

Curriculum Vitae



Name: Hamid Reza Mohammadi

Date of birth: June/10/1986- Iran, Lorestan province, Kuhdasht

Tell: +9871-32424126-282

E-mail: Hamidrezamohammadi65@yahoo.com

Educational Background

2016-2020: Ph.D. Student of Toxicology (*Shiraz University of Medical Sciences –Shiraz-Iran*)

2011-2013: Master of Science Student of Toxicology (*Tehran University of Medical Sciences –Tehran-Iran*)

Research Techniques and Experiences

1. Bile Duct Ligation (BDL) for Cirrhosis/Cholestasis Induction in Rats/Mice/Rabbits/Hamsters
2. Hepatocytes Isolation from Rat
3. *In vivo* Evaluation of Xenobiotics-Induced Hepatotoxicity
4. “Drug-Inflammation Interaction” as a Model for Evaluating Idiosyncratic Drug-Induced Liver Injury (IDILI)

5. Isolated Perfused rat liver (IPL) as an *Ex vivo* Model for Assessing Xenobiotics Induced Hepatotoxicity
6. Mitochondrial Isolation from Different Tissues for Assessing Xenobiotics-Induced Mitochondrial Dysfunction
7. Experimental Models of Acute Liver Failure (ALF), Hepatic Encephalopathy, and Hyperammonemia
8. Unilateral Ureteral Obstruction (UUO) as an Animal Model of Progressive Renal Disease
9. Gastric Ulcer Induction in Rats
10. Unilateral Chronic Constriction Injury (CCI) and Spared Nerve Injury (SNP) to Rat Sciatic Nerve; an Animal Model for Studying Neuropathic Pain
11. Bio-analyzers; for assessing biochemistry of animals biological samples (Serum, Plasma, Urine, etc.)
12. In-vitro studies with cell culture
13. Perfect Cognition with SPE Column (solid phase extraction) before analysis
14. Perfect Cognition with USP pharmacopeia and how to use it
15. Perfect Cognition with BP pharmacopeia and how to use it
16. Determine Assay and purity and testing qualitative drugs for Raw materials and products pharmaceutical company
17. Expert Quality Control of the Elixir Pharmaceutical 2013-2015
18. The expert of the devices in the chemistry laboratory :
 - Device HPLC
 - Device GC
 - Device UV/Visible , Plate Readers
 - Device FT-IR for determine the functional groups
 - Device Fluorimeter/Luminometer Assessments
 - Device Karl Fischer
 - Device Polarograph
 - Device Polarimetr

Professional Activities

Scientific Committee, 14th Iranian Congress of Toxicology, 24-26 October 2017, Shiraz, Iran

Refereeing Committee , 14th Iranian Congress of Toxicology , 24-26 October 2017, Shiraz, Iran

Attending the congress 12th International Congress of Toxicology & Iranian Congress of Poisonings, 15-

17 May 2013, Sary, Iran

Publications

1. Heidari R, Ghanbarinejad V, **Mohammadi HR** Ahmadi A, Esfandiari A, Azarpira N, Niknahad H. *Dithiothreitol supplementation mitigates hepatic and renal injury in bile duct ligated mice: Potential application in the treatment of cholestasis-associated complications*. Biomed Pharmacother. 2018.

2. Mohammad Mehdi Ommati, Akram Jamshidzadeh, Hossein Niknahad, **Hamidreza Mohammadi**, Samira Sabourib, Reza Heidaria, Narges Abdoli . *N-acetylcysteine treatment blunts liver failure-associated impairment of locomotor activity*. PharmaNutrition. 2017.

3. Reza Heidari, Vahid Ghanbarinejad, **Hamidreza Mohammadi** , Asrin Ahmadi, Mohammad Mehdi Ommati, Narges Abdoli, Fatemeh Aghaei, Athena Esfandiari, Negar Azarpira, Hussein Niknahad. *Mitochondria protection as a mechanism underlying the hepatoprotective effects of glycine in cholestatic mice*. Biomedicine & Pharmacotherapy. 2018.

4. Faghihloo E, Araei Y, Mohammadi M, Mirzaei H, **Mohammadi HR**, Mokhtari-Azad T. *The effect of oxamflatin on the E-cadherin expression in gastric cancer cell line*. Cancer Gene Therapy .2016.

5. Mohsen Mohammadi, Mohammad Jafar Rezaie, Ayoob Rostamzadeh, Azra Allahveisi, **Hamid Reza Mohammadi**, Fatemeh Mohammadi ,Ardeshir Moayeri. *Signaling Pathways of Melatonin in Prevention of Liver Disorders via Suppressing of Oxidative Stress in Cellular Leve*.2016.

6. Omid Farshad, Reza Heidari, **Hamidreza Mohammadi**, Amin Reza Akbarizadeh, Mohammad M. Zarshenas *Hepatoprotective Effects of Avicennia Marina (Forssk.) Vierh*.2017.

7. Mohammadi, M. and Moayeri, A. and Ghaderi, O. **Mohammadi, H.R.** and Rostamzadeh, A. *Understanding the signaling pathway as a new strategy for bum management and treatment based on stem cell therapy*. Research Journal of Medical Sciences.2016.

8. Mohammadi, M. and Rostamzadeh, A. and Moayeri, A. and Allahveisi, A. **Mohammadi, H.R.** Rezaie, M.J. *Role of Silymarin in regeneration and treatment of skin disorders; Progress in signaling pathways*. Research Journal of Pharmaceutical, Biological and Chemical Sciences.2016.

9. Reza Heidari , **Hamidreza Mohammadi**, Asrin Ahmadi, Vahid Ghanbarinejad, Faraz Kasra, Amir Khosravi. *Protective Effect of Glycine and Tri-Methyl Glycine (Beanie) Against Heavy Metals-Induced Oxidative Stress in Liver-Derived Post-Nuclear Supernatant (PNS)*. Trends in Pharmaceutical Sciences. 2018.

10. Reza Heidari, Hossein Niknahad, Ala Sadeghi, **Hamidreza Mohammadi**, Vahid Ghanbarinejad, Mohammad Mehdi Ommati, Arghavan Hosseini, Negar Azarpira, Forouzan Khodaei, Omid Farshad, Elaheh Rashidi, Asma Siavashpour, Asma Najibi, Asrin Ahmadi,

Akram Jamshidzadeh. *Betaine treatment protects liver through regulating mitochondrial function and counteracting oxidative stress in acute and chronic animal models of hepatic injury*. Biomedicine & Pharmacotherapy.2018

11. Reza Heidari , **Hamidreza Mohammadi**, Asrin Ahmadi, Vahid Ghanbarinejad, Mohammad Mehdi Ommati, Hossein Niknahad, Negar Azarpira. *Proline supplementation mitigates the early stage of liver injury in bile duct ligated rats*. 2018.

12. Reza Heidari, Asrin Ahmadi, **Hamidreza Mohammadi**, Mohammad Mehdi Ommati, Negar Azarpira, Hossein Niknahad. *Mitochondrial dysfunction and oxidative stress are involved in the mechanism of methotrexate-induced renal injury and electrolytes imbalance*. 2018.

13. Seyyed Vahid Niknezhad, Ghasem Najafpour Darzi, Sedigheh Kianpour, Sina Jafarzadeh,**Hamidreza Mohammadi**, Younes Ghasemi, Reza Heidari, and Mohammad-Ali Shahbazi. *Bacteria Assisted Biogreen Synthesis of Radical Scavenging Exopolysaccharide-Iron Complex: An Oral Nano-Sized Nutritional Supplement with High in Vivo Compatibility*. 2019.

14. Ehsan Emadi, Narges Abdoli, Vahid Ghanbarinejad, **Hamid Reza Mohammadi** ,Khadijeh Mousavi Mobarakeh, Negar Azarpira, Zahra Mahboubi, Hossein Niknahad,Reza Heidari.*The potential role of mitochondrial impairment in the pathogenesis of imatinib-induced renal injury*.2019.

15. Ommati MM, Farshad O, Ghanbarinejad V, **Mohammadi HR**, Khadijeh M, Negar A, Zahra M, Ilkhaninasab F, Moezi L, Heidari R. *The Nephroprotective Role of Carnosine Against Ifosfamide-Induced Renal Injury and Electrolytes Imbalance is Mediated Via the Regulation of Mitochondrial Function and Alleviation of Oxidative Stress*.2019.

16. Hamidreza Mohammadi, Akram Jamshidzadeh, Mohammad Reza Nikbakht , Hossein Niknahad, Reza Heidari. *Taurine and isolated mitochondria: A concentration-response study* *Taurine and isolated mitochondria*.2019.

17. Mohammad Mehdi Ommati,Omid Farshad,Hossein Niknahad,Mohammad Reza Arabnezhad,Negar Azarpira,**Hamid Reza Mohammadi**,Maral Haghnegahdar,Khadijeh Mousavi,Shiva Akrami,Akram Jamshidzadeh,Reza Heidari. *Cholestasis-associated reproductive toxicity in male and female rats: The fundamental role of mitochondrial impairment and oxidative stress*.2019.

18. Asma Siavashpour, Bahman Khalvati, Negar Azarpira, **Hamidreza Mohammadi**, Hossein Niknahad, Reza Heidari. *Poly (ADP-Ribose) Polymerase-1 (PARP-1) Overactivity Plays a Pathogenic Role in Bile Acids-Induced Nephrotoxicity in Cholestatic Rats*.2020

19. Mohammad Mehdi Ommati, Omid Farshad, Hossein Niknahad, Khadijeh Mousavi, Marjan Moein, Negar Azarpira, **Hamidreza Mohammadi**, Akram Jamshidzadeh, Reza Heidari. *Oral administration of thiol-reducing agents mitigates gut barrier disintegrity and bacterial lipopolysaccharide translocation in a rat model of biliary obstruction*. *Current Research in Pharmacology and Drug Discovery*.2020.

20. Mohammad Mehdi Ommati, **Hamidreza Mohammadi**, Khadijeh Mousavi, Negar Azarpira, Omid Farshad, Reyhaneh Dehghani, Asma Najibi, Sedigheh Kamran, Hossein Niknahad, Reza Heidari. *Metformin alleviates cholestasis-associated nephropathy through regulating oxidative stress and mitochondrial function*. *Liver research*.2020.

21. Khadijeh Mousavi, Hossein Niknahad, Amin Ghalamfarsa, **Hamidreza Mohammadi**, Negar Azarpira, Mohammad Mehdi Ommati, Reza Heidari *Taurine mitigates cirrhosis-associated heart injury through mitochondrial-dependent and antioxidative mechanisms*. *Clinical and Experimental Hepatology*.2020.

22. Hamidreza Mohammadi, Abolfazl Sayyad, Mohsen Mohammadi, Hossein Niknahad, Reza Heidari. *N-acetyl cysteine treatment preserves mitochondrial indices of functionality in the brain of hyperammonemic mice*. Clinical and Experimental Hepatology.2020.

23. Hamidreza Mohammadi, Reza Heidari, Sayed Vahid Niknezhad, Akram Jamshidzadeh, Fatemeh Farjadian. *In vitro and in vivo evaluation of succinic acid-substituted mesoporous silica for ammonia adsorption: Potential application in the management of hepatic encephalopathy*.international journal of nanomedicine.2020.

Abstracts& Posters

1. Hamid Reza Mohammadi, Reza Heidari, Behnam Asadi, Mohammad Reza Arabnadj, Negar Azarpira. hepatoprotective effect of boldine a bile duct ligated rat model of cholestasis/cirrhosis. Poster14th Iranian Congress of Toxicology , 24-26 October 2017, Shiraz, Iran

2. Hamid Reza Mohammadi, Akram Jamshidzadeh, Mohammad Reza Arabnejad, Hossein Niknahad, Reza Heidari, Mehdi Zarei. Carnosine protects brain mitochondria under hyperammonemic Conditions Relevance to hepatic encephalopathy treatment. Poster14th Iranian Congress of Toxicology , 24-26 October 2017, Shiraz, Iran

3. Hamid Reza Mohammadi, Mohsen Mohammadi, Roya Khosrokhavar. Method Development to detect and determine furosine in Infant formula by High Performance Liquid Chromatography (HPLC). Poster13th International Congress of Toxicology & Iranian Congress of Poisonings, 12-14 May 2015, Sary, Iran

Books

Mohammadi, hamidreza. List of commonly used drugs in the treatment of various diseases. First edition. (2018). Heydari publisher. (In Persian)

Relevant Software

- ✓ *GraphPad Prism*: Biostatistics, curve fitting, and scientific graphing
- ✓ *EndNote*: Publishing and managing bibliographies, citations and references
- ✓ *SPSS*: Statistical analysis
- ✓ *ChemBioDraw*: A scientific drawing program to draw accurate, chemically-aware structures
- ✓ *Zotero*: A tool to collect, organize, cite, and share research sources
- ✓ *ImageJ*: Image (*e.g* Histopathology) processing and analysis
- ✓ *Minitab*: Analyzing and presenting research results

Research Interests:

- ✓ *Mechanistic Toxicology*
- ✓ *Hepatotoxicology*
- ✓ *Drug-Induced Liver Injury (DILI)*
- ✓ *Xenobiotics-Induced Mitochondrial Dysfunction*
- ✓ *Bioenergetics*
- ✓ *Cellular Responses to Oxidative Stress*
- ✓ *Tissue Fibrosis*
- ✓ *Cirrhosis and its Associated Complications*
- ✓ *Hepatoprotection*
- ✓ *Hepatic Encephalopathy*
- ✓ *Hepatoprotective Effects of Sulfur-Containing Amino Acids*
- ✓ *Target Organ Toxicity*