-582, 2004.
333. Saleem M, Aziz M and **Mukhtar H**: Lupeol modulates NF-kB and PI3/AKT pathways and inhibits skin cancer in CD-1 mice. *Oncogene* 23: 5203-5214, 2004.
334. Adhami VM, Aziz MH, Reagan-Shaw SR, **Mukhtar H** and Ahmad N: Sanguinarine causes cell cycle blockade and apoptosis of human prostate carcinoma cells via modulation of cyclin kinase inhibitor –cyclin-cyclin dependent kinase machinery. *Mol Cancer Ther* 3: 933-940, 2004.
335. Ahmad N and **Mukhtar H**: Cytochrome P450: A target for drug development for skin diseases. *J Invest Dermatol* 123: 417-425, 2004.
336. Adhami VM, Siddiqui IA, Ahmad N, Gupta S and **Mukhtar H**: Oral consumption of green tea polyphenols inhibits insulin-like growth factor I induced signaling in an autochthonous mouse model of prostate cancer. *Cancer Res* 64: 8715-8722, 2004.
337. Afaq F, Saleem M and **Mukhtar H**: Anthocyanins and hydrolyzable tannins rich pomegranate fruit extract modulates MAPKs and NF-kB pathways and inhibits skin tumorigenesis in CD-1 mice. *Int J Cancer* 113: 413-423, 2005. **Featured on the cover of the journal.**
338. Saleem M, Adhami VM, Ahmad N, Gupta S and **Mukhtar H**: Prognostic significance of metastasis – associated protein S100A4 (Mts1) in prostate cancer progression and chemoprevention regimes in an autochthonous mouse model. *Clin Cancer Res* 11: 147-153, 2005.
339. Hussain T, Gupta S, Adhami VM and **Mukhtar H**: Green tea constituent epigallocatechin-3-gallate selectively inhibits Cox-2 but not Cox-1 expression in human prostate cancer cells. *Int J Cancer* 113: 660-669, 2005.

340. Nihal, M, Ahmad, N, **Mukhtar H** and Wood GS: Differential anti-proliferative effects of (-) epigallocatechin-3-gallate on human melanoma cells versus normal human melanocytes; Possible implications for the chemoprevention of melanoma. *Int J Cancer* 114: 513-521, 2005.
341. Hastak K, Agarwal MK, **Mukhtar H** and Agarwal ML: Ablation of either P21 or bax prevents P53-dependent apoptosis induced by green tea polyphenol epigallocatechin-3-gallate. *FASEB J* 19:789-791, 2005
342. Afaq F, Adhami VM and **Mukhtar H**: Photochemoprevention of ultraviolet B signaling and photocarcinogenesis. *Mutation Res* 571: 153-173, 2005.
343. Afaq F, Malik A, Syed D, Maes D, Matsui MS and **Mukhtar H**: Pomegranate fruit extract modulates UV-B-mediated phosphorylation of mitogen-activated protein kinases and activation of nuclear factor Kappa B in normal human epidermal keratinocytes. *Photochem Photobiol* 81: 38-45, 2005. **Featured on the cover of the journal.**
344. **Mukhtar H** and Ananthaswamy HN: Photocarcinogenesis. *Photochem Photobiol* 81: 1-2, 2005.
345. Sarfaraz S, Afaq F, Adhami VM and **Mukhtar H**: Cannabinoid receptor as a novel target for the treatment of prostate cancer. *Cancer Res* 65: 1635-1641, 2005.
346. Saleem M, Kaur S, Kweon MH, Adhami VM, Afaq F and **Mukhtar H**: Lupeol, a fruit and vegetable based triterpene, induces apoptotic death of human pancreatic adenocarcinoma cells via inhibition of Ras signaling pathway. *Carcinogenesis* 26:1956-1964, 2005.
347. Yun JM, Kweon MH, **Mukhtar H** and Hwang JK: Induction of apoptosis by panduratin A isolate from *Kaempferia pandurata* in human colon cancer HT-29 cells. *Planta Med* 71:501-507, 2005.
348. Malik A, Afaq F, Sarfaraz S, Adhami VM, Syed DN and **Mukhtar H**: Pomegranate fruit juice for chemoprevention and chemotherapy of prostate cancer. *Proc Natl Acad Sci USA* 102:14813-14818, 2005.
349. Saleem M, Kweon MH, Yun JM, Adhami VM, Hadi N, Syed DN and **Mukhtar H**: A novel dietary triterpene Lupeol induces Fas-mediated apoptotic death of androgen-sensitive prostate cancer cells and inhibits tumor growth in a xenograft model. *Cancer Res* 65:11203-11213, 2005.
350. Krewski D, Partanen T, Vahakangas K, Stuker I, Borlak J, Feron V, Marques M, Gerdfe P, Gustavsson P, Fletcher T, Arey J, Beland F, Burchiel S, Flowers L, Herbert R, **Mukhtar H**, Nesnow S, Penning T, Sinha R. Carcinogenicity of polycyclic aromatic hydrocarbons. *Lancet Oncology* 6: 931-932, 2005.
351. Siddiqui IA, Adhami VM, Saleem M and **Mukhtar H**: Beneficial effects of tea and its polyphenols against prostate cancer. *Mol Nutr Food Res* 50: 130-143, 2006.
352. Syed DN, Malik A, Hadi N, Afaq F and **Mukhtar H**: Photochemopreventive effect of pomegranate fruit extract on UVA-mediated activation of cellular pathways in normal human epidermal keratinocytes. *Photochem Photobiol* 82: 398-405, 2006.
353. Saleem M, Adhami VM, Zhong W, Longley BJ, Lin YL, Dickson RB, Reagan-Shaw S, Jarrard DF and **Mukhtar H**: A novel biomarker for staging human prostate adenocarcinoma: Overexpression of matriptase with concomitant loss of its inhibitor, HAI-1. *Cancer Epidemiol Biomarkers and Prev* 15: 217-227, 2006.
354. Yun JM, Kweon MH, Kwon H, Hwang JK and **Mukhtar H**: Induction of apoptosis and cell cycle arrest by panduratin A isolated from *Kaempferia pandurata* in androgen-independent human prostate cancer cells PC3 and DU145. *Carcinogenesis* 27:1454-1464, 2006.
355. Kweon MH, Park YI, Sung HC and **Mukhtar H**: The novel antioxidant 3-O-caffeoyl-1-methylquinic acid induces Nrf2-dependent phase II detoxifying genes and alters intracellular glutathione redox. *Free Radical Biol Med* 40: 1349-1361, 2006.
356. Siddiqui IA, Zaman N, Aziz MH, Reagan-Shaw SR, Sarfaraz S, Adhami VM, Ahmad N, Raisuddin S and **Mukhtar H**: Inhibition of CWR22Rv1 tumor growth and PSA secretion in athymic nude mice by green and black teas. *Carcinogenesis* 27:833-839, 2006.
357. Khan N, Afaq F, Saleem M, Ahmad N and **Mukhtar H**: Targeting multiple signaling pathways by green tea polyphenol EGCG. *Cancer Res* 66: 2500-2505, 2006.
358. Malik A and **Mukhtar H**: Prostate cancer prevention through pomegranate juice. *Cell Cycle* 5: 371-373, 2006.
359. Bhatia N, Thiyagarajan S, Elcheva I, Saleem M, Dlugosz A, **Mukhtar H** and Spiegelman VS: GLI2 is targeted for ubiquitination and degradation by  $\beta$ -TRCP ubiquitin ligase. *J Biol Chem* 281:19320-19326, 2006.
360. Adhami VM and **Mukhtar H**: Polyphenols from green tea and pomegranate for prevention of prostate cancer. *Free Radicals Research* 40:1095-1104, 2006.
361. Afaq F and **Mukhtar H**: Botanical antioxidants in prevention of photocarcinogenesis and photoaging. *Exp Dermatol* 15:678-684, 2006.

362. Kweon MH, Adhami VM and **Mukhtar H**: Constitutive overexpression of Nrf-2-dependent heme oxygenase-1 in A549 cells contributes to resistance to apoptosis by EGCG. *J Biol Chem* 281:33761-33772, 2006.
363. Sarfaraz S, Afaq, Adhami VM, Malik A and **Mukhtar H**: Cannabinoid receptor agonist induced apoptosis of human prostate cancer cells LNCaP proceeds through sustained activation of ERK  $\frac{1}{2}$  leading to G1 cell cycle arrest. *J Biol Chem* 281: 39480-39491, 2006.
364. Adhami VM, Afaq F and **Mukhtar H**: Insulin-like growth factor-1 axis as a pathway for cancer chemoprevention. *Clin Cancer Res* 12:5611-5614, 2006.
365. Saleem M, Kweon MH, Johnson JJ, Shami VM, Elcheva I, Khan N, Hafeez BB, Bhat KM, Sarfaraz S, Reagan-Shaw S, Spiegelman VS, Staluri V and **Mukhtar H**: S100A4 accelerates tumorigenesis and invasion of human prostate cancer through the transcriptional regulation of MMP-9. *Proc Natl Acad Sci, USA* 103:14825-14830, 2006.
366. Khan N, Hadi N, Afaq F, Syed DN, Kweon MH and **Mukhtar H**: Pomegranate fruit extract inhibits prosurvival pathways in A549 lung carcinoma cells and tumor growth in athymic nude mice. *Carcinogenesis* 28:163-173, 2007.
367. Afaq F, Syed DN, Malik A, Hadi N, Sarfaraz S, Kweon MH and **Mukhtar H**: Delphinidin, an anthocyanidin in pigmented fruits and vegetables, protects HaCaT keratinocytes against UVB-induced oxidative stress and apoptosis. *J Invest Dermatol* 127: 222-232, 2007.
368. Syed DN, Afaq A, Kweon MH, Hadi N, Bhatia N, Spiegelman, VS and **Mukhtar H**: Green tea polyphenol EGCG suppresses cigarette smoke condensate-induced NF $\kappa$ B activation in normal human bronchial epithelial cells. *Oncogene* 26: 673-682, 2007.
369. Khan N, Afaq F and **Mukhtar H**: Apoptosis by dietary factors: the suicide solution for delaying cancer growth. *Carcinogenesis* 28: 233-239, 2007.
370. Adhami VM, Malik A, Zaman N, Sarfaraz S, Siddiqui IA, Syed DN, Afaq F, Pasha FS, Saleem M and **Mukhtar H**. Combined inhibitory effects of green tea polyphenols and selective Cox-2 inhibitors on growth of human prostate cancer cells both *in vitro* and *in vivo*. *Clin Cancer Res* 13:1611-1619, 2007.
371. **Mukhtar H**, Afaq F and Matsui MS. Fishing for Allergens Hiding as Prohaptens. *J Invest Dermatol* 127:992-993, 2007.
372. Amin AR, Thakur VS, Paul RK, Feng GS, Qu CK, **Mukhtar H** and Agarwal ML. SHP-2 tyrosine phosphatase inhibits p73-dependent apoptosis and expression of a subset of p53 target genes induced by EGCG. *Proc Natl Acad Sci, USA* 104:5419-5424, 2007.
373. Kweon MH, Afaq F, Bhat K, Setaluri V and **Mukhtar H**: A novel antioxidant 3-O-caffeoyl-1-methylquinic acid enhances ultraviolet A-mediated apoptosis in immortalized HaCaT keratinocytes via Sp1-dependent transcriptional activation of p21WAF1/Cip1. *Oncogene* 26: 3559-3571, 2007.
374. Khan N, Afaq F, Kweon MH, Kim KM and **Mukhtar H**: Oral consumption of pomegranate fruit extract inhibits growth and progression of primary lung tumors in mice. *Cancer Res* 67:3475-3482, 2007.
375. Ahsan H, Reagan-Shaw S, Eggert DM, Tan TC, Afaq F, **Mukhtar H** and Ahmad, N: Protective effect of sanguinarine on ultraviolet B-mediated damages in SKH-1 hairless mouse skin: implications for prevention of skin cancer. *Photochem Photobiol* 83: 986-993, 2007.
376. Abu Zaid M, Afaq F, Syed DN, Dreher M and **Mukhtar H**: Inhibition of UVB-mediated oxidative stress and markers of photoaging in immortalized HaCaT keratinocytes by pomegranate fruit extract POMx. *Photochem Photobiol* 83: 882-888, 2007.
377. Johnson JJ and **Mukhtar H**: Curcumin for chemoprevention of colon cancer. *Cancer Lett* 255: 170-181, 2007.
378. Syed DN, Afaq F, **Mukhtar H**: Pomegranate derived products for cancer chemoprevention. *Semin Cancer Biol* 17: 377-385, 2007.
379. Khan N, **Mukhtar H**: Tea polyphenols for health promotion. *Life Sci* 81: 519-533, 2007.
380. Ahsan H, Reagan-Shaw S, Eggert DM, Tan TC, Afaq F, **Mukhtar H**, Ahmad, N: Protective effect of Sanguarine on ultraviolet B-mediated damages in SKH-1 hairless mouse skin. *Photochem Photobiol* 83: 986-993, 2007.
381. Siddiqui IA, Saleem M, Adhami VM, Asim, M and **Mukhtar H**: Tea beverage in chemoprevention and chemotherapy of prostate cancer. *Acta Pharmacologica Sinica* 28: 1392-1408, 2007.
382. Adhami VM and **Mukhtar H**: Anti-oxidants from green tea and pomegranate for chemoprevention of prostate cancer. *Mol Biotechnology* 37: 52-57, 2007.

383. Syed DN, Khan N, Afaq F and **Mukhtar H**: Chemoprevention of prostate cancer through dietary agents: progress and promise. *Cancer Epidemiol Biomarkers Prev* 16:2193-2203, 2007.
384. Siddiqui IA, Afaq F, Adhami VM and **Mukhtar H**: Prevention of prostate cancer through custom tailoring of chemopreventive regimen. *Chem Biol Interact* 171: 122-132, 2008.
385. Sarfaraz S, Adhami VM and **Mukhtar H**: Cannabinoids for cancer treatment: Progress and Promise. *Cancer Res* 68: 339-342, 2008.
386. Siddiqui IA, , Malik A, Adhami VM, Asim M, Hafeez BB, Sarfaraz S and **Mukhtar H**: Green tea polyphenol EGCG sensitizes human prostate carcinoma LNCaP cells to TRAIL-mediated apoptosis and synergistically inhibits biomarkers associated with angiogenesis and metastasis. *Oncogene* 27: 2055-2063, 2008.
387. Reagan-Shaw S, **Mukhtar H** and Ahmad N: Resveratrol imparts photoprotection of normal cells and enhances the efficacy of radiation therapy in cancer cells. *Photochem Photobiol* 84: 415-421, 2008.
388. Asim M, Siddiqui IA, Hafeez BB, Baniahmad A and **Mukhtar H**: Src kinase potentiates androgen receptor transactivation function and invasion of androgen-independent prostate cancer C4-2 cells. *Oncogene* 27: 3596-3604, 2008.
389. Khan N, Afaq F and **Mukhtar H**: Cancer chemoprevention through dietary antioxidants: progress and promise. *Antioxid Redox Signal* 10: 475-570, 2008. **Featured on the cover of the journal.**
390. Ke M, Xue L, Feyes D, Azizuddin K, Baron E, McCormick T, **Mukhtar H**, Panneerselvam A, Schluchter M, Cooper K, Oleinick N and Stevens S: Apoptosis mechanisms related to the increased sensitivity of jurkat T-cells vs A431 epidermoid cells to photodynamic therapy with the phthalocyanine PC 4. *Photochem Photobiol* 84: 407-414, 2008.
391. Saleem M, Maddodi N, Zaid MA, Khan N, Hafeez BB, Asim M, Suh Y, Yun JM, Setaluri V and **Mukhtar H**: Lupeol inhibits growth of highly aggressive human metastatic melanoma cells in vitro and in vivo by inducing apoptosis. *Clin Cancer Res* 14: 2119-2127, 2008. **Featured on the cover of the journal.**
392. Mays JR, Weller Roska RL, Sarfaraz S, **Mukhtar H** and Rajsiki SR: Identification, synthesis, and enzymology of non-natural glucosinolate chemopreventive candidates. *Chembiochem* 9: 728-747, 2008.
393. Siddiqui IA, Shukla Y, Adhami VM, Sarfaraz S, Asim M, Hafeez BB and **Mukhtar H**: Suppression of NFkappaB and its regulated gene products by oral administration of green tea polyphenols in an autochthonous mouse prostate cancer model. *Pharm Res* 25: 2135-2142, 2008.
394. Johnson JJ, Syed DN, Heren CR, Suh Y, Adhami VM and **Mukhtar H**: Carnosol, a dietary diterpene, displays growth inhibitory effects in human prostate cancer PC3 cells leading to G(2)-phase cell cycle arrest and targets the 5'-AMP-activated -protein kinase (AMPK) pathway. *Pharm Res* 25: 2125-2134, 2008.
395. Khan N, Afaq F, Syed DN, **Mukhtar H**: Fisetin, a novel dietary flavonoid causes apoptosis and cell-cycle arrest in human prostate cancer LNCaP cells. *Carcinogenesis* 29: 1049-1056, 2008.
396. Syed DN, Suh Y, Afaq F, **Mukhtar H**: Dietary agents for chemoprevention of prostate cancer. *Cancer Lett* 265: 167-176, 2008.
397. Syed DN, Afaq F, Sararaz S, Khan N, Kedlaya R, Setaluri V, **Mukhtar H**: Delphinidin inhibits cell proliferation and ivasion via modulation of Met receptor phosphorylation. *Toxicol Appl Pharmacol* 231: 52-60, 2008. **Featured on the cover of the journal.**
398. Afaq F, Zaman N, Khan N, Syed D, Sarfaraz S, Zaid M, **Mukhtar H**. Inhibition of epidermal growth factor receptor signaling pathway by delphinidin, an anthocyanidin in pigmented fruits and vegetables. *Int. J. Cancer* 123: 1508-15, 2008. **Featured on the cover of the journal.**
399. Hafeez BB, Siddiqui IA, Asim M, Malik A, Afaq F, Adhami VM, Saleem M, Din M and **Mukhtar H**: A dietary anthocyanidin delphinidin induces apoptosis of human prostate cancer PC3 cells *in vitro* and *in vivo*: Involvement of NF-kB signaling. *Cancer Res* 68: 8564-8572, 2008.
400. Khan N and **Mukhtar H**: Multitargeted therapy of cancer by green tea polyphenols. *Cancer Lett* 269: 269-280, 2008.
401. Yun JM, Afaq F, Khan N and **Mukhtar H**: Delphinidin, an anthocyanidin in pigmented fruits and vegetables, induces apoptosis and cell cycle arrest in human colon cancer HCT116 cells. *Molecular Carcinogenesis* 48:260-270, 2009.
402. Sarfaraz S, Siddiqui IA, Syed DN, Afaq F and **Mukhtar H**: Guggulsterone modulates MAPK and NF-kappaB pathways and inhibits skin tumorigenesis in SENCAR mice. *Carcinogenesis* 29: 2011-2018, 2008.

403. Reagan-Shaw S, Ahsan N, **Mukhtar H** and Ahmad N: Combination of vitamin E and selenium causes an induction of apoptosis of human prostate cancer cells by enhancing Bax/Bcl-2 ratio. *Prostate* 68: 1624-1634, 2008.
404. Khan N, Asim M, Afaq F, Zaid MA and **Mukhtar H**: A novel dietary flavonoid fisetin inhibits androgen receptor signaling and tumor growth in athymic nude mice. *Cancer Res* 68: 8555-8563, 2008.
405. Khan N, Adhamsi VM and **Mukhtar H**: Apoptosis by dietary agents for prevention and treatment of cancer. *Biochem Pharmacol* 76: 1333-1339, 2008.
406. Hafeez BB, Asim M, Siddiqui IA, Adhamsi VM and **Mukhtar H**: Delphinidin, a dietary anthocyanidin in pigmented fruits and vegetables: A new weapon to blunt prostate cancer growth. *Cell Cycle* 7: 3320-3326, 2008.
407. Suh Y, Afaq F, Johnson JJ and **Mukhtar H**: A plant flavonoid fisetin induces apoptosis in colon cancer cells by inhibition of COX2 and Wnt/EGFR/NF- $\kappa$ B signaling pathways. *Carcinogenesis* 30:300-307, 2009.
408. Hafeez BB, Adhamsi VA, Asim M, Siddiqui IA, Bhat K, Zhong W, Saleem M, Din M, Setaluri V and **Mukhtar H**: Targeted Knockdown of *Notch1* Inhibits Invasion of Human Cancer Cells Concomitant with Inhibition of MMP9 and uPA. *Clin Cancer Res* 15: 452-459, 2009.
409. Adhamsi VM, Siddiqui IA, Sarfaraz S, Khwaja S, Hafeez BB, Ahmad N and **Mukhtar H**: Effective prostate cancer chemopreventive intervention with green tea polyphenols in the TRAMP model depends on the stage of the disease. *Clin Cancer Res* 15: 1947-1953, 2009.
410. Murtaza I, Saleem M, Adhamsi VM, Hafeez BB and **Mukhtar H**: Suppression of cFLIP by lupeol, a dietary triterpene, is sufficient to overcome resistance to TRIAL-mediated apoptosis in chemoresistant human pancreatic cancer cells. *Cancer Res* 69: 1156-1165, 2009.
411. Siddiqui IA, Adhamsi VM, Bharali D, Hafeez BB, Asim M, Khwaja S, Ahmad N, Cui H, Mousa S and **Mukhtar H**: Introducing nanochemoprevention as a novel approach for cancer control: Proof-of-principle with green tea polyphenol epigallocatechin-3-gallate. *Cancer Res* 69: 1712-1716, 2009.
412. Saleem M, Murtaza I, Tarapore R, Suh Y, Adhamsi VM, Johnson JJ, Siddiqui IA, Khan N, Asim M, Hafeez BB, Shekhani MT, Li B and **Mukhtar H**: Lupeol inhibits proliferation of human prostate cancer cells by targeting b-catenin signaling. *Carcinogenesis* 30: 808 – 817, 2009.
413. Afaq, F, Abu Zaid M, Khan N, Dreher M and **Mukhtar H**: Protective effect of pomegranate-derived products on UVB-mediated damage in human reconstituted skin. *Exp. Dermatol* 18:553-561, 2009.
414. Afaq F, Abu Zaid M, Pelle E, Khan N, Syed D N, Matsui M S, Maes D and **Mukhtar H**: Aryl hydrocarbon receptor is an ozone sensor in human skin. *J Invest Dermatol* 129: 2396 – 2403, 2009.
415. Nihal M, Ahsan H, Siddiqui IA, **Mukhtar H**, Ahmad N and Wood GS: Epigallocatechin-3-gallate (EGCG) sensitizes melanoma cells to interferon induced growth inhibition in a mouse model of human melanoma. *Cell Cycle* 8: 2057 – 2063, 2009.
416. Murtaza I, Adhamsi V, Hafeez B, Saleem M and **Mukhtar H**: Fisetin, a natural flavonoid, targets chemoresistant human pancreatic cancer AsPC-1 cells through DR3-mediated inhibition of NF-kappaB. *International Journal of Cancer* 125: 2465 - 2473, 2009.
417. Siddiqui IA, Tarapore RS and **Mukhtar H**: Prevention of skin cancer by green tea: past, present and future. *Cancer Biol Ther* 8: 1288 – 1291, 2009.
418. Adhamsi VM, Khan N and **Mukhtar H**: Cancer Chemoprevention by pomegranate: Laboratory and clinical evidence. *Nutrition and Cancer* 61: 811 – 815, 2009
419. Khan N, Adhamsi VM and **Mukhtar H**: Green tea polyphenols in chemoprevention of prostate cancer: Preclinical and clinical studies. *Nutr Cancer* 61: 836 – 841, 2009
420. Johnson JJ, Bailey HH and **Mukhtar H**: Green tea polyphenols for prostate cancer chemoprevention: a transitional perspective. *Phytomedicine* 17: 3 – 13, 2010.
421. Khan N, Adhamsi VM and **Mukhtar H**: Apoptosis by dietary agents for prevention and treatment of prostate cancer. *Endocr Relat Cancer* 17: R39 - 52, 2010.
422. Khan N, Adhamsi VM and **Mukhtar H**: Lifestyle as risk factor for cancer: Evidence from human studies. *Cancer Lett* 293: 133-143, 2010.
423. Siddiqui IA and **Mukhtar H**: Nanochemoprevention by bioactive food components: A perspective. *Pharm Res* 27: 1054-1060, 2010, **featured on the cover of the journal**.
424. Peng Li, Khan N, Afaq F, Ye C and **Mukhtar H**: In vitro and in vivo effects of water extract of white cocoa tea (*Camellia ptilophylla*) against human prostate cancer. *Pharm Res* 27:1128-1137, 2010

425. Prasad AS, **Mukhtar H**, Beck FW, Adhami VM, Siddiqui IA, Din M, Hafeez BB and Kucuk O: Dietary zinc and prostate cancer in the TRAMP mouse model. *Journal of Medicinal Foods* 13: 70 – 76, 2010.
426. Thakur VS, Ruhul Amin AR, Paul RK, Gupta K, Hastak K, Agarwal MK, Jackson MW, Wald DN, Agarwal ML and **Mukhtar H**: p53- dependent p21-mediated growth arrest pre-empts and protects HCT116 cells from PUMA-mediated apoptosis induced by EGCG. *Cancer Lett* 296:225-232, 2010.
427. Reagan-Shaw S, Eggert D, **Mukhtar H** and Ahmad N: Antiproliferative effects of apple peel extract against cancer cells. *Nutr Cancer* 62: 517-524, 2010.
428. Suh Y, Afaq F, Khan N, Johnson JJ, Khusro FH and **Mukhtar H**: Fisetin induces autophagic cell death through suppression of mTOR signaling pathway in prostate cancer cells. *Carcinogenesis* 31:1424-1433, 2010.
429. Johnson JJ, Syed D, Suh Y, Heren C, Saleem M, Siddiqui I and **Mukhtar H**: Disruption of androgen and estrogen receptor activity in prostate cancer by a novel dietary diterpene carnosol. *Cancer Prevention Research* 3: 1112-1123, 2010.
430. Tarapore R, Siddiqui I, Saleem M, Adhami V, Spiegelman V and **Mukhtar H**: Specific targeting of Wnt/B-catenin signaling in human melanoma cells by the dietary triterpene lupeol. *Carcinogenesis* 31: 1844-1853, 2010.
431. Khan N and **Mukhtar H**: Cancer and metastasis: prevention and treatment by green tea: *Cancer and Metastasis Reviews* 29: 435-445, 2010.
432. Siddiqui IA, Adhami VM, Ahmad N and **Mukhtar H**: Nanochemoprevention: Sustained release of bioactive food components for cancer prevention. *Nutr Cancer* 62: 883-890, 2010.
433. Afaq F, Khan N, Syed D and **Mukhtar H**: Oral feeding of pomegranate fruit extract inhibits early biomarkers of UVB radiation-induced carcinogenesis in SKH-1 hairless mouse epidermis. *Photochem Photobiol* 86: 1318-1326, 2010.
434. Siddiqui I, Asim M, Adhami V, Tarapore R and **Mukhtar H**: Green Tea polyphenol EGCG blunts androgen receptor function in prostate cancer. *The FASEB Journal* 25: 1198 -1207, 2011.
435. Jung-Hynes B, Schmit TL, Reagan-Shaw SR, Siddiqui IA, **Mukhtar H** and Ahmad N: Melatonin, a novel Sirt1 inhibitor, imparts anti-proliferative effects against prostate cancer in vitro and in vivo in TRAMP model. *J Pineal Research* 50:140-149, 2011.
436. Ledesma MC, Jung-Hynes B, Schmit TL, Kumar R, **Mukhtar H** and Ahmad N: Selenium and vitamin E for prostate cancer: Post-SELECT status. *Molecular Medicine* 17: 134-143, 2011.
437. Siddiqui IA, Spiegelman VS and **Mukhtar H**: Specific Targeting of Wnt/ (beta)-catenin signaling in human melanoma cells by a dietary triterpene lupeol. *Carcinogenesis* 32: 121, 2011.
438. Syed D, Afaq F, Maddodi N, Johnson JJ, Sarfraz S, Ahmad A, Setaluri V and **Mukhtar H**: Inhibition of human melanoma cell growth by dietary flavonoid fisetin is associated with disruption of Wnt/(beta)-catenin signaling and decreased Mitf levels. *J Invest. Dermatol* 131: 1291-1299, 2011.
439. Chamcheu JC, Siddiqui IA, Syed DN, Adhami VM, Liovic M and **Mukhtar H**: Keratin gene mutations in disorders of human skin and its appendages. *Arch Biochem Biophys* 508: 123-137, 2011.
440. Ndiaye M, Philippe C, **Mukhtar H** and Ahmad N: The grape antioxidant resveratrol for skin disorders: *Promise, Prospects, and Challenges*. *Arch Biochem Biophys* 508: 164-170, 2011.
441. **Mukhtar H** and Wood GS: Guest Editorial: Biochemistry and Biophysics of the skin. Introduction. *Arch Biochem Biophys* 508 : 121-122, 2011.
442. Syed DN and **Mukhtar H**: Botanicals for the prevention and treatment of cutaneous melanoma. *Pigment Cell Melanoma Res* (In Press).
443. Khan N, Afaq F, Khusro FH, Adhami VM, Suh Y and **Mukhtar H**: Dual inhibition of PI3/AKT and mTOR signaling in human non-small cell lung cancer cells by a dietary flavonoid fisetin. *Int J Cancer* (IN Press).
444. Johnson JJ, Mihal M, Siddiqui IA, Scarlet CO, Bailey HH, **Mukhtar H** and Ahmad N: Enhancing the bioavailability of resveratrol by combining it with piperine. *Mol Nutr Food Res* (In Press).

## BOOKS

1. Pharmacology of the Skin, CRC Press, 1992. ISBN 0-8493-7292-5.
2. Skin Cancer: Mechanisms and Human Relevance, CRC Press, 1994. ISBN 0-8493-7358-1.

**EDITORIAL/ FOCUS PARA/ COMMENTERY**

1. Bickers DR and **Mukhtar H**: Biogenic amine metabolism and neurodermatology. *J Invest Dermatol* 101:641, 1993.
2. **Mukhtar H**: Focus Para: Photodection of intra-abdominally disseminated tumor. *Photochem Photobiol.* 72:No4, 2000.
3. **Mukhtar H**: Focus Para: Inhibitors of apoptosis and lipid peroxidation: Are they the same? – Maybe not. *Photochem Photobiol* 72:No4, 2000.
4. **Mukhtar H**: Focus Para: Wonders of light in skin: Photolysis of 7-DHC generates caleitrol-Implications for the treatment of psoriasis. *Photochem Photobiol* 72:No6, 2000.
5. **Mukhtar H**: Focus Para: UV-A mediated increase in TNF- $\alpha$  could be blunted. *Photochem Photobiol*, 73: No2, 2001.
6. **Mukhtar H**: Focus Para: Both PDT and UVB irradiation activates inflammatory cytokine 1L-10, so what is the difference. *Photochem Photobiol*, 73: No2, 2001.
7. Merk HF, **Mukhtar H**: Preface: *Skin Pharmacol Appl Skin Physiol.* Nov-Dec; 14:349, 2001.
8. **Mukhtar H**: Focus Para: Role of reactive oxygen species in endothelial cell activation. *Photochem Photobiol*, 75: No1, 2002.
9. **Mukhtar H**: Focus Para: UVA activates AP-1. *Photochem Photobiol*, 75: No 3, 2002.
10. **Mukhtar H**: Focus Para: A dosimetric model for PDT-induced damage. *Photochem Photobiol*, 75: No 3, 2002.
11. **Mukhtar H**: Focus Para: A new beam splitting device for PDT. *Photochem Photobiol*, 76: No 6, 2002.
12. **Mukhtar H**: Focus Para: UVA enhances benzo (a) pyrene-induced DNA damage in mouse skin. *Photochem Photobiol*, 77: No 4, 2003.
13. **Mukhtar H**: Eat plenty of green leafy vegetables for photoprotection: emerging evidence. *J Invest Dermatol*, 121: (2) VIII, 2003
14. **Mukhtar H**: Focus Para: Inflammatory response from thoracic surgery followed by PDT. *Photochem Photobiol*, 78: No1, 2003.
15. **Mukhtar H**: Focus Para: Fluorescence spectroscopy in diagnostic oncology. *Photochem Photobiol*, 78: No 2, 2003.
16. **Mukhtar H**: Correspondence re: M Leone et al., Cancer prevention by tea polyphenols is linked to their direct inhibition of antiapoptotic BeL-2-family proteins. *Cancer Res* 64: 2639-2640, 2004.
17. **Mukhtar H**: Focus Para: Transportation of photosensitizer to tumors. *Photochem Photobiol*, 79: No 4, 2004.
18. **Mukhtar H**: Focus Para: New light on UV-B – induced effect in skin. *Photochem Photobiol* 80: September/October 2004.
19. **Mukhtar H**: Murdering fungi with photodynamic treatment. *Photochem Photobiol*, 80: September/October, 2004.
20. **Mukhtar H**: A new kid on the block for UV-B response in skin. *Photochem Photobiol*, 80: November/December 2004.

**CHAPTERS IN BOOKS**

1. **Mukhtar H**, Sahib MK and Kidwai JR: Induction of tyrosine aminotransferase in fetal and neonatal rat liver. *Proc Symp "Control Mechanisms in Cellular Processes."* Bhabha Atomic Research Centre, India, 8:471-479, 1973.
2. Bresnick E, Stoming, TA, **Mukhtar H** and Vaught JB: Polycyclic hydrocarbon oxides, their formation, inactivation and biologic effect. In: *Polynuclear aromatic hydrocarbons: Chemistry, Metabolism and Carcinogenesis.* (Freudenthal RI and Jones PW, Eds) Raven Press, pp 191-201, 1976.
3. **Mukhtar H**, Philpot RM, Lee IP and Bend JR: Developmental aspects of epoxide-metabolizing enzyme activities in adrenals, ovaries and testes of rat. *EDRA Symposium Series on Developmental Toxicology of Energy Related Pollutants*, Raven Press, New York pp 89-104, 1978.
4. Bend JR, Smith BR, Ball LM and **Mukhtar H**: Alkene and arene oxide metabolism in hepatic and extrahepatic tissues - Pharmacological and toxicological aspects. In: *Conjugation Reactions in Drug Transformation.* (Aitio A, ed) Elsevier Press, North Holland, pp 3-16, 1979.
5. Dixit R, **Mukhtar H**, Husain, R and Seth PK: Some biochemical aspects of acrylamide neuropathy in rats. *Proc. Symp. Toxicology in Defence Sciences*, India. pp 48-54, 1981.

6. **Mukhtar H** and Dixit R: Biotransformation of environmental pollutants: Toxicological and pharmacological implications. Proc Symp Toxicology in Defence Sciences, India. pp 142-146, 1981.
7. Mushtaq M, **Mukhtar H**, Dutta KK Tandon SG and Seth PK: Toxicological studies of a leachable stabilizer di-n-butyltin dilaurate. Proc Symp Toxicology in Defence Sciences, India. pp 55-59, 1981.
8. Bickers DR, **Mukhtar H** and Yang SK: Metabolism of benzo (a) pyrene by skin microsomes: comparative studies in C57BL/6N and DBA/2N mice and Sprague Dawley rats. Proceedings 6th International Symposium on polynuclear aromatic hydrocarbons, (Cooke M, Dennis AJ and Fischer GL, eds) pp 121-131, 1981.
9. Baars AJ, **Mukhtar H**, Jansen M and Breimer DD: Induction of rat hepatic glutathione-S-transferase activities by 2, 3, 7, 8-tetrachlorodibenzo (p) dioxin. Chlorinated dioxins and related compounds impact on the environment. (Hutzinger O et. al. eds) Pergamon Press, Oxford and New York. pp 393-401, 1982.
10. Das M, Seth PK and **Mukhtar H**: Aryl hydrocarbon hydroxylase activity in rat brain mitochondria. In "Cytochrome P-450, Biochemistry Biophysics and Environmental implications". (Hietanen E, Laitinen M, and Hanninen eds) Elsevier Biomedical Press. pp 671-674, 1982.
11. Lee IP, Suzuki K, Nagayama J, **Mukhtar H** and Bend JR: Hormonal regulation of cytochrome P-450 dependent monooxygenase activity and benzo (a) pyrene metabolism in rat testes. In: "Extrahepatic Drug Metabolism and Chemical Carcinogenesis", (Rydstrom J, Montelius J and Bengtsson M, eds), Elsevier Science Publishers, pp. 351-362, 1983.
12. Das M, Bickers DR and **Mukhtar H**: Inhibition of mouse epidermal polycyclic hydrocarbon metabolism and carcinogenicity by clotrimazole. In: "Polynuclear Aromatic Hydrocarbons", (Cooke M and Dennis AJ, eds) Battelle Press, Columbus, pp 215-227, 1987.
13. **Mukhtar H**, Das M and Bickers DR: Alterations in benzo (a) pyrene metabolism and its DNA adduct formation in skin of mice chronically exposed to ultraviolet-B radiation. In: "Radiation Carcinogenesis and DNA Alterations", (Burns FJ, Upton AC and Silini G, eds) Plenum Press, pp 233-241, 1987.
14. **Mukhtar H**, Asokan P, Das M, Bik DP, Howard PC, McCoy GD, Rosenkranz HS and Bickers DR: Nitroarenes are inducers of cutaneous and hepatic monooxygenases in neonatal rats: Comparison with the parent arenes. In: "Polynuclear Aromatic Hydrocarbons - A Decade of Progress", (Cooke M and Dennis AJ, eds) Battelle Press, Columbus, pp 581-594, 1987.
15. Das M, Asokan P, Bik DP, Bickers DR and **Mukhtar H**: Inhibition of benzo (a) pyrene-DNA adduct formation by naturally occurring plant phenols in epidermis of SENCAR mice. In "Polynuclear Aromatic Hydrocarbons - A Decade of Progress", (Cooke M, and Dennis AJ, eds) Battelle Press, Columbus, pp 155-158, 1987.
16. Athar M, Elmets CA, Zaim MT., Lloyd JR, Bickers DR and **Mukhtar H**: Involvement of superoxide anions in cutaneous porphyrin photosensitization: An in vivo study. Proc Soc Photoopt, 847, 193-200, 1988.
17. Merk HF and **Mukhtar H**: Cytochrome P-450 dependent metabolic pathways of endogenous and exogenous substrates in human hair roots. Proceedings Acne and Related Disorders, (Marks R. and Plewig G, eds) Martin Dunitz, pp 39-41, 1989.
18. **Mukhtar H**, Merk HF and Athar M: Skin chemical carcinogenesis. In: "Clinics in Dermatology", (Shear, N.H., ed) 7:1-10, 1989.
19. Merk HF and **Mukhtar H**: Azole antifungals. In: "Clinics in Dermatology", (Shear, N.H., ed) 7:121-127, 1989.
20. **Mukhtar H**, Leukotriene B4 catabolism by rodent and human skin. In: "Eicosanoids and the Skin", (Ruzicka T, ed) CRC Press, pp. 45-50, 1990.
21. Khan WA, Wang ZY, Das M, Athar M, Bickers DR and **Mukhtar H**: Latency of polycyclic aromatic hydrocarbon-induced skin tumorigenesis by tannic acid: Mechanistic study. In: "Polynuclear Aromatic Hydrocarbons: Measurements, Means, and Metabolism", (Cooke M, Loening K, and Merritt J, eds) Battelle Press, Columbus, pp 481-493, 1991.
22. Wang ZY, Bickers DR and **Mukhtar H**: Inhibition of 3-methylcholanthrene induced skin tumorigenesis by green tea polyphenols. In: "Polynuclear Aromatic Hydrocarbons: Measurements, Means, and Metabolism", (Cooke M, Loening K, and Merritt J, eds) Battelle Press, Columbus, pp 995-1008, 1991.
23. **Mukhtar H**, Agarwal R and Bickers DR: Cutaneous metabolism of xenobiotics and steroid hormones. In: "Pharmacology of the Skin", (Mukhtar H, ed) CRC Press, pp 89-110, 1991.
24. Raza H, Agarwal R and **Mukhtar H**: Cutaneous glutathione S-transferases. In: "Pharmacology of the Skin", (Mukhtar H, ed) CRC Press, pp 131-137, 1991.



25. **Mukhtar H:** Epidermal cytochrome P-450. In: "Pharmacology of the Skin", (Mukhtar H, ed) CRC Press, pp 139-147, 1991.
26. Merk HF, **Mukhtar H** and Hertl M: Drug induced skin disorders. In: "Pharmacology of the Skin", (Mukhtar H, ed) CRC Press, 151-166, 1991.
27. Bickers DR and **Mukhtar H:** Pharmacology of psoralen photochemotherapy. In: "Pharmacology of the Skin", (Mukhtar H, ed) CRC Press, pp 217-225, 1991.
28. Athar M, Agarwal R, Bickers DR and **Mukhtar H:** Role of reactive oxygen species in skin. In: "Pharmacology of the Skin", (Mukhtar H,ed) CRC Press, 269-279, 1991.
29. Agarwal R and **Mukhtar H:** Cutaneous chemical carcinogenesis. In: "Pharmacology of the Skin", (Mukhtar H, ed) CRC Press, 371-387, 1991.
30. **Mukhtar H,** Katiyar SK and Agarwal R: Cancer chemoprevention by green tea polyphenols. Proceedings Symposium ISTS (Yaminishi T and Tomita I, eds), pp 12-16, 1992.
31. **Mukhtar H** and Agarwal R: Cytochrome P-450-dependent metabolism of drugs and carcinogens in skin. In: "Health Risk Assessment - Dermal and Inhalation Exposure and Absorption of Toxicants", (Wang RGM, Knaak JB and Maibach H, eds) CRC Press, pp 47-62, 1992.
32. Agarwal R and **Mukhtar H:** Chemical carcinogenesis in skin: causation, mechanism and role of oncogenes. In: "Health Risk Assessment - Dermal and Inhalation Exposure and Absorption of Toxicants", (Wang RGM, Knaak JB and Maibach H, eds) CRC Press, pp 291-308, 1992.
33. Bickers DR and **Mukhtar H:** Xenobiotic metabolism in the skin. In: Environmental Threat to the skin. (Plewig G and Marks R, eds), Martin Dunitz Publishers, pp 167-171, 1992.
34. Oleinick NL, Zaidi SIA, Rihter BD, Kenney ME, Clay ME, Antunez AR and **Mukhtar H:** Photodynamic effects of silicon phthalocyanines in model cells and tumors. In: Optical Methods for Tumor Treatment and Detection: Mechanisms and Techniques in Photodynamic Therapy, vol 1645, (TJ Dougherty, ed) SPIE, pp 242-250, 1992.
35. Bickers DR and **Mukhtar H:** Skin as a portal of entry for systemic effect: Xenobiotic metabolism. In Skin Pharmacology and Toxicology: Recent Advances. (Galli CL, Hensby CN and Marinovich M, eds), Plenum Press, New York, pp 85-97, 1992.
36. Agarwal R and **Mukhtar H:** Oxidative stress in skin chemical carcinogenesis. In Oxidative Stress in Dermatology (Packer L and Fuchs J, eds.) Marcel Dekker, pp 207-242, 1993.
37. Oleinick NL, Agarwal ML, Berger NA, Berger SJ, Cheng M-F, Chatterjee S, He J, Kenney ME, Larkin HE, **Mukhtar H,** Rihter BD and Zaidi SIA: Signal transduction and metabolic changes during tumor cell apoptosis following phthalocyanine-sensitized photodynamic therapy. In: Optical Methods for Tumor Treatment and Detection: Mechanisms and Techniques in Photodynamic Therapy II, vol. 188,( Dougherty TJ, ed). SPIE Proceeding, pp 252-261, 1993.
38. Katiyar SK, Agarwal, R and **Mukhtar, H:** Introduction: Sources, occurrence, nomenclature and carcinogenicity of polycyclic aromatic hydrocarbons. In: "Liquid Chromatography of Polycyclic Aromatic Hydrocarbons", (HS Rathore ed), CRC press, pp 1-18, 1993.
39. **Mukhtar H,** Agarwal R and Katiyar SK: Anticarcinogenic and anti-inflammatory effects of green tea in murine skin. Proceedings of the 2nd International Symposium on Green Tea, Seoul, Korea. pp 35 - 46, 1993.
40. **Mukhtar H,** Katiyar SK and Agarwal R: Cancer chemoprevention by green tea components. In: "Diet and Cancer: Markers, Prevention and Treatment", (Jacobs MM, ed) Plenum Press, pp 121-132, 1994.
41. Elmets CA, Trefzer U and **Mukhtar, H:** Immunotoxicology and immunopharmacology of the skin immune system. In: "Immunotoxicology and Immunopharmacology", (Dean JH, Luster MI, Munson AE and Kimber I eds), Raven Press, New York, pp 455-472, 1994.
42. **Mukhtar H,** Mercurio MG and Agarwal R: Murine skin carcinogenesis: relevance to Humans. In Skin Cancer: Mechanisms and Human Relevance, (**Mukhtar H,** ed), CRC Press, Boca Raton, FL., pp 3-8, 1994.
43. Agarwal R, Khan SG and **Mukhtar H:** *Ras* p21 Post-translational processing: an overview and studies in skin cancer. In: "Skin Cancer: Mechanisms and Human Relevance", (**Mukhtar H,** ed), CRC Press, Boca Raton, FL, pp 293-304, 1994.
44. Agarwal R, Katiyar SK and **Mukhtar H:** Skin cancer chemoprevention by naturally occurring polyphenols. In: "Skin Cancer: Mechanisms and Human Relevance", (**Mukhtar H,** ed), CRC press, Boca Raton, FL, pp 391-399, 1994.

45. Wang ZY and **Mukhtar H**: Anticarcinogenesis of licorice and its major triterpenoid constituents. In: "Food Phytochemicals for Cancer Prevention II: teas, spices, and herbs", (Huang MT, Osawa T, Hou CT and Roson RT, eds), Washington: American Chemical Society, pp 329-334, 1994.
46. **Mukhtar H**, Zaidi SIA, Bickers DR and Elmets CA: Photoimmunology of Photodynamic Therapy. In: Photoimmunology: An Update. (Krutmann J and Elmets CA eds). Blackwell Publishers, Berlin, Germany. pp 257-264, 1995.
47. **Mukhtar H** and Katiyar SK: Cancer chemopreventive effects of tea. In: Proceedings of 95 International Tea-Quality-Human Health Symposiums, Chinese Academy of Agricultural Sciences, pp 7-15, 1996.
48. Katiyar SK and **Mukhtar H**: Tea consumption and cancer. In: Metabolic Consequences of Changing Dietary Patterns. World Rev Nutr Diet, (Simopoulos AP, ed). Vol 79, pp 154-184, 1996.
49. Agarwal R and **Mukhtar H**: Cancer Chemoprevention by polyphenols in green tea and artichoke. In: Advances in Experimental Medicine and Biology: Dietary Phytochemicals in Cancer Prevention and Treatment, Plenum Press, Volume 401, pp 35-50, 1996.
50. Ahmad N, Katiyar SK, and **Mukhtar H**: Cancer chemoprevention by tea polyphenols. In: Nutrition and Chemical Toxicity, (C. Ionanide, ed). John Wiley & Sons, England pp 301-344, 1998.
51. Lahiri M, **Mukhtar H** and Agarwal R: Reactive intermediates and skin cancer. In Testing, Predicting, and Interpreting Chemical Effects. Kitchin KT (ed) Marcel Dekker, Inc. Carinogenicity: pp 679-714, 1999.
52. Ahmad N and **Mukhtar H**: Mechanism of PDT-induced cell death. Methods in Enzymology. 139:342-358, 2000.
53. Ahmad N, Katiyar SK, and **Mukhtar H**: Antioxidants in chemoprevention of skin cancer. In: Oxidants and Antioxidant in Cutaneous Biology, J Thiele and P Elsner, eds; Karger Press, pp 128-139, 2000.
54. Katiyar SK and **Mukhtar H**: Immunotoxicity of environmental agents in the skin. In: Environmental Stressors in Health and Disease: J Fuchs and L Packer, eds; Marcel Dekker, pp 345-364, 2001.
55. Katiyar SK, Afaq F and **Mukhtar H**: Effects of solar radiation on detoxification mechanisms in the skin. In: Sun Protection in Man: Giacomoni PU (ed) Elsevier, pp 419-436; 2001.
56. Aggarwal BB, Ahmad N and **Mukhtar H**: Spices as potent antioxidants with therapeutic potential. In: Handbook of Antioxidants: E Cadenas and L Packer, eds; Marcel Dekker, pp 437-472, 2001.
57. Afaq F, Adhami VM and **Mukhtar**: The use of green tea by the elderly. In: Alternative Medicine for the Elderly (P Cherniack and N Cherniack eds.), Springer, pp 133-143, 2003.
58. Afaq F, Adhami VM, Ahmad N and **Mukhtar H**: Health benefits of tea consumption in Beverages. In: Nutritiona and Health (Wilson T and Temple NJ, eds.) pp 143-156, 2003.
59. Adhami VM, Afaq F, Ahmad N, Hara Y, and **Mukhtar H**: Tea Polyphenols as Cancer Chemopreventive Agents. In Cancer Chemoprevention Volume 1: Promising Cancer Chemopreventive Agents (Kelloff GJ, Hawk ET and Sigman CC, eds.), Humana, pp 437-449, 2004.
60. Adhami VM, Aziz MH, Ahmad N and **Mukhtar H**: Tea in chemoprevention of cancer. In Phytopharmaceuticals in Cancer Chemoprevention (Debasis Bagchi and Harry G Preuss, eds.), pp 389-424, 2005.
61. Khan N, Adhami VM, Afaq F, and Mukhtar H: Dietary phytochemicals in the chemoprevention of prostate cancer. In: Polyphenols and Health: New and Recent Advances (Vassallo N, eds.). Nova Science Publishers, Inc. NY, pp. 221-244, 2008.
62. Khan N and Mukhtar H: Green tea catechins: anticancer effects and molecular targets. In: Plant Phenolics and Human Health: Biochemistry, Nutrition and Pharmacology (Fraga C, G, Ed). John Wiley & Sons, Inc. NJ, pp. 165-181, 2008.
63. Khan N and **Mukhtar H**: Caner Chemoprevention. In: Comprehensive Toxicology (second edition). Elsevier, UK (In Press)
64. Abu Zaid M, Afaq F, Syed D and **Mukhtar H**: Botanical antioxidants for protection against damage from sunlight. In: Nutritional Cosmetics Beauty from Within (Aron Tabor and Robert Blair, eds.), Elsevier Publishers, pp161-184, 2009.
65. Afaq F and **Mukhtar H**: Botanical antioxidants for skin protection: An overview. In: Nutrition for Healthy Skin (Jean Krutmann and philippe humbert, eds.), Springer, pp 51-64, 2010

#### PUBLISHED ABSTRACTS

1. **Mukhtar H** and Krishna Murti CR: Induction of liver tyrosine aminotransferase by drugs. Symposium on molecular mechanisms of drug action. Central Drug Research Institute, Lucknow, India, 1970.
2. **Mukhtar H** and Krishna Murti CR: Dietary control of hepatic tyrosine amino transferase. "39th Annual Meeting of Soc. of Biological Chemists". Aligarh, India, 1970.
3. **Mukhtar H** and Sharma SK: In vivo effect of anti-inflammatory drugs on in vivo production of lipid peroxide. "39th Annual Meeting of Soc of Biological Chemists". India, 1970.
4. Imam SK, Dutta GP, **Mukhtar H** and Mohan Rao VK: Reduction of emetine induced inhibition of succinate hydrogenase by lysozyme in guinea pig heart. "Second International Convention of Biochemists". Baroda, India, 1970.
5. **Mukhtar H** and Sahib MK: Role of drugs in stabilization of hepatic tyrosine aminotransferase. "41st Annual Meeting of Soc of Biological Chemists". Pantnagar, India, 1972.
6. **Mukhtar H**, Kidwai JR and Sahib MK: Induction of tyrosine aminotransferase in neonatal rats. "41st Annual Meeting of Soc of Biological Chemists". Pantnagar, India, 1972.
7. **Mukhtar H**, Kidwai JR and Sahib MK: Developmental formation of certain drug metabolizing enzymes of rat liver. "41st Annual Meeting of Soc of Biological Chemists". Pantnagar, India, 1972.
8. Pandey VC, **Mukhtar H**, Azhar S, Dutta GP and Mohan Rao VK: Enzymatic changes in the gut wall of a rat infected with a virulent strain of *Entamoeba histolytica*. "41st Annual Meeting of Soc of Biological Chemists". Pantnagar, India, 1972.
9. **Mukhtar H** and Sahib MK: Induction of tyrosine aminotransferase in fetal and neonatal rat liver. "Symposium on Control Mechanisms in Cellular Processes." Bhabha Atomic Research Centre, Bombay, India, February 18, 1973.
10. **Mukhtar H**, Sharma SK and Prasad R: Membrane changes in hypercholes terolemic rabbits. "International Symposium on Biomembranes". Medurai, India, December, 1973.
11. **Mukhtar H** and Bresnick E: Glutathione-S-epoxide transferase in rodent tissues and in human foreskin. "Third Annual Meeting of Southeastern Cancer Research Association". October, 1975.
12. **Mukhtar H**, Jerina DM and Bresnick E: Effect of phenobarbital and 3 methylcholanthrene administration on epoxide hydrase(s) levels in rat liver microsomes. *Fed Proc* 34:726-727, 1975.
13. **Mukhtar H** and Bend JR: Serum glutathione-S-transferase activity: A leak of enzyme from liver? *Toxicol Appl Pharmacol* 41:161, 1977.
14. Bend JR, **Mukhtar H**, Foureman GL and Lee IP: Epoxide metabolizing enzyme activities in steroidogenic tissues of the rat. *Fed Proc* 36:961, 1977.
15. Chuang AHL, **Mukhtar H** and Bresnick E: Inhibition of skin carcinogenesis by diethylmaleate and methionine sulfoximine. *Fed Proc* 36:348, 1977.
16. **Mukhtar H**, Maguire JH, Philpot RM and Bend JR: Enhancement of glutathione-S-transferase (GST) activity and microsomal cytochrome P-450 content in rat ovaries during pregnancy. *Pharmacologist*, 19:161, 1977.
17. Chhabra RS, Miranda CL, Bend JR, **Mukhtar H** and Zeiger E: Effects of vitamin A deficiency (A-DEF) on extrahepatic drug metabolism in the guinea pig and rabbit. *Pharmacologist* 19:160, 1977.
18. **Mukhtar H**, Philpot RM, Lee IP and Bend JR: Developmental aspects of epoxide metabolizing enzyme activities in adrenals, ovaries and testes of rat. Proceedings of the "17th Handford Biology Symposium on Developmental Toxicology of Energy-Related Pollutants". October 1977, Richland, Washington.
19. **Mukhtar H**, Maguire JH, Philpot RM and Bend RJ: Enhancement of glutathione-S-transferase (GST) activity and microsomal cytochrome P-450 content in rat ovaries during pregnancy. *Environ Health Perspect* 20:229, 1977.
20. Lee IP, Suzuki K, **Mukhtar H**, Bend JR and Dixon RL: Metabolism of benzo (a) pyrene 4, 5-oxide by the isolated perfused rat testes. *Toxicol Appl Pharmacol* 45:361, 1978.
21. Ong Tong-Man, Zeiger E, Wolf CR and **Mukhtar H**: Enzymatic activities and metabolic activation capabilities of S-9 fraction from liver homogenates of rats pretreated with various enzyme inducers. "9th Annual Meeting of Environmental Mutagen Society". February, 1978.
22. **Mukhtar H**, Elmamlouk TH and Bend JR: Mixed-function oxidase and epoxide hydrase (EH) activities in nuclear membranes prepared from rat liver. *Fed Proc* 37:270, 1978.
23. Elmamlouk TH, **Mukhtar H**, Fouts JR and Bend JR: Induction of rat hepatic microsomal and nuclear epoxide hydrase (EH) and mixed-function oxidase (MFO) activities by pretreatment with trans-stibene oxide (t-SO). *Fed Proc* 37:270, 1978.

24. Kohli KK, **Mukhtar H**, Bend JR, Albro PW and McKinney JD: Structure activity relationships of pure isomers of hexachlorobiphenyl (HCB) isomers: Effect on rat liver lipid content and xenobiotic metabolizing enzymes. *Pharmacologist* 20:177, 1978.
25. **Mukhtar H**, Leakey JEA, Elmamlouk TH, Fouts JR and Bend JR: Precocious development of hepatic glutathione-S-transferase activity and cytochrome P-450 content in neonatal rat liver following glucocorticoid treatment. *Fed Proc* 38:691, 1979.
26. Sivarajah K, **Mukhtar H** and Eling TE: Activation of trans-7, 8-dihydroxy-7, 8 dihydro-benzo (a) pyrene to 7,10/8,9-teterols by prostaglandin synthetase. *Fed Proc* 38:211, 1979.
27. Dixit R, Seth PK and **Mukhtar H**: Brain glutathione-S-transferase catalyzed conjugation of a cumulative neurotoxin acrylamide. *Proc Inaugural Function Society of Toxicology (India)*, Lucknow, p 31. November, 1979.
28. Husain MM, Kumar A and **Mukhtar H**: Induction of liver drug metabolizing enzyme activities in pigeons by phenobarbital and 3-methylcholanthrene. *Proc Inaugural Function Society of Toxicology (India)*, Lucknow, November, 1979.
29. Kumar A, Husain MM and **Mukhtar H**: Hepatic and extrahepatic GST activity of wild pigeons: induction by 3-methylcholanthrene and lack of induction by phenobarbital. *Proc Inaugural Function Society of Toxicology (India)*, Lucknow, November, 1979.
30. Das M, Dixit R, Kumar A, Husain MM, **Mukhtar H** and Seth PK: Effect of 3-methylcholanthrene (3MC) administration on microsomal aryl hydrocarbon hydroxylase (AHH) and cytosolic glutathione-S-transferase (GST) activities in rat tissues. *Proc Inaugural Function Society of Toxicology (India)*, p 46. November, 1979.
31. **Mukhtar H**, Dixit R and Seth PK: Inhibition of hepatic and dermal aryl hydrocarbon hydroxylase and glutathione-S-transferase activities and of glutathione contents following skin application of acrylamide to mice. "XII Annual Meeting of Indian Pharmacological Society". Raipur, India, December, 1979.
32. Mushtaq M, **Mukhtar H** and Seth PK: Inhibition of rat hepatic mixed function oxidase activities by dibutyltin dilaurate (DBTL). "XII Annual Meeting of Indian Pharmacological Society". Raipur, India, December, 1979.
33. Lee IP, Suzuki K, **Mukhtar H**, Bend JR and Dixon RL: Hormonal regulation of cytochrome P-450, aryl hydrocarbon hydroxylase and epoxide-metabolizing enzyme activities in testis of hypophysectomized rats. *Pharmacologist* 21:191, 1979.
34. Dixit R, **Mukhtar H** and Seth PK: The conjugation of acrylamide with glutathione catalyzed by partially purified glutathione-S-transferases of rat liver. *Ind J Biochem Biophys* 17(suppl) p 67, 1980.
35. Husain MM, Kumar A and **Mukhtar H**: Hepatic mixed function oxidase activities of wild pigeon and their inducibility by 3-methylcholanthrene and phenobarbital. *Ind J Biochem Biophys* 17(suppl) 27, 1980.
36. Mushtaq M, **Mukhtar H**, Dutta KK, Tandon SG and Seth PK: Toxicological evaluation of a leachable stabilizer dibutyltin dilaurate (DBTL). *Symposium on Toxicology in Defence Research*, Gwalior, India, February, 1980.
37. Dixit R, Husain R, **Mukhtar H** and Seth PK: Some aspects of acrylamide neurotoxicity. *Symposium on Toxicology in Defence Research*, Gwalior, India, February, 1980.
38. **Mukhtar H**: Biotransformation of environmental pollutants: toxicological and pharmacological implications. *Symposium on Toxicology in Defence Research*, Gwalior, India, February, 1980.
39. **Mukhtar H**: The nuclear envelope as a site of glucuronyl transferase in rat liver: properties of and effect of inducers on, enzyme activity. *International Symposium on Cell Proliferation and Differentiation*, Madras, India. February, 1980.
40. Seth PK, Dixit R, **Mukhtar H** and Krishna Murti CR: Brain glutathione-S transferase: conjugation of acrylamide. "XIth Annual Meeting of American Society of Neurochemistry". p 75, 1980.
41. Das M, Seth PK and **Mukhtar H**: Glutathione-S-transferase activity in developing rat brain and its inducibility by mixed-function oxidase inducers. "XIII Annual Meeting of Indian Pharmacological Society". Jammu, Kashmir, India, 1980.
42. Dixit R and **Mukhtar H**: Identity of glutathione-S-transferase with acrylamide binding protein of rat liver and brain cytosol. *Ind J Biochem Biophys* 18(suppl) 1980.
43. Baars AJ, **Mukhtar H**, Jansen M and Breimer DD: Induction of rat liver glutathione-S-transferase by TCDD. *Workshop on Chlorinated Dioxines*, October, 1980. Roma (Italy).
44. Dixit R, **Mukhtar H** and Seth PK: Studies on in vitro binding of acrylamide with bovine serum albumin. "XIII Annual Meeting of Indian Pharmacological Society". Jammu, Kashmir, India, 1980.

45. Das M, Seth PK and **Mukhtar H**: Cytochrome P-450 dependent aryl hydrocarbon hydroxylase activity in rat brain microsomes. *Ind J Biochem Biophys* 18 (suppl), p 154, 1981.
46. **Mukhtar H**, Zoetemelk CEM, Baars AJ, Meera Khan P and Breimer DD: Comparative glutathione-S-transferase activities in human and rat tissues. Annual Dutch Federation, Amsterdam, 1981.
47. **Mukhtar H**, Baars AJ, Jansen M and Breimer DD: Inducibility of particulate and cytosolic rat liver glutathione-S-transferase activities. Annual Dutch Federation, Amsterdam, 1981.
48. Seth PK, Dixit R and **Mukhtar H**: Interaction of acrylamide with brain glutathione-S-transferase: a mechanism of its neurotoxicity. "Eighth Meeting of the International Society for Neurochemistry". Nottingham, UK Sept. 6-11, 1981.
49. Bickers DR, Marcelo CL, Choudhury T, Hubbard W and **Mukhtar H**: Drug metabolizing enzyme activity and benzo (a) pyrene metabolism in cultured keratinocytes. *Pharmacologist* 23:166, 1981.
50. **Mukhtar H**, Choudhury T, Hubbard W, Banks F and Bickers DR: Comparative activities of drug metabolizing enzymes in dermis and epidermis of neonatal rats. *Pharmacologist* 23:213, 1981.
51. **Mukhtar H**, Marcelo C and Hubbard W: Benzo (a) pyrene metabolism in keratinocytes cultured from Balb-C mouse epidermis, AFCR Nov 7, Chicago.
52. Bickers DR and **Mukhtar H**: Patterns of polynuclear aromatic hydrocarbons by skin microsomal enzyme. Sixth International Symposium on Polynuclear Aromatic Hydrocarbons. Battelle Columbus Laboratories, Oct 27-29, 1981.
53. Das M, Seth PK and **Mukhtar H**: Brain mitochondrial aryl hydrocarbon hydroxylase. 52nd Annual Meeting of Society of Biological Chemist, India, Baroda, India, p 37. Dec 1981.
54. Dixit R, **Mukhtar H** and Seth PK: Biotransformation of acrylamide into mercapturic acids. 52nd Annual Meeting of Society of Biological Chemist, India, Baroda, India, Dec 1981.
55. Das M, **Mukhtar H** and Seth PK: Inhibition of rat brain and liver mixed function oxidases and glutathione-S-transferase(s) by acrylamide. Proc 2nd Annual Meeting of Society of Toxicology, India, Lucknow, p 39. November, 1981.
56. **Mukhtar H**, Marcelo C and Hubbard W: Benzo (a) pyrene metabolism in keratinocytes cultured from Balb-C mouse epidermis. *Clin Res* 29, 706A, 1981.
57. **Mukhtar H**, Marcelo CL, Cherniack E and Bickers DR: Clotrimazole: an inhibitor of microsomal aryl hydrocarbon hydroxylase (AHH) in rat skin and Balb-C mouse cultured keratinocytes. *Fed Proc* 41:1730, 1982.
58. Dixit R, Bickers DR and **Mukhtar H**: Benzo (a) pyrene binding to cytosolic protein enhances its microsomal oxidation. *Fed Proc* 41:1730, 1982.
59. Hubbard W, **Mukhtar H** and Bickers DR: Age related changes in drug carcinogen and epoxide metabolism in skin. *Fed Proc* 41:1547, 1982.
60. **Mukhtar H**, Hubbard W and Bickers DR: Drug and carcinogen metabolism in rat skin: age dependent differences in inducibility by topically applied compounds. *J Invest Dermatol* 78:338, 1982; *Clin. Res* 30:599, 1982.
61. Dixit R, **Mukhtar H** and Bickers DR: Lipid peroxide formation in epidermal microsomes: studies on the role of superoxide, hydrogen peroxide and singlet oxygen. *J Invest Dermatol* 78:352, 1982; *Clin. Res* 30:581, 1982.
62. Bickers DR, Marcelo C, Hubbard W and **Mukhtar H**: Benzo (a) pyrene metabolism in keratinocytes cultured from Balb-C mouse epidermis. *J Invest Dermatol* 78:338, 1982; *Clin Res* 30:577, 1982.
63. Bickers DR, **Mukhtar H**, Dutta-Choudhury T, Marcelo C and Voorhees JJ: Epidermal drug metabolism in normal individuals and patients with psoriasis. *Clin Res* 30:260, 1982.
64. **Mukhtar H**: Epoxide metabolism in skin. XVI International Congress of Dermatology, Tokyo, Japan, May 28, 1982.
65. Das M, Seth DK and **Mukhtar H**: Aryl hydrocarbon hydroxylase of rat brain mitochondria. 4th International Conference on Cytochrome P-450. Helsinki, Finland, June 3, 1982.
66. **Mukhtar H**, Kotake AN, Dixit R and Bickers DR: The HPLC resolution of cytochrome P-450 from solubilized neonatal rat epidermal microsomes. *Pharmacologist* 24:605, 1982.
67. Dixit R, **Mukhtar H** and Bickers DR: Destruction of hepatic microsomal cytochrome P-450 and heme by reactive oxygen species. *Pharmacologist* 24:605, 1982.
68. Bickers DR, Marcelo C, Cherniack E and **Mukhtar H**: Clotrimazole: an inhibitor of microsomal aryl hydrocarbon hydroxylase (AHH) in rat skin and Balb-C mouse keratinocytes. *Clin Res* 30:719, 1982.

69. Dixit R, **Mukhtar H** and Bickers DR: Destruction of epidermal microsomal cytochrome P-450 and drug and carcinogen metabolism by porphyrin sensitization. *Clin Res* 30:800, 1982.
70. Srivastava SP, Das M, **Mukhtar H** and Seth PK: Glutathione-S-transferase activity in brain and liver following acrylamide. 51st Annual Meeting Soc Biol Chem (India) Abstr 240, Nov 18-20, Chandigarh, India, 1982.
71. Seth PK, Das M and **Mukhtar H**: Aryl hydrocarbon hydroxylase activity in rat brain. *SEIKAGAKU (Japanese J Biochem Soc)* 54:574, 1982.
72. **Mukhtar H**: Induction of cytochrome P-450: Good or bad. Symposium on Biochemistry in Harnessing the Environment, March 3-4, Lucknow, India.
73. Bickers DR, Dixit R and **Mukhtar H**: Enhancement of bleomycin-mediated cleavage of calf thymus and epidermal DNA by epidermal microsomal enzymes. *Fed Proc* 42:512, 1983.
74. Dixit R, **Mukhtar H** and Bickers DR: Binding of benzo (a) pyrene to glutathione-S transferase. Effects on subsequent cellular translocation and microsomal metabolism of the hydrocarbon. *Fed Proc* 42:914, 1983.
75. Del Tito BJ Jr, **Mukhtar H** and Bickers DR: Alterations in enzyme-mediated binding of polycyclic aromatic hydrocarbon carcinogens to epidermal DNA by coal tar and clotrimazole. *J Invest Dermatol* 80:349, 1983, *Clin. Res* 31:562, 1983.
76. Del Tito BJ Jr, Marcelo CL, **Mukhtar H** and Bickers DR: Inhibition of metabolism and DNA-binding of benzo (a) pyrene by ellagic acid and clotrimazole in Balb/C keratinocytes. *Clin Res* 31:717, 1983.
77. **Mukhtar H**, Del Tito BJ Jr and Bickers DR: Inhibition of epidermal benzo (a) pyrene metabolism and DNA-binding by ellagic acid. *Clin Res* 31:799, 1983.
78. Bickers DR, Speck WT, Meyer LW and **Mukhtar H**: Epidermal enzyme mediated mutagenicity of 2-aminoanthracene, an aromatic amine skin carcinogen. *Clin Res* 31:761, 1983.
79. **Mukhtar H**, Del Tito BJ and Bickers DR: Inhibition of epidermal benzo (a) pyrene (BP) metabolism and DNA-binding by ellagic acid. Proc First Annual Meeting of the International Society for the Study of Xenobiotics, Nov 1983.
80. Del Tito BJ, **Mukhtar H** and Bickers DR: Inhibition of epidermal metabolism of benzo (a) pyrene (BP) by ellagic acid. *Pharmacologist* 25:187, 1983.
81. Seth PK, Srivastava PK, **Mukhtar H** and Agarwal AK: Involvement of a metabolite in neurobehavioral effects of acrylamide (ACR). *Tox Lett* 18:96, 1983.
82. **Mukhtar H**, Das M, Del Tito BJ, Marcelo CL and Bickers DR: Ellagic acid (EA) inhibits epidermal benzo (a) pyrene (BP) metabolism and 3-methylcholanthrene (MCA) skin carcinogenicity in Balb/C mice. *Fed Proc* 43:1801, 1984.
83. **Mukhtar H** and Bickers DR: Ellagic acid and clotrimazole as inhibitors of 3 methylcholanthrene (MCA)-induced skin tumorigenesis in Balb/C mice. *Clin Res* 32:605, 1984.
84. Das M, Del Tito BJ Jr, **Mukhtar H**, Marcelo CL and Bickers DR: Ellagic acid inhibits benzo(a)pyrene metabolism and enzyme-mediated DNA-binding in Balb/C mouse cultured keratinocytes. *Clin Res* 32:578, 1984.
85. Del Tito BJ Jr, Das M, Marcelo CL, **Mukhtar H** and Bickers DR: Clotrimazole: a potent inhibitor of benzo(a)pyrene BP-metabolism and covalent binding to DNA in cultured Balb/C mouse keratinocytes. *Clin Res* 32:578, 1984.
86. Bickers DR, Speck WT, Meyer LW and **Mukhtar H**: Epidermal enzyme mediated mutagenicity of 2-aminoanthracene, an aromatic amine skin carcinogen. *Clin Res* 32:571, 1984.
87. Merk HF, **Mukhtar H** and Bickers DR: Human hair follicles: accessible tissue source for measuring enzyme-mediated DNA-binding of chemical carcinogens. *Clin Res* 32:482, 1984.
88. Hawkins CW, Elmetts CA, **Mukhtar H** and Bickers DR: A new animal model for porphyrin photosensitization in the skin. *Clin Res* 32:588, 1984.
89. **Mukhtar H**, Das M, Del Tito BJ Jr and Bickers DR: Ellagic acid, a dietary plant phenol, inhibits 3-methylcholanthrene (MCA)-induced skin tumorigenesis in Balb/C mice. *Proc Amer Assoc Cancer Res* 1984.
90. **Mukhtar H**, Das M, and Bickers DR: Effect of ellagic acid on hepatic and extrahepatic benzo (a) pyrene (BP) metabolism, monooxygenases and glutathione S transferase (GST) activities. 6th International Symposium on Microsomes and Drug Oxidation. Aug 5-10, Brighton, England.
91. Bickers DR, **Mukhtar H**, Marcelo CL and Voorhees JJ: Human epidermal monooxygenase epoxide hydrolase and benzo(a)pyrene (BP) metabolism. 6th International Symposium on Microsomes and Drug Oxidation. Aug 5-10, Brighton, England.

92. Das M, **Mukhtar H** and Bickers DR: Impairment of xenobiotic metabolism in skin of mice chronically exposed to ultraviolet-B radiation. *Clin Res* 32:817A, 1984.
93. Das M, Bickers DR and **Mukhtar H**: Inhibition by clotrimazole of epidermal metabolism of polycyclic aromatic hydrocarbons and their carcinogenicity in Balb/C mice. IX International Symposium on Polynuclear Aromatic Hydrocarbons. Oct 30-Nov 1, 1984 Columbus, Ohio.
94. Das M, Dixit R, **Mukhtar H** and Bickers DR: Destruction of microsomal cytochrome P-450 by hematoporphyrin derivative photosensitization. *Fed Proc* 44:411, 1985.
95. **Mukhtar H**, Das M and Bickers DR: Protection against 3-methylcholanthrene induced skin tumorigenesis in Balb/C mice by chronic oral feeding of ellagic acid. *Fed Proc* 44:1782, 1985.
96. Das M, Bickers DR and **Mukhtar H**: Chronic oral feeding of ellagic acid inhibits 3-methylcholanthrene-induced skin tumorigenesis in Balb/C mice. *Clin Res* 33:632A, 1985; *J Invest Dermatol* 84:288, 1985.
97. Gordeuk VR, Brittenham GM, **Mukhtar H**, Hawkins CW and Bickers DR: Carbonyl iron in the treatment of hepatic failure in erythropoietic protoporphyria. *Clin Res* 33:641A, 1985; *J Invest Dermatol* 84:324, 1985.
98. **Mukhtar H**, Matgouranis PM, Del Tito BJ, Das M and Bickers DR: Additive effects of ultraviolet B and coal tar on cutaneous carcinogen metabolism. *Clin Res* 33:668A, 1985; *J Invest Dermatol* 84:332, 1985.
99. Merk HF, **Mukhtar H**, Das M and Bickers DR: 7-ethoxyresorufin O-deethylase in human hair follicles. *Proc Int Sym Clinical and Basic Aspects of Enzyme Induction and Inhibition*. Essen, W. Germany July 5-6, 1985.
100. **Mukhtar H**, Asokan P, Das M, Howard PC, McCoy GD, Rosenkranz HS and Bickers DR: Nitroarenes are inducers of cutaneous and hepatic monooxygenases in neonatal rats: comparison with the parent arene. *Proc X International Symposium on Polynuclear Aromatic Hydrocarbons*. Oct 21-23, 1985, Columbus, Ohio.
101. Das M, Asokan P, Bickers DR and **Mukhtar H**: Inhibition of benzo (a) pyrene DNA adduct formation by naturally occurring plant phenols in epidermis of SENCAR mice. *Proc X International Symposium on Polynuclear Aromatic Hydrocarbons*. Oct 21-23, 1985, Columbus, Ohio.
102. Das M, Bickers DR and **Mukhtar H**: Relative carcinogenic potency of crude coal tar in skin of SENCAR mice. *Clin Res* 33:913A, 1985.
103. **Mukhtar H**, Merk HF, Das M and Bickers DR: Inducibility of human hair follicle carcinogen metabolism by a coal tar containing shampoo. *Clin Res* 33:914A, 1985.
104. Asokan P, Das M, Santella RM, Bickers DR and **Mukhtar H**: Topical application of crude coal tar inhibits benzo(a)pyrene diol-epoxide I-DNA adduct formation in skin a lung of SENCAR mice. *Clin Exptl Dermatol* 11:320, 1986.
105. Das M, **Mukhtar H** and Bickers DR: Mechanism of photodestruction of microsomal membranes by hematoporphyrin derivative. *Clin Exptl Dermatol* 11:318, 1986.
106. Don PSC, Das M, **Mukhtar H**, Berger NA and Bickers DR: Carcinogen metabolism and DNA-binding and UV-induced repair of DNA damage in cultured skin fibroblasts from a patient with multiple basal cell carcinoma. *Clin Exptl Dermatol* 11:320, 1986.
107. **Mukhtar H**: Molecular epidemiology: hair follicle carcinogen metabolism as a marker for human cancer risk. *Clin Exptl Dermatol* 11:319, 1986.
108. **Mukhtar H**, Bik DP, Das M and Bickers DR: Hepatic microsomal w-oxidation of Leukotriene B4. *Fed Proc* 45:447, 1986.
109. Das M, Bik DP, Bickers DR and **Mukhtar H**: Inhibition of metabolism and DNA binding of polycyclic aromatic hydrocarbons (PAHS) by plant phenols in epidermis of SENCAR mice. *Fed Proc* 45:1090, 1986.
110. Asokan P, Das M, Bickers DR and **Mukhtar H**: Comparative effects of nitroarenes and their parent arenes on hepatic drug and carcinogen metabolism in rats. *Fed Proc* 45:573, 1986.
111. Das M, Bickers DR and **Mukhtar H**: Comparative tumorigenicity of crude coal tar with other polycyclic aromatic hydrocarbons in skin of Sencar mice. *J Invest Dermatol* 86:470, 1986. *Clin Res* 34:744A, 1986.
112. Asokan P, Das M, Santella RM, Bickers DR and **Mukhtar H**: Inhibition of benzo(a)pyrene diol-epoxide-I-DNA adduct formation in skin and lung of Sencar mice by crude coal tar. *J Invest Dermatol* 86:461, 1986. *Clin Res* 34:735A, 1986.
113. Don PSC, Das M, **Mukhtar H**, Berger NA and Bickers DR: Metabolism and DNA-binding of benzo(a)pyrene and UV-induced repair of DNA damage in cultured skin fibroblasts from a patient with multiple basal cell carcinoma. *J Invest Dermatol* 86:472, 1986. *Clin Res* 34:746A, 1986.
114. **Mukhtar H**, Asokan P, Das M, Don PSC, Krueger GG and Bickers DR: Carcinogen metabolism in human skin grafted onto athymic nude mice: effects of crude coal tar application. *J Invest Dermatol* 87:158, 1986.

115. Bickers DR, Das M, Steele JD and **Mukhtar H**: Multiplicity of epidermal cytochrome P-450: HPLC separation of solubilized microsomes in neonatal Sprague Dawley rats. *J Invest Dermatol* 87:130, 1986.
116. Das M, Bik DP, Bickers DR and **Mukhtar H**: Plant phenols as inhibitors of the metabolism, DNA-binding and tumorigenicity of polycyclic aromatic hydrocarbons in skin of SENCAR mice. *J Invest Dermatol* 87:134, 1986.
117. Merk HF, **Mukhtar H**, Kaufmann I, Nettersheim H, Das M and Bickers DR: Human hair follicle benzo (a) pyrene and benzo (a) pyrene 7, 8-diol metabolism: Effect of exposure to a coal tar containing shampoo. *J Invest Dermatol* 87:155, 1986.
118. Das M, Bickers DR, Krueger GG and **Mukhtar H**: Cytochrome P-450 dependent metabolism of xenobiotics in human skin grafted onto athymic nude mice. *Clin Res* 34:990A, 1986.
119. **Mukhtar H**, Das M, Steele JD and Bickers DR: HPLC separation of multiple isozymes of epidermal cytochrome P-450 in neonatal Sprague-Dawley rats. *Clin Res* 34:991A, 1986.
120. **Mukhtar H**, Das M and Bickers DR: Skin tumor initiating activity of crude coal tar as compared to other polycyclic aromatic hydrocarbons in SENCAR mice. *Clin Exptl. Dermatol* 12:151, 1987.
121. Merk HF, **Mukhtar H**, Kaufmann I, Nettersheim H, Das M and Bickers DR: 7-Ethoxyresorufin O deethylase activity in human hair follicles and its inhibition by ketoconazole - in vitro and in vivo studies. *Clin Exptl Dermatol* 12:143, 1987.
122. Bickers DR, Das M, Bik DP and **Mukhtar H**: Plant phenols as inhibitors of the metabolism, DNA-binding and tumorigenicity of polycyclic aromatic hydrocarbons in skin of SENCAR mice. *Clin Exptl Dermatol* 12:143, 1987.
123. Khan WA, Park SS, Gelboin HV, Bickers DR and **Mukhtar H**: Use of isozyme specific monoclonal antibodies to characterize the induction effects of nitrofluoranthenes on hepatic cytochrome P-450. *Fed Proc* 46:863, 1987.
124. Wang ZY, Das M, Bickers DR and **Mukhtar H**: Interaction of epicatechins derived from green tea with rat hepatic cytochrome P-450. *Fed Proc* 46:697, 1987.
125. **Mukhtar H**, Wang ZY, Zhou ZC and Bickers DR: Inhibitory effects of nordihydroquaiaretic acid (NDGA) on mutagenicity, monooxygenase activities and cytochrome P-450 and prostaglandin synthetase-dependent metabolism of benzo (a) pyrene (BP). *Fed Proc* 46:696, 1987.
126. Singh SV, Das M, **Mukhtar H**, Creadon G and Awasthi YC: Differential inhibition of rat and human glutathione S-transferase isozymes by plant phenols. *Fed Proc* 46:1492, 1987.
127. **Mukhtar H**: Anticarcinogens as an approach for skin cancer prevention. Fourth Annual Symposium of Skin Pharmacology Society, Cologne, West Germany, June 1-2, 1987.
128. Das M, Bickers DR and **Mukhtar H**: Protection against chemically induced skin tumorigenesis by naturally occurring plant phenols in Sencar mice. Fourth Annual Symposium of Skin Pharmacology Society, Cologne, West Germany, June 1-2, 1987.
129. Don PSC, **Mukhtar H**, Zaim MT, Bik DP and Bickers DR: Regional differences in cutaneous carcinogen metabolism. *J Invest Dermatol* 88:485, 1987; *Clin Res* 35:679A, 1987.
130. Khan WA, Park SS, Gelboin HV, Bickers DR and **Mukhtar H**: Characterization of cytochrome P-450 isozymes in neonatal rat epidermis using monoclonal antibodies. *J Invest Dermatol* 88:498, 1987; *Clin Res* 35:694A, 1987.
131. Lewen RL, Elmets CA, **Mukhtar H** and Bickers DR: Ablation of dimethyl benz(a)anthracene and crude coal tar induced skin tumors in Sencar mice by Photofrin-I and Photofrin-II. *J Invest Dermatol* 88:503, 1987; *Clin Res* 35:692A, 1987.
132. Athar M, **Mukhtar H** and Bickers DR: Photofrin-I and Photofrin-II mediated enhancement of lipid peroxidation in epidermal microsomes. *J Invest Dermatol* 88:475, 1987; *Clin Res* 35:667, 1987.
133. Bickers DR, Wang ZY and **Mukhtar H**: Mechanistic studies on the inhibitory effects of nordihydroquaiaretic acid on carcinogen activation. *Clin Res* 35:581A, 1987.
134. **Mukhtar H**, Das M, Wang ZY and Bickers DR: Chemopreventive action of tannic acid against chemically induced skin tumors. *J Invest Dermatol* 88:509, 1987; *Clin Res* 35:706A, 1987.
135. Elmets CA, Lewen RL, Khan WA, **Mukhtar H** and Bickers DR: Photofrin II photodynamic therapy: Pharmacokinetics and efficacy in the treatment of chemically-induced skin tumors in mice. *Photochem Photobiol* 45:103S, 1987.
136. Khan WA, Wang ZY, Das M, Bickers DR and **Mukhtar H**: Protection against polycyclic aromatic hydrocarbon-induced skin tumorigenesis by tannic acid: Mechanistic studies. Eleventh International Symposium on Polynuclear Aromatic Hydrocarbons. Gaithersburg, MD, Sept 23-25, 1987.



137. Wang ZY, Bickers DR and **Mukhtar H**: Inhibition of 3-methylcholanthrene skin tumorigenesis by green tea polyphenols. Eleventh International Symposium on Polynuclear Aromatic Hydrocarbons. Gaithersburg, MD, Sept 23-25, 1987.
138. Khan WA, Merk HF, Bickers DR and **Mukhtar H**: Induction of epidermal NAD (P) H: quinone reductase by xenobiotics. Clin Res 35:883A, 1987.
139. **Mukhtar H**, Athar A, Bik DP and Bickers DR: Cytochrome P-450 dependent metabolism of testosterone in rat skin. Clin Res 35:924A, 1987.
140. Athar M, Elmets CA, Zaim MT, Bickers DR and **Mukhtar H**: Involvement of superoxide anions in cutaneous porphyrin photosensitization: An in vivo study. Presented at meeting New Direction in Photodynamic Therapy. Cambridge, MA, Oct. 1987.
141. Wang ZY, Khan WA, Bickers DR and **Mukhtar H**: Protection against experimental skin chemical carcinogenesis in mice by green tea polyphenols. Proceedings International Tea-Quality-Human Health Symposium, pp 122-123. Hangzhou China, Nov. 4-9, 1987.
142. Merk HF, Khan WA, Bickers DR and **Mukhtar H**: Induction of epidermal and liver NAD (P) H: quinone reductase by anthralin. J Invest Dermatol 90:248, 1988.
143. Khan WA, Kuhn C, Merk HF, Park SS, Gelboin HV, Bickers DR and **Mukhtar H**: Monoclonal antibody directed analysis of induction of hepatic cytochrome P-450 isozyme(s) by clotrimazole. FASEB J 2:A563, 1988.
144. Athar M, Khan WA and **Mukhtar H**: Effect of dietary tannic acid on epidermal, lung and forestomach polycyclic aromatic hydrocarbon (PAH) metabolism and tumorigenicity. FASEB J 2:A862, 1988.
145. Elmets CA, Khan WA, Klemme J and **Mukhtar H**: Polyaromatic hydrocarbons (PAHs) are immunogens when applied topically to the skin of mice. FASEB J 2:A698, 1988.
146. Bik DP, Das M, Khan WA, Wang ZY, Athar M, Bickers DR and **Mukhtar H**: Protection against polycyclic aromatic hydrocarbon (PAH)- and N-methyl-N nitrosourea (MNU)-induced skin tumorigenesis in mice by naturally occurring plant phenols. FASEB J 2:A863, 1988.
147. Wang ZY, Khan WA, Bickers DR and **Mukhtar H**: Anticarcinogenic activity of green tea polyphenols in murine skin. Proc Amer Assoc Cancer Res 29:132, 1988.
148. Bickers DR, Khan WA, **Mukhtar H**, Park SS and Gelboin HV: Metabolic activation of carcinogens by keratinocytes. Presented at the New York Academy of Sciences Symposium entitled "Endocrine, Metabolic and Immunologic Functions of Keratinocytes." Feb 17-19, 1988.
149. Klemme JC, **Mukhtar H** and Elmets CA: Strain differences in the development of contact hypersensitivity in mice to a polyaromatic hydrocarbon. J Invest Dermatol 90:576, 1988; Clin Res 36:663A, 1988.
150. Athar M, Elmets, C., Zaim M, Bickers DR and **Mukhtar H**: Activation of xanthine oxidase pathway leading to generation of superoxide anions as a mechanism for porphyrin-mediated cutaneous photosensitization. J Invest Dermatol 90:544, 1988; Clin Res 36:630A, 1988.
151. **Mukhtar H**, Bik DP, Ruzicka T, Merk HF and Bickers DR: Cytochrome P 450-dependent-oxidation of leukotriene B4 in rodent and human epidermis keratinocytes. J Invest Dermatol 90:591, 1988; Clin Res 36:677A, 1988.
152. Wang ZY, Bickers DR and **Mukhtar H**: Anticarcinogenic activity of nordihydroguaiaretic acid in murine skin. J Invest Dermatol 90:615, 1988; Clin Res 36:702A, 1988.
153. Khan WA, Merk HF, Park SS, Gelboin HV, Bickers DR and **Mukhtar H**: Use of monoclonal antibodies to identify epidermal cytochrome P-450 isozymes induced in rats by topical application of therapeutic crude coal tar. J Invest Dermatol 90:575, 1988; Clin Res 36:661A, 1988.
154. Bickers DR, Athar M and **Mukhtar H**: Metal-substituted phthalocyanines: novel photosensitizers for use in photoradiation therapy of cutaneous cancer. Clin Res 36:549A, 1988.
155. Krutmann J, Athar M, Mendel D, Khan IU, Guyre PM, **Mukhtar H** and Elmets CA: Inactivation of the ligand binding site of the human monocyte Fc receptor following porphyrin photosensitization. Clin Res 36:377A, 1988.
156. Kronberger A, Khan WA, **Mukhtar H**, Welgus HG, Bickers DR, and Bauer EA: Murine carcinogenesis is associated with collagenase-stimulatory cytokines. Clin Res 36:550A, 1988.
157. Elmets CA, Klemme JC and **Mukhtar H**: Genetic variation in the development of contact hypersensitivity in mice to a polyaromatic hydrocarbon carcinogen. Skin Pharmacology 1:55, 1988.

158. Khan WA, Merk HF, Park SS, Gelboin HV, Bickers DR and **Mukhtar H**: Induction of hepatic ethanol-inducible isozyme of cytochrome P-450 by clotrimazole in rats. *Skin Pharmacology* 1:57, 1988.
159. Bickers DR, Athar M and **Mukhtar H**: Protection against active oxygen species. *Skin Pharmacology* 1:49, 1988.
160. **Mukhtar H**, Athar M, Elmetts CA, Zaim MT and Bickers DR: Mechanism of Photofrin-II-induced skin photosensitization: Involvement of the xanthine oxidase pathway. *Skin Pharmacology* 1:58, 1988.
161. Khan IU, Athar M, Mendel D, Krutmann J, **Mukhtar H**, Guyre PM and Elmetts CA: Porphyrin photosensitization inhibits Fc RI receptor expression on human monocytes in a highly specific manner. *Clin Res* 1988.
162. Athar M, **Mukhtar H** and Bickers DR: Photodestruction of microsomal membrane by chloroaluminum phthalocyanine tetrasulfonate. *Clin Res* 1988.
163. Khan WA, Park SS, Gelboin HV, Bickers DR and **Mukhtar H**: Monoclonal antibody-based radioimmunoassay of cytochrome P-450 isozymes in rat epidermis. *Clin Res* 1988.
164. Khan WA, Park SS, Gelboin HV, Bickers DR and **Mukhtar H**: Immunochemical characterization of epidermal cytochrome P-450. *FASEB J* 3:A584, 1989.
165. Athar M, Bickers DR and **Mukhtar H**: Inhibition of benzoyl peroxide tumor promotion in 7,12-dimethylbenz(a)anthracene treated skin of Sencar mice by the antioxidants nordihydroguaiaretic acid and diallyl sulfide. *J Invest Dermatol* 92:398, 1989.
166. Bickers DR, Khan WA, Park SS, Gelboin HV and **Mukhtar H**: Immunochemical characterization of cytochrome P-450 isozymes in rat epidermis. *J Invest Dermatol* 92:403, 1989.
167. **Mukhtar H**, Athar M, Lloyd JR and Bickers DR: All-trans retinoic acid exerts a novel anticarcinogenic effect by inhibiting malignant conversion of skin papillomas. *J Invest Dermatol* 92:487, 1989.
168. Nontasut C, Athar M, Zaim MT, **Mukhtar H** and Elmetts CA: Evidence for the involvement of superoxide anions in  $\beta$ -methoxypsoralen cutaneous photosensitivity in vivo. *J Invest Dermatol* 92:492, 1989.
169. **Mukhtar H**, Athar M, Lloyd JR, and Bickers DR: Malignant conversion of ultraviolet B (UVB) and 7, 12-dimethylbenz (a) anthracene (DMBA)-induced murine skin papilloma by free radical generating compounds: Protective effect of all-trans retinoic acid. *Proc Amer Assoc Cancer Res* 30:208, 1989.
170. Bickers DR and **Mukhtar H**: Photochemical and chemical carcinogenesis. *Photochem Photobiol* 49:53S, 1989.
171. Bickers DR, Urban SA, Athar M and **Mukhtar H**: Photodynamic therapy of cutaneous cancer with chloroaluminum phthalocyanine: mechanistic studies. *Skin Pharmacol* 2:42, 1989.
172. **Mukhtar H**, Athar M, Lloyd JR and Bickers DR: Protection against progression of benign papillomas to malignant carcinomas by all-trans-retinoic acid. *Skin Pharmacol* 2:43, 1989.
173. Raza H, Athar M, Bickers DR and **Mukhtar H**: Inhibition of benzoyl peroxide induced epidermal ornithine decarboxylase and tumor promotion by nordihydroguaiaretic acid in Sencar mice. *Skin Pharmacol* 2:44, 1989.
174. Raza H, Bickers DR and **Mukhtar H**: Specific fatty acid binding protein in human and rodent epidermal cytosol. *Clin Res* 1989.
175. **Mukhtar H**, Athar M and Raza H: Inhibition of benzoyl peroxide mediated skin tumor promotion by antioxidants diallyl sulfide and nordihydroguaiaretic acid. *Soc Toxicol* 1990.
176. Raza H, Allyn DL, Awasthi YC, Zaim MT and **Mukhtar H**: Multiplicity of glutathione S-transferases in human and rodent skin. *FASEB J* 4:A598, 1990.
177. **Mukhtar H**, Raza H and Bickers DR: Purification of  $\beta$ -naphthoflavone inducible neonatal rat epidermal cytochrome P-450. *FASEB J* 4:A600, 1990.
178. Wang ZY, Zhou ZC, Bickers DR and **Mukhtar H**: Inhibition of chemical and photocarcinogenesis in murine skin by green tea polyphenols. *Proc Amer Assoc Cancer Res* 1990.
179. Elmetts CA and **Mukhtar H**: Contact hypersensitivity to the carcinogens dimethylbenz (a) anthracene and benzo (a) pyrene in mice occurs independently of their metabolism by the AH receptor. *J Invest Dermatol* 94:522, 1990.
180. Agarwal R, Raza H and **Mukhtar H**: Lipoxigenase-catalyzed metabolism of the skin carcinogen benzo (a) pyrene in rodent and human epidermis. *J Invest Dermatol* 94:502, 1990.
181. **Mukhtar H**, Raza H, Allyn DL and Bickers DR: Glutathione S-transferase catalyzed metabolism of leukotriene A4 to leukotriene C4 in rodent and human epidermis. *J Invest Dermatol* 94:557, 1990.
182. Bickers DR, Raza H, Haqqi TM and **Mukhtar H**: Purification and genetic expression of  $\beta$ -naphthoflavone inducible neonatal rat epidermal cytochrome P-450. *J Invest Dermatol* 94:507, 1990.

183. Raza H, Allyn DL, Awasthi YC, Zaim MT and **Mukhtar H**: Glutathione S transferase(s) in human and rodent skin: multiple forms and species specific expression. *J Invest Dermatol* 94:570, 1990.
184. Bickers DR and **Mukhtar H**: Porphyrins in nature and the spectrum of porphyrin induced diseases in man. *Photochem Photobiol* 51(suppl): 1990.
185. **Mukhtar H**, Athar M, Agarwal R, Elmets CA and Bickers DR: Chloroaluminum phthalocyanine tetrasulfonate (ALPCTS) photodynamic therapy of cutaneous tumors. *Photochem Photobiol* 51(suppl):74S, 1990.
186. Kenney ME, Rihter BD, Clay ME, Antunez AR, **Mukhtar H** and Oleinick NL: New phthalocyanine photosensitizers for photodynamic therapy. IPA 3rd Biennial Meeting, July 17-21, Buffalo, NY, 1990.
187. Oleinick NL, Clay ME, Thota NR, Rihter BD, Antunez AR, Kenney ME and **Mukhtar H**: Characterization of new phthalocyanines as photosensitizers in vitro. IPA 3rd Biennial Meeting, July 17-21, Buffalo, NY, 1990.
188. Bickers DR, Raza H, Haqqi TM and **Mukhtar H**: Studies on epidermal cytochrome P-450. *Skin Pharmacol* 3:195-196, 1990.
189. Agarwal R and **Mukhtar H**: Lipooxygenase catalyzed metabolism of benzo(a)pyrene and benzo(a)pyrene-7,8-diol in human skin. *Toxicologist* 11:346, 1991.
190. **Mukhtar H**, Raza H, Haqqi TM, Khan IU and Bickers DR: Purification, characterization and gene expression of  $\beta$ -naphthoflavone ( $\beta$ -NP) inducible cytochrome P-450 in rat epidermis. *Toxicologist* 11:175, 1991.
191. Elmets CA and **Mukhtar H**: Identification of genetic loci in the cell-mediated immune response to topically applied dimethylbenz (a) anthracene (DMBA) in mice. *Toxicologist* 11:79, 1991.
192. **Mukhtar H**, Agarwal R, Raza H and Bickers DR: Glutathione S-transferase-dependent conjugation of leukotriene A<sub>4</sub> to leukotriene C<sub>4</sub> in rodent and human skin. *FASEB J* 5:A1205, 1991.
193. Agarwal R, Tafel J and **Mukhtar H**: Role of singlet oxygen in *in vivo* and *in vivo* photodestruction of microsomal membranes by chloroaluminum phthalocyanine tetrasulfonate. *FASEB J* 5:A1563, 1991.
194. Khan IU, **Mukhtar H**, Bickers DR and Haqqi TM: Induction of cytochrome P450IA1 gene expression in rat epidermis and human keratinocytes by  $\beta$ -naphthoflavone and benzanthracene. *FASEB J* 5:A1161, 1991.
195. Zaidi SIA, Agarwal R, Rihter BD, Kenney ME, Oleinick NL and **Mukhtar H**: Photoenhancement of lipid peroxidation in human erythrocyte membranes by new silicon phthalocyanines. *FASEB J* 5:A1563, 1991.
196. **Mukhtar H**: Tea components: antimutagenic and anticarcinogenic effects. An international symposium on Physiological and Pharmacological effects of Camellia Sinensis (Tea): Implications of Cardiovascular Disease, Cancer and Public Health. New York, March 4-5, 1991.
197. **Mukhtar H**, Khan IU, Haqqi TM and Bickers DR: Polymerase chain reaction based detection of messenger RNA for three gene families of cytochrome P450 in mammalian epidermis. *J Invest Dermatol* 96:581, 1991.
198. Haqqi TM, Khan IU, Bickers DR and **Mukhtar H**: Induction of interleukin-6 gene expression by chemical carcinogens and ultraviolet B radiation in human keratinocytes. *J Invest Dermatol* 96:613, 1991.
199. Agarwal R, Elmets CA, Bickers DR and **Mukhtar H**: Photodynamic therapy of ultraviolet B radiation-induced murine skin tumors by photofrin-II and chloroaluminum phthalocyanine tetrasulfonate. *J Invest Dermatol* 96:589, 1991.
200. Zaidi SIA, Evans BN, Raza H, Agarwal R, Ahmad H, Awasthi YC and **Mukhtar H**: Altered expression of glutathione S-transferase isozymes in murine and human skin tumors. *J Invest Dermatol* 96:599, 1991.
201. Pathak MA, Paccagnella ML, Zaidi SIA and **Mukhtar H**: Photoreactive phthalocyanines in photomedicine and photodynamic therapy. *J Invest Dermatol* 96:590, 1991.
202. **Mukhtar H**, Agarwal R, Wang ZY and Bickers DR: Antimutagenic and anti-tumorigenic activities of nordihydroguaiaretic acid. *Proc Amer Assoc Cancer Res* 32:147, 1991.
203. Agarwal R and **Mukhtar H**: Metabolism of benzo (a) pyrene and benzo (a) pyrene 7, 8-dihydrodiol catalyzed by human rodent epidermal lipooxygenase. *Proc Amer Assoc Cancer Res* 32:117, 1991.
204. **Mukhtar H**, Zaidi SIA, Agarwal R, Eichler G, Rihter B, Kenney ME, Clay MD, Oleinick NL and Bickers DR: Photodynamic effects of silicon phthalocyanine in Chinese hamster V79 cells and human erythrocyte membranes. *Photochem Photobiol* 53:93S, 1991.
205. Bickers D, Raza H, Khan IU, Haqqi TM and **Mukhtar H**: The skin as a site for drug and xenobiotic metabolism. *Acta Pharm Nord* 3:114, 1991.
206. Sutter C, **Mukhtar H**, Strickland PT, Winter, and Schweizer J: Investigations on aberrant keratin 13 expression in UV-induced murine epidermal tumors. International Symposium on Skin Carcinogenesis Heidelberg, FRG Oct 1991.

207. Agarwal R, Jugert FK, Merk HF, Bickers DR and **Mukhtar H**: Multiple cytochrome P-450 isozymes in murine skin: induction by pyridine. *FASEB J* 6:A1567, 1992.
208. Jugert FK, Agarwal R, Merk HF, Bickers DR and **Mukhtar H**: Induction of multiple cytochrome P-450 isoenzymes in murine skin by dexamethasone. *FASEB J* 6: A1567, 1992.
209. Elmets CA, Zaidi SI and **Mukhtar H**: Evidence that genetic differences controlling tumor necrosis factor-alpha (TNF- $\alpha$ ) production inhibit the tumor initiation stage of cutaneous chemical carcinogenesis. *FASEB J* 6:A1876, 1992.
210. Katiyar SK, Agarwal R and **Mukhtar H**: Inhibition of tumor promoter-caused induction of epidermal ornithine decarboxylase (ODC) and skin tumor promotion in SENCAR mice by green tea polyphenols. *FASEB J* 6:A1495, 1992.
211. Agarwal R, Katiyar SK, Zaidi SIA and **Mukhtar H**: Inhibition of tumor promoter-caused epidermal ornithine decarboxylase induction by polyphenolic fraction isolated from green tea. *Proc Amer Assoc Cancer Res* 33:168, 1992.
212. Katiyar SK, Agarwal R, Wang ZY and **Mukhtar H**: Protection against 12-O-tetradecanoylphorbol-13-acetate-caused tumor promotion in SENCAR mice by polyphenolic fraction from green tea. *Proc Amer Assoc Cancer Res* 33:168, 1992.
213. Zaidi SIA, Agarwal R and **Mukhtar H**: Expression of glutathione S-transferases in murine and human skin tumors. *Proc Amer Assoc Cancer Res* 33:11, 1992.
214. Elmets CA, Zaidi SI and **Mukhtar H**: The gene for endotoxin responsiveness (Lps gene) confers resistance to dimethylbenz (a) anthracene-induced cutaneous carcinogenesis. *Proc Amer Assoc Cancer Res* 33:347, 1992.
215. Mirando WS, Athar M, **Mukhtar H**, Ellner JJ and Elmets CA: UVB radiation and photosensitizers plus light promote monocyte antimicrobial activities. *J Invest Dermatol* 98:654, 1992.
216. Katiyar SK, Agarwal R and **Mukhtar H**: Inhibition of tumor promotion in murine skin by green tea polyphenols. *J Invest Dermatol* 98:663, 1992.
217. Elmets CA, Zaidi SI and **Mukhtar H**: A mutation in the gene for endotoxin responsiveness (Lps gene) renders mice susceptible to dimethylbenz (a) anthracene-induced skin carcinogenesis. *J Invest Dermatol* 98:611, 1992.
218. Jugert FK, Agarwal R, Merk HF, Bickers DR and **Mukhtar H**: Evidence for the occurrence of multiple cytochromes P-450 isozymes in murine skin: induction by dexamethasone. *J Invest Dermatol* 98:652, 1992.
219. Zaidi SIA, Agarwal R, Bickers DR and **Mukhtar H**: Mechanism of photodynamic effects of chloroaluminum phthalocyanine. *J Invest Dermatol* 98:657, 1992.
220. Agarwal R, Jugert FK, Merk HF, Bickers DR and **Mukhtar H**: Induction of cytochrome P-450 isozymes 1A, 2B and 3A in murine skin by pyridine. *J Invest Derm* 98:652, 1992.
221. Jugert FK, Bolson K, Goerz G, **Mukhtar H** and Merk HF: Erythromycin-demethylation activity is present in murine skin and inducible by dexamethasone. *J Invest Dermatol* 98:523, 1992.
222. Zaidi SIA, Faulk J, Rihter BD, Kenney ME and **Mukhtar H**: Tissue uptake, distribution and photodynamic effects of silicon phthalocyanine administered in corn oil and liposomes to mice bearing transplantable tumors. *Photochem Photobiol* 55:58S, 1992.
223. Agarwal R, Raza H, Bickers DR and **Mukhtar H**: Biotransformation of leukotriene A4 to leukotriene C4 by affinity purified glutathione-S-transferase from rat skin. *Skin Pharmacol* 5:193, 1992.
224. Jugert FK, Agarwal R, Frankenberg S, Junginger H, Bickers DR, **Mukhtar H** and Merk HF: Multiple inducible cytochrome P-450 isozymes in human epidermal keratinocytes. *Skin Pharmacol* 5:197-198, 1992.
225. Zaidi SIA, Agarwal R, Bickers DR and **Mukhtar H**: Photodynamic therapy of murine skin tumors. *Skin Pharmacol* 5:207, 1992.
226. Katiyar SK, Agarwal R, Wood GS and **Mukhtar H**: Skin cancer chemoprevention by green tea polyphenols. *Skin Pharmacol* 5:198-199, 1992.
227. Studer JA, Jugert FK, Fleming TE, Elmets CA, Bik DP, Agarwal R and **Mukhtar H**: Cytochrome P450IA1-dependent metabolism of skin carcinogen benzo(a)pyrene in human Langerhans cells. *Skin Pharmacol* 5:205-206, 1992.
228. Elmets CA, Athar M, Zaidi SIA and **Mukhtar H**: Regulation of the immune response to dimethylbenz (a) anthracene is governed by genes with the major histocompatibility complex and at the Ah receptor locus. *Skin Pharmacol* 5:195-196, 1992.
229. Jugert FK, Agarwal R, Bickers DR, Merk HF and **Mukhtar H**: Induction of cytochrome P-450 subfamilies 1A, 2B, 2E and 3E in murine skin by dexamethasone. *Skin Pharmacol* 5:198, 1992.

230. Studer J, Agarwal R, Jugert FK, Fleming T, **Mukhtar H** and Elmets CA: Cytochrome P450IA1-dependent metabolism of the skin carcinogen benzo(a)pyrene in human Langerhan cells. *Clin Res* 40:708, 1992.
231. Singhal SS, Saxena, M, Awasthi S, Ahmad H, Sharma R, **Mukhtar H**, Zaidi SIA and Awasthi YC: Glutathione S-transferases of human skin: Qualitative and quantitative differences in men and women. *FASEB J* 1993.
232. Agarwal R, Khan SG, Bickers DR and **Mukhtar H**: Processing of overexpressed Ha-ras oncoprotein p21 in chemical carcinogen-induced tumors in SENCAR mouse skin. *J Invest Dermatol* 100:601, 1993.
233. Khan SG, Bickers DR, **Mukhtar H** and Agarwal R: Farnesylation of Ha-ras p21 in ultraviolet B radiation-induced tumors in SKH-1 hairless mice. *J Invest Dermatol* 100:599, 1993.
234. Katiyar SK, Agarwal R, Bickers D, and **Mukhtar H**: Chemopreventive effects of green tea against stage I and stage II tumor promotion and malignant conversion in SENCAR mouse skin. *J Invest Dermatol* 100:603 1993.
235. **Mukhtar H**, Katiyar SK, Agarwal R and Bickers DR: Inhibition of ultraviolet B radiation-induced inflammatory responses in SKH-1 hairless mice by a polyphenolic fraction isolated from green tea. *J Invest Dermatol* 100:600 1993.
236. Raza H and **Mukhtar H**: Effect of topical and parental administration of  $\beta$ -naphthoflavone to rats on cutaneous and extracutaneous cytochrome P-450 and glutathione-S-transferase activities. *J Invest Dermatol* 100:593, 1993.
237. Zaidi SIA, Kenney ME and **Mukhtar H**: Photodynamic therapy of RIF-1 tumors with topical application of silicon phthalocyanine: evidence for induction of apoptosis during tumor ablation. *J Invest Dermatol* 100:599, 1993.
238. Elmets CA, Katiyar SK and **Mukhtar H**: Immunogenetic influences on the cutaneous photocarcinogenesis pathway. *J Invest Dermatol* 100:562, 1993.
239. Miranda WS, Zaidi SIA, Tubesing K, **Mukhtar H** and Elmets CA: Immunotherapy of cutaneous tumors with the bacterial superantigen staphylococcal endotoxin B. *J Invest Dermatol* 100:520, 1993.
240. Takahara H, Zaidi SIA, **Mukhtar H**, Handa M and Fukuyama K: NADPH cytochrome P-450 reductase in rat epidermis. *J Invest Dermatol* 100:518, 1993.
241. Agarwal R, Khan SG and **Mukhtar H**: Ha-ras p21 processing during cutaneous chemical carcinogenesis. *Proc Am Assoc Cancer Res* 34:526, 1993.
242. Khan SG, **Mukhtar H** and Agarwal R: Farnesyltransferase activity in ultraviolet B (UVB)-induced skin tumors in SKH-1 hairless mice. *Proc Am Assoc Cancer Res* 34:526, 1993.
243. **Mukhtar H**, Katiyar SK and Agarwal R: Protection against diethylnitrosamine (DEN) and benzo(a)pyrene (BP)-induced forestomach and lung tumorigenesis in A/J mice by green tea. *Proc Am Assoc Cancer Res* 34:555, 1993.
244. Katiyar SK, Agarwal R and **Mukhtar H**: Protection against malignant conversion of mouse skin papillomas to carcinomas by green tea polyphenols. *Proc Am Assoc Cancer Res* 34:555, 1993.
245. Zaidi SIA and **Mukhtar H**: Evidence for the induction of apoptosis during photodynamic therapy-induced tumor ablation and cure. *Proc Am Assoc Cancer Res* 34:291, 1993.
246. Elmets CA, Katiyar SK and **Mukhtar H**: A mutation in the gene for endotoxin responsiveness (Lps gene) renders mice susceptible to UVB-induced cutaneous carcinogenesis. *Proc Am Assoc Cancer Res* 34:450, 1993.
247. Agarwal R, Katiyar SK, Khan SG and **Mukhtar H**: Inhibition of ultraviolet B radiation (UVB)-induced changes in the skin of SKH-1 hairless mice by green tea polyphenols. *Photochem Photobiol* 57:24S, 1993.
248. Zaidi SIA, Li YS, Oleinick NL, Kenney ME and **Mukhtar H**: Photodynamic therapy (PDT) with local application of axial amine-bearing silicon phthalocyanines. *Photochem Photobiol* 54:51S, 1993.
249. Zaidi SIA and **Mukhtar H**: Induction of Apoptosis following photodynamic therapy (PDT) of RIF-1 tumors in C3H/HeN mice. *Photochem Photobiol* 57:51S, 1993.
250. He J, Larkin HE, Li YS, Zaidi SIA, Rihter BD, Kenney ME, **Mukhtar H** and Oleinick NL: Axial amine ligand-bearing phthalocyanines for photodynamic therapy: Structure-activity comparisons. *Photochem Photobiol* 57:90S, 1993.
251. **Mukhtar H**, Katiyar SK and Agarwal R: Protection against tumor promoter-induced inflammation in murine skin by green tea polyphenols. *J Invest Dermatol* 101:393, 1993.
252. Agarwal, R, Khan SG and **Mukhtar H**: Ras p21 farnesylation in ultraviolet radiation-induced tumors in murine skin. *J Invest Dermatol* 101:394, 1993.
253. Elmets CA, Miranda WS, Zaidi SIA, Tubesing K and **Mukhtar H**: Immunotherapy of cutaneous tumors with the bacterial superantigen staphylococcal enterotoxin B. *J Invest Dermatol* 101:407, 1993.

254. Khan SG, Saxena R, **Mukhtar H** and Agarwal R: Ras p21 processing modulates protein kinase C (PKC) isozymes and ornithine decarboxylase (ODC) transcripts: possible role in tumor growth. *Proc Amer Assoc Cancer Res* 35:616, 1994.
255. Agarwal R, Katiyar SK, Lundgren DW and **Mukhtar H**: Inhibition of 12-O-tetradecanoylphorbol-13-acetate-induced epidermal ornithine decarboxylase activity and mRNA in SENCAR mice by silymarin. *Proc Amer Assoc Cancer Res* 35:626, 1994.
256. Katiyar SK, Agarwal R and **Mukhtar H**: Protection against diethylnitrosamine (DEN)-and benzo (a) pyrene (BP)-induced forestomach and pulmonary neoplasia in A/J mice by limited oral intubation of green tea polyphenols. *Proc Amer Assoc Cancer Res* 35:626, 1994.
257. Katiyar SK, Agarwal R and **Mukhtar H**: Inhibition of lipid peroxidation in mouse epidermal microsomes by epicatechin derivatives from green tea. *J Invest Dermatol* 102:652, 1994.
258. Mercurio MG, Siddiqui J, Ou XM, Bickers DR, **Mukhtar H** and Haqqi TM: Differential display and cloning of an mRNA species from chemically-induced tumors in SENCAR mice. *J Invest Dermatol* 102:653, 1994.
259. Häffner AC, Zepter K, Tubesing K, Dummer R, Khan S, **Mukhtar H** and Elmetts CA: Class II negative squamous cell carcinoma cell lines are potent antigen presenting cells for the T cell superantigen staphylococcal enterotoxin B. *J Invest Dermatol* 102:630, 1994.
260. Dummer R, Siddiqui J, Khan SG, Häffner AC, Rupp C, Bickers DR, Agarwal R and **Mukhtar H**: Human basal cell carcinomas frequently express the gene for farnesyltransferase beta subunit. *J Invest Dermatol* 102:653, 1994.
261. Khan SG, Saxena R, Bickers DR, **Mukhtar H** and Agarwal R: Ras p21 post-translational processing with membrane localization modulates expression and activation of protein kinase C isozyme  $\zeta$ ,  $\beta$ II, and  $\alpha$ : evidence for a role in tumor growth. *J Invest Dermatol* 102:548, 1994.
262. Agarwal R, Katiyar SK and **Mukhtar H**: Inhibitory effect of silymarin, an anti-hepatotoxic flavonoid, on tumor promoter-induced epidermal ornithine decarboxylase activity and mRNA in SENCAR mice. *J. Invest. Dermatol* 102:653, 1994.
263. Jugert FK, Agarwal, R, **Mukhtar H**, Bickers DR and Merk HF: Dexamethasone and cyclosporine: An inducible cytochrome P450 3A in murine and human skin. *J Invest Dermatol* 102:647, 1994.
264. Young C, **Mukhtar H**, Tubesing K, Mulvihill J and Elmetts CA: Pc4 PDT cutaneous photosensitivity and tumor regression occur through disparate mechanisms. *Photochem Photobiol* 59:32S-33S, 1994.
265. Khan SG, Dummer R, Siddiqui J, Agarwal, and **Mukhtar H**: Farnesyltransferase (FTase) activity and gene expression of its  $\alpha$  and  $\beta$  subunits in human skin basal cell carcinomas (BCCs). *Proc Amer Assoc Cancer Res* 36:527, 1995.
266. Siddiqui J, Mercurio MG, Bickers DR, Haqqi TM and **Mukhtar H**: Differentially expressed genes in chemically-induced tumors in SENCAR mice. *Proc Amer Assoc Cancer Res* 36:521, 1995.
267. Bickers DR, Siddiqui J, Mercurio MG, Haqqi TM and **Mukhtar H**: Novel gene expression in chemically induced skin tumors in SENCAR mice. *Skin Pharmacology* 8:278, 1995.
268. **Mukhtar H**, Agarwal R and Katiyar SK: Inhibition of mouse skin tumor promotion by ethanol extract of ginger root. *Proc Amer Assoc Cancer Res* 36:594, 1995.
269. Katiyar SK, Agarwal R, Korman NJ, Rupp CO and **Mukhtar H**: Inhibition of tumor promoter-caused induction of interleukin-1 (IL-1)-alpha, tumor necrosis factor (TNF)-alpha, and ornithine decarboxylase (ODC) gene expression in SENCAR mouse skin by tea polyphenols. *Proc Amer Assoc Cancer Res* 36:594, 1995.
270. Agarwal R, Katiyar SK and **Mukhtar H**: Protection against tumor promotion in mouse skin by silymarin. *Proc Amer Assoc Cancer Res* 36:593, 1995.
271. Mohan RR, Khan SG, Agarwal R and **Mukhtar H**: Testosterone induces ornithine decarboxylase (ODC) activity and mRNA expression in human prostate carcinoma cell line LNCaP: inhibition by green tea. *Proc Amer Assoc Cancer Res* 36:274, 1995.
272. Young-Anderson C, Mulvihill J, **Mukhtar H** and Elmetts CA: Phthalocyanine photodynamic therapy. Cutaneous photosensitivity and tumor regression are mediated by distinct mechanisms. *Proc Amer Assoc Cancer Res* 36:608, 1995.
273. Siddiqui J, Haqqi TM and **Mukhtar H**: Identification and cloning of differentially expressed mRNAs in chemically-induced skin tumors in SENCAR mice. *J Invest Dermatol* 104:575, 1995.

274. **Mukhtar H**, Agarwal R, Korman NJ, Rupp CO and Katiyar SK: Inhibition of tumor promoter-caused induction of epidermal interleukin-1 $\alpha$ , tumor necrosis factor- $\alpha$ , and ornithine decarboxylase mRNA expression in SENCAR mouse by green tea polyphenols. *J Invest Dermatol* 104:575, 1995.
275. Agarwal R, Katiyar SK and **Mukhtar H**: Protective effects of silymarin against ultraviolet B radiation-induced tumorigenesis in SKH-1 hairless mouse skin. *J Invest Dermatol* 104:635 1995.
276. Mohan RR, Katiyar SK, **Mukhtar H** and Agarwal R: Protective effects of retinoic acid against tumor promotion and progression in low- and high-risk protocols of mouse skin carcinogenesis. *J Invest Dermatol* 104:574, 1995.
277. Katiyar SK, Elmets CA, Agarwal R and **Mukhtar H**: Protection against ultraviolet B radiation-induced local and systemic suppression of contact hypersensitivity in mice by green tea polyphenols. *J Invest Dermatol* 104:690, 1995.
278. Hrabovsky S, Anderson C, **Mukhtar H** and Elmets CA: Pharmacologic agents that block cutaneous photosensitivity associated with phthalocyanine (PC) photodynamic therapy (PDT) in C3H mice do not inhibit tumor regression. *J Invest Dermatol* 104:690, 1995.
279. **Mukhtar H**, Korman NJ, Mohan RR, Jawed S, Zaim MT and Agarwal R: Phthalocyanine-photodynamic therapy of murine skin tumors: Apoptosis is an early event during tumor shrinkage. *Photochem Photobiol* 61:41S, 1995.
280. Agarwal R, Katiyar S and **Mukhtar H**: Protection against photocarcinogenesis in SKH-1 hairless mice by silymarin. *Photochem Photobiol* 61:41S, 1995.
281. Anderson CY, **Mukhtar H** and Elmets CA: Inhibition of TNF- $\alpha$  blocks cutaneous photosensitivity without affecting Pc 4-PDT. *Photochem Photobiol* 61:685, 1995.
282. Elmets, CA, Anderson C and **Mukhtar H**: Metabolic capabilities of Langerhans cells. *J Invest Dermatol* 105:862, 1995.
283. Lahiri M, Agarwal R and **Mukhtar H**:  $^{32}\text{P}$  postlabelling detection of photoproducts in the epidermis of SKH-1 hairless mice exposed to ultraviolet B radiation. *Photodermatology, Photoimmunology, and Photomedicine* 11:226, 1995.
284. Katiyar SK, Elmets CA, Agarwal R and **Mukhtar H**: Polyphenols from green tea inhibit UVB-caused immune suppression and IL-1  $\alpha$  mRNA expression in C3H/HeN mouse skin. *Photodermatology, Photoimmunology, and Photomedicine* 11:234, 1995.
285. Hasnain A, Siddiqui J, Kuzmin N, Haqqi TM and **Mukhtar H**: Novel genes induced in C3H mouse skin exposed to ultraviolet B radiation. *Photodermatology, Photoimmunology and Photomedicine* 11:227, 1995.
286. Mohan RR, Khan SG, Katiyar SK, Wood GS, Bickers DR, **Mukhtar H** and Agarwal R: Ras oncogene mutations are rare events in ultraviolet B radiation-induced tumorigenesis in mouse skin. *Photodermatology, Photoimmunology and Photomedicine* 11:230, 1995.
287. Agarwal R, Katiyar SK and **Mukhtar H**: Protection against photocarcinogenesis by silymarin. *Photodermatology, Photoimmunology and Photomedicine* 11:233, 1995.
288. Shivji GM, Zielinski E, **Mukhtar H** and Sauder DN: Effects of green tea polyphenols on cultured normal human keratinocytes. *Toxicologist* 171, 1995.
289. Siddiqui J, Hasnain A, Kuzmin N, Haqqi TM and **Mukhtar H**: Characterization of six differentially expressed mRNAs in ultraviolet B (UVB)-irradiated C3H mouse skin. *Proc Amer Assoc Cancer Res* 37:517, 1996.
290. Agarwal R, Lahiri M, Mohan RR and **Mukhtar H**: Stage specific anti-tumor promoting potential of silymarin in mouse skin. *Proc Amer Assoc Cancer Res* 37:278, 1996.
291. **Mukhtar H**, Mohan RR, Bostwick DG, Amini SG and Agarwal R: Significantly higher ornithine decarboxylase (ODC) activity in human prostate cancer than in normal tissue. *Proc Amer Assoc Cancer Res* 37:244, 1996.
292. Singh SV, Mohan RR, Agarwal R, Benson PJ, Rudy MA, Hu X, Xia H, Mack LM, **Mukhtar H**, Gupta V, Katoh A and Zaren HA: Inhibition of H-*ras* oncogene transformed cell growth *in vivo* by diallyl disulfide is associated with inhibition of HMG-CoA reductase activity and *ras* p21 membrane localization. *Proc Amer Assoc Cancer Res* 37:391-392, 1996.
293. Shivji GM, Zielinska E, Kondo S, **Mukhtar H** and Sauder DN: Anti-inflammatory effect of green tea polyphenols on cultured normal human keratinocytes. *J Invest Dermatol* 106:937, 1996.

294. Agarwal R, Lahiri M, Mohan RR and **Mukhtar H**: Anti-tumor promoting potential of silymarin against both phorbol and nonphorbol ester type tumor promoter-caused promotion in SENCAR mouse skin. *J Invest Dermatol* 106:856, 1996.
295. Lahiri M, Agarwal R and **Mukhtar H**: <sup>32</sup>P postlabelling assay: a sensitive tool for detection of ultraviolet B radiation-induced DNA lesions. *J Invest Dermatol* 106:857, 1996.
296. Siddiqui J, Haqqi TM and **Mukhtar H**: Cloning of a novel cDNA associated with tumor promotion in 7,12-dimethylbenz(a)anthracene-initiated mouse skin. *J Invest Dermatol* 106:904, 1996.
297. Haqqi TM, Siddiqui J, Hasnain A, Kuzmin N and **Mukhtar H**: Identification and cloning of novel cDNA components of the mammalian UV response in C3H mouse skin. *J Invest Dermatol* 106:906, 1996.
298. **Mukhtar H**, Matsui MS, Maes D, Marenus K, Tubesing K and Elmetts CA: Prevention by green tea polyphenols against ultraviolet-induced erythema in humans. *J Invest Dermatol* 106:846, 1996.
299. Feyes D, He J, Rihter BD, **Mukhtar H**, Kenney ME and Oleinick, NL: Axial ligand structure: Effect on the efficacy of phthalocyanines in PDT. *Photochem and Photobiol* 63:97S, 1996.
300. Anderson C, **Mukhtar H** and Elmetts CA: A comparative analysis of silicon phthalocyanine and photofrin photodynamic therapy in RIF-1 tumors C3H mice. *Photochem and Photobiol* 63:70S, 1996.
301. Lahiri M, Agarwal R and **Mukhtar H**:  $\beta$ -Naphthoflavone and 2, 3, 7, 8-tetrachlorobenzo-p-dioxin inducible cytochrome P450 1B1 in mouse epidermis. *Fund Appl Toxicol* 36:86, 1997.
302. Agarwal R, Ahmad N, Javed S and **Mukhtar H**: Silymarin, a polyphenolic antioxidant, exerts its anti-tumor promoting effect by inhibiting epidermal growth factor receptor tyrosine kinase activity. *J Invest Dermatol* 108:547, 1997.
303. Baron JM, Jugert FK, Zwaldo-Klarwasser G, Rübber A, **Mukhtar H** and Merk HF: Cytochrome P450 1B1 is the major P450 isoenzyme in human blood monocytes and macrophage subsets. *J Invest Dermatol* 108:661, 1997.
304. Ahmad N, Feyes DK, Agarwal R and **Mukhtar H**: Photodynamic therapy results in WAF1/CIP1/P21-mediated cell cycle arrest in G1-phase followed by apoptosis in human squamous carcinoma cells (A431). *J Invest Dermatol* 108:667, 1997.
305. **Mukhtar H**, Ahmad N, Feyes D and Agarwal R: Cell cycle arrest and induction of apoptosis in human epidermoid carcinoma cells A431 by green tea polyphenols. *J Invest Dermatol* 108:600, 1997.
306. Zi X, Steele JD, **Mukhtar H** and Agarwal R: Complete preventive effect of silymarin against okadiac acid-caused tumor promotion in mouse skin. *J Invest Dermatol* 108:600, 1997.
307. **Mukhtar H**, Ahmad N, Feyes DK and Agarwal R. Green tea polyphenols induce apoptosis and alter the progression of cell cycle in human epidermoid carcinoma cells A431. *Proc Amer Assoc Cancer Res* 38:580, 1997.
308. Ahmad N, Feyes DK, Agarwal R and **Mukhtar H**: P53-independent induction of WAF1/Cip1/p21 regulates the cell cycle mediated apoptosis during photodynamic therapy in human epidermoid carcinoma cells A431. *Proc Amer Assoc Cancer Res* 38:377, 1997.
309. Gali H, Ahmad N, Jawed S, **Mukhtar H** and Agarwal R: Inhibition of epidermal growth factor receptor (EGFr) tyrosine kinase activity by silymarin, a polyphenolic antioxidant and potent cancer chemoprevention agent. *Proc Amer Assoc Cancer Res* 38:263, 1997.
310. Zi X, Feyes DK, **Mukhtar H** and Agarwal R: Anti-carcinogenic effect of a polyphenolic antioxidant in breast cancer cells MDA-MB468: A p53-independent induction of WAF1/Cip1/p21 and G1 arrest. *Proc Amer Assoc Cancer Res* 38:217, 1997.
311. Agarwal R, Mohan RR, Khan SG and **Mukhtar H**: Bifonazole, an anti-fungal imidazole, inhibits HMG-CoA reductase followed by ras p21 farnesylation leading to a selective growth inhibition of ras transformed cells. *Proc Amer Assoc Cancer Res* 38:96, 1997.
312. He J, Feyes DK, Whitacre CM, Xue LY, Berger NA, **Mukhtar H** and Oleinick NL: Protease activation and cleavage of poly (ADP-ribose) polymerase (PARP) in photodynamic therapy (PDT)-induced cell killing. *Photochem Photobiol* 65:87S, 1997.
313. Ahmad N, Feyes DK, Agarwal R and **Mukhtar H**: WAF1/Cip1/p21 mediates G1 arrest in cell cycle and apoptosis by photodynamic therapy (PDT). *Photochem Photobiol* 65:58S, 1997.
314. Kim KH, Feyes DK, Ahmad N and **Mukhtar H**: *In vitro* and *in vivo* inhibition of telomerase activity by phthalocyanine-photodynamic therapy. *Photochem Photobiol* 65:86S, 1997.



315. **Mukhtar H** and Ahmad N: Polyphenolic catechins in green tea induce apoptosis and cell cycle arrest in human carcinoma cells. *Int J Oncol* 11:910, 1997.
316. Balasubramanian S, Kim KH, Ahmad N and **Mukhtar H**: Activation of telomerase and its association with G0/G1-phase of the cell cycle during photocarcinogenesis in SKH1-hairless mouse skin. *Proc Amer Assoc Cancer Res* 39, 87:368, 1998.
317. Zhao JF, Jin X-H, **Mukhtar H**, Bickers DR and Wang ZY: Photoprotection in human skin by green tea and black tea. *Proc Amer Assoc Cancer Res* 39: 87:392, 1998.
318. Ahmad N, Agarwal R, Feyes DK and Mukhtar H: Involvement of pRb/p105 and E2F during photodynamic therapy mediated G0/G1-phase arrest of human epidermoid carcinoma cells A431. *Proc Amer Assoc Cancer Res* 39:378, 1998.
319. **Mukhtar H** and Ahmad N. (-)-Epigallocatechin-3-gallate inhibits the expression and activation of nuclear transcription factor NFkB in human epidermoid carcinoma cells A431. *Proc Amer Assoc Cancer Res* 39: 87, 1998.
320. Challa A, Katiyar SK, Cooper KD and **Mukhtar H**: Inhibition of UV-radiation-caused induction of oxidative stress and immunosuppression in C3H/HeN mice by polyphenols from green tea. *J Invest Dermatol* 110: 695, 1998.
321. Rothaupt D, Anderson CY, Semler D, Tubesing KA, Balasubramanian S, **Mukhtar H** and Elmets CA: TNF- $\alpha$  inhibits the initiation stage of the cutaneous chemical carcinogenesis pathway. *J Invest Dermatol* 110:694, 1998.
322. Ahmad N, Gupta S and **Mukhtar H**: Photodynamic therapy-induced apoptosis is mediated by activation of CD-95 (FAS/APO-1). *J Invest Dermatol* 110:692, 1998.
323. **Mukhtar H**, Gupta S and Ahmad N: Inhibition of nuclear transcription factor NFkB by green tea constituent epigallocatechin-3-gallate in human epidermoid carcinoma cells A431. *J Invest Dermatol* 110:521, 1998.
324. **Mukhtar, H**: Photoprotection by antioxidants from natural products: a tale of green tea. *Photochem Photobiol* 67:40S-41S, 1998.
325. Gupta S, Ahmad N and **Mukhtar H**: Nitric oxide may be involved in photodynamic therapy-mediated apoptosis. *Photochem Photobiol* 67:89S-90S, 1998.
326. Feyes DK, Colussi VC and **Mukhtar H**: Nitric oxide (NO) scavengers inhibit photodynamic therapy (PDT) mediated apoptosis. *Photochem Photobiol* 67:90S, 1998.
327. Li, Y-S, Oleinick NL, **Mukhtar H**, Elmets CA and Kenney ME: A synthesis of  $^{14}\text{C}$ -labeled Pc 4 and an improved synthesis for unlabeled Pc 4. *Photochem Photobiol* 67:23S, 1998.
328. Colussi VC, Feyes DK, Li Y-S, Mulvihill J, Kenney ME, Elmets CA, Oleinick NL and **Mukhtar H**: Phthalocyanine (Pc 4) photodynamic therapy (PDT) of human ovcar-3 tumors. *Photochem Photobiol* 67:25S, 1998
329. Ahmad N, Gupta S and **Mukhtar H**: Involvement of FAS/CD-95/APO-1 in photodynamic therapy-mediated apoptosis. *Photochem Photobiol* 67:69S-70S, 1998.
330. **Mukhtar H**, Ahmad N and Balasubramanian S: Telomerase activation during photocarcinogenesis. *Photochem Photobiol* 67:85S-86S, 1998.
331. **Mukhtar H**: Green tea in chemoprevention of cancer: Mechanism of action. *The Toxicologist* 48:105, 1999.
332. **Mukhtar H**, Gilliam AC, Farouk S, Katiyar SK, Ahmad N and O'Brien TG: Photocarcinogenesis in ornithine decarboxylase transgenic mice. *Proc Amer Assoc Cancer Res* 40:502, 1999.
333. Ahmad N, Gupta S and **Mukhtar H**: Suppression of nuclear transcription factor (NFkB)-activation by green tea polyphenol (-)-epigallocatechin-3-gallate. *Proc Amer Assoc Cancer Res* 40:532, 1999.
334. Katiyar SK, Cooper KD and **Mukhtar H**: Protection against ultraviolet (UV) B-induced immunosuppression in mice by antioxidant (-)-epigallocatechin-3-gallate (EGCG) from green tea. *Proc Amer Assoc Cancer Res* 40:532, 1999.
335. Gupta S, Ahmad N and **Mukhtar H**: Epigallocatechin-3-gallate-caused G0/G1-phase cell cycle arrest and apoptosis in human prostate carcinoma cells is mediated by the induction of WAF/1p21. *Proc Amer Assoc Cancer Res* 40:532, 1999.
336. Sakamoto K, Ahmad N, Gupta S, Hara Y and **Mukhtar H**: Synergy of black and green tea polyphenols with genistein in inhibiting human prostate cancer cell growth. *Proc Amer Assoc Cancer Res* 40:531, 1999.

337. Gupta S, Ahmad N, MacLennan GT, Greenberg NM and **Mukhtar H**: Prevention against prostate cancer development and its metastases by  $\alpha$ -difluoromethylornithine in transgenic adenocarcinoma mouse prostate (TRAMP) model that mimics human disease. LB-15 late breaking abstract, 90th Annual AACR meeting, 1999.
338. Ahmad N, Srivastava M and **Mukhtar H**: Regulation of cyclin dependent kinase CDK1, cyclin A, cyclin B, topoisomerase II $\alpha$ , and RAD51 by photodynamic therapy in human epidermoid carcinoma cells A431. *J Invest Dermatol* 112:659, 1999.
339. Katiyar SK, Matsui MS, Marenus K and **Mukhtar H**: Ultraviolet B induction of cytochromes P450 1A1 and 1B1 in human skin. *J Invest Dermatol* 112:655, 1999.
340. Kalka K, Ahmad N, Kermode T and **Mukhtar H**: Involvement of epidermal growth factor receptor (EGFR)-tyrosine kinase pathway in photodynamic therapy-mediated cell death. *J Invest Dermatol* 112:659, 1999.
341. **Mukhtar H**, Gilliam AC, Farouk S, Katiyar SK, Ahmad N and O'Brien TG: Photocarcinogenesis in ornithine decarboxylase overexpressing mice. *J Invest Dermatol* 112:562, 1999.
342. Gupta S, Colussi VC, Feyes DK, Greenberg NM and **Mukhtar H**: P53-mediated induction of P21/WAF1 and apoptosis during phthalocyanine (Pc 4) photodynamic therapy of prostate cancer in transgenic mice. *Photochem Photobiol* 69:8S, 1999.
343. Whitacre CM, Separovic D, Feyes DK, Mulvihill J, Surmacz TA, **Mukhtar H** and Oleinick NL: The induction of apoptosis in SW480 human colon cancer xenografts in athymic mice by photodynamic therapy (PDT) with Pc 4. *Photochem Photobiol* 69:8S, 1999.
344. Kalka K, Ahmad N, Feyes DK and **Mukhtar H**: P53-dependent induction of WAF1/P21 during PDT-mediated apoptosis and ablation of mouse skin tumors. *Photochem Photobiol* 69:7S, 1999.
345. Katiyar SK, Yoshida Y, Matsui MS, Cooper KD and **Mukhtar H**: Inhibition of UV-induced oxidative stress in human skin by polyphenols from green tea. *Photochem Photobiol* 69:54S, 1999.
346. **Mukhtar H**, Gilliam AC, Farouk S, Katiyar SK, Ahmad N and O'Brien TG: Photocarcinogenesis in transgenic mice overexpressing ornithine decarboxylase. *Photochem Photobiol* 69:4S, 1999.
347. Ahmad N, Srivastava M and **Mukhtar H**: Modulation of cyclin dependent kinase CDK1, cyclin A, cyclin B, topoisomerase II $\alpha$ , and RAD51 by photodynamic therapy. *Photochem Photobiol* 69:8S, 1999.
348. Kenney ME, Li Y-S, Oleinick NL, **Mukhtar H** and Rodgers MAJ: PDT structure-activity study of two homologous series of compounds related to Pc 4. *Photochem Photobiol* 69:38S, 1999.
349. Agarwal S, Kalka K, Nieminen A, Feyes D, Oleinick N, **Mukhtar H**, Gilliam AC, and Stevens SR: Vehicle-dependent distribution of the photosensitizer Pc4 after topical administration. *J Invest Dermatol* 114:796, 2000.
350. Ahmad N, Gupta S, and **Mukhtar H**: Sanguinarine is an effective inhibitor of proliferation of skin cancer cells: Involvement of nuclear factor kappa B. *J Invest Dermatol* 114:765, 2000
351. Katiyar SK, Perez A, Afaq F, and **Mukhtar H**: Inhibition of UBB-induced oxidative stress-mediated phosphorylation of EGFR and ERK1/2 cell signaling pathways in cultured human epidermal keratinocytes by green tea constituent(-)-epigallocatechin-3-gallate. *J Invest Dermatol* 114:828, 2000.
352. Jugert F, Oepen T, Frank J, **Mukhtar H**, Merk H, and Roos T: Retinoid metabolism in the HaCaT-keratinocytes: Strong inducibility of RALDH and CYP26, but not of ROLDH. *J Invest Dermatol* 114:808, 2000.
353. Kalka K, Ahmad N, and **Mukhtar H**: Upregulation of clusterin during photodynamic therapy-mediated apoptosis of skin cancer cells and ablation of mouse skin tumors. *J. Invest Dermatol* 114:841, 2000.
354. Ahmad N, Kalka K, and **Mukhtar H**: Inhibition of epidermal growth factor receptor-tyrosine kinase pathway during photodynamic therapy-mediated apoptosis of skin cancer cells and ablation of mouse skin tumors. *J Invest Dermatol* 114:842, 2000.
355. Srivastava M, Ahmad N, and **Mukhtar H**: Role of Bcl 2 in photodynamic therapy-mediated apoptosis of skin cancer cells. *J Invest Dermatol* 114:791, 2000.
356. **Mukhtar H**, Cheng P, and Ahmad N: Deregulation of cyclin kinase inhibitor-cyclin-cyclin dependent kinase machinery by green tea polyphenol (-)-epigallocatechin-3-gallate. *J Invest Dermatol* 114:765, 2000.
357. Gupta S, Ahmad N, Lewin JS, Greenberg NM and **Mukhtar H**: Chemoprevention of prostate cancer in tramp mice by oral infusion of green tea polyphenols. *Proc Amer Assoc Cancer Res* 41:531, 2000.
358. Katiyars SK, Matsui MS and **Mukhtar H**: Protection against ultraviolet (UV) light-induced thymine dimers, oxidative stress and depletion of antioxidant enzymes in human skin by polyphenols from green tea. *Proc Amer Assoc Cancer Res* 42:532, 2000.

359. Srivastava M, Gupta S, Bostwick DG, Ahmad N and **Mukhtar H**: Overexpression of lipooxygenase-5 in human prostate adenocarcinoma. Proc Amer Assoc Cancer Res 41:46, 2000.
360. Athar M, Kim AL, Kalka K, Ahmad N, **Mukhtar H**, Gautier J and Bickers DR: Ultraviolet B induces cell cycle arrest in G<sub>2</sub>/M phase in p53-mutant immortalized skin keratinocytes. Proc Amer Assoc Cancer Res 41:248, 2000.
361. Gupta S, Husain MM, Ahmad N, Hastak K, Marengo SR and **Mukhtar H**: Antitumor efficacy of green tea constituent epigallocatechin-3-gallate (EGCG) in androgen-dependent and -independent human prostate tumor xenografts in athmic nude mice: A relationship with levels of circulating prostate specific antigen (PSA). Proc Amer Assoc Cancer Res 41:533, 2000.
362. Ahmad N, Kalka K and **Mukhtar H**: *In vitro* and *in vivo* inhibition of epidermal growth factor receptor (EGFR)-tyrosine kinase pathway by photodynamic therapy (PDT). Proc Amer Assoc Cancer Res 41:708, 2000.
363. Afaq F, Katiyar SK, Perez A, Matsui MS, Marenus K, Maes D and **Mukhtar H**: Protection against UV-light induced erythema, DNA damage, p53 and CYP1A1 protein expression and depletion of langerhans cells by titanium dioxide and zinc oxide containing sunscreens on human skin. Proc 13th International Congress on Photobiology, p 20, 2000.
364. Colussi VC, Feyes DK, Mourant JR, **Mukhtar H**, Kinsella TJ, Bigio IJ and Sibata CH: Determination of phthalocyanine 4 (Pc4) concentration in tissue by a new non-invasive, site specific spectroscopic device. Proc 13th International Congress on Photobiology, p 47, 2000.
365. Kalka K, Ahmad N, Criswell T, Saunders M, Boothman D and **Mukhtar H**: Induction of clustrin during photodynamic therapy (PDT)-mediated apoptosis of human epidermoid carcinoma cells and ablation of mouse skin tumors. Proc 13th International Congress on Photobiology, p 58, 2000.
366. **Mukhtar H** and Katiyar SK: Green tea in chemoprevention of photocarcinogenesis: Human effects and underlying mechanisms. Proc 13th International Congress on Photobiology, p 80, 2000.
367. Stevens SR, Agarwal S, Kalka K, **Mukhtar H**, Nieminen AL and Oleinick N: Delivery of the photosensitizer Pc4 to distinct skin structures can be achieved by topical application in different vehicles. Proc 13th International Congress on Photobiology, P 130, 2000.
368. Katiyar, SK, Perez A and **Mukhtar H**: Ultraviolet light-induced DNA damage, oxidative stress and phosphorylation of EGFR and ERK1/2 signaling in human skin. Proc 13th International Congress on Photobiology, p 159, 2000.
369. Ahmad N, Kalka K and **Mukhtar H**: *In vitro* and *in vivo* involvement of MDM2 during photodynamic therapy mediated cell apoptosis. Proc 13th International Congress on Photobiology, p 176, 2000
370. Feyes DK, Colussi VC and **Mukhtar H**: Nitric oxide scavengers suppress photodynamic therapy mediated apoptosis and tumor response *in vivo*. Proc 13th International Congress on Photobiology, p 177, 2000.
371. Srivastava M, Ahmad N and **Mukhtar H**: Antisense BCL 2 treatment makes photodynamic therapy-apoptosis-resistant radiation-induced fibrosarcoma cells undergo apoptosis. Proc 13th International Congress on Photobiology, p 178, 2000.
372. Katiyar S, Elmets C and **Mukhtar H**: Green tea polyphenol (-)-epigallocatechin-3-gallate treatment to mouse skin prevents UVB radiation-induced infiltration of leukocytes, depletion of antigen presenting cells and oxidative stress. Proc Amer Assoc Cancer Res 42:20, 2001.
373. Wang S and **Mukhtar H**: Identification by cDNA microarray of genes affected by green tea constituent epigallocatechin-3-gallate in human prostate carcinoma cells LNCaP. Proc Amer Assoc Cancer Res 42:20, 2001.
374. Wang S and **Mukhtar H**: A human internal ribosome entry site highly effective for mediating CaP-independent translation in human carcinoma cells. Proc Amer Assoc Cancer Res 42:27, 2001.
375. Gupta S, Afaq F and **Mukhtar H**: Apigenin in chemoprevention of prostate cancer. Proc Amer Assoc Cancer Res 42:140, 2001.
376. Ahmad N, Adhami VM, Gupta S, Greenberg N and **Mukhtar H**: Involvement of matrix metalloproteinase as a mechanism of inhibition of prostate cancer development and its metastasis by green tea polyphenols in TRAMP Mice. Proc Amer Assoc Cancer Res 42:141, 2001.
377. Hastak K, Ahmad N, Gupta S, Agarwal M and **Mukhtar H**: Role of p53 in anti-proliferative effect of epigallocatechin-3-gallate. Proc Amer Assoc Cancer Res 42:224, 2001.
378. Adhami VM, Afaq F, **Mukhtar H** and Ahmad N: Resveratrol causes G1-phase dysregulation of cell cycle and apoptosis of human epidermoid carcinoma A431 cells. Proc Amer Assoc Cancer Res 42:576, 2001.

379. Balasubramanian S, **Mukhtar H** and Eckert R: Activation of normal keratinocyte differentiation by green tea polyphenol: A mechanism of chemoprevention. *Proc Amer Assoc Cancer Res* 42:806, 2001.
380. Gupta S, Hastak K, Rao JS and **Mukhtar H**: Overexpression of nitric oxide synthase-2 in human prostate adenocarcinoma: Implication for angiogenesis and disease progression. *Proc Amer Assoc Cancer Res* 42:942, 2001.
381. Ahmad N, Gupta S, Cheng P and **Mukhtar H**: Involvement of retinoblastoma and E2F transcription factors during epigallocatechin-3-gallate-mediated cell cycle dysregulation and apoptosis of human epidermoid carcinoma A431 cells. *J Invest Dermatol*, 117:479, 2001.
382. Gupta S, Hastak K, Ahmad N and **Mukhtar H**: The role of caspases in execution of apoptosis in human epidermoid carcinoma A431 cells by green tea polyphenols (-)-epigallocatechin-3-gallate. *J Invest Dermatol*, 117:479, 2001.
383. Katiyar SK, and **Mukhtar H**: Prevention of UVB light-induced leukocytes infiltration, oxidative stress, and depletion of class II MHC+Iak+ cells by green tea constituent (-)-epigallocatechin-3-gallate in C3H/HeN mouse skin. *J Invest Dermatol*, 117:503, 2001.
384. Afaq F, **Mukhtar H** and Ahmad N: Protective effects of resveratrol against short-term markers of photocarcinogenesis in a mouse skin model. *J Invest Dermatol*, 117:505, 2001.
385. An KP, Athar M, Katiyar S, Connolly B, Aszterbaum M, Longley J, Kim AL, Epstein EH Jr., **Mukhtar H** and Bickers DR: Enhanced cyclooxygenase-2 expression in UVB-induced murine and human skin tumors. *J Invest Dermatol*, 117:506, 2001.
386. Balasubramanian S, **Mukhtar H** and Eckert RL: Green tea polyphenol increases AP1 factor-dependent human involucrin gene expression in normal human keratinocytes. *J Invest Dermatol*, 117:523, 2001.
387. **Mukhtar H**, Ahmad N and Gupta S: Sequence of events during photodynamic therapy-mediated apoptosis of human epidermoid carcinoma A431 cells. *J Invest Dermatol*, 117:538, 2001.
388. Adhami VM, Afaq F, **Mukhtar H**, and Ahmad N: Cell cycle dysregulation and apoptosis of human epidermoid carcinoma A431 cells by trans-resveratrol. *J Invest Dermatol*, 117:474, 2001.
389. **Mukhtar H** and Gupta S: Green tea in chemoprevention of prostate cancer. *Mutant Res* 483:S17, 2001.
390. Adhami VM, **Mukhtar H** and Ahmad N: Anti-proliferative effect of sanguinarine against human prostate cancer cells LNCaP and DU145P: Involvement of cell cycle regulation. *Proc Amer Assoc Cancer Res* 43:63, 2002.
391. Afaq, F, Adhami FM, Ahmad N, Gupta S and **Mukhtar H**: Green tea polyphenol (-)-epigallocatechin-3-gallate inhibits ultraviolet B-mediated activation of nuclear factor kappa B in cultured human epidermal keratinocytes. *Proc Amer Assoc Cancer Res* 43:1143, 2002.
392. Gupta S, Hussain T, MacLennan GT, Patel J and **Mukhtar H**: Calcium binding proteins S100A2 and S100A4 as potential prognostic markers for progression of human prostate adenocarcinoma. *Proc Amer Assoc Cancer Res* 43:1, 2002.
393. Hastak K, Gupta S, Ahmad N and **Mukhtar H**: Green tea polyphenol, epigallocatechin-3-gallate induces apoptosis in LNCaP cells by stabilization of p53 and modulation of Bax/Bcl2 ratio. *Proc Amer Assoc Cancer Res*, 43:166, 2002.
394. Hussain T, Gupta S and **Mukhtar H**: Green tea polyphenol, (-) epigallocatechin-3-gallate inhibits cyclooxygenase-2 in androgen-sensitive and androgen-insensitive human prostate carcinoma cells. *Proc Amer Assoc Cancer Res* 43:166, 2002.
395. Gupta S, Adhami VM, Lewin JS and **Mukhtar H**: Dietary supplementation of selective COX-2 inhibitor celecoxib suppresses prostate carcinogenesis in TRAMP mice. *Proc Amer Assoc Cancer Res* 43:671, 2002.
396. Subbarayan M, Hafeli U, Feyes DK, Unnithan J and **Mukhtar H**: A novel method for non-invasive detection of apoptosis *in vivo* using <sup>99m</sup>Tc-Annexin V: Photodynamic therapy applications. *Proc Amer Assoc Cancer Res* 43:1001, 2002.
397. Ke MS, Xue LY, Feyes DK, Azizuddin K, McCormick TS, **Mukhtar H**, Oleinick NL and Stevens SR: Uptake of the silicon phthalocyanine Pc 4 and photodynamic dose-response relationships in A-431 versus Jurkat cells. *J Invest Dermatol*, 119:336, 2002.
398. Ahmad N, Feyes DK, **Mukhtar H** and Adhami VM: Sanguinarine induces apoptosis in human carcinoma keratinocytes (HaCaT cells) via an increase in bax/bcl-2 ratio and induction in WAF1/p21. *J Invest Dermatol*, 119:343, 2002.

399. **Mukhtar H**, Ahmad N, Adhami VM and Afaq F: Green tea polyphenol (-)-epigallocatechin-3-gallate inhibits ultraviolet B-mediated activation of NF- $\kappa$ B in normal human epidermal keratinocytes. *J Invest Dermatol*, 119:214, 2002.
400. Afaq F and **Mukhtar H**: Green tea polyphenol-inhibits UVB-induced mitogen activated protein kinase and NF- $\kappa$ B signaling pathways in mouse skin. *J Invest Dermatol*, 119:214, 2002.
401. Aziz M, Adhami VM, **Mukhtar H** and Ahmad N: Involvement of mitochondrial-events and Bcl-2 family proteins in apoptotic death of immortalized human HaCaT keratinocytes by sanguinarine. *Proc Amer Assoc Cancer Res* 44: 607, 2003.
402. Afaq F, Saleem M, Brans R and **Mukhtar H**: Pomegranate fruit extract could be a novel agent for cancer chemoprevention: Studies in mouse skin. *Proc Amer Assoc Cancer Res* 44:1096, 2003.
403. Saleem M, Adhami VM, Ahmad N, Gupta S and **Mukhtar H**: Calcium binding protein S100A4 is upregulated in advanced prostate cancer in TRAMP: Significant down regulation by oral feeding of green tea. *Proc Amer Assoc Cancer Res* 44:1099, 2003.
404. Adhami VM, Siddiqui IA, Ahmad N, Gupta S and **Mukhtar H**: Inhibition of IGF-I induced autocrine signaling in TRAMP mice by oral infusion of green tea polyphenols. *Proc Amer Assoc Cancer Res* 44:1099, 2003.
405. Afaq F, Ahmad N and **Mukhtar H**: Inhibition of UVB-induced signal transduction pathway in mouse skin by green tea polyphenol. *Proc Amer Assoc Cancer Res* 44:1099, 2003.
406. Nihal M, **Mukhtar H** and Wood GS: Differential anti-proliferative effects of (-)-epigallocatechin-3-gallate on human melanoma cells versus normal human melanocytes: Possible implications for the chemoprevention of melanoma. *Proc Amer Assoc Cancer Res* 44:1303, 2003.
407. Afaq F, Saleem M, Brans R and **Mukhtar H**: Novel agents and targets for skin cancer chemoprevention: studies with pomegranate fruit extract. *J Invest Dermatol*, 121:140, 2003.
408. **Mukhtar H**, Saleem M, Aziz MH, Brans R and Afaq F: Oleandrin: a novel agent for skin cancer chemoprevention. *J Invest Dermatol*, 121: 142, 2003.
409. Nihal M, **Mukhtar H** and Wood GS: (-)-Epigallocatechin-3-gallate directly induces apoptosis and inhibits proliferation of human melanoma cell lines. *J Invest Dermatol*, 121: 161, 2003.
410. **Mukhtar H** and Reeve V: Botanical antioxidants for prevention of photocarcinogenesis. *Proc. 31<sup>st</sup> Annual Meeting of the American Society for Photobiology*. P 27, 2003.
411. Afaq F, Ahmad N and **Mukhtar H**: Suppression of ultraviolet B-induced phosphorylation of mitogen activated protein kinase and activation of nuclear factor kappa B by green tea polyphenols in mouse skin. *Proc 31<sup>st</sup> Annual Meeting of the American Society for Photobiology* P 46, 2003.
412. Malik A, Afaq F, and **Mukhtar H**: Pomegranate fruit extract could be a useful agent for chemoprevention of prostate cancer. *Proc Amer Assoc Cancer Res* 45: 169-170, 2004.
413. Adhami VM, Siddiqui IA, Ahmad N and **Mukhtar H**: Involvement of vimentin in prostate cancer progression and invasion: A study in transgenic TRAMP model that closely mimics human disease. *Proc Amer Assoc Cancer Res* 45: 481, 2004.
414. **Mukhtar H**, Saleem M, Afaq F, and Adhami VM: Lupeol is a novel agent for skin cancer chemoprevention: Modulation of NF $\kappa$ B and Akt pathways. *Proc Amer Assoc Cancer Res* 45:730, 2004.
415. Saleem M, Adhami VM and **Mukhtar H**: siRNA and DNA micro-array studies of S100A4 gene: Regulation of matrix metalloproteinases during metastasis of prostate cancer. *Proc Amer Assoc Cancer Res* 45: 834, 2004.
416. Hastak K, Agarwal MK, **Mukhtar H** and Agarwal ML: Role of p21<sup>WAF1</sup> and Bax in p53-dependent apoptosis induced by green tea polyphenol epigallocatechin-3-gallate. *Proc Amer Assoc Cancer Res* 45: 932, 2004.
417. Afaq F, Malik A, Matsui MS, Maes D and **Mukhtar H**: Pomegranate fruit extract modulates UVB-induced activation of nuclear factor kappa B and phosphorylation of mitogen activated protein kinases in normal human epidermal keratinocytes. *Proc Amer Assoc Cancer Res* 45: 932, 2004.
418. Siddiqui IA, Afaq F, Adhami VM, Ahmad N and **Mukhtar H**: Inhibition of EGF induced signal transduction pathways by green and black tea polyphenols in androgen independent prostate cancer cells. *Proc Amer Assoc Cancer Res* 45: 935, 2004.
419. Nihal M, **Mukhtar H**, and Wood GS: Epigallocatechin-3-gallate (EGCG) causes cell cycle arrest and apoptosis in human melanoma cells via modulation of the cyclin kinase inhibitor (cki) network and Bcl2 family proteins. *J Invest Dermatol*, 122: A155, 2004.

420. Afaq F, Malik A, Matsui MS, Maes D, and **Mukhtar H**: Inhibition of ultraviolet B-mediated activation of nuclear factor kB and phosphorylation of MAPKs in normal human epidermal keratinocytes by pomegranate fruit extract. *J Invest Dermatol*, 122: A145, 2004.
421. **Mukhtar H**, Saleem M, Afaq F and Adhami VM: Lupeol inhibits TPA-induced activation of nuclear factor kappa B (NFkB) and phosphatidyl inositol 3-kinase (PI3K) Akt and skin tumor promotion in CD-1 mouse. *J Invest Dermatol*, 122: A24, 2004.
422. **Mukhtar H**, Malik A, Syed D, and Afaq F: Pomegranate fruit extract for chemoprevention and chemotherapy of prostate cancer. *Cancer Epi Biomarkers Prevention*, 13: 1862S, 2004.
423. Agarwal ML, Hastak K, Agarwal ML and **Mukhtar H**: Ablation of either p21 or bax prevents p53 dependent apoptosis induced by green tea polyphenol epigallocatechin-3-gallate. *Cancer Epi Biomarkers Prevention*, 13: 1847S, 2004.
424. Kweon MH and **Mukhtar H**: Novel cytoprotective MCGA3 upregulates ARE-dependent detoxifying genes *via* Nrf2 translocation and GSH/GSSG redox regulation. *Proc Amer Assoc Cancer Res* 46: 366, 2005.
425. Syed DN, Malik A, Afaq F and **Mukhtar H**: An extract from the seeds of pomegranate for chemoprevention and chemotherapy of prostate cancer. *Proc Amer Assoc Cancer Res* 46: 1228, 2005.
426. Saleem M, Adhami VM, Longley BJ, Reagan-Shaw S, Jarrard DF, Dickson RB, Lin CY and **Mukhtar H**: Over expression of matriptase with concomitant loss of its inhibitor HAI-1 during progression of human prostate adenocarcinoma. *Proc Amer Assoc Cancer Res*, 46: 1324, 2005.
427. Yun JM, Saleem M, Kweon MH, Syed D and **Mukhtar H**: Lupeon induces FAS-mediated apoptotic death of androgen-dependent LNCaP prostate cancer cells and inhibits tumor growth in athymic nude mouse model. *Proc Amer Assoc Cancer Res* 46: 1013-1014, 2005.
428. Adhami VM, Zaman N, Saleem M, Pasha FS and **Mukhtar H**: Combinatorial effects of green tea polyphenol EGCG and NS-398, a COX-2 specific inhibitor on growth and apoptosis in androgen-dependent and – independent prostate cancer cells. *Proc Amer Assoc Cancer Res* 46: 1014, 2005.
429. **Mukhtar H**, Adhami VM, Reagan-Shaw, S and Saleem M: Ablation of S100A4 gene by small interfering RNA reduces the invasiveness and tumorigenicity of human prostate cancer cells PC-3 *in vitro* and *in vivo*. *Proc Amer Assoc Cancer Res* 46: 1088, 2005.
430. Siddiqui IA, Sarfaraz S, Zaman N, Adhami VM, Aziz MH, Ahmad N and **Mukhtar H**: Inhibition of CWR22Rv1 tumor growth and PSA secretion in athymic nude mice by green and black teas. *Proc Amer Assoc Cancer Res* 46:1075, 2005.
431. Hadi N, Afaq F and **Mukhtar H**: Antiproliferative effects of anthocyanins, hydrolyzable and oligomeric tannins rich pomegranate fruit extract on human lung carcinoma cells A549. *Proc Amer Assoc Cancer Res* 46: 579, 2005.
432. Afaq F, Syed DN, Malik A, Hadi N, Sarafaz S and **Mukhtar H**: Delphinidin, an anthocyanin present in pigmented fruits and vegetables, protects human HaCaT keratinocytes against UVB-mediated oxidative stress and apoptosis. *Proc Amer Assoc Cancer Res* 46: 1016, 2005.
433. Sarfaraz S, Afaq F, Adhami VM, Malik A, Siddiqui IA and **Mukhtar H**. Cannabinoid receptors: A novel target for the treatment of prostate cancer. *Proc Amer Assoc Cancer Res* 46: 603, 2005.
434. Malik A, Syed DN, Sarfaraz S, Adhami VM, Afaq F and **Mukhtar H**: Inhibition of CWR22Rv1 prostate tumor growth and PSA secretion in athymic nude mice by celecoxib in combination with green tea polyphenols. *Proc Amer Assoc Cancer Res* 46: 1014-1015, 2005.
435. Nihal M, Siddiqui IA, Siddiqui S, **Mukhtar H** and Wood GS: Epigallocatechin-3-gallate (EGCG) induces apoptosis and inhibits proliferation of human melanoma cells in a murine xenograft model. *J Invest Dermatol*, 124: A 26, 2005.
436. Afaq F, Syed DN, Malik A, Hadi N, Sarfaraz S and **Mukhtar H**: Delphinidin protects human HaCaT keratinocytes against UVB-mediated oxidative stress and apoptosis. *J Invest Dermatol*, 124: A 130, 2005.
437. Malik A, Syed DN, Afaq F, Hadi N and **Mukhtar H**: Photochemopreventive effect of pomegranate fruit extract on UVA-mediated activation of cellular pathways in normal human epidermal keratinocytes. *J Invest Dermatol*, 124: A 131, 2005.
438. Syed DN, Afaq F, Malik A, Hadi N and **Mukhtar H**: Differential activation of signaling pathways by UVA and UVB radiation in normal human epidermal keratinocytes. *J Invest Dermatol*, 124: A 130, 2005.
439. Amin AR, **Mukhtar H** and Agarwal ML: Identification of tyrosine phosphate, SHP-2 as a negative regulator of p53-independent apoptosis and p53 target gene expression. *Proc Amer Assoc Cancer Res* 47: 706, 2006.

440. Nihal M, Ahmad N, **Mukhtar H** and Wood GS: Green tea polyphenol (-)-epigallocatechin-3-gallate causes growth inhibition, induction of apoptosis and cell cycle arrest in cutaneous T-cell lymphoma cell lines. *Proc Amer Assoc Cancer Res* 47: 2256, 2006.
441. Syed DN, Afaq F, Kweon MH, Hadi N, Bhatia N, Spiegelman VS and **Mukhtar H**: Suppression of cigarette smoke condensate-induced NF $\kappa$ B activation in normal human bronchial cells by green tea polyphenol EGCG. *Proc Amer Assoc Cancer Res* 47: 2256, 2006.
442. Siddiqui IA, Malik A, Adhami VM and **Mukhtar H**: EGCG sensitizes human prostate carcinoma LNCaP cells to TRAIL-induced apoptosis. *Proc Amer Assoc Cancer Res* 47: 2258, 2006.
443. Zaman N, Afaq F, Khan N, Syed DN and **Mukhtar H**: Delphinidin, a major anthocyanin in pigmented fruits and vegetables is a potent inhibitor of epidermal growth factor receptor and its downstream signaling pathway. *Proc Amer Assoc Cancer Res* 47: 2266, 2006.
444. Malik A, Afaq F, Adhami VM, Sarfaraz S and **Mukhtar H**: Delphinidin, a major anthocyanin in pigmented fruits and vegetables induces caspase-dependent apoptosis in human prostate cancer cells PC3. *Proc Amer Assoc Cancer Res* 47: 2272, 2006.
445. Khan N, Afaq F and **Mukhtar H**: Modulation of MAPK and NF $\kappa$ B pathways in human A549 lung carcinoma cells by pomegranate fruit extract. *Proc Amer Assoc Cancer Res* 47: 3193, 2006.
446. Adhami VM, Zaman N, Sarfaraz S and **Mukhtar H**: Loss of MAP-2 during sustained activation of EGFR in breast cancer cells leads to resistance to conventional chemotherapeutic drug docetaxel. *Proc Amer Assoc Cancer Res* 47: 3758, 2006.
447. Reagan-Shaw S, Ahsan H, **Mukhtar H** and Ahmad N: Combination of vitamin E and selenium synergistically inhibits proliferation and induces apoptosis of prostate cancer cells via modulations in Bcl-2 family proteins. *Proc Amer Assoc Cancer Res* 47: 3909, 2006.
448. Saleem M, Khan N, Hafeez BB, Kweon MH and **Mukhtar H**: Lupeol, a dietary triterpene, inhibits Wnt/ $\beta$ -catenin/TCF signaling pathway with concomitant G2/M cell cycle arrest in human prostate cancer cells. *Proc Amer Assoc Cancer Res* 47: 3731, 2006.
449. Afaq F, Sarfaraz S, Syed DN, Khan N, Malik A, Bailey HH and **Mukhtar H**: Cannabinoid receptors as a target for therapy of ovarian cancer. *Proc Amer Assoc Cancer Res* 47: 4615, 2006.
450. Sarfaraz S, Afaq F, Adhami VM, Malik A and **Mukhtar H**: Cannabinoid receptor agonist induced apoptosis of human prostate cancer cells LNCaP proceeds through activation of MAPKs and G<sub>1</sub> cell cycle arrest. *Proc Amer Assoc Cancer Res* 47: 4616, 2006.
451. Kweon MH, Saleem M and **Mukhtar H**: Constitutive overexpression of Nrf2-dependent HO-1 confers resistance to apoptosis by EGCE in human lung adenocarcinoma A549 cells. *Proc Amer Assoc Cancer Res* 47: 4891, 2006.
452. Shukla Y, Adhami VM, Siddiqui IA, Zaman N, Sarfaraz S and **Mukhtar H**: Suppression of NF $\kappa$ B and its regulated pathways by oral administration of green tea polyphenols in an autochthonous mouse model of prostate cancer. *Proc Amer Assoc Cancer Res* 47: 4893, 2006.
453. Syed DN, Afaq F, Khan N and **Mukhtar H**: Delphinidin, a major anthocyanidin in pigmented fruits and vegetables, induces differentiation but not apoptosis in normal human epidermal keratinocytes. *J Invest Dermatol*, 126: 18, 2006.
454. Afaq F, Hafeez BB, Syed DN, Kweon MH and **Mukhtar H**: Oral feeding of pomegranate fruit extract inhibits early biomarkers of UVB radiation-induced carcinogenesis in SKH-1 hairless mouse epidermis. *J Invest Dermatol*, 126: 141, 2006.
455. Kweon MH, Afaq F and **Mukhtar H**: The novel antioxidant 3-O-caffeoyl-1-methylquinic acid enhances UVA-induced apoptosis in HaCaT cells through induction of hypoxia-dependent p21 Waf1/Cip1. *J Invest Dermatol*, 126: 141, 2006.
456. Ahsan H, Reagan-Shaw S, Eggert D, Afaq F, **Mukhtar H** and Ahmad N: Plant alkaloid sanguinarine prevents ultraviolet B radiation-mediated damages in the skin of SKH1 hairless mouse. *J Invest Dermatol*, 126: 141, 2006.
457. Ahsan H, Reagan-Shaw S, Eggert D, Afaq F, **Mukhtar H** and Ahmad N: Suppression of ultraviolet B-mediated activation of P13K/Akt and NF $\kappa$ B signaling in SKH1 hairless mouse skin by sanguinarine. *J Invest Dermatol*, 126: 142, 2006.

458. Saleem M, Maddodi N, Khan N, Hafeez BB, Kweon MH, Setaluri V and **Mukhtar H**: Lupeol, a novel diet based triterpene, inhibits growth and induces apoptosis of primary and metastatic melanoma cells by modulating NF $\kappa$ B signaling. *J Invest Dermatol*, 126:1154, 2006.
459. Nihal M, Ahsan H, Ahmad N, **Mukhtar H** and Wood GS: Combination of (-)-epigallocatechin-3-gallate (EGCG) and interferon-alpha (IFN $\alpha$ ) exerts synergistic inhibitory effects against melanoma xenografts in athymic nude mice. *J Invest Dermatol* 126: 156, 2006.
460. **Mukhtar H**: A new mantra for controlling prostate cancer: custom tailoring of chemoprevention cocktail. *Chem Biol Interact* 161: 186-187, 2006.
461. **Mukhtar H**, Adhami VM, Afaq F, Saleem M, Sarfaraz S, Khan N, Din M and Hafeez BB: Delphinidin induces apoptosis and growth inhibition of prostate cancer PC-3 cells via inhibition of Notch-1 and NF- $\kappa$ B/PI3K pathways. *Proc Amer Assoc Cancer Res* 48: 1578, 2007.
462. Sarfaraz S, Afaq F, Adhami VM, Malik A, Siddiqui IA and **Mukhtar H**: Cannabinoid receptors agonist WIN-55,212-2 inhibits angiogenesis, metastasis and tumor growth of androgen-sensitive prostate cancer cell CWR22Rv1 xenograft in athymic nude mice. *Proc Amer Assoc Cancer Res* 48: 2195, 2007.
463. Siddiqui IA, Adhami VM, Malik A, Sarfaraz S, Hafeez BB and **Mukhtar H**: EGCG sensitizes human prostate cancer LNCaP cells to TRAIL induced apoptosis through modulation of extrinsic and intrinsic pathways and synergistically inhibits angiogenesis and metastasis. *Proc Amer Assoc Cancer Res* 48: 2343, 2007.
464. Afaq F, Abu Zaid M, Khan N, Syed DN, Hafeez BB, Yun JM, Sarfaraz S and **Mukhtar H**: Pomegranate fruit extract inhibits UVB-induced activation of NF- $\kappa$ B and MAPK leading to decreased expression of matrix metalloproteinases in SKH-1 mouse skin. *Proc Amer Assoc Cancer Res* 48: 2571, 2007.
465. Abu Zaid M, Afaq F, Khan N and **Mukhtar H**: Protective effects of pomegranate juice, oil and byproduct on UVB-induced DNA damage, PCNA expression and MMPs in human reconstituted skin. *Proc Amer Assoc Cancer Res* 48: 2573, 2007.
466. Khan N, Afaq F, Kweon MH, Kim KM and **Mukhtar H**: Oral consumption of pomegranate fruit extract inhibits growth and progression of primary lung tumors in mice. *Proc Amer Assoc Cancer Res* 48: 2572, 2007.
467. Amin AM, Thakur VS, Paul RK, Feng GS, **Mukhtar H** and Agarwal ML: SHP-2 tyrosine phosphatase inhibits p73-dependent apoptosis and expression of a subset of p53 target genes induced by EGCG. *Proc Amer Assoc Cancer Res* 48: 4218, 2007.
468. Syed DN, Afaq F, Sarfaraz S, Khan N, Kedlaya R, Setaluri V and **Mukhtar H**: Delphinidin, a major anthocyanidin in pigmented fruits and vegetables inhibits HGF/Met- mediated proliferation and invasion in immortalized MCF10A cells. *Proc Amer Assoc Cancer Res* 48: 4203, 2007.
469. Yun JM, Afaq F, Khan N and **Mukhtar H**: Delphinidin, an anthocyanidin in pigmented fruits and vegetables, induces apoptosis and cell cycle arrest via suppression of NF- $\kappa$ B pathway in human colon cancer HCT116 cells. *Proc Amer Assoc Cancer Res* 48: 4195, 2007.
470. Adhami VM, Zaman N and **Mukhtar H**: Involvement of interleukin-1 $\alpha$  during prostate cancer progression and invasion in autochthonous transgenic TRAMP model. *Proc Amer Assoc Cancer Res* 48: 4667, 2007.
471. Asim M, **Mukhtar H** and Baniahmad A: Src kinase promotes the growth of therapy resistant prostate cancer cells via regulation of androgen receptor function. *Proc Amer Assoc Cancer Res* 48: 9059, 2007.
472. Hafeez BB, Adhami VM, Bhat K, Afaq F, Siddiqui IA, Din M, Setaluri V and **Mukhtar H**: Silencing of NOTCH-1 inhibits invasion and metastasis of human prostate cancer PC-3 cells via inhibition of matrix metalloproteinase and urokinase plasminogen activator. *Proc Amer Assoc Cancer Res* 48: 4940, 2007.
473. Saleem M, Khan N, Siddiqui IA, Adhami VM, Zhong W and **Mukhtar H**: Bmi-1 gene in regulation of proliferation and survival of human prostate cancer. *Proc Amer Assoc Cancer Res* 48: 5232, 2007.
474. **Mukhtar H**, Abu Zaid M, Afaq F, Syed DN, Pelle E, Matsui MS and Maes D: Ozone exposure of human epidermal keratinocytes results in activation of aryl hydrocarbon receptor leading to increased expression of cytochrome P450: Role of phosphorylation of EGFR. *J Invest Dermatol* 127, S101: 601, 2007.
475. Abu Zaid M, Afaq F, Khan N and **Mukhtar H**: Protective effects of pomegranate derived products on UVB-induced DNA damage, PCNA expression and MMPs in human reconstituted skin. *J Invest Dermatol* 127, S143: 855, 2007.
476. Asim M, Hafeez BB, Siddiqui IA, Baniahmad A and **Mukhtar H**: Regulation of corepressor LCoR functions by Src kinase in prostate cancer. *Proc Amer Assoc Cancer Res* 49, 2008.



477. Abu Zaid M, Afaq F, Khan N, Pelle E, Matsui MS, Maes D and **Mukhtar H**: Exposure of normal human epidermal keratinocytes to ozone results in increased expression of cytochrome P450 through activation of aryl hydrocarbon receptor. *Proc Amer Assoc Cancer Res* 49, 2008.
478. Khan N, Afaq F, Syed DN and **Mukhtar H**: Fisetin, a novel dietary flavonoid causes apoptosis and cell-cycle arrest in human prostate cancer LNCaP cells. *Proc Amer Assoc Cancer Res* 49, 2008.
479. Yun JM, Afaq F and **Mukhtar H**: Dietary anthocyanidin delphinidin modulates B-catenin signaling pathway in human prostate cancer PC-3 cells. *Proc Amer Assoc Cancer Res* 49, 2008.
480. Saleem M, Suh Y, Hafeez BB, Johnson JJ, Murtaza I and **Mukhtar H**: Lupeol, a novel dietary based triterpene modulates insulin growth factor receptor 1 and B-catenin signaling in human prostate cancer cells. *Proc Amer Assoc Cancer Res* 49, 2008.
481. Afaq F, Abu Zaid M, Khan N, Syen DN, Yun JM, Sarfaraz S, Suh Y and **Mukhtar H**: Inhibitory effect of oral feeding of pomegranate fruit extract on UVB-induced skin carcinogenesis in SKH-1 hairless mice. *Proc Amer Assoc Cancer Res* 49, 2008.
482. Siddiqui IA, Adhami VM, Hafeez BB, Asim M, Khwaja SI, Bharali D, Mousa SA and **Mukhtar H**: Nanochemoprevention: Introducing a novel concept in cancer chemoprevention with a proof of principle for superior activity of green tea polyphenol epigallocatechin-3-gallate encapsulated in PLGA/PVA nanoparticles. *Proc Amer Assoc Cancer Res* 49, 2008.
483. Asim M, Hafeez BB, Siddiqui IA and **Mukhtar H**: Green tea polyphenol EGCG antagonizes androgen function: Novel insight into the mechanism of chemopreventive effects of green tea on prostate cancer. *Proc Amer Assoc Cancer Res* 49, 2008.
484. Hafeez BB, Adhami VM, Asim M, Saleem M, Zhong W, Siddiqui IA, Din M and **Mukhtar H**: Over-expression of Notch1 in human prostate cancer and its role in tumor invasion: Evidence based on tissue and cDNA gene arrays. *Proc Amer Assoc Cancer Res* 49, 2008.
485. Murtaza I, Saleem M, Hafeez BB, Sonkarley P, Adhami VM, Siddiqui IA and **Mukhtar H**: Lupeol, a dietary triterpene, inhibits the proliferation of human prostate cancer cells: modulation of microtubule assembly and inhibition of proteasome. *Proc Amer Assoc Cancer Res* 49, 2008.
486. Suh Y and **Mukhtar H**: Dietary flavonoid fisetin induces apoptosis, down regulates COX2 and suppresses Wnt signaling pathway in HT29 colon cancer cells. *Proc Amer Assoc Cancer Res* 49, 2008.
487. Johnson JJ, Syed DN, Adhami VM and **Mukhtar H**: Carnosol, a dietary diterpene, displays growth inhibitory effects leading to G1-phase cell cycle arrest and targets the 5'-AMP-activated protein kinase (AMPK) pathway in human prostate cancer PC3 cells. *Proc Amer Assoc Cancer Res* 49, 2008.
488. Adhami VM, Siddiqui IA, Sarfaraz S, Khwaja SI and **Mukhtar H**: Efficacious prostate cancer chemopreventive intervention with green tea polyphenols decreases with increasing tumor grade in the autochthonous transgenic TRAMP model. *Proc Amer Assoc Cancer Res* 49, 2008.
489. Sarfaraz S, Siddiqui IA, Abu Zaid M, Syed DN, Afaq F and **Mukhtar H**: Guggulsterone modulated MAPK and NF-kappaB pathways and inhibits skin tumorigenesis in SENCAR mice. *Proc Amer Assoc Cancer Res* 49, 2008.
490. Syed DN, Sarfaraz S, Afaq F and **Mukhtar H**: Inhibition of the growth of human melanoma cells with concomitant downregulation of B-catenin signaling by a novel dietary flavonoid fisetin: Implications for chemoprevention. *Proc Amer Assoc Cancer Res* 49, 2008.
491. Afaq F, Zaid MA, Pelle E, Matsui MS, Maes D, and **Mukhtar H**: Aryl hydrocarbon receptor is an ozone sensor in human skin, *J Invest Dermatol*, April 2008.
492. Hafeez BB, Asim M, Siddiqui IA, Adhami VM, Ahmad A, Baniahmad A and **Mukhtar H**: Dietary anthocyanidin delphindin interacts with androgen receptor and accelerates its decay in human prostate cancer cells and in a xenograft mouse model. *AACR* April, 2009.
493. Siddiqui IA, Moody L, Asim M, Khwaja SI, **Mukhtar H**: Inhibition of Capdependent protein translation concomitant with induction of autophagy through repression of mTOR signaling pathway in PC3 prostate cancer cells by dietary flavonoid fisetin. *AACR* April, 2009.
494. Siddiqui IA, Moody L, Hafeez BB, Adhami VM, Khwaja SI and **Mukhtar H**: Green tea polyphenol epigallocatechin-3-gallate cause p21 regulated induction of cellular senescence in prostate cancer cells. *AACR* April, 2009.

495. Saleem M, Adhami VM, Murtaza I, Shekhni MT, Tarapore RS, Khwaja SI, Asim M, Hafeez BB, Ambartsumain N and **Mukhtar H**: Intracellular and Extracellular S100A4 promote development and invasion of prostate cancer: Involvement of RAGE receptor-NFkB signaling network. AACR April, 2009.
496. Tarapore RS, Siddiqui IA, Saleem M and **Mukhtar H**: Lupeol, a novel dietary triterpene, modulates Wnt/B-catenin and NF-kB signaling in human melanoma cells. AACR April, 2009.
497. Khan N, Afaq F, Suh Y, Khusro F and **Mukhtar H**: Fisetin, a dietary flavonoid activates tumor suppressor LKB1 and inhibits Akt/ mTOR signaling in human non-small cell lung cancer cells. AACR April, 2009.
498. Johnson JJ, Syed DN, Heren CR and **Mukhtar H**: Carnosol acts as a dual disruptor of both AR and ER-alpha expression in prostate cancer. AACR April, 2009.
499. Asim M, Hafeez BB, Siddiqui IA, Tarapore RS, Baniahmad A and **Mukhtar H**: Green tea polyphenol EGCG blunts nuclear shuttling of androgen receptor: novel insight into its androgen antagonistic function in prostate cancer. AACR April, 2009.
500. Tarapore RS, Siddiqui IA, Saleem M and **Mukhtar H**: induction of apoptosis of human melanoma cells through modulation of NF-kB signaling by a dietary triterpene lupeol. J Invest Dermatology, 129, 595, 2009.
501. Siddiqui IA, Tarapore RS, Adhami VM, Bharali DJ, Mohamud Z, Mousa SA and **Mukhtar H**: Anti-proliferative and pro-apoptotic effects of (-)-epigallocatechin-3-gallate encapsulated in chitosan nanoparticles on human melanoma Mel 928 cells. Proc Amer Assoc Cancer Res 51: 1385, 2010.
502. Khan N, Afaq F, Yun JM, Khusro FH and **Mukhtar H**: Inhibition of lung tumorigenesis by oral consumption of pomegranate fruit extract. Proc Amer Assoc Cancer Res 51: 230-231, 2010.
503. Tarapore RS, Siddiqui IA, Saleem M, Speigelman V and **Mukhtar H**: Inhibition of nuclear B-catenin translocation by a chemoprevention dietary triterpene lupeol. Proc Amer Assoc Cancer Res 51: 357-358, 2010.
504. Tarapore RS, Siddiqui IA, Saleem M, Speigelman V and **Mukhtar H**: Growth inhibition of human melanoma cells in vitro and in vivo by lupeol is associated with inhibition of Wnt/B-catenin signaling. Proc Amer Assoc Cancer Res 51: 922, 2010.
505. Johnson J, Syed DN, Siddiqui IA, Adhami VM, Rasmussen JT and **Mukhtar H**: Standardized mangosteen fruit extract promotes cell cycle arrest and apoptosis of PC3 cells and inhibits tumor formation in athymic nude mice. Proc Amer Assoc Cancer Res 51: 703-704, 2010.
506. Peng L, Khan N, Afaq F, Ye C and **Mukhtar H**: Cocoa tea (camellia ptilophylla): another beverage for chemotherapy of prostate cancer. Proc Amer Assoc Cancer Res 51: 459, 2010.
507. Johnson J, Syed DN, Siddiqui IA, Adhami VM, Rasmussen JT, Handa H and **Mukhtar H**: From fruit extract to structure activity relationship studies: Alpha-mangostin promotes G1 cell cycle arrest in PC3 cells and inhibits tumor formation in athymic nude mice. Proc Amer Assoc Cancer Res 51: 704, 2010.
508. Jung-Hynes BD, Schmit TL, Reagan-Shaw S, Siddiqui IA, Ahmad N and **Mukhtar H**: Melatonin, a novel Sirt1 inhibitor, imparts anti-proliferative effects against PCa in vitro in cell culture and in vivo in transgenic adenocarcinoma of mouse prostate (TRAMP) model. Proc Amer Assoc Cancer Res 51: 1328-1329, 2010.
509. Tarapore RS, Siddiqui IA, Bharali DJ, Ahmad MA and **Mukhtar H**: Prevention and treatment of human melanoma by EGCG encapsulated in chitosan nanoparticles. J Invest Dermatol 130: S139, 2010.
510. Tarapore RS, Siddiqui IA, Saleem M, Speigelman V and **Mukhtar H**: Dietary triterpene lupeol targets melanoma phenotype exhibiting activated Wnt/B-catenin signaling. J Invest Dermatol 130: S141, 2010.
511. Adhami VM, Siddiqui IA and **Mukhtar H**: Pomegranate fruit extract inhibits prostate carcinogenesis in the TRAMP mouse model. Proc Amer Assoc Cancer Res 52, 2011.
512. Khan N, Adhami VM, Afaq F and **Mukhtar H**: Modulation of prostate cancer signaling and inhibition of tumor growth by a plant polyphenol butein. Proc Amer Assoc Cancer Res 52, 2011.
513. Khan N, Afaq F and **Mukhtar H**: Delphinidin dietary anthocyanidin modulates EGFR/HER-2 signaling pathway in breast cancer cells. Proc Amer Assoc Cancer Res 52, 2011.
514. Siddiqui IA, Tarapore RS, Adhami VM, Bharali DJ, Kohl AM, Lind SD, Mousa SA and **Mukhtar H**: Inhibition of melanoma cell growth in vitro and in vivo by (-)- epigallocatechin – 3 – gallate encapsulated in chitosan nanoparticles. Proc Amer Assoc Cancer Res 52, 2011.
515. Syed DS, Adhami VM, Chamcheu JC and **Mukhtar H**: Inhibition of P13K/AKT/mTOR pathway in human melanoma cells with induction of autophagy and decreased tumor growth both in *vitro* and in *vivo* by a dietary flavonoid fisetin. J Invest Dermatol 131: S24, 2011

516. Afaq F, Syed DN, Khan N and **Mukhtar H**: A dietary anthocyanidin delphinidin promotes epidermal differentiation and activation of caspase-14 in human epidermal keratinocytes and reconstituted skin. *J Invest Dermatol* 131: S48, 2011.