

CURRICULUM VITAE

Name: Ezdihar A. Hassoun
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EDUCATION AND DEGREES:

Ph.D. Department of Toxicology, College of Pharmacy, Uppsala University, Sweden, 1985
B.S. Pharmacy, College of Pharmacy, University of Baghdad, 1978
Registered Pharmacist (The Iraqi Board of Pharmacists) Baghdad/Iraq (1978-1990)

APPOINTMENTS:

January 2014-December 2016 Chair/ Department of Pharmacology and Experimental Therapeutics
2010-present: Joint appointment with the Department of Medicinal and Biological Chemistry
2001-2013: Vice Chair/ Department of Pharmacology, University of Toledo/ College of Pharmacy
2005-present: Professor, University of Toledo, College of Pharmacy and Pharmaceutical Sciences
1999-2005: Associate Professor, University of Toledo, College of Pharmacy
1995- 1999 : Assistant Professor, University of Toledo, College of Pharmacy, Toledo, Ohio
2004-2006: Member, the Advisory Committee on Special Studies Related to the Long Term Effects of Phenoxy herbicides and contaminants/ Department of Health and Human Services (DHHS)
1991-1995 : Research Associate, Creighton University, School of Pharmacy and Allied Health Professions, Omaha, Nebraska
1989-1990 : Associate Professor, Department of Pharmacology and Toxicology, College of pharmacy/ University of Baghdad.
1985-1988 : Assistant Professor, Dept. of Pharmacology and Toxicology, college of Pharmacy, University of Baghdad
1985-1986: Part-time pharmacist, a private retail pharmacy, Baghdad /Iraq.
1980-1985 : Ph.D. student, Dept. of Toxicology, Uppsala University, Sweden.
Title of Ph.D. Thesis: "Teratogenicity and in vitro fetal thymus toxicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin and its congeners: Segregation with the Ah-locus"
1978-1979 : Research Associate, Dept. of Pharmacology and Toxicology, College of Pharmacy, University of Baghdad.

TEACHING:

1985-1990	Human physiology course and Toxicology course (Pharmacy students, Baghdad University)
1995-1996	PHCL-2600 (Functional Anatomy and Pathophysiology I), 4 cr. (UT, pharmacy)
1996-1998	PHCL-2620 (Functional Anatomy and Pathophysiology II), 4cr. (UT Pharmacy)
1996-present	UT Pharmacy: PHCL-4730/5730 (Toxicology I), 3-credit course (grad. & undergrad levels) PHCL-4750/5750 (Toxicology II), 3-credit course (grad. & undergrad levels) PHCL-6600 (Seminar in Pharmacology, graduate course) 1 credit. PHCL-4910/5990 (Problems in Pharmacology Undergrad/grad) 1-6 credit (lab.) PHCL-6900/6920 (M.S. Thesis Research in Pharmacology) 1-6 credit (lab)
2007- present	PHCL-3700/5700 (Pharmacology I), 3 cr. (grad. & undergrad levels)
2006-2012	MBC-8960 (Ph.D. Dissertation Research Medicinal Chemistry)
2006-2012	MBC-6300 (Biomedical Chem Lab)
2013- present	PHCL-5770/7770 Current Topics in Toxicol I. (1 credit, PHD students)
2013-present	PHCL-6300/7300 Research in Experimental Therapeutics.
2014-present	PHCL-8960 Ph.D Dissertation research in Experimental Therapeutics
2015-present	PHCL-5500/7500 From Experimental to Applied Therapeutics (4 credit, PHD students)

GRANTS

2007-2012	(P.I)	NIH/NIEHS "Long term toxicity of di- and tri-chloroacetate" . \$ 209,400
2005-2007	(P.I)	DeArce Memorial Endowment Fund "Phagocytic activation and induction of oxidative stress in hepatic tissues of mice after exposure to di- and tri-chloroacetate. \$ 4,722.
2001-2005	(P.I)	NIH/NIEHS "TCDD-induced oxidative stress in the rats brain. \$ 149,000
2000-2001	(P.I)	DeArce Memorial Endowment Award "Assessment of the roles of antioxidants in the chronic toxicity of TCDD". \$ 6,000
1998-2001	(P.I)	NIH/NIEHS "TCDD-induced oxidative stress in the tissues of rats" . \$ 65,000
1997-1998	(P.I)	The University of Toledo Research Grants Program
1994-1998	(P.I)	NIH/NIEHS "Fetotoxicity of TCDD, Endrin and Lindane in Mice." \$ 98,000

AWARDS:

1. CPPS, Department Leadership Award-2017
2. College of Pharmacy and Pharmaceutical Sciences (CPPS) Ambassador Award, 2016
3. CPPS Assessment Award, 2011
4. University of Toledo Outstanding Researcher Award, 2010
5. CPPS Deans Service Award, 2010
6. CPPS Award for Research Excellence, 2008
7. A certificate and plaque from US Secretary of Health and Human Services, Michael Leavitt in recognition of Distinguished Service on Advisory Committee on Special Studies Relating to Possible Long-Term Health Effects of Phenoxy Herbicides and Contaminants., 2006

GRADUATE ADVISING:

The followings are names and theses/dissertation titles of the graduate students who successfully finished their theses/dissertation research under my supervision:

1. Amy Walter (1997). Oxidative stress as a mechanism for the teratogenicity of TCDD.
2. Xin Wang (1998). The toxicity of ricin in the macrophage cell culture: The role of TNF-alpha.
3. Feng Li (1999). Oxidative tissue damage as a mechanism for the neurotoxicity of TCDD and its congeners.
4. Bethany Holden (2000). The role of the antioxidant enzymes in the long term neurotoxicity and hepatotoxicity of TCDD.
5. Hong Huang (2000). Oxidative tissue damage as a mechanism for the long term hepatotoxicity of TCDD and its congeners.
6. SeAnna Periandri (2000). The roles of glutathione, superoxide dismutase, glutathione peroxidase in the neurotoxicity of PCB-126.
7. Sunetra Ray (2001). In vitro studies on the toxicity of some water purification by products.
8. Akram Abu Mahfouz (2001). The modulation effects of vitamin E on TCDD toxicity.
9. Vidisha Kini (2002). The role of TNF-alpha in the toxicity of DCA, a water purification by product.
10. Chirag Kariya (2002). The role of oxidative stress in dichloroacetate-induced developmental toxicity in Zebra fish embryos.
11. Mohamed AlGhafri (2003). The role of antioxidant enzymes in TCDD-induced oxidative tissue damage in various brain regions of rats after subchronic exposure.
12. Soumyadeep Dey (2003). The role of peritoneal macrophages in the induction of oxidative stress by trichloroacetate and dichloroacetate in mice.
13. Jatin Mehta (2003). Dichloroacetate-induced cellular toxicity in macrophages: The role of antioxidant enzymes.
14. Karilane Masters (Co-Advisor, 2004). Effects of TCDD on the levels of biogenic amines in rat brains after subchronic exposure.
15. Traci Sickelbough (Co-advisor, 2004). Effects of ellagic acid on dichloroacetate-induced embryotoxicity and oxidative stress in zebra fish embryos.
16. Jennifer Vodhanel (2004). The modulatory effects of antioxidants on TCDD-induced oxidative stress in various brain regions of rats.
17. Brian Dougan (2006). Induction of oxidative stress by di- and tri-chloroacetates and mixtures of the compounds in mice.
18. Xiaquon Zeng (2008). In vitro studies on the toxicity of the haloacetates formed during the water chlorination process and their possible interaction with ethanol.
19. Nicole Twaddle (2009). Studies on thallium toxicity in J774A.1 cells and zebrafish embryos.
20. Jessica Spildener (2009). Dichloroacetate and trichloroacetate-induced phagocytic activation in mice after prolonged exposure.
21. Christopher Mettling (2011). Dichloroacetate- and trichloroacetate-induced cellular death and oxidative stress in AML-12 Hepatocytes
22. Ali Al-Dieri (2011). Studies on the long term effects of marginal vitamin E deficiency on dichloroacetate- and trichloroacetates-induced phagocytic activation in mice.
23. Jacquelyn Cearfoss (2012). The induction of oxidative stress in the livers of mice following long-term exposure to the water chlorination by-products, dichloroacetate and trichloroacetate.
24. Sukamto Mamada (2014). Studies on the Toxicity of Mixtures of Haloacetates and Ethanol in AML-12 Cells.
25. Kyle McIntosh (2015). The Role of Antioxidant Enzymes in the Induction of Phagocytic activation by Dichloroacetate and Trichloroacetate Mixtures in Mice.
26. Mohammed Abdulkareem (2016): The Interaction Between Dichloroacetate, Trichloroacetate, and Acetaminophen: Effects on Oxidative Stress Induction in AML 12 cells

27. Omar Issa (current)

MEMBERSHIP OF PROFESSIONAL SOCIETIES

Society of Toxicology (1992-present)

Teratology Society (1994-1997)

The American Association of the Colleges of Pharmacy (1994-1999)

MEETINGS AND PRESENTATIONS

Society of Toxicology meeting, Las Vegas, Nevada, March, 1983 (Presented a poster)

3rd World Conference on Inflammation, Monte Carlo, March, 1989 (Presented a paper, Platform)

Society of Toxicology meeting, Dallas, Texas, March, 1994 (Presented 3 posters)

Society of Toxicology meeting, Baltimore, Maryland, 1995 (Presented a poster)

Society of Toxicology meeting, Anaheim, California, 1996 (Presented a poster)

Society of Toxicology meeting, Cincinnati, Ohio, 1997 (Presented a poster)

Presented a seminar within the seminar series arranged by the department of Medicinal and Biological Chemistry, UT (1998)

Society of Toxicology meeting, Nashville, Tennessee, March, 2002(presented a poster)

Presented a seminar at the Toxicology Department, Uppsala University , Sweden (2002)

Society of Toxicology meeting, Salt Lake City, Utah, March 2003 (presented a poster)

Society of Toxicology meeting, Baltimore, Maryland, March 2004 (presented a poster)

Society of Toxicology meeting, New Orleans, LA, March 2005 (presented a poster)

Society of Toxicology meeting, San Diego, CA, February 2006 (Presented a poster)

Society of Toxicology meeting, Charlotte, N.C., 2007 (Presented a poster)

Society of Toxicology meeting, Seattle , Washington, 2008 (Presented a poster)

Presented a seminar at Al-Zaytoonah University Pharmaceutical Sciences conference, Amman, Jordan (2008)

Society of Toxicology meeting, Baltimore, Maryland, 2009 (presented a poster)

Society of Toxicology meeting, Salt Lake City, Utah, 2010 (Presented a poster)

Society of Toxicology meeting, Washington D.C., 2011 (presented 2 posters)

Society of Toxicology meeting, San Francisco, CA, 2012 (presented a poster)

Society of Toxicology meeting, San Antonio, TX, 2013 (presented a poster)

Society of Toxicology meeting, Phoenix, AZ, 2014 (presented a poster)

Society of Toxicology meeting, San Diego, CA, 2015 (presented a poster)

Society of Toxicology meeting, New Orleans, Louisiana, 2016 (presented a poster)

LANGUAGES

Native language: Arabic

Other languages: English, Swedish

CONTINUING EDUCATION COURSES/ Workshops

1. Toxicokinetics: Study Design and Data Analysis (SOT meeting, Dallas, 1994)
2. New Endpoints in developmental and Reproductive regulatory studies: Methods for Success (SOT meeting, Baltimore, 1995).
3. The College of Pharmacy Strategic planning (2001).
4. The College of Pharmacy Strategic planning (2002).
5. The College of Pharmacy Strategic Planning (2003).
6. The College of Pharmacy Strategic planning (2004).
7. The College of Pharmacy Strategic planning (2005)
8. The College of Pharmacy Strategic planning (2006)
9. The College of Pharmacy strategic planning (2008)
10. Academic Impression Workshop for New Chairs (2014)- Orange County, CA

PUBLICATIONS

1. Danielsson, B.R.G., **Hassoun, E.** and Dencker, L. Embryotoxicity of Chromium: Distribution in Pregnant Mice and Effect on Embryonic Cells in Vitro. Arch. Toxicol. **51**, 233-245 (1982).
2. **Hassoun, E.** and Dencker, L. TCDD Embryotoxicity in the Mouse May be Enhanced by β -Naphthoflavone, Another Ligand of the Ah-Receptor. Toxicol. Lett. **12**, 191-198 (1982).
3. **Hassoun, E.**, d'Argy, R. and Dencker, L. Teratogenicity of 2,3,7,8-Tetrachlorodibenzofuran in the Mouse. J. Toxicol. Environ. Hlth. **14**, 337-351 (1984).
4. **Hassoun, E.** et al. Tetratological Studies on the TCDD Congener 3,3',4,4'-Tetrachloroazoxy Benzene in Sensitive and Nonsensitive Mouse Strains: Evidence for Direct Effect on Embryonic Tissues. Arch. Toxicol. **55**, 20-26 (1984).
5. **Hassoun, E.** et al. Teratogenicity of 2,3,7,8-Tetrachlorodibenzofuran in BXD Recombinant Inbred Strains. Toxicol. Lett. **23**, 37-42 (1984).
6. d'Argy, R., **Hassoun, E.** and Dencker, L. Teratogenicity of TCDD and the Congener 3,3',4,4'-Tetrachloroazoxy Benzene in Sensitive and Nonsensitive Mouse Strains after Reciprocal Blastocyst Transfer. Toxicol. Lett. **21**, 197-202 (1984).
7. Dencker, L., **Hassoun, E.**, d'Argy, R. and Alm, G. Fetal Thymus Organ Culture as an Invitro Model for the Toxicity of 2,3,7,8-Tetrachlorodibenzo-p-dioxin and its Congeners. Mol. Pharmacol. **27**, 133-140 (1985).
8. **Hassoun, E.** In vivo and Invitro Interactions of TCDD and Other Ligand of the Ah-receptor: Effect on Embryonic and Fetal Tissues. Arch. Toxicol. **61**, 145-149 (1987).
9. **Hassoun, E.** Studies on the Distribution of ^{14}C - β -Naphthoflavone, a Ligand of the Ah-receptor in the Fetuses and Maternal Tissues of Pregnant Mice. J. Fac. Med. Baghdad **29**, 11-20 (1987).
10. **Hassoun, E.** and Arif, A.T. Effect of D,L- -difluoromethyl Ornithine on Cleft Palate Induced by the TCDD Congener 3,3',4,4'-Tetrachloroazoxy Benzene in the Fetuses of Mice. Toxicology **51**, 77-85 (1988).
11. **Hassoun, E.** Effects of α - and β -Naphthoflavones on Cleft Palate and Fetal Death Induced by the TCDD Congener 3,3',4,4'-Tetrachloroazoxy Benzene in Mice. J. Fac. Med. Baghdad **31**, 25-34 (1989).
12. Bagchi, D., Bagchi, M., **Hassoun, E.** and Stohs, S.J. Effect of Endrin on the Hepatic Distribution of Iron and Calcium in Female Sprague-Dawley Rats. J. Biochem. Toxicol. **7**, 37-42 (1992).
13. Muldoon, D.F., **Hassoun, E.A.** and Stohs, S.J. Ricin-induced Hepatic Lipid Peroxidation, Glutathione Depletion, and DNA-Single Strand Breaks in Mice. Toxicol. **30**, 977-984 (1992).
14. Bagchi, M., **Hassoun, E.A.**, Bagchi, D. and Stohs, S.J. Endrin-induced Increases in Hepatic Lipid Peroxidation, Membrane Microviscosity and DNA Damage in Rats. J. Environ. Contam. Toxicol. **23**, 1-5

- (1992).
15. **Hassoun, E.**, Bagchi D., Roche, V., Stohs, S.J. An Assessment of Potential Chemoprotectant Activity Against Ricin Toxicity by Mechanism-based Glycosidase Inhibitors in Macrophage J774A.1 Cell Cultures. Toxicol **30**, 1545-1554 (1992).
 16. Bagchi, D., Bagchi, M., **Hassoun, E.** and Stohs, S.J. Endrin-induced Urinary Excretion of Formaldehyde, Acetaldehyde, Malondialdehyde and Acetone in Rats. Toxicology **75**, 81-89 (1992).
 17. **Hassoun, E.**, Bagchi, M., Bagchi, D. and Stohs, S.J. Comparative Studies on Lipid Peroxidation and DNA-Single Strand Breaks Induced by Chlordane, Lindane, DDT and Endrin. Comp. Biochem. Physiol. **104C**, 427-431 (1993).
 18. Bagchi, M., **Hassoun, E.A.**, Bagchi, D. and Stohs, S.J. Production of Reactive Oxygen Species by Peritoneal Macrophages and Hepatic Mitochondria and Microsomes from Endrin-treated rats. Free Rad. Biol. Med. **14**, 149-155 (1993).
 19. Bagchi, D., **Hassoun, E.**, Bagchi, M. and Stohs, S.J. Protective effects of antioxidants against endrin-induced hepatic lipid peroxidation, DNA damage and excretion of urinary lipid metabolites. Free Rad. Biol. Med. **15**, 217-222 (1993).
 20. Bagchi, D., Bagchi, M., **Hassoun, E.** and Stohs, S.J. Carbon Tetrachloride-induced Urinary Excretion of Formaldehyde, Malondialdehyde, Acetaldehyde and Acetone in Rats. Pharmacology **47**, 209-216 (1993).
 21. Bagchi, M., **Hassoun, E.**, Akubue, P., Bagchi, D. and Stohs, S.J. Comparative effects of endrin on hepatic lipid peroxidation, DNA damage and nitric oxide production by peritoneal macrophages from C57BL/6J and DBA/2J mice. Comp. Biochem. Physiol. **105C**, 525-529 (1993).
 22. **Hassoun, E.**, Roche, V., Stohs, S.J. The Release of Enzymes by Ricin from Macrophage and Chinese Hamster Ovary (CHO) Cells in Culture. Toxicol. Methods **3**, 119-129 (1993).
 23. Bagchi, D., Bagchi, M., **Hassoun, E.**, Moser, J. and Stohs, S.J. Effects of Carbon Tetrachloride, Menadione and Paraquat on the Urinary Excretion of Malondialdehyde, Formaldehyde, Acetaldehyde and Acetone in Rats. J. Biochem. Toxicol. **8**, 101-106 (1993).
 24. Bagchi, D., Bagchi, M., **Hassoun, E.A.** and Stohs, S.J. Time-dependent Effects of 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) on Serum and Urine Levels of Malondialdehyde, Formaldehyde, Acetaldehyde and Acetone in Rats. Toxicol. Appl. Pharmacol. **123**, 83-88 (1993).
 25. Bagchi, D., Bagchi, M., **Hassoun, E.A.** and Stohs, S.J. Detection of paraquat-induced *in vivo* lipid peroxidation by gas chromatography-mass spectrometry and high pressure liquid chromatography. J. Analyt. Toxicol. **17**, 411-414 (1993).
 26. Alsharif, N.Z., **Hassoun, E.**, Bagchi, M., Lawson, T. and Stohs, S.J. The effect of anti-TNF- α antibody and dexamethasone on TCDD-induced oxidative stress in mice. Pharmacology **48**, 127-136 (1994).
 27. Muldoon, D.F., Bagchi, D., **Hassoun, E.A.** and Stohs, S.J. The modulating effects of tumor necrosis factor alpha antibody on ricin-induced oxidative stress in mice. J. Biochem. Toxicol. **9**, 311-318 (1994)
 28. Bagchi, M., Bagchi, D., **Hassoun, E.A.** and Stohs, S.J. Smokeless tobacco induced increases in hepatic lipid peroxidation, DNA damage and excretion of urinary lipid metabolites. Int. J. Exp. Pathol. **75**, 197-202 (1994)
 29. Bagchi, D., Bagchi, M., **Hassoun, E.A.**, Kelly, J. and Stohs, S.J. Adriamycin-induced hepatic and myocardial lipid peroxidation and DNA damage, and enhanced excretion of urinary lipid metabolites. Toxicology **95**, 1-9 (1995)
 30. **Hassoun, E.A.**, Bagchi, D., Bagchi, M. and Stohs, S.J. Effect of vitamin E succinate on smokeless tobacco-induced production of nitric oxide by rat peritoneal macrophages and J774A.1 macrophage cells in culture. Free Rad. Biol. Med. **18**, 577-583 (1995)
 31. **Hassoun, E.A.**, Bagchi, D. and Stohs, S.J. Evidence of TCDD-induced tissue damage in fetal and placental tissues and changes in amniotic fluid lipid metabolites of pregnant CF1 mice. Toxicol. Lett. **76**, 245-250 (1995).

32. Bagchi, D., **Hassoun, E.A.**, Bagchi, M. and Stohs, S.J. Chromium-induced excretion of urinary lipid metabolites, DNA damage, nitric oxide production, and generation of reactive oxygen species in Sprague-Dawley rats. Comp. Biochem. Biophys. 110C, 177-187 (1995)
33. Bagchi, D., **Hassoun, E.A.**, Bagchi, M., Muldoon, D.F. and Stohs, S.J. Oxidative stress induced by chronic administration of sodium dichromate (Chromium VI) to rats. Comp. Biochem. Biophys. 110C, 281-287 (1995)
34. Bagchi, M., Ghosh, S., Bagchi, D., **Hassoun, E.**, and Stohs, S., J. Protective effect of lazardol (tirilazad) U74389F on endrin induced lipid peroxidation and DNA damage in brain and liver and regional distribution of catalase activity in rat brain. Free rad. Biol. Med. 19: 867-872 (1995)
35. Bagchi D., **Hassoun EA.**, Bagchi M., Stohs SJ. Protective effects of free radical scavengers and antioxidants against smokeless tobacco extract (STE)-induced oxidative stress in macrophage J774A.1 cell cultures. Arch. Environ. Contam. Toxicol. 29: 424-428 (1995)
36. Bagchi D., Bagchi, M., **Hassoun, E.**, and Stohs, S. J. *in vitro* and *in vivo* generation of reactive oxygen species, DNA damage, and lactate dehydrogenase leakage by selected pesticides. Toxicology 104: 129-140 (1995)
37. **Hassoun, E** and Stohs, S.J. Chromium-induced production of reactive oxygen species, DNA-single strand breaks, nitric oxide production and lactate dehydrogenase leakage in J774A.1 cell cultures. J. Biochem. Toxicol. 10: 315-321 (1995)
38. **Hassoun, E.A.**, Bagchi, D., Roche, V.F. and Stohs, S.J. Potential chemoprotectant activity of mechanism-based glycosidase inhibitors against ricin toxicity in Chinese hamster ovary and macrophage J774A.1 cell cultures. J. Appl. Toxicol. 16: 49-54 (1996)
39. **Hassoun, E.A.** and Stohs, S.J. Potential chemoprotectant activity of 3'-azido-3'-deoxythymidine (AZT) and 2'-dideoxycytidine (DDC) against ricin toxicity in Chinese hamster ovary and macrophage J774A.1 cell cultures. J. Appl. Toxicol. 16: 43-48 (1996)
40. **Hassoun E.** and Stohs SJ. Comparative teratological studies on TCDD, endrin and lindane in C57BL/6J and DBA/2J mice. Comp. Biochem. Physiol. 113: 393-398 (1996). PMID 8697196.
41. **Hassoun EA**, Stohs SJ. Cadmium-induced production of superoxide anion and nitric oxide, DNA-single strand breaks and lactate dehydrogenase leakage in J774A.1 cell cultures. Toxicology, 112: 219-226 (1996)
42. Muldoon DF, **Hassoun E**, Stohs SJ. Role of iron in ricin-induced lipid peroxidation and superoxide production. Res. Comm. Mol. Path. Pharmacol. 92: 107-118 (1996)
43. Vuchetich PJ, Bagchi D, Bagchi M, **Hassoun E**, Tang L , Stohs SJ. Naphthalene-induced oxidative stress in rats and the protective effects of vitamin E succinate. Free Rad. Biol. Med. 21: 577-590 (1996)
44. **Hassoun E**, Stohs SJ. TCDD, endrin and lindane induced oxidative stress in fetal and placental tissues of C57BL/6J and DBA/2J mice. Comp. Biochem. Physiol. 115C: 11-19 (1996). PMID 8983165.
45. Bagchi D, Bagchi M., **Hassoun E**, Stohs S.J. Cadmium-induced excretion of urinary lipid metabolites, DNA damage, glutathione depletion, and hepatic lipid peroxidation in Sprague-Dawley rats. Biological Trace Element Research. 52: 143-154 (1996)
46. **Hassoun E.**, Bagchi D., Stohs J. TCDD, endrin and lindane induced increases in lipid metabolites in maternal sera and amniotic fluids of pregnant C57BL/6J and DBA/2J mice. Res. Comm. Mol. Pathol. P., 94: 157-169 (1996). PMID 8987113
47. Bagchi D., Vuchetich P.J., Bagchi M., **Hassoun E.**, Tran M.X. Tang L., Stohs S.J. Induction of oxidative stress by chronic administration of sodium dichromate (chromium VI) and cadmium chloride (cadmium II) to rats. Free Rad. Biol. Med. 22: 471-478 (1997)
48. **Hassoun E**, Walter A, Alsharif N and Stohs SJ. Modulation by vitamin E succinate and ellagic acid of TCDD-induced embryotoxicity and oxidative stress in embryonic and placental tissues of C57BL/6J mice. Toxicology, 124: 27-37 (1997). PMID 9392543
49. **Hassoun E**, Wilt S, DeVito M, Van Birgelen A, Alsharif N, Birnbaum L, Stohs s. Induction of oxidative

- stress in brain tissues of mice after subchronic exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). Toxicological Sciences, 42: 23-27 (1998).
50. Bagchi M, Bagchi D, **Hassoun E.**, Stohs S.J. Subchronic effects of smokeless tobacco extract (STE) on hepatic lipid peroxidation, DNA damage and excretion of urinary metabolites in rats. Toxicology, 127: 29-38 (1998).
 51. **Hassoun, EA**, and Wang X. Time- and concentration-dependent production of superoxide anion, nitric oxide, DNA damage and cellular death by ricin in J774A.1 macrophage cells. J.Biochem. Mol.Toxicol., 13:179-185 (1999)
 52. **Hassoun, EA**, and Wang, X. Ricin-induced toxicity in the macrophage J774A.1 cells: the role of TNF-alpha and the modulation effects of TNF-alpha polyclonal antibody . J Biochem. Mol. Toxicol., 14: 95-101 (2000)
 53. **Hassoun, EA**, Li, F, Abushaban, A, and Stohs, SJ. The relative abilities of TCDD and its congeners to induce oxidative stress in the hepatic and brain tissues of rats after subchronic exposure. Toxicology, 145: 103-113 (2000). PMID10771135.
 54. Slezak, BP, Hatch, GE, DeVito, MJ, Diliberto, JJ, Slade, R, Crissman, K, **Hassoun E**, and Birnbaum LS. Oxidative stress in female B6C3F1 mice following acute and subchronic exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). Toxicological Sciences, 54: 390-398 (2000)
 55. Stohs, SJ, Bagchi, D, **Hassoun, E**, Bagchi, M. Oxidative mechanisms in the toxicity of chromium and cadmium ions. J. Environ. Pathol. Toxicol. Oncol. 19: 201-213 (2000).
 56. **Hassoun, EA**, Li, F, Abushaban, A, and Stohs, SJ. Production of superoxide anion, lipid peroxidation and DNA damage in the hepatic and brain tissues of rats after subchronic exposure to mixtures of TCDD and its congeners. J. Appl. Toxicol. 21: 211-219 (2001). PMID 11404832.
 57. **Hassoun, EA**, Wang, H, Abushaban, A and Stohs, SJ. Induction of oxidative stress in the tissues of rats after chronic exposure to TCDD, 2,3,4,7,8-pentachlorodibenzofuran and 3,3',4,4',5-pentachlorobiphenyl. J. Toxicol. Environ. Hlth. 65: 825-842 (2002). PMID 12079609
 58. **Hassoun E**, Abraham M., Kini V., Al-Ghafri M, Abushaban A. Cytotoxicity of the ionic liquid, 1-N-Butyl-3-Methyl Imidazolium Chloride. Research Communications in Pharmacology and Toxicology, 7: 23-31 (2002).
 59. **Hassoun EA**, and Ray, Sunetra. In vitro studies on the role of macrophages in the toxicities of the drinking water disinfection by-products Di- and Tri-chloroacetates. Comp. Biochem. Physiol. Part C : 135,119-128 (2003). PMID 12860050
 60. **Hassoun E**, Al-Ghafri M, Abushaban A. The role of antioxidant enzymes in TCDD-induced oxidative stress in various brain regions of rats after subchronic exposure. Free. Rad. Biol. Med. 35, 1028-1036 (2003). PMID 14572606.
 61. **Hassoun E.** , Kini, V. Effects of superoxide dismutase and polyclonal tumor necrosis factor alpha antibodies on chloroacetate-induced cellular death and superoxide anion production by J774.A1 macrophages. Comp. Biochem. Physiol. Part C, 138: 113-120 (2004). PMID 15450858
 62. Alsharif, N., **Hassoun E.** Protective effects of vitamin A and vitamin E succinate against TCDD-induced body wasting, hematology, thymic atrophy, production of reactive oxygen species and DNA damage in C57BL/6J mice. Basic. Clin. Pharmacol. Toxicol. 95: 131-138 (2004).
 63. **Hassoun, E.**, Vodhanel, J., Abushaban, A. The modulatory effects of ellagic acid and vitamin E succinate on TCDD-induced oxidative stress in different brain regions of rats after subchronic exposure. J. Biochem. Mol. Toxicol. 18: 196-203 (2004). PMID 15452880
 64. **Hassoun, E.**, Kariya, C., Williams, F. Dichloroacetate-induced developmental toxicity and production of reactive oxygen species in zebrafish embryos. J. Biochem. Mol. Toxicol., 19: 52-57 (2005)
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