

## **Arezo Nahavandi, M.D., Ph.D.,**

***Associate professor of university, senior lecturer ,research supervisor.***

**Office:** *faculty of medicine, department of physiology, Iran university of medical sciences.*

**Contact:** *+98 21 88058709*

Mobile: 0098 9121151037

**Email address:** [arezonahavandi\\_1999@yahoo.com](mailto:arezonahavandi_1999@yahoo.com)

### **Education qualifications:**

- 1) Medicine (Medical Doctor), from Tehran university of Medical sciences*
- 2) Ph.D, in clinical physiology, from Tehran University of Medical sciences*
- 3) post doc fellow in clininical pharmacology . University college of London ( Granted by welcome trust).*
- 4) Diploma of practical dermatology, from Cardiff University, Wales College of Dermatology.*
- 5) Laser Certificate Workshop c from Australia.*

### **Teaching fields:**

- 1) cardiovascular physiology
- 2) Electrocardiography
- 3) neuroscience ( Higher brain function)
- 4) cerebral cognitive function

### **Academic and Professional experiences:**

- 1) *Associate professor, Iran University of Medical Sciences*
- 2) *Assistant professor, Iran University of Medical Sciences.*
- 3) *Post doc. fellow, in clinical pharmacology, University College of London (UCL), wellcome trust*

### **Teaching Topics:**

- *Cognition and behavior*
- *Higher brain functions*
- *Brain associative cortices*
- *Limbic system function*
- *Sleep physiology and brain waves*
- *Autonomic nervous system*
- *Cardiac physiology*
- *Electrocardiography*
- *Apoptosis*

## **Publications:**

1) Nahavandi A., et al. NG-nitro -L- arginine methylester is protective against ethanol-induced gastric damage in cholestatic rats. *European Journal of Pharmacology* 370 (1999) 283-286.

2) Nahavandi, A. et al. THE ROLE OF NITRIC OXIDE IN STRESS-INDUCED GASTRIC DAMAGE IN CHOLESTATIC RATS. *Acta Medica Iranica* 37.

. (2):68-72;1999

3) Nahavandi A., et al. Role of nitric oxide in hypodipsia of rats with obstructive cholestasis. *JPP* 2001 ,53,277-281.

4) Nahavandi, A. et al. The role of nitric oxide in bradycardia of rats with obstructive cholestasis. *European journal of pharmacology* 411(2001) 135-141

5) Nahavandi A., et al .The Role of the interaction between endogenous opioids and nitric oxide in the pathophysiology of ethanol-induced gastric

*damage in cholestatic rats. Fundamental & clinical pharmacology 15 (2001) 1-7.*

*6) Nahavandi A., et al. DUAL NITRIC OXIDE MECHANISMS OF CHOLESTASIS-INDUCED BRADYCARDIA IN THE RAT. Clinical and Experimental Pharmacology and physiology (2002) 29, 905-908.*

*7) Nahavandi A., et al. Protective Effect of Digoxin on Impaired Chronotropic Responsiveness to Adrenergic Stimulation in Cholestatic Rats. Iranian Biomedical Journal 7(2) ,85-88(April 2003).*

*8) Nahavandi A., et al. Aortic responsiveness to nitric oxide is affected by seasonal variation. Pathophysiology 13 (2006) 67-69.*

*9) Role of lithium on gastroprotective effect of Lithium. Firouzeh nejadkay, arezo nahavandi, et al. Pathophysiology 13(2006) 85-89*

*10) Effect of nitric oxide on immobilization stressed rat ,prefrontal cortex. mehdi mehdizadeh, arezo nahavandi. et al. Gorgan university of medical sciences, scientific journal(2007). spring vol 9, no 1.5-13*

11) Mansouri p, Farshi s, Nahavandi A, Pimecrolimus 1percent cream and pulsed dye laser in treatment of a patient with reticular erythematous mucinosis syndrome. *Dermatology online Journal* .VOL 13 ,ISSUE 2, MARCH 2007 .Article number 22

12) Arezo nahavandi, ali shahbazi. Nitric oxide is protective against mercury induced depression. *Basic and clinical neuroscience* .(2010);summer ,1(4)

**13) The effect of L-Arginine on the brain tissue of stressed rats**

Batoul Ebadi, Mehdi Mehdizadeh, Arezo Nahavandi, Tabandeh Shariati, Hamdollah Delaviz,  
Volume 1, Number 2 (Winter 2010 -- 2010)

**14) Effects of dalteparin on structure of hippocampal neurons of rats in chronic stress**

Fereshteh Farajdokht, Arezo Nahavandi, Mansoureh Soleimani, Volume 3, Number 3 (Spring 2012 -- 2012)

**15) Parents' adulthood stress induces behavioral and hormonal alterations in male rat offspring.**

Niknazar S, Nahavandi A, Najafi R, Danialy S, Mehrjardi FZ, Karimi M. *Behav Brain Res*. 2013 May 25. doi:pii: S0166-4328(13)00305-7. 10.1016/j.bbr.2013.05.026

**16) Chronic Ritalin Administration during Adulthood Increases Serotonin Pool in Rat Medial Frontal Cortex.**

*Daniali S, Nahavandi A, Madjd Z, Shahbazi A, Niknazar S, Shahbazzadeh D. Iran Biomed J. 2013 Jul;17(3):134-9.*

**Research Fields:**

- *Psychophysiology*
- *Stress and depression*
- *Cognition and brain wiring*
- *Mental stress and brain adaptation*
- *Cognitive and mood disorders (Mental depression)*

**International congresses:**

- 1) *AN APPROACH TO THE ROLE OF NITRIC OXIDE IN ETHANOL-INDUCED GASTRIC DAMAGE OF RATS WITH CHOLESTASIS.14th CONGRESS OF PHYSIOLOGY AND PHARMACOLOGY 16-20 MAY 1999.*

2) *EVALUATION OF THE ROLE OF NITRIC OXIDE IN DECREASED ISOLATED ATRIAL CONTRACTION OF CHOLESTATIC RATS.14th CONGRESS OF PHYSIOLOGY AND PHARMACHLOGY .16-20 MAY 1999.*

3) *DUAL NITRIC OXIDE MECHANISMS OF CHOLESTASIS-INDUCED BRADYCARDIA IN THE RAT.16th IRANIAN CONGRESS OF PHYSIOLOGY AND PHARMACOLOGY .TEHRAN-IRAN.MAY 9-13, 2003.*

4) *FAMILLIAL SYSTEMIC LUPUS REYTHEMATOSOUS AND NOS3 GENE POLYMORPHSM—A CASE REPORT IN NEW DIAGNOSTIC TECNIQUES I DERMATOLOGIC DIAGNOSIS. THE INTERNATIONAL CONGRESS OF NEW DERMATOLOGICAL DIAGNOSTIC PROCEDURES AND TRARMENTS .TEHRAN JAN (2003).*

5) *EFFECT OF NITRIC OXIDE ON CIRCANNUAL RHYTHM OF CARDIOVASCULAR EVENTS.THE 16th ANNUAL MEDITERRANEAN*

*C9ONGRESS OF CARDIOLOGY AND CARDIAC SURGERY.26-29 OF  
SEPTEMBER, 2004, BODRUM, TURKEY.*

6) *LOW DOSE NITRIC OXIDE IS PROTECTIVE AGAINST MERCURY INDUCED DEPRESSION.(SUBMITTED IN CONGRESS OF PSHCOLOGY ,VERONA,ITALY,2007)*

8) *Alzheimer a prion disease. Alzheimer congress. (IUMS)*

9) *PREVALENCE OF ADULT OF ADHD COMPAIRMENT BETWEEN HIGHLY EDUCATED SUBJECTS AND ORDINERY ONES. 36th Congress of the International Union of Physiological Sciences (IUPS2009).*

11) *The first congress of effect electromagnetic fields on biological tissues (As a chairwoman).*

12) *Nitric oxide and antinociceptive effect of oxytocin.14th EFNS Congress in Geneva. 14th EFNS Congress in Geneva.*

13) *Iborofen protection against stress-induced depression. 17 – 23 July 2010. Copenhagen, Denmark.*

**Membership and Professional Activities:**

1) *IRANIAN COMITEE OF PYSIOLOGY AND PHARMACOLOGY.*

2) IBRO

3) INTERNATIONAL COMITEE OF DERMATOSCOPY

4) CELLULAR AND MOLECULAR RESEARCH CENTRE. IRAN UNIVERSITY OF MEDICAL SCIENCES.

4) DERMATOLOGIC COMITEE OF CARDIFF UNIVERSITY, WALES COLLEGE.

5) American applied psychophysiology (aapb)(2007)

6) Physiology Research Centre, Iran University of Medical Sciences

7) Member of Nanotechnology department (IUMS)

8) Reviewer of JCD (Journal of Clinical Dermatology)

9) Reviewer of Iranian Biomedical Journal

10) Reviewer of Journal of Basic and Clinical Neuroscience

11) Reviewer of journal of Iran University of Medical Sciences (iums)

12) Editorial board of Basic and Clinical Neuroscience

13) The first congress of effect electromagnetic fields on biological tissues (As chairwoman).

### **Working Projects:**

- ADHD in young adults (finished)
- Ritalin abuse and cognition (finished)
- Mental stress and brain epigenetics (finished)

- *Iron homeostasis and mental depression*
- *Hepcidin and depression*
- *Biomarkers of depression*
- *Epigenetics ,stress and depression*
- *Stress and neuronal mitochondrial dysfunction.*
- *Effect of cognitive disorder in depression induction*
- *Depression detection and treatment by its novel biomarkers*
- *How stress changes related brain structure*

## **Lab Setups:**

1)*Immunohistochemistry*

2)*Elevated Plus Maze*

3)*forced swim test*

4)*Effort Based Decision Making T-Test*

## *5)Chronic Mild Stress*